Appendix A

U.S. Army Corps of Engineers, Charleston District Record of Decision CESAC-RD-SAC-2012-00960 CESAC-RD-SAC-2012-00960

RECORD OF DECISION

I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning the permit application for the proposed action, as well as the stated views of interested agencies and the public. In doing so, I have considered the possible consequences of the proposed action in accordance with regulations published in Title 33 Code of Federal Regulations (C.F.R.) Parts 320 through 332, and Title 40 C.F.R. Part 230 and Parts 1500 through 1508.

Background

In March 2013, the South Carolina Department of Commerce Division of Public Railways d/b/a Palmetto Railways (Palmetto Railways, Applicant or Permittee) submitted a written request to initiate environmental review as per the National Environmental Policy Act (NEPA) for its proposed Navy Base Intermodal Container Transfer Facility (ICTF) (the Project) on the former Clemson Site in the Charleston Naval Complex (CNC). As a result of prior coordination and pre-application meetings, the U.S. Army Corps of Engineers, Charleston District (Corps) determined that preparation of an Environmental Impact Statement (EIS) was necessary for the Project and issued a Notice of Intent (NOI) that was published on October 23, 2013 in Vol. 78, No. 205 Federal Register (78 FR 205, PP. 63169-63170). Two agencies, the U.S. Environmental Protection Agency (EPA) and the Federal Railroad Administration (FRA), requested to be, and were designated as, cooperating agencies under NEPA.

The Corps distributed information on the Project, scoping, and environmental review process through the EIS website (http://www.navybaseictf.com), as well as through typical SAC public notice procedures, including email notification to the Corps public notice distribution list and mailing a Public Notice letter to adjacent and nearby landowners and other interested parties. A meeting announcement was published in area newspapers and emails were sent out to the Navy Base ICTF EIS mailing list. The first public scoping meeting was held on November 14, 2013, at the Chicora School of Communications (former Ronald C. McNair Elementary School). The Corps provided a public scoping comment period from November 14, 2013, to December 14, 2013, and distributed invitations to surrounding landowners, state and federal agencies, and tribes for the public and agency scoping meeting.

In addition to the scoping meeting, additional meetings were scheduled to solicit community input. A large community meeting was held May 6, 2014, from 6:00 p.m. to 8:00 p.m. at the Military Magnet Academy. Eight additional small group community and stakeholder meetings were also held throughout the development of the Draft EIS.

A Project newsletter, *Navy Base ICTF EIS News*, was developed to assist in the dissemination of information and provide updates on the EIS process. The newsletter was distributed as hard copy mail-outs and electronically to the Project email distribution list. The first issue, published in October 2014, provided an update on the Project and presented alternatives that would be evaluated in the Draft EIS.

On September 8, 2015, Palmetto Railways submitted a revised proposal that included the construction of two new connections to the local rail network. A Public Notice announcing the changes to the Project and a second public scoping meeting was issued on September 25, 2015. A second issue of

the Project newsletter, *Navy Base ICTF EIS News*, was distributed in September 2015 as hard copy mail-outs and electronically to the Project email distribution list to provide an update on the Project changes per Palmetto Railways' revised proposal and announced the second scoping meeting (i.e., rescoping). The second public scoping meeting was held at the Military Magnet Academy Cafeteria on October 27, 2015 to provide the public with additional information about the proposed Project and to obtain feedback about the revised proposal. The 30-day rescoping comment period was open from October 27, 2015, to November 27, 2015.

The Corps and the cooperating agencies developed a Draft EIS that was released in April 2016, in accordance with NEPA. The Notice of Availability of the Draft EIS (SAC 2012-0960) was published in Vol. 81, No. 83 Federal Register (81 FR 83, PP. 2566) on April 29, 2016. The Draft EIS was also published on the EIS website. A public hearing was held on May 24, 2016, at the Military Magnet Academy in North Charleston, SC. After a 72-day comment period that concluded on July 9, 2016, 190 comment submittals (e.g., emails, letters) including 684 individual comments on the Draft EIS were received from the public (citizens and businesses), local government, state and federal agencies, and organizations.

On October 11, 2016, the Corps received an application for a Department of the Army (DA) permit from the Applicant, requesting authorization for placement of fill material into waters of the United States, including wetlands (waters of the U.S.) in connection with construction of the Project at the former CNC.

The Corps and South Carolina Department of Health and Environmental Control (SCDHEC) published a Joint Public Notice (JPN; SAC 2012-00960) on October 19, 2016, to inform the public about the application for a DA permit from Palmetto Railways and to request comments. The JPN comment period extended from October 20 to November 18, 2016.

A third issue of the Project newsletter, *Navy Base ICTF EIS News*, was distributed in January 2018 as hard copy mail-outs and electronically to the Project email distribution list to inform the public of project developments and refinements since publication of the Draft EIS, and to provide information on the development of the Final EIS.

The Draft EIS was revised based on comments received and recent Project developments since its publication to create the Final EIS, which was published in Vol. 83, No. 126 Federal Register (83 FR 126, PP. 30730) on June 29, 2018, as well as on the EIS website. This Record of Decision (ROD) incorporates by reference the Final EIS for the ICTF published in June 2018.

1. Application

1.1. Applicant: South Carolina Department of Commerce Division of Public Railways d/b/a Palmetto Railways

1.2. Waterway & Location:

The proposed Project is located between Buist Avenue and Milford Street, East of Spruill Avenue, in North Charleston, Charleston County, South Carolina including wetlands associated with Noisette Creek and Shipyard Creek.

Application #SAC 2012-00960

Latitude North¹: 32.8566 Longitude West: -79.9574

1.3. Existing Conditions:

The 231.28-acre Project site is located within the Lower Atlantic Coastal Plain physiographic province with relatively flat topography and predominantly overland flow into the Cooper River. Land cover is predominantly high intensity urban development, with low intensity urban development, marsh and marine water. As of September 2015, the site contained both open land and developed areas interspersed within a network of private roads. Palmetto Railways has conducted voluntary cleanup and site preparation of the Project site that was undertaken regardless of whether the DA permit is issued or not. Voluntary cleanup and site preparation activities have included tasks such as the closing and demolition of Sterett Hall (spring 2016), demolition of a tank farm and the Viaduct Road overpass, and long-term monitoring and removal of hazardous wastes.

Additional details regarding the surrounding environment are provided in Chapter 3, "Affected Environment" and Chapter 4, "Environmental Consequences" of the Final EIS.

1.4. Proposed Work as Described in the Public Notice:

The Corps' public notice dated October 19, 2016 for Palmetto Railways' DA permit application states as follows:

"The proposed work is to construct an intermodal container transfer facility, known as the Navy Base Intermodal Facility (NBIF), and its associated infrastructure improvements at the site of the former Charleston Naval Complex. (Intermodal container transfer describes the act of transferring containerized freight between truck and railcar.) The project encompasses approximately 231.28 acres which includes the construction of approximately 174,410 feet of new track, railroad bridges, a container stacking area, vehicle travel lanes, electric wide-span gantry cranes, automated gate systems, administrative and maintenance buildings, multiple roadway bridges, and intersection and roadway upgrades...

In detail, the proposed project would permanently impact approximately 13.878 acres of waters of the United States, including 5.389 acres of Critical Area and 8.489 acres of freshwater wetlands. These permanent impacts include fill, shading and excavation. An additional 1.775 acres of temporary impacts are also proposed to account for construction and temporary clearing areas based on proposed construction methods."

Additional refinement of design by the Applicant was received on drawings dated February 9, 2017 that proposed approximately 1.966 additional acres (i.e., approximately 15.844 acres) of impacts to waters of the U.S. As a result, the total impacts due to fill, shading, clearing, and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts (Table 1.). In January 2018, the Corps coordinated these proposed changes with resource agencies and the public through the Project newsletter, *Navy Base ICTF EIS News*. The newsletter was distributed electronically to the Navy Base ICTF mailing list and mailed as hard copies to other interested parties.

¹ This location is the approximate center of the Project area.

Table 1. Summary of Impacts by Type

Impact Type	Acres
Critical Area Permanent Fill	4.175
Critical Area Temporary Clearing	0.050
Critical Area Permanent Clearing	0.062
Critical area Excavation	0.360
Critical Area Permanent Shading	1.476
Critical Area Temporary Construction	1.672
Freshwater Wetlands Permanent Fill	6.194
Freshwater Wetlands Temporary Clearing	0.057
Freshwater Wetlands Permanent Clearing	0.368
Freshwater Wetland Excavation	1.430
Total	15.844

1.4.1. Avoidance & Minimization Statement:

The Applicant provided avoidance and minimization measures in the permit application dated October 11, 2016 (and updated by email on January 16, 2018), which is summarized below:

- Site the ICTF on previously disturbed land (with industrial uses) that is mostly comprised of uplands, thereby minimizing impacts to waters of the U.S. in the Cooper River watershed.
- Design the ICTF and roadway and rail improvements to minimize impacts to waters of the U.S., such as the drayage road placement that reduces impacts to waters of the U.S. associated with Shipyard Creek.
- Where possible, limit the placement of pilings for bridges within waterways.
- Use 2:1 side slopes in areas that are not bridged to minimize the amount of fill material.
- Rehabilitate existing bridge over Noisette Creek to reduce impacts.
- Design culverts and bridges to maintain existing flow/exchange and hydrology for wetland areas and marshes.
- Replacement of earthen berm with a sound attenuation and security wall, where appropriate, in areas adjacent to waters of the U.S. to avoid filling of wetlands.
- Removal of dredge/fill and restoration natural grades to minimize temporary impacts during construction.
- Develop and execute wetland mitigation plan to ensure any wetland impacts have been minimized and that compensation (restoration and purchase of mitigation credits) will be provided for all remaining unavoidable impacts.

As a result of these measures, the Project would result in approximately 15.84 acres of impacts to waters of the U.S. These impacts due to fill, shading and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts.

1.4.2. Compensatory Mitigation Plan:

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et seq.), a joint permit application was submitted to the DA and the SCDHEC in October 2016. The Applicant's permit application included the Navy Base Intermodal Facility Community Mitigation Plan (dated October 2016) (Community Mitigation Plan). The Community Mitigation Plan included avoidance and minimization measures for impacts to waters of the U.S., as well as proposed mitigation for community programs and activities, community and social infrastructure mitigation, natural environment mitigation, historic properties/cultural resources mitigation, and community involvement. The Community Mitigation Plan was updated in May 2017 with minor revisions, and again in December 2017 to remove content which described compensatory mitigation for impacts to waters of the U.S.

A revised compensatory mitigation plan for impacts to waters of the U.S. was submitted on December 1, 2017 and entitled, *Kings Grant Mitigation Site*, *North Charleston*, *SC*. This document was ultimately updated with an addendum, dated September 5, 2018 and is hereafter collectively referred to as the Mitigation Plan which is summarized as follows:

The Applicant proposes to offset losses to waters of the U.S., including wetlands, with a combination of off-site measures to replace losses of aquatic resources, consistent with 33 C.F.R. Part 332, Compensatory Mitigation for Losses of Aquatic Resources. The Applicant's Mitigation Plan proposes to purchase 86.3 wetland mitigation credits from either the Pigeon Pond Mitigation Bank or the Congaree Carton Mitigation Bank to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permittee-responsible mitigation plan. Temporary impacts would be minimized with the removal of dredge/fill material deposited during construction and the restoration of natural grades.

1.4.3. Project Purpose and Need:

Palmetto Railways' stated view of the basic project purpose and overall project purpose from their DA permit application is: "To locate, build, and operate a state-of-the-art intermodal container transfer facility serving the Port of Charleston with near-dock, equal access for the two Class I rail carriers serving the area (e.g., CSX Transportation [CSX] and Norfolk Southern Railway [NS]) to meet future demand in the Charleston region to facilitate the movement of goods and commerce over rail, thus stimulating and supporting economic development in the region and providing and maintaining connections to key regional and national transportation corridors."

1.4.3.1. Basic Project Purpose

The Corps has determined that the "basic purpose" is: to create the elevations necessary to facilitate the construction of an ICTF that would handle the transfer of intermodal containers.

1.4.3.2. Water Dependency (preliminary determination based on the information in the application):

The Project \square is/ \boxtimes is not water dependent.

The Corps has determined that the basic purpose of Palmetto Railways' discharge of fill material is to create the elevations necessary to facilitate the construction of an ICTF that would handle the transfer of intermodal containers. This action does not require access or proximity to, or siting within, a special aquatic site to fulfill its basic purpose. Therefore, the Corps has determined that the basic purpose of this project is not water dependent.

1.4.3.3. Overall Project Purpose:

The Corps has determined that the overall project purpose is:

to provide a state-owned, near-dock ICTF that provides equal access to both Class I rail carriers and accommodates existing and projected future increases in intermodal container cargo transport through the Port of Charleston to enhance transportation efficiency in the state of South Carolina.

1.5. Revisions to the Original Proposed Project:

Following the Draft EIS, the Applicant continued to meet with the community, organizations, local government, and state and federal agencies to further refine the project design and develop a compensatory mitigation plan.

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et seq.), a joint permit application was submitted to the Corps and SCDHEC in October 2016. A joint Public Notice (PN) was issued on October 19, 2016, with a 30-day comment period. The DA permit application included a compensatory mitigation plan, as well as design refinements to the Project since the Draft EIS such as:

- Restriction of left turns at the truck gate exit on North Hobson Avenue to reduce truck traffic on local roadways and funnel truck traffic to the Port Access Road and I-26.
- Rehabilitation and reuse of an existing bridge over Noisette Creek instead of constructing a new bridge to reduce natural resource (wetland) impacts.
- Extension of the multi-use path on Cosgrove Avenue from Noisette Boulevard to Turnbull Avenue and North Hobson.
- Design of a cut section (trench) on the northern rail connection through the Hospital District.
- Design of two sound walls along St. Johns Avenue on the northern rail connection and a sound wall at the northern end of the earthen berm for noise mitigation.
- Redesign of the Drayage Road including single ingress/egress at the Drayage Road Bridge, elimination of a flyover at the Port Access Road, and change from a two-way roadway to a one-lane divided roadway, which will reduce impacts at Shipyard Creek.

• Signalization of the intersection at Bainbridge Avenue and the Bainbridge Avenue Connector, instead of stop signs to allow for future increase in traffic demand.

The public notice in October of 2016 estimated approximately 13.878 acres of impacts to waters of the U.S. Additional refinement of design by the Applicant was received on drawings dated February 9, 2017 that proposed approximately 1.966 additional acres (i.e., approximately 15.844 acres) of impacts to waters of the U.S. As a result, the total impacts due to fill, shading, clearing, and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts (Table 1.). In January 2018, the Corps coordinated these proposed changes with resource agencies and the public through the Project newsletter, *Navy Base ICTF EIS News*. The newsletter was distributed electronically to the Navy Base ICTF mailing list and mailed as hard copies as well as posted on the project web site at navybaseictf.com.

Initially, the Applicant's compensatory mitigation plan proposed buying credits for freshwater (Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank) and saltwater impacts (Clydesdale Mitigation Bank). The Applicant proposed to mitigate for the permanent loss of 5.389 acres of Critical Area at a 1:1 ratio with 5.389 acres of Critical Area restoration through mitigation credit purchase from an approved bank. SCDNR and USFWS objected to use of the Clydesdale Mitigation Bank and the critical area impact compensation in letters commenting on the DA permit application.

The Mitigation Plan proposes for the Applicant to purchase 86.3 wetland mitigation credits from either the Pigeon Pond Mitigation Bank or the Congaree Carton Mitigation Bank to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permittee-responsible mitigation plan. The planned restoration of the Kings Grant mitigation site involves a former wetland site, which was converted to an upland site used as a golf course. This area would be restored to a tidal marsh ecosystem adjacent to the Ashley River. The acreage impacted is 6.65 acres, while the restored acreage will be 40.61 resulting in a 6:1 ratio. Once restored, the physical, chemical and biological functions created at the restoration site will result in a net improvement and serve the aquatic resource needs of the watershed.

1.6. Proposed Work That is the Subject of this Record of Decision:

The proposed work consists of land clearing, paving, fencing, general site improvements, and extension of utilities to construct an intermodal container transfer facility, known as the Navy Base Intermodal Facility (NBIF), and its associated infrastructure improvements at the site. The proposed project would impact approximately 15.84 acres of impacts to waters of the U.S. These impacts due to fill, shading and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts. Construction is anticipated to be phased over 20 years with full buildout by 2038. Operations would take place 24 hours a day, 7 days a week.

In detail, the Project, as submitted by Palmetto Railways, consists of constructing and operating an ICTF on approximately 135 acres for the facility site and undertaking off-site roadway and rail improvements for a total of 231.28 acres. The intermodal facility would include, but is not limited to, processing and classification railroad tracks, wide-span gantry cranes, container stacking areas, administrative buildings, and vehicle driving lanes. The off-site infrastructure improvements would include building: (1) a private drayage road and associated bridges approximately 1-mile long connecting the ICTF to the HLT, (2) rail improvements to the north and south of the ICTF resulting

Application #SAC 2012-00960

in 174,410 feet of new track, and (3) several roadway improvements and modifications, including the construction of a new overpass.

2. Authorities

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403).	
Section 404 of the Clean Water Act (33 U.S.C. §1344).	
Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413	3).

3. Scope of Analysis and Public Involvement

3.1. NEPA Scope:

Factors:

Whether or not the regulated activity comprises "merely a link" in a corridor type project: This Project is not a corridor-type project.

Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity which affect the location and configuration of the regulated activity:

Construction and operation of an economically viable ICTF is dependent on the facility being located near (within 4 miles) a container terminal that currently handles or is planning to handle intermodal containers. Also, a contiguous 65-acre minimum footprint is necessary to handle up to 800,000 TEUs/year. Certain infrastructure is required for an ICTF such as proximity to existing rail lines for both Class I carriers, proximity to a highway network, and availability of major infrastructure needed to access existing rail and/or highway networks. Further, availability of a private drayage road and configuration of available acreage (extended rectangular-shaped parcel) are also requirements. The aforementioned constraints affect the location and configuration of the regulated activity.

The extent to which the entire project will be within Corps jurisdiction:

The entire Project site is not within Corps jurisdiction. As such, Corps jurisdiction is limited to waters of the U.S. where shading, excavation and placement of fill material will occur.

The extent of cumulative Federal control and responsibility:

The Corps' primary jurisdiction over this Project is limited to regulated discharges and/or work subject to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. However, the FRA, a federal agency, is a cooperating agency for purposes of NEPA because the Applicant submitted a Railroad Rehabilitation and Improvement Financing (RRIF) loan application to FRA. Therefore, in accordance with 33 C.F.R. Part 325, Appendix B, Par. 7.b., sufficient cumulative Federal involvement exists to expand the scope of Federal action beyond the limits of Corps jurisdiction because the regulated activities, in concert with those activities involving funding by the FRA, comprise a substantial portion of the overall Project.

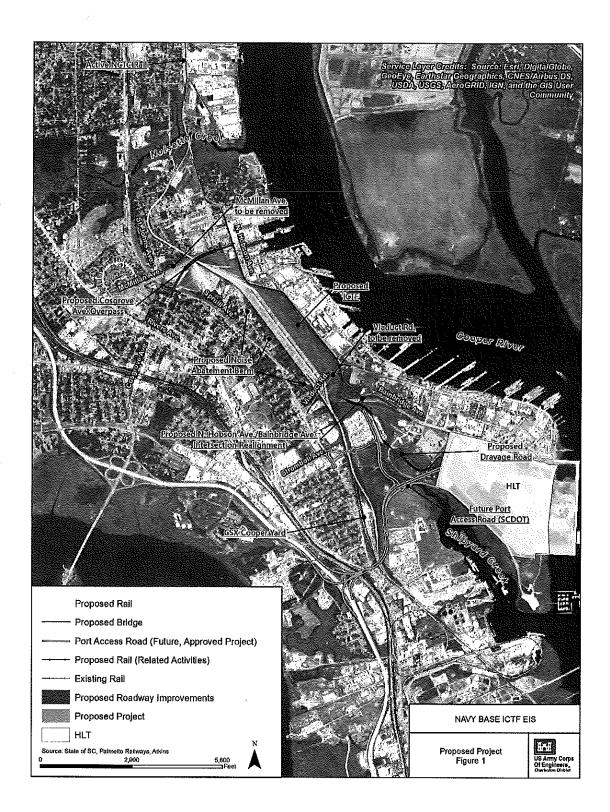
Determined Scope:

	Only	within the	he footprint	of the	regulated	activity	within	the	delineated	water.
\boxtimes	Over	entire pr	roperty.							

Explanation: Sufficient Federal control and responsibility exists to expand the scope of analysis for this Project to cover the entire geographic area within the Project boundary, an area of approximately

231.28 acres depicted on Figure 1, which includes the ICTF and proposed rail and roadway improvements, as well as the surrounding area (e.g., analysis of socioeconomic impacts). Although not all facilities to be constructed will be located within waters of the U.S., the location of all Project facilities in the 2016 DA permit application has been determined in consideration of the various engineering, logistical, financial, safety, and other considerations (i.e., FRA funding); and the Project represents the Applicant's optimized design. In addition, the analysis of impacts on environmental resources for the Final EIS included the National Historic Preservation Act (NHPA) Permit Area / Area of Potential Effects and the Endangered Species Act (ESA) Action Area, as described below.

² The socioeconomic study area, as shown on Final EIS Figure 3-16.1, is generally bounded by Greenleaf Road to the south (south of the Union Heights neighborhood), Rivers Avenue to the west (south of McMillan Avenue), Spruill Avenue to the west (north of McMillan Avenue), Buist Avenue to the north, and Hobson Avenue to the east.



3.2. NHPA Permit Area:

Activities outside waters of the U.S. are included in the NHPA Permit Area since ALL of the following tests are satisfied: "Activity would not occur but for the authorization of the work or structures within the Waters of the United States." ✓ Yes □ No The ICTF site, northern rail connection, southern rail connection, Cosgrove McMillan overpass, Hobson/Bainbridge realignment, and drayage road are integrally related to the work to be authorized in waters of the U.S. "Activity must be directly associated (first order impact) with the work or structures to be authorized." ⊠ Yes □ No Portions of the ICTF and associated road and rail improvements will be constructed in upland areas, outside of waters of the U.S. These facilities would not occur if the Project activities of shading, excavation and placement of fill material in waters of the U.S. did not occur. "Activity is integrally related to the work or structures to be authorized within the Waters of the United States. Or, conversely, the work or structures to be authorized must be essential to the completeness of the overall project or program." Yes □ No Portions of the ICTF and associated road and rail improvements in upland areas are directly associated with the Project. Permit Area: For purposes of the NHPA Section 106 process, the Corps has defined the undertaking's Area of

Potential Effects (APE) as all of the land (approximately 118 acres) between Hobson Avenue and the western edge of the CNC, and between Reynolds Avenue and the southern ramp connecting Viaduct Road and Bainbridge Avenue, as well as the land between Reynolds and McMillan Avenues and Hobson Avenue and Avenue E South (see Appendix A of the NHPA MOA).

3.3. **ESA Action Area:**

The ESA Action Area includes all areas to be affected directly or indirectly by the federal action, not merely the immediate area involved in the action.

Action Area:

The Action Area encompasses the Project area and habitat within the Protected Species Study Area (Final EIS Figure 3.6-1).

Explanation: Although the Action Area focused on the geographic area within the Project boundary, available information and surveys were evaluated within the Protected Species Study Area. No federally listed species or critical habitats were identified; however, suitable habitat is present for some species.

3.4. Public Involvement:

3.4.1. Public Notice:

Application received: October 11, 2016 Application complete: October 11, 2016 Public Notice dates: October 19, 2016

Public Notice periods: October 20 to November 18, 2016

3.4.2. Other Public Involvement:

The Corps provided several opportunities and mechanisms to share and receive information with the public, stakeholders, governmental agencies, tribes, and non-governmental organizations (NGOs) throughout the development of the EIS. Opportunities and mechanisms for information sharing included:

- 1. Project website (www.NavyBaseICTF.com);
- 2. Project newsletters (Navy Base ICTF EIS News);
- 3. Public scoping meetings and community and stakeholder meetings;
- 4. Agency coordination; and
- 5. Public notice, public hearing, and comment period for the Draft EIS.
- 6. Public Involvement, public notice, public comment for Final EIS.

Project Website

A publicly accessible website is available at www.NavyBaseICTF.com and was maintained throughout the EIS process. The Navy Base ICTF EIS website contains updated information about the project and allowed the public opportunities to participate in preparation of the EIS.

Project newsletter

A project newsletter, *Navy Base ICTF EIS News* was developed to assist in the dissemination of information and provide updates on the EIS. The newsletter was distributed as hard copy mail-outs and electronically to the project email distribution list. Three issues of the newsletter were distributed throughout the EIS process in October 2014, September 2015, and January 2018, respectively. Copies of the newsletters are available on the project website (www.NavyBaseICTF.com).

Public Scoping and Community/Stakeholder Meetings

Public scoping meetings were held in 2013 and 2015 with 30-day comment periods following each meeting. All comments received during the scoping process can be found in Final EIS Appendix C (Scoping Report). Additional community and stakeholder meetings were held between 2013 and 2016. The Corps developed and maintained a mailing list throughout the public involvement process and used the list to keep interested parties informed throughout the development of the EIS. Section 9 of the Final EIS provides additional details regarding these meetings.

The Applicant also worked with several neighborhood organizations including the Chicora-Cherokee Neighborhood Association, the Union Heights Community Council, the Lowcountry Alliance for Model Communities (LAMC), and the Metanoia Community Development Corporation. LAMC represents seven neighborhoods (Accabee, Chicora/Cherokee, Union Heights, Howard Heights, Windsor Place, Five Mile, and Liberty Hill). These groups worked to develop the Community Memorandum of Agreement (MOA) to mitigate for impacts to socioeconomic and Environmental Justice resources discussed in this document. A copy of the Community MOA is included in Final EIS Appendix N.

Agency Coordination

The Corps was the lead agency and the EPA and the FRA were cooperating agencies on the EIS. Section 9.2.1 of the Final EIS provides details on agency coordination and consultation. Additional federal and state agencies and well as Tribal Nations and local governments were provided the opportunity to provide input on the EIS as part of the scoping and public involvement process and offered the opportunity to be cooperating parties. Multiple agencies and local jurisdictions provided input on the EIS. Copies of agency comments can be found in Final EIS Appendix C (Scoping Report) and Final EIS Appendix O (Comments and Responses on the Draft EIS).

Due to the impacts on historic resources, the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP) were also involved in the review of the Project as part of the NHPA Section 106 Process. The Muscogee (Creek) Nation requested to be a consulting party on the Section 106 process as the project is located in a historic area of interest that is important to the tribe. However, a letter from the Muscogee (Creek) Nation Tribal Historic Preservation Office (THPO) on January 20, 2017 stated that the "agree that there is very little potential for intact archaeological deposits, and if there are any, they are likely beneath the (existing) fill" (see letter in Final EIS Appendix G). Concurring parties that have also been involved in the Section 106 process include the Historic Charleston Foundation, the Preservation Society of Charleston and the Naval Order of the United States, Charleston Commandery.

The SCDHEC has also been involved in air and water quality issues for the project. The Applicant entered into an Air Quality MOA with SCDHEC on October 26, 2016, to voluntarily undertake certain mitigation measures to reduce air emissions at the ICTF facility. See the Community Mitigation Plan in Final EIS Appendix N for additional details and a copy of the Air Quality MOA.

Draft EIS

The Notice of Availability of the Draft EIS (SAC 2012-0960) was published in Vol. 81, No. 83 Federal Register (81 FR 83, PP. 2566) on April 29, 2016. Agencies and local governments were provided both hard copies and CD copies of the Draft EIS for review. The public was able to access and review the Draft EIS via the Document Library on the project website. In addition, several printed copies of the Draft EIS were placed in the following locations:

- Cooper River Memorial Library (3503 Rivers Avenue, Charleston, SC 29405)
- Charleston Public (Main) Library (68 Calhoun Street, Charleston, SC 29401)
- North Charleston City Hall (2500 City Hall Lane, North Charleston, SC 29406)

The public was invited to submit comments on the Draft EIS via email, online at the project website, and through the mail.

A public hearing was held on May 24, 2016, at the Military Magnet Academy located at 2950 Carner Avenue in North Charleston, South Carolina. The purpose of the hearing was to provide an overview and history of the project, discuss the EIS process, and provide an opportunity for public input on the Draft EIS. Public officials, state representatives, and members of the public were offered an opportunity to speak. The comment period on the Draft EIS was 72 days through July 9, 2016. Approximately 200 people attended the public hearing. A total of 190 comments on the Draft EIS were received from individuals, representatives (including elected officials), municipalities, agencies, and NGOs.

Final EIS

The Notice of Availability of the Final EIS (SAC 2012-0960) was published in Vol. 83, No. 126 Federal Register (83 FR 126, PP. 30730) on June 29, 2018. Agencies and local governments were provided either hard copies, CD copies, or both of the Final EIS for review. The public was also able to access and review the Final EIS via the Document Library on the project website. In addition, several printed copies of the Final EIS were placed in the following locations:

- Cooper River Memorial Library (3503 Rivers Avenue, Charleston, SC 29405)
- Charleston Public (Main) Library (68 Calhoun Street, Charleston, SC 29401)
- North Charleston City Hall (2500 City Hall Lane, North Charleston, SC 29406)

The public was invited to submit comments on the Final EIS via email, online at the project website, and through the mail. Comments on the Final EIS were accepted for 30 days through July 31, 2018. The Corps held a number of public and agency meetings for the Project, as shown in Table 2.

3.4.3. Comments Received:

In response to public notices published by the Corps for this Project, and in response to the Draft EIS, numerous comments were received from local, state, and federal agencies, tribes, and the public. All comments received on the Project through the end of the comment period on the Draft EIS were fully considered and addressed in the Final EIS. This section addresses comment letters received during the DA permit application comment period and following publication of the Final EIS.

Table 2. Navy Base ICTF Public and Agency Meetings

Activity	Date(s)
The Corps held a public scoping meeting.	November 14, 2013
The Corps held a meeting with the Berkeley Charleston Dorchester Council of Governments (BCDCOG), South Carolina Department of Transportation (SCDOT), and Palmetto Railways to discuss the scope of the Transportation Study for the EIS.	November 22, 2013
The Corps held a community meeting to discuss the studies and alternatives that will be included in the EIS.	May 6, 2014

The Corps held separate local interviews with BCDCOG, Low Country Alliance for Model Communities (LAMC), Metanoia, and the City of North Charleston.	May 7, 2014
The Corps attended the Chicora-Cherokee Neighborhood Council meeting, provided a brief background on the Project, and listened to comments from the neighborhood residents.	July 28, 2014
The Corps attended the Union Heights monthly neighborhood meeting, provided a brief background on the Project, and listened to comments from the neighborhood residents.	August 12, 2014
The Corps attended the monthly neighborhood meeting for Olde North Charleston, Palmetto Gardens, Cameron Terrace, and North East Park Circle (combined meeting to discuss this Project), provided a brief background on the Project, and listened to comments from the neighborhood residents.	August 13, 2014
The Corps held a meeting with the BCDCOG, SCDOT, South Carolina Ports Authority (SCPA), City of North Charleston and Palmetto Railways to provide a status update on the Transportation Study for the EIS.	October 23, 2014
The Corps held a meeting with the BCDCOG to provide an update on Palmetto Railways' revised proposal.	October 6, 2015
The Corps held a second public scoping meeting on the revised Proposed Project.	October 27, 2015
The Corps met with the owners of Salmons Dredging Company and Marinex Construction.	December 10, 2015
The Corps met with several tenants of the 1799 Meeting St Road professional complex (eLifespaces and Tecklenburg and Jenkins LLC).	January 27, 2016
The Corps attended a Hunley Waters Neighborhood Association meeting.	February 1, 2016
The Corps attended the annual Metanoia Town Hall meeting.	February 8, 2016
A public hearing was held to receive comments on the Draft EIS. An informal open house was held prior to the hearing so that the public could review project information and discuss the Project with staff.	May 24, 2016
A Section 106 consultation meeting was held. Attendees included the Applicant, the Corps, project consultants, and representatives from SHPO, Historic Charleston Foundation, the Preservation Society of Charleston, and the Naval Order of the United States. Representatives from ACHP, the Muscogee (Creek) Nation, and the FRA called in to the meeting and participated via phone.	April 7, 2017

3.4.3.1. Comments on the DA Permit Application

The Applicant submitted a joint permit application to the Corps and the SCDHEC in October 2016. A joint Public Notice (PN) was issued on October 19, 2016, with a 30-day comment period. A total of 14 comment letters were received on the DA permit application, including five from local, state, and

federal agencies. Specifically, agency comments were received from the Charleston County Council, the U.S. Fish and Wildlife Service (USFWS), the South Carolina Department of Natural Resources (SCDNR), the City of Charleston, and the Charleston Area Regional Transportation Authority (CARTA). The remaining public comments were received from citizens, businesses, and organizations. The contents of these letters are described below, followed by a response to the comments.

Agency Comments

Charleston County Council: The Chairman of Charleston County, J. Elliott Summey, submitted a letter dated October 31, 2016 expressing concerns over impacts from the Project and recommend denial of the permit as it "fails to adequately protect and preserve the waters of the United States and the water quality/quality of life of the adjacent community." Specific concerns expressed are listed below:

- The SCDHEC has not yet reviewed the Proposed Project and has not concluded that the Proposed Project will comply with applicable effluent limitations and water quality standards.
- The proposed Permit fails to demonstrate how alternatives to the Proposed Project would have lesser impacts to the waters of the United States than the preferred Proposed Project plan.
- Proposed compensatory mitigation should not be an inducement of the approval of a permit.
- The National Marine and Fisheries Service ("NMFS") has not affirmed the determination of the District Engineer that the Proposed Project would not have substantial individual or cumulative adverse impact on fisheries, therefore, the Permit application is incomplete.
- The Proposed Project will impact the historic properties in its immediate vicinity.
- The Proposed Project will create traffic problems at more major intersections than it will reduce those problems, thus increasing the overall risk of safety concerns. In addition, the proposed Permit fails to demonstrate how alternatives to the Proposed Project would have lesser impacts on overall noise pollution from general operation, especially at night, while adjacent to a residential community.

Chairman Summey also suggested that the Corps conduct public hearings in the community for the following reasons:

- To present the findings, conclusions and recommendations of SCDHEC associated with the discharges of the Proposed Project to determine if the Proposed Project will comply with applicable effluent limitations and water quality standards;
- To present and provide information demonstrating how the Proposed Project would have lesser impacts to the area than alternative proposals for the Project;
- To determine if the applicant's proposed compensatory mitigation to the Corps in exchange for the permit is appropriate;
- To present the findings, conclusions and recommendations of the District Engineer's initial determination that the Proposed Project will not have a substantial individual or cumulative

adverse impact on the fisheries managed by NMFS and for NMFS to publicly address those findings

- To assess the needs and general welfare of the public in relation to the Proposed Project regarding the historical significance of the community and the overall degradation of the existing aesthetics in regard to the Proposed Project, as well as a balance of benefits versus detriments to the Proposed Project as they may be contrary to the public interest.
- To present and provide information demonstrating how the Proposed Project would have lesser impacts regarding safety, vehicular traffic, and noise from the projected operation than alternatives, to include showing plans for traffic flow, to include both vehicular traffic and rail traffic, in and around the Proposed Project.

Response

A Water Quality Certification (WQC) was issued on July 2, 2018 by the SCDHEC pursuant to Section 401 of the Clean Water Act, and by Special Condition of the DA permit, the Permittee will be required to comply with all of its requirements and conditions. This Section 401 Water Quality Certification verifies that state water quality standards will be met. This certification is required as part of a DA permit that authorizes discharges into waters of the U.S. An individual CZMA consistency concurrence is required and has been issued by the appropriate agency (Table 4).

As stated in the Final EIS, the Corps believes that the Mitigation Plan proposed by the Applicant adequately compensates for the aquatic resource functions that will be lost as a result of the Project. Section 8 of this ROD discusses details on compensation and other mitigative actions in greater detail.

The National Marine Fisheries Service (NMFS) participated in scoping process, reviewed the Draft and Final EIS, and provided comments on the Project. Section 7.3 of this ROD provides additional details on the Corps' coordination with NMFS.

Sections 6.6 and 7.4 of this ROD provides a full description of the impacts to the historic properties in the immediate vicinity of the Project, a discussion of Section 106 coordination, and the Applicant's mitigative measures (to be implemented through a NHPA MOA).

The Final EIS details the potential impacts from noise and traffic generated by the Project and proposed mitigation for those impacts. Section 4.12 of the Final EIS provides additional information on noise, while Section 4.8 of the Final EIS provides additional information on traffic and transportation. Section 6.4 of this ROD includes a summary of the public interest review for noise and traffic impacts.

The Corps has determined that an additional public meeting on the project is not warranted. Various meetings have been held throughout the project planning and review process. Section 9.1 of the Final EIS provides details on public and stakeholder coordination. The public was also given the opportunity to review and comment on the Project as part of the DA permit process in October of 2016 and the Final EIS in June of 2018. The Final EIS presents the findings on the anticipated project impacts.

US Fish and Wildlife Service: Thomas McCoy, a Field Supervisor for the U.S. Fish and Wildlife Service (USFWS), submitted a letter dated November 10, 2016. In this letter, the USFWS concurred

with the Corps' finding that the project may affect but is not likely to adversely affect the West Indian Manatee, a federally protected species. The USFWS also stated that the proposed salt water resource impact compensation was not appropriate and objected to the use of credits from the Clydesdale Mitigation Bank and the Daniel Island Salt Water Mitigation Bank. The USFWS recommended that the Applicant seek an alternate location or plan to satisfy mitigation needs, specifically stating as follows:

"We believe that the creation of a permittee responsible mitigation plan (PRM) is appropriate, and the applicant should seek an area within the watershed suitable for direct salt marsh restoration. Another possible mitigation strategy would be to acquire suitable lands that are in need of restoration adjacent to an existing State or federally protected area. In partnership with an appropriate agency or third-party organization, the applicant could develop a restoration and enhancement plan for the acquired land then transfer control for long-term stewardship and protection."

The USFWS also included previous letters from 2011 and 2012 that detailed their issues with the Clydesdale Mitigation Bank and the Daniel Island Salt Water Mitigation Bank.

Response

The Applicant revised their compensatory mitigation plan in December 2017 and no longer proposed the use of credits from the Clydesdale Mitigation Bank or the Daniel Island Salt Water Mitigation Bank. The Applicant's Mitigation Plan proposes to purchase 86.3 wetland mitigation credits from Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permitteeresponsible mitigation plan. As stated in the Final EIS, the Corps believes that the Mitigation Plan proposed by the Applicant adequately compensates for the aquatic resource functions that will be lost as a result of the Project.

South Carolina Department of Natural Resources: Susan Davis, a Coastal Environmental Coordinator with the SCDNR, submitted a letter dated November 14, 2016. They stated that "the project as currently proposed involves less impacts to tidal resources than described in the DEIS and in the opinion of the DNR represents the least damaging, practicable alternative." SCDNR did express concerns with the proposed compensatory mitigation. They oppose the use of the Clydesdale Mitigation Bank but support the use of the Daniel Island Salt Water Mitigation Bank. They also stated as follows:

"The applicant proposes to mitigate for the permanent loss of 5.389 acres of Critical Area at a 1:1 ratio with 5.389 acres of Critical Area restoration through mitigation credit purchase from an approved bank. We recommend mitigation requirements for tidal impacts be consistent with those for freshwater wetland impacts and in accordance with the Corps' Charleston District Guidelines for Preparing a Compensatory Mitigation Plan dated October 7, 2010. The calculation of total required mitigation credits should include compensation for the temporary loss of wetland functions associated with proposed temporary impacts to 1.775 acres of waters of the U.S."

Response

The Applicant revised their compensatory mitigation plan in December 2017 and no longer proposed the use of credits from the Clydesdale Mitigation Bank or the Daniel Island Salt Water Mitigation Bank. The Applicant's Mitigation Plan proposes to purchase 86.3 wetland mitigation credits from Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permittee-responsible mitigation plan. As stated in the Final EIS, the Corps believes that the Mitigation Plan proposed by the Applicant adequately compensates for the aquatic resource functions that will be lost as a result of the Project.

City of Charleston: Mayor John Tecklenburg submitted a letter dated November 16, 2016 expressing continued concerns over the anticipated, negative impacts to the City of Charleston that would result from the proposed project. The Mayor noted that the proposed project in the Draft EIS did not include the "southern loop" and the redesign of Project and additional track/crossing in their jurisdiction would result in a "substantial impact." The Mayor requested an additional public meeting and response extension for the following reasons:

- 1) To allow the public the opportunity to learn about the new changes to the project and determine how it may affect them.
- 2) To allow the public to weigh in on proposed alternatives that may be less impactful.
- 3) To allow for an updated analysis and corrections to the EIS based on the scope changes.
- 4) To allow SCDHEC the opportunity to review and comment on compliance with effluent limitations and water quality standards.
- 5) To allow the National Marine and Fisheries Services to comment on the adverse impact on fisheries.
- 6) To allow the City to perform due diligence regarding safety and navigation concerns of the newly updated proposal as we seek mitigation efforts.

The Mayor specifically listed four main topics of concern including:

- 1) Public Safety and Navigation The Mayor expressed concern that the new at-grade crossing at Meeting Street and Herbert Street will impair vehicle movement, resulting in daily delays and frequent unsafe blockages. The Mayor expressed further concern that this will inconvenience residents and business and is a matter of public safety as it could delay emergency response and evacuations. The Mayor also noted the location of a fire station at Heriot Street and King Street (first response station for areas of the City on the Upper Peninsula) and expressed concern with impacts at the Discher Street crossing as well. The Mayor indicated that extreme blockages were evident in the Draft EIS before the project scope change. The Mayor stated, "It is imperative that the long view be taken with respect to this project and appropriate planning and mitigation measures be incorporated to accommodate the safety and mobility needs of all users."
- 2) Land Use and Property Impacts The Mayor expressed concern that the Project will affect property values as the once industrial area is redeveloping with mixed-use, urban land uses and significant private sector development has been made near the southern end of the project. The Mayor stated, "The present design of the NBIF project will have significant adverse effects to the current

and future land use of the Upper Peninsula which is zoned to encourage a dense, urban mixed-use community and depends heavily on strong transportation connections." The Mayor also commented that the southern loop is not part of the Applicant's project, but it is a "related activity", and raises an issue as to whether the impact of the loop has been sufficiently studied.

- 3) Public Service and Safety Operations Center Relocation The Mayor expressed concern over the impact of the Project on the proposed public service and safety operations center that was planned on the 16-acre parcel located north of Milford Street. The Mayor commented that the land was purchased by the City for the new center and the Project would extend through a portion of the site, thus compromising the size of the site as well as its access and usefulness. The Mayor stated, "Due to the potential impact of the southern rail loop on the viability of the site as a public service and safety operations center, the City has currently suspended the design and construction of a planned police vehicle maintenance facility there. The disruption to this project's timetable has required leasing of an alternative facility until resolution of this impact is determined and resolved." In addition, the Mayor also stated that "the EIS identifies the new at-grade crossing at Herbert Street would have minor indirect adverse impact to community safety and may also have a minor adverse impact on emergency response times for certain locations because there is the potential for Meeting Street to be blocked for approximately 11 minutes, four times a day. Respectfully, 11 minutes to one in need of emergency services would feel more like a lifetime."
- 4) Consent The Mayor expressed that the City of Charleston does not recommend approval of the Project until its concerns are satisfactorily addressed and requested that if the southern loop is unavoidable, that its impacts be mitigated. The Mayor stated that "they have participated in many discussions with Palmetto Rail about mitigation and while no agreement has been reached yet, we remain hopeful Palmetto Rail will provide us with acceptable mitigation measures to ensure our citizens are protected from negative impacts of the NBIF project."

The Mayor provided a list of nine proposed mitigation measures designed to follow Complete Streets standards accommodating for all types of users.

Response

Coordination between the Applicant and the City of Charleston has been ongoing since spring 2015, when the Applicant changed the Proposed Project to include a southern rail connection within the northern limits of the City of Charleston. The City of Charleston has expressed concern with the potential negative impacts within its jurisdiction. The City of Charleston is specifically concerned with traffic impacts that would result from the Project's southern rail connection and the addition of the new at-grade crossing at Meeting Street. The City of Charleston indicated in their letter that extreme traffic blockages were evident in the Draft EIS before the project scope change (southern rail connection); however, the Draft EIS released in April 2016 included the southern rail connection and therefore all traffic impacts in the Draft and Final EIS include impacts due to the southern rail connection. The City of Charleston is also concerned with mobility, access restrictions, property impacts, and the relocation of its planned Public Service and Safety Operations Center and has requested mitigation to lessen these negative impacts.

Numerous coordination meetings and actions have transpired since spring 2015, and are detailed in an April 24, 2018, letter from the Applicant to the Corps (Appendix B of the Final EIS). The Applicant contracted with a third-party firm (HDR, Inc.) to evaluate the City of Charleston's requested mitigation, analyze the feasibility of the infrastructure improvements requested, and provide

supplementary recommendations for infrastructure or other improvements. The City of Charleston also contracted with a different third-party firm (Bihl Engineering) to analyze impacts from the Project and to study potential mitigation options. Mitigation proposed as part of this report estimated the costs for the improvements between \$40 and \$55 million. As a result, a meeting was held between Applicant, the South Carolina Department of Commerce, and the City of Charleston to discuss the information presented in the City of Charleston's engineering study. According to the Applicant, "at that meeting, PR [Palmetto Railways] agreed to increase the amount of mitigation funding to \$4.5 million for mitigation efforts and infrastructure the City could prioritize based on its assessment of immediate needs."

In an effort to reach an agreement concerning the impacts and potential mitigation options for the City of Charleston, the Applicant prepared a draft Transportation Memorandum of Agreement (draft Transportation MOA) between the Applicant, South Carolina Department of Transportation (SCDOT), the South Carolina Department of Commerce, and the City of Charleston. It is the Corps' understanding that this draft Transportation MOA was prepared to address transportation and safety impacts; specifically, with ICTF-related grade crossings within the City of Charleston. The draft Transportation MOA recognizes the importance of the ICTF to facilitate and enhance economic growth and development in the region, while ensuring an adequate and functioning transportation system in the surrounding jurisdictions. The draft Transportation MOA identifies the scope of evaluation activities, sources of funding, and roles and responsibilities of the parties. As part of the draft Transportation MOA, the parties will conduct a Crossing Analysis (funded by the Applicant) to examine conditions at the crossings and identify potential improvements, where warranted. The draft Transportation MOA does not specifically identify, or commit the Applicant to construct, any new grade separated crossings; however, it proposes to study the impacts and needs for these improvements. In addition to the Crossing Analysis, the Applicant also proposes in the draft Transportation MOA to provide funds up to \$4.5 million to the City of Charleston (or another government body) for its use on mitigation measures for transportation improvements. The draft Transportation MOA is included in Appendix N of the Final EIS. Although the Applicant and the City of Charleston have not reached a final agreement on the specific terms of mitigation for the City of Charleston, the Applicant has represented by letter dated December 6, 2017, that it is "committed to fulfilling the items in Section 2 of the MOA as mitigation for the [ICTF] impact on the City [of Charleston]" (also included in Appendix B of the Final EIS). It is the Corps' understanding that the Applicant continues to work with the City of Charleston regarding potential mitigation options for the City.

Charleston Area Regional Transit Authority: Michael Seekings, the Charleston Area Regional Transit Authority (CARTA) Chairman, submitted a letter dated February 22, 2017 expressing concern that the Project would negatively impact the transit system in the North Charleston to downtown Charleston area. He noted that many riders along three CARTA routes³ accounting for 33 percent of CARTA's total ridership (January 2017), are transit dependent and trains blocking roadways have negative impacts to the bus schedules. Mr. Seekings is concerned that the additional delays from the new rail crossings and increased train volumes and would further degrade the quality of service along this transit corridor. He also noted that CARTA and the Berkeley-Charleston-Dorchester Council of

³ Three (3) of CARTA's 22 fixed transit routes operate from North Charleston to downtown Charleston via Meeting Street and King Street—Route 10 (Rivers Avenue), Route 11 (Dorchester/Airport), and Route 102 (North Neck/Rutledge Avenue).

Governments (BCDCOG) are working on multimodal strategies, including the development of fixed guideway transit, and have proposed Bus Rapid Transit (BRT) along US 52 and US 78. Mr. Seekings expressed concern that travel delays due to the new crossing at the southern loop would present a challenge to the BRT project for the Meeting Street and King Street alignment. He added that in November 2016, Charleston County residents voted in favor of a half-cent transportation sales tax to fund multiple transportation projects, including BRT.

Mr. Seekings' letter also stated: "The alignment options for the Neck area will require further engineering and alternatives study to identify the best solution, particularly as it relates to the impacts from the southern rail alignment identified in the NBIF proposed project. Additionally, travel delays caused by trains at rail crossings on US 52 (Rivers Avenue) at Taylor Street and Aragon Street would have similar negative impacts to the Bus Rapid Transit project."

Response

It is the Corps' understanding that the Applicant continues to coordinate with the City of Charleston regarding traffic impacts that would result from the Project's southern rail connection and the addition of the new at-grade crossing at Meeting Street. The Corps' response to the City of Charleston on pages 20 and 21 of this ROD provides additional details of the Applicant's coordination efforts.

Comments from Organizations

Hunley Waters Home Owners Association (HOA): The neighborhood HOA letter dated October 16, 2016 expressed concern over impacts to the residential neighborhood from the Project, including noise, and the HOA's letter requested sound barriers on both sides of the rail track in residential areas, as well as "silent" hours from midnight to 6AM. The HOA also expressed concern over safe access to park facilities, and concern about drainage issues with increased fill in the area from construction of the Project.

Response

A noise and vibration analysis was conducted and is detailed in in Section 4.12 of the Final EIS. Abatement and mitigation was proposed for locations where standard thresholds were exceeded. After the DA permit application was submitted, the Applicant provided additional noise mitigation in the Project design. A noise wall is proposed along the rail line southeast of the Hunley Waters development (Noise Wall F in Final EIS Figure 4.12-15). In addition, the Applicant has agreed to work with both the City of Charleston and City of North Charleston in the establishment of "Quiet Zones". Section 4.12.12.1 of the Final EIS provides additional information on the Applicant's proposed mitigation for noise impacts, including the proposed study for "Quiet Zones". The Applicant has also included a multi-use path on the Cosgrove Avenue overpass to provide east-west access for bicycles and pedestrians over the rail corridor.

With regard to potential water quality issues, the Applicant coordinated with the Corps and the SCDHEC throughout the Project. Section 4.3 of the Final EIS provides analysis on the potential changes to surface water quality and groundwater resources from disturbance activities associated with the Project. Development of the ICTF, as proposed, would have negligible effects to water quality and would have some beneficial effects as a result of stormwater improvements at the Project site.

The Applicant has proposed several mitigation measures to improve water quality at the site and will comply with all regulations and permit requirements. The ICTF will comply with requirements and standards from the NPDES permit, Stormwater Master Plan, and Spill Prevention Plan applicable to the project. A WQC was issued on July 2, 2018 by the SCDHEC pursuant to Section 401 of the Clean Water Act, and by Special Condition of the DA permit, the Permittee will be required to comply with all of its requirements and conditions. This Section 401 Water Quality Certification verifies that state water quality standards will be met. This certification is required as part of a DA permit that authorizes discharges into waters of the U.S. Section 8.2 of the Final EIS provides additional details on the SCDHEC Water Quality Certification, and Section 4.3.12 of the Final EIS includes a complete list of mitigation for water quality impacts.

Preservation Society of Charleston: Kristopher King, the Executive Director of the Preservation Society of Charleston (the Society), submitted a letter dated November 18, 2016 expressing concern over the Project's impacts to historic properties at the Charleston Navy Complex (CNC) and formally requested that the Society become a consulting party for the Section 106 process. The Society's primary concerns were with demolition of historic structures, as well as vibration and visual impacts that would diminish the character of the Naval Hospital Historic District (NHHD). Mr. King stated, "While the impacts on the individual resources are substantial, the cumulative effect on the CNC, particularly the Naval Hospital Historic District (NHHD), is the most detrimental aspect of the proposed undertaking."

Mr. King's letter also cited that the National Trust for Historic Preservation (NTHP) has listed the NHHD as one of the nations "Eleven Most Endangered Historic Places," and further stated that the Society is also concerned that the impacts to the Charleston Naval Hospital (CNH) could create a loss of integrity to the NHHD and potentially result in its "delisting" from the National Register of Historic Places and impede future revitalization. Mr. King also stated that the Society had reviewed the draft NHPA MOA for the Project and had concern with some of the commitments in the MOA, including the delegation of certain tasks to the Applicant regarding historic preservation and need for a Section 4(f) review and formal Section 106 consultation. He stated that a thorough Section 106 review is necessary to fully assess effects and develop mitigation for a MOA. Mr. King also stated that the Society looked forward to working with the Corps, FRA, and the Applicant on the undertaking of the MOA.

Response

Construction and operation of the Project would result in an adverse effect to historic resources and the Corps has completed the Section 106 consultation in compliance with the NHPA. Informal meetings were ongoing throughout the project planning process and a formal Section 106 consultation meeting was held April 7, 2017, in Charleston, SC. The meeting was attended by the Applicant, the Corps, project consultants, and representatives from the SHPO, Historic Charleston Foundation, Preservation Society of Charleston, and Naval Order of the United States. Additional representatives from the ACHP, Muscogee (Creek) Nation, and FRA called-in to the meeting and participated via phone. The Corps coordinated with the Applicant and the consulting parties to develop mitigation for impacts to these historic properties as part of the Section 106 consultation process, and the parties worked together to develop a MOA to mitigate the adverse effects to these resources. The MOA was executed on May 30, 2018 and is included in Appendix G of the Final EIS. The MOA provides for multiple mitigation measures to reduce and offset the adverse impacts to historic properties that would result from the Project, including the establishment and funding of \$2,000,000 for a CNB

Historical Trust for rehabilitation of historic structures. Section 4.10 of the Final EIS provides additional details on analysis, impacts, and proposed mitigation for impacts to cultural resources and historic properties.

In summary, the Corps, Palmetto Railways, FRA, the ACHP, the SHPO, and various consulting parties have all signed a NHPA MOA for this Project to address the adverse effects to the CNH historic district and the USMC Barracks. The MOA describes agreed-upon measures that Palmetto Railways will take to avoid, minimize, or mitigate the adverse effects. The MOA was executed on May 30, 2018 and then filed with the ACHP to evidence the Corps' compliance with NHPA Section 106.

Public Comments (Citizens and Businesses)

Gary Lesesne (resident/business): This resident submitted the same letter on October 21, 2016 that he provided as a comment to the Draft EIS in June of 2016. The resident expressed concerns over community impacts from the Project, such as noise and environmental justice issues, and encouraged the Applicant to work with the community on these issues. He also recommended the use of noise walls for mitigation.

Response

The Final EIS recognizes that adverse impacts associated with the Project would be predominantly borne by the minority and low-income population of the Chicora-Cherokee Neighborhood. The Applicant worked with several neighborhood groups and organizations as part of the Community Mitigation Working Group. This group worked collaboratively to develop the Community Mitigation Plan (included in Appendix N of the Final EIS) and agreed to the scope of the mitigation and enhancement actions to compensate the communities impacted by the Project and have entered into a Community MOA. Measures outlined in the MOA would mitigate the adverse burdens borne by the Environmental Justice community. The Applicant proposes a 100-foot landscape buffer with a berm and a sound attenuating walls along the western boundary of the ICTF; adjacent to the neighborhood. For a complete response to this comment please see Comment/Response #169 in Appendix O of the Final EIS.

Annabell Shands (resident): This resident inquired as to the timeline for the project and how it would impact her property on Arbitus Avenue.

Response

This resident has been included on the mailing list and has received updated information throughout the course of the Project.

Paul Tecklenburg (business): Paul Tecklenburg submitted a letter on November 1, 2016 on the permit application that included the two previous comment letters he provided on the Project. One was previously submitted as comment during scoping process (November 2015) and the other was submitted on the Draft EIS (July 2016). Mr. Tecklenburg owns a law firm on Meeting Street and has expressed concerns thought the process regarding property impacts to his business and the overall business community near the southern rail connection. He is concerned over the access and parking issues created by the project design as well as noise and vibration from the trains. He also expressed a preference for Alternative 3 to alleviate traffic and avoid condemnation of several businesses.

Response

The Applicant is working with a right-of-way consultant on negotiated purchases and relocations and any required acquisitions will be compliant with all state and federal regulations. The Applicant has also proposed mitigation for traffic and noise impacts associated with the Project. See Section 4.8-Traffic and Transportation and Section 4.12-Noise and Vibration in the Final EIS for details on potential impacts and proposed mitigation. As part of the mitigation for the Project, the Applicant is working with several organizations on separate studies including a Surface Transportation Study and a Crossing Analysis to further explore potential mitigation measures for rail impacts in the area. The Applicant is also working with the City of Charleston on a Transportation Memorandum of Agreement to address transportation and safety impacts related to the ICTF grade crossings within the City of Charleston.

Fred Fabian (business): Mr. Fabian submitted a letter on November 4, 2016 in opposition to the proposed project; specifically, the southern rail connection and its potential for traffic and safety impacts at the Meeting Street crossing. He has expressed concerns throughout the process regarding impacts to his businesses at Gateway Properties (1799 Meeting Street) and is concerned that his business will be displaced from development of the Project and they will have to relocate. He recommends denial of the permit and an alternative alignment with fewer impacts.

Response

The Applicant has attempted to design the Project to avoid or minimize displacement impacts where possible. However, the Project will require right-of way (ROW) acquisitions that would result in the demolition of several structures and relocation of residents and some businesses; including the business at 1799 Meeting Street. The Final EIS details the impacts that would occur from any of the build alternatives. As noted in Table 2.5 of the Final EIS, each of the build alternatives would result in noise and traffic impacts as well as relocations, if differing locations. The Applicant is working with a right-of-way consultant on negotiated purchases and relocations and any required acquisitions will be compliant with all state and federal regulations.

CSX Transportation (Class I Railroad): John Hart, the Vice President of CSX Service Design, submitted a letter dated November 18, 2016 expressing concern that the project did not consider their comments on the Draft EIS and does not account for needed capacity or the wishes of the rail carriers. They have specific concerns with the access routes and stated that "CSX and Norfolk Sothern (NS) are in the early stages of developing the necessary infrastructure designs and legal and regulatory plans to support fair and equal access the ICTF for both carriers." Their conclusion in the letter stated: "CSX believes that the existing permit application is premature. The permit application does not take into account the results of the Final EIS, which is intended to address the bona fide concerns and analysis from stakeholders such as NSR and CSX. Moreover, the current Rail Plan does not fully consider the rail capacity needed to support existing and future train movements on the lines leading to and from the ICTF by CSX and NSR at the south end of the Project or the environmental impacts of the development of that additional capacity. We urge the Corps to review and thoughtfully consider comments and recommendations received from CSX, NSR and all parties prior to issuing any permits associated with the proposed Project."

Response

The Permit Application is Palmetto Railways' request or 'ask'. The impacts of the 'ask' were evaluated in the EIS as the Proposed Project, along with 7 other alternatives, including dual southern access (Alternative 4). Comments from public review of the DEIS and FEIS are taken into consideration by the Corps when making a permit decision. The Corps appreciates that the Class I carriers intend to use the ICTF and may have their preferred routes at the current time. The analysis conducted in the EIS is based on the information presented by the Applicant and validated by the Corps. Palmetto Railways has indicated that in order to meet their purpose and need to provide a facility with equal access they need both a northern and southern alignment to access the site.

The design of Alternative 1 (Proposed Project), and the presence of two separate arrival/departure tracks that allow connectivity to both CSX and NS rail lines, provides the opportunity for equal access by the Class I rail carriers. The Proposed Project's design allows it to manage and switch two trains at the same time. For analysis in the Final EIS, assumptions for the number of train occurrences and average crossing time was based on a rail simulation model provided by Palmetto Railways and its consultants at the request of the Corps and included certain assumptions of Class I rail carrier service design that are outside the control of Palmetto Railways. In the initial years of operation, the analysis assumed that the facility would load/unload up to eight trains (i.e., two inbound and two outbound trains for NS and CSX for a total of eight train movements) every day. The Final EIS acknowledges that depending on capacity needs and service designs at facility opening and through initial years of operation, the distribution of arrival/departure trains connecting to NS or CSX rail lines may vary. Another assumption was that average train lengths initially may be less than 8,000 feet considering the TEU throughput that would occur at the ICTF. By the year 2038 (full build-out), the facility is expected to load/unload approximately eight trains (i.e., two inbound and two outbound trains for NS and CSX for a total of eight train movements) every day (based on assumed service design which may vary), although the average train lengths would be greater than 8,000 feet.

As discussed in Section 4.2 of this ROD, the Corps has determined that Palmetto Railways has met its burden to clearly demonstrate that Alternative 1 (Proposed Project) is considered to be the least environmentally damaging practicable alternative (LEDPA) that meets the overall project purpose.

Norfolk Southern Railway (NS) (Class I Railroad): Robert Martinez, Vice President of Real Estate and Development for Norfolk Southern, submitted a letter dated November 18, 2016 expressing their concern over the proposed design for the project. NS expressed continued concern that their comments in the Draft EIS with respect to the southern access to the ICTF had not been reflected in the project design submitted with the permit application. They cited an August 2016 meeting with Palmetto Railways, South Carolina Ports Authority, CSX, the City of Charleston, the City of North Charleston, SCDOT and South Carolina State Senator Leatherman's office where access was discussed and they expressed a preference for the all-south route and believe it would result in fewer impacts. NS also stated that they "continue to reserve the right to review liability exposure with jointly owned and operated track to determine acceptable exposure limits. In addition, the Corps should be aware that any construction of lines of railroad to serve the NBIF will require review and approval by the U.S. Surface Transportation Board."

Response

See response to CSX's letter on page 26 of this ROD.

Hans Van Heek (business): Mr. Van Heek, the owner of Crazy Dutchman Catering located at 1823 Reynolds Avenue, submitted a letter dated November 30, 2016 stating he was concerned about major impacts to his business from the closure of North Carolina Avenue between Reynolds Avenue and Dayton Street. His business is reliant on multiple food deliveries via tractor-trailer trucks and is concerned that the trucks would not be able to turn around at the end of Reynolds and suggests creating a turnaround area to accommodate trucks in that location.

Response

The Applicant's preliminary plans included in the permit application do not indicate that North Carolina Avenue will be closed in this location.

3.4.3.2. Comments on the Final EIS

The Public Notice was issued on June 29, 2018 and approximately 600 emails and 1,300 postcards were distributed to announce the release of the Final EIS for review and comment. The Corps also distributed the document to various Federal and State agencies, organizations, and municipalities including:

- The Environmental Protection Agency (EPA)
- The Federal Railroad Administration (FRA)
- The U.S. Fish and Wildlife Service (USFWS)
- The National Marine Fisheries Service (NMFS)
- The South Carolina Department of Natural Resources (SCDNR)
- The State Historic Preservation Office (SHPO)
- The South Carolina Department of Health and Environmental Controls (SCDHEC)
- The National Oceanic and Atmospheric Administration (NOAA)
- The U.S. Coast Guard (USCG) Sector Charleston
- The South Carolina Ports Authority (SCPA)
- The Federal Law Enforcement Training Center (FLETC)
- The Department of State
- The City of Charleston
- The City of North Charleston

Hard copies of the complete document were provided for public viewing at:

- Cooper River Memorial Library 3503 Rivers Avenue Charleston, SC 29405
- Charleston County Public (Main) Library 68 Calhoun Street Charleston, SC 29401
- North Charleston City Hall 2500 City Hall Lane, Planning Dept, Third Floor North Charleston, SC 29406

Comments on the Final EIS were accepted for 30 days through July 31, 2018. A total of 15 comments were received by email or letter on the Final EIS including 4 from local, state, and federal agencies. Agency comments were received from the City of Charleston, the City of North Charleston, the EPA), and the NMFS. The remaining public comments were received from citizens, businesses, and organizations. The contents of these emails and letters are described below, followed by a response to the comments.

Comments from Agencies

City of Charleston: Mayor John Tecklenburg submitted a letter on July 31, 2018 stating that they continue to have concerns with the safety, navigation, land use and needs and welfare of the people as they relate to impacts from the ICTF. Their primary concerns have been expressed throughout the NEPA process and are summarized below:

Public Safety and Navigation – impacts from the at-grade new crossing at Meeting Street will result in traffic delays and unsafe blockages to residents, business, transit, and emergency responders.

Land Use – the area is in a "transformative" stage and the EIS does not make clear that a "planning shift" in 2015 occurred around the southern loop to encourage mixed-use, urban development and maps and zoning information is outdated in the EIS. While some mention of these changes were noted, land use impacts have not been thoroughly analyzed considering new plans for the area. The City anticipates that a rezoning and a comprehensive plan change would be required for the Project.

Public Service and Safety Operations Center Relocation – The City expressed concern over the impact of the Project on the proposed public service and safety operations center that was planned on the 16-acre parcel located north of Milford Street.

Consent — The City of Charleston does not recommend approval of the project until it concerns are satisfactorily addressed and requested that If the southern loop is unavoidable, that its impacts be mitigated. The City provided a list of proposed mitigation measures including traffic/roadway improvements and recommendation for replacement land/restitution for impacts to the operations center. The City indicated that they have been in negotiations with the Applicant regarding mitigation, but no agreement has been reached to date.

Response

The land use and infrastructure Section 3.9 and 4.9 of the Final EIS consulted the best available data and information available at the time the analysis was completed. The Corps recognizes the inherent limitations of the available data and the uncertainties associated with those data, however these limitations and uncertainties do not invalidate the extensive impact analysis conducted for the Final EIS. The Applicant has included a mitigation measure in their plans to ensure the project and its operations are consistent with zoning codes and comprehensive plans and the Applicant is responsible for obtaining any required local approvals for the Project. The Applicant continues to coordinate with the City of Charleston regarding impacts from the southern rail connection within the City of Charleston.

The proposed project will have a major effect on land use. Corps regulations state that "The primary responsibility for determining zoning and land use matters rests with state, local and tribal governments. The district engineer will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance. Such issues would include but are not necessarily limited to national security, navigation, national economic development, water quality, preservation of special aquatic areas, including wetlands, with significant interstate importance, and national energy needs. Whether a factor has overriding importance will depend on the degree of impact in an individual case." C.F.R. § 320.4(j)(2) (emphasis added). The wetlands proposed to be impacted have no significant interstate importance and therefore the Project has no significant issues of overriding national importance. Therefore, the

primary responsibility for local zoning and land use matters for the proposed project fall upon the City of Charleston and state, local and tribal governments, not the Corps.

It is the Corps' understanding that the Applicant also continues to work with the City of Charleston regarding impacts to the operations center. The Applicant has proposed a draft Transportation MOA between the Applicant, South Carolina Department of Transportation (SCDOT), the South Carolina Department of Commerce, and the City of Charleston to address transportation and safety impacts. This MOA proposes a Crossing Analysis (funded by the Applicant) to examine conditions at the crossings and identify potential improvements and provides funds up to \$4.5 million to the City of Charleston (or another government body) for its use on mitigation measures for transportation improvements. The draft Transportation MOA is included in Appendix N of the Final EIS. Although the Applicant and the City of Charleston have not reached a final agreement on the specific terms of mitigation for the City of Charleston, they continue to work together on mitigation for the Project.

City of North Charleston: Mayor Keith Summey submitted a letter on July 31, 2018 and provided the following comments on the Project:

Noisette Creek Bridge - "The City has made it known that this Bridge needs to be replaced. The Bridge is too narrow for normal traffic. Long terms plans are for its replacement and elevation to allow for ecotourism activities along the creek. Bicycle route, pedestrian route and new rail access is important to the safety of the bridge."

Sterrett Hall – Mitigation for the replacement of the gymnasium at Sterrett Hall fails to address the loss of space for local artisans, which used the barracks for studio space. Sterrett Hall also had a 900-seat theatre, "which was extensively used by the community for meetings, presentations, school plays and theatre."

Cultural Resources – Reconstruction costs of other historic structures such as the Chapel (\$2, 700,000), the Rehab of Quarters F (\$3,500,000), a recent bid on Quarters A (\$4,400,000) and an estimate of \$2,000,000 in Quarters J. seem to indicate that the proposed \$2,000,000 in the Cultural Resources MOA "may not be an adequate seed amount to begin the task of rehabilitation of dozens of structures in the hospital zone." In addition, "It is our understanding that other local groups have not signed the MOU as of the submission of these comments."

Job Creation – How does the 96 jobs that will be created by 2038 at the ICTF relate to "the loss of 135 acres and potential tax revenue which could have been provided other than the ICTF construction."

Surface Transportation Impact Study — "The Summary highlights a separate surface transportation impact study underway. Data from the FEIS is required to conduct the study. With the data in hand and the study forthcoming, should the surface transportation impact study become a part of the FEIS?"

At-grade Crossings – "Study includes only one new overpass, located at the extension of Cosgrove Avenue, but does not identify at grade crossing at Meeting Street (Located in the Executive Summary) would have detour routes. "Figure 4.8-7 Indicates 7 at Grade Rail Crossing at poor level of service in 2038. How does the applicant propose to mitigate the loss of service at 7 of the 12 at grade crossings? 2 of the 12 are considered in a 2002 MOU between the City and the SC State Ports Authority."

Quiet Zones — "The City of North Charleston, in conjunction with CSX Rails, extended a quiet zone along the Bexley Street Line. The Map (Figure 3.12-5) is incorrect with 2 other crossings in the zones, that being the Rivers Avenue Crossing and the Meeting Street Road Crossing."

Inaccuracies and Editorial Comments – "Map (Figure 4.16-2) does not show Stromboli Road Extension from Spruill to Meeting Street Road. Component of Port Access Road Project."

"Some data has been changed since the creation of the document, ie page 3.243 other notable community resources. The County of Charleston is now the owner of the Chicora Life Center. Property changed in excess of 6 months ago. What is the date that information is valid to? How would data crafted in order to provide correct information?"

"Some of the City's comments are applicable in all sections that are continued in the document under various headings."

"The distinction of colors on some of the exhibits are difficult to distinguish, ie light purple and dark purple."

Mitigation – "How will the citizens of North Charleston have confidence that all of the mitigation decisions in the document will be implemented?"

Transportation Study - "Seems interesting that Alternative 1 would reroute existing commodity trains to another rail line, but these rerouted trains are not analyzed, just because they are not ICTF trains. This approach is a significant fault of the study."

"One of the flaws in the FEIS is the Corps' limited focus on just the intermodal facility itself and not the Southern Route impacts. The FEIS instead relies on a future Surface Transportation Plan Study to address traffic, transportation, and drainage impacts of the project at grade road and rail crossings, along with road and rail grade separation improvement needs on the area outside of its defined study area. Therefore, the FEIS does not study the entire scope of the Rail project impacts. Palmetto Rails has commenced a number of condemnation actions to acquire land to construct the Southern Route. It is clear that the Southern Route extension to the intermodal facility is not a separate project but a part of the intermodal project."

"We understand that the design of the Intermodal Project Southern Route may not be a complete enough to properly study the impacts to the City's transportation system or the necessary medications to existing roads or bridges as contemplated in the 2002 MOU with the SC State Port Authority. Finally, it is the present intention of the Palmetto Rails to fund its intermodal projects through the Federal Railway Administration or some different division of the Federal Department of Transportation, such as the Build America Bureau and that the funding process may trigger its own environmental review process or it may adopt and rely on the Corps' approval. All of these facts may influence the Corps' deferral of these issues which otherwise should have been addressed in this FEIS. These facts however justify a request by the City to the Corps to either extend the comment period, withhold approval of the FEIS or delay the issuance of it Record of Decision until the South Route design is complete and the Surface Transportation Plan Study has been completed."

Response

Noisette Creek Bridge — The Applicant has proposed renovation of the bridge over Noisette Creek in order to reduce impacts to waters of the U.S.

Sterrett Hall — The Applicant worked with the community as part of the Community Mitigation Working Group to develop acceptable mitigation for the replacement of Sterrett Hall, as detailed in the Community MOA. In the Community MOA, the Applicant agreed to support the City of North Charleston to rehabilitate the former Chicora Elementary School with the intent that the rehabilitation of the Chicora Elementary School auditorium combined with the Rec Center partially funded by the Applicant would replace the facilities at Sterrett Hall.

Cultural Resources – The Applicant has also executed a NHPA MOA to compensate for impacts to the historic properties. This NHPA MOA was fully executed by the signatories to the NHPA Section 106 process on May 30, 2018. A copy of the fully executed NHPA MOA is available www.navybaseictf.com.

Job Creation - An estimated \$150 million dollars will be used to develop and construct the Project. This expenditure would result in a major short-term benefit to the local and regional economy. As noted in a study completed in 2015 by Frank Hefner with the College of Charleston, 3,032 temporary construction jobs within the region would be created from construction, and a total of 55 direct jobs at the site after its completion. In addition, the Project would provide indirect, long-term economic benefits to the regional and local community as employment opportunities are directly and indirectly created as a result. Palmetto Railways estimates that the Project would employ approximately 96 people by 2038. According to a study completed in 2015 by the University of South Carolina, for every 10 jobs that are directly supported by SCPA operations, an additional 14 jobs are indirectly created elsewhere with companies that do business through the SCPA. The purpose of the Project is to improve efficiency within the intermodal container transportation network to and from the port. This increased efficiency in local intermodal transport is expected to attract economic activity and provide a competitive advantage for the ports. The study also indicates that the total economic impact of the SCPA corresponds to \$53 billion in annual economic output, creating 187,206 jobs and over \$10.2 billion in labor income in the state that would not exist otherwise. The Corps cannot speculate on potential tax revenue that the City of North Charleston would accrue from this economic activity.

Transportation Impacts and Surface Transportation Impact Study – The Corps conducted a transportation analysis to document the existing transportation network and evaluate the traffic operations in opening year 2018 and design year 2038 to determine the impact the Project would have on the roadway network. Impacts are detailed in Section 4.8.3 of the Final EIS. Coordination between the Applicant, the South Carolina Department of Transportation (SCDOT), the City of Charleston, the City of North Charleston, and the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) has been ongoing throughout the entire NEPA process. This coordination will continue as the Applicant, SCDOT, the South Carolina Ports Authority (SCPA), and the City of North Charleston have committed to complete a Surface Transportation Impact Study as part of a 2012 agreement. The City of Charleston has also been invited to participate in the study. The Corps is not a party to the Surface Transportation Impact Study, its findings do not impact a final DA permit decision, and the surface transportation impact study will not become a part of the Final EIS. The Applicant continues to coordinate with the City of Charleston and the City of North Charleston regarding agreement on mitigation for transportation impacts.

The southern rail connection was included in the transportation study area (Final EIS Figure 3.8-1). The transportation study area is larger than other study areas due to the need to analyze the impacts to the surrounding transportation network as a result of the Navy Base ICTF, two existing rail-truck intermodal facilities (CSX's Bennet Yard and NS's 7-Mile Yard), and three Port facilities that handle

containerized cargo (Future HLT, Wando Welch, and North Charleston port facilities). As shown in Figure 3.8-1, the TSA includes the entire I-526 corridor from US 17 in West Ashley to US 17 in Mount Pleasant and the portion of the I-26 corridor from Aviation Avenue (Exit 211A) to US 17 (Exit 220B). The TSA also includes 48 analyzed existing roadway intersections and 11 analyzed existing roadway at-grade rail crossing locations generally bounded by I-526 to the north, the Cooper River to the east, Stromboli Avenue to the south, and I-26 to the West in North Charleston. Impacts to pedestrian, bicycle, and transit facilities and from historical roadway crash data are limited to the study area.

Quiet Zones – The City of North Charleston indicated that "The City of North Charleston, in conjunction with CSX Rails, extended a quiet zone along the Bexley Street Line. The Map (Figure 3.12-5) is incorrect with 2 other crossings in the zones, that being the Rivers Avenue Crossing and the Meeting Street Road Crossing." A representative of the FRA provided a list of 5 quiet zone crossings (Montague Street, Spruill Avenue, Rhett Avenue, Rivers Avenue, and Old Meeting Street) in North Charleston by email on June 15, 2015. These quiet zones were included in the noise analysis in the Final EIS.

Inaccuracies and Editorial Comments – The City of North Charleston indicated that the "Map (Figure 4.16-2) does not show Stromboli Road Extension from Spruill to Meeting Street Road. Component of Port Access Road Project." The extension was omitted from the maps, however in the Final EIS' transportation analysis, Stromboli Road connected from the Local Access Road to Spruill to Carner Avenue. The City of North Charleston pointed out that some information on other notable community resources has changed. The Final EIS details existing environmental conditions as of September 2015, which was the date of Palmetto Railway's Project proposal.

Mitigation – The City of North Charleston questioned "How will the citizens of North Charleston have confidence that all of the mitigation decisions in the document will be implemented?" Many of the Applicant's proposed mitigation measures are included in MOAs⁴ that are incorporated by reference into the DA permit special conditions, and to the extent the Applicant fails to comply with the special conditions of the DA permit, the permittee would be subject to a potential enforcement action by the Corps for permit noncompliance.

Transportation Study – The City of North Charleston questioned why Alternative 1 would reroute existing commodity trains to another rail line, but these rerouted trains were not analyzed, and therefore is a significant fault of the study. The other commodity trains and ICTF trains were both included in the Final EIS's transportation analysis. The comment may have referred to the following statement in the Final EIS: "Alternative 1 would reroute approximately 1.2 other commodity trains

⁴ Memorandum of Agreement among U.S. Army Corps of Engineers, Charleston District; Federal Railroad Administration or Other U.S. Department of Transportation Agency; Palmetto Railways; Advisory Council on Historic Preservation; Muscogee (Creek) Nation; and the South Carolina State Historic Preservation Officer Regarding the Navy Base Intermodal Facility Project in Charleston County, South Carolina;

Memorandum of Agreement between the S.C. Department of Health and Environmental Control and Palmetto Railways Regarding the Navy Base Intermodal Facility Project in Charleston County, South Carolina Memorandum of Agreement between Palmetto Railways and the Chicora-Cherokee Neighborhood Association, the Union Heights Community Council, the Lowcountry Alliance for Model Communities, and the Metanoia Community Development Corporation Related to the Use of Mitigation Funds in Connection With the Redevelopment on the Navy Base Intermodal Facility Project in Charleston County, South Carolina.

per day from the Reads Branch line to the Park Circle and Bexley Corridors. The impact Alternative 1 would have on the at-grade crossings along the Park Circle and Bexley Corridors was not analyzed because no ICTF trains would use these corridors." However, on all of the crossings that were analyzed, both ICTF and other commodity trains were included as appropriate.

In light of the above, the Corps does not agree that it has deferred transportation issues which otherwise should have been addressed in the Final EIS due to the extensive transportation study conducted during the EIS process (see Final EIS Appendix F – Transportation Analysis Technical Memorandum), and the Corps does not believe it is necessary or appropriate to extend the comment period, or delay the issuance of its ROD until the South Route design is complete and the Surface Transportation Plan Study has been completed.

Environmental Protection Agency (EPA): Carol Monell, Acting Director with the Resource Conservation and Restoration Division at the Environmental Protection Agency (EPA) submitted a letter dated July 18, 2018 and noted the comments were limited to the NEPA review and not intended to be review comments on the DA permit application. The EPA stated that the Final EIS addressed all of the EPA's comments and recommendations from the review of the Draft EIS. The EPA acknowledged that the appropriate modeling and analysis on air quality impacts associated with the project were conducted and appreciated the efforts by the Applicant to engage environmental justice stakeholders and develop mitigation that was beneficial to the community. The letter also encourages the Corps to "memorialize these avoidance, minimization and mitigation commitments within the Record of Decision and/or Statement of Findings."

Response

Many of the Applicant's proposed mitigation measures are included in MOAs⁵ that are incorporated by reference into the DA permit special conditions, and to the extent the Applicant fails to comply with the special conditions of the DA permit, the permittee would be subject to a potential enforcement action by the Corps for permit noncompliance.

National Marine Fisheries Service (NMFS): Virginia Fay, Assistant Regional Administrator with NMFS submitted a letter on July 31, 2018 stating that their comments on the Draft EIS had been incorporated into the Project and recognized that impacts had been reduced based on their previous comments and mitigation suggestions. They also stated: "The NMFS believes the proposed conceptual PRM plan has potential as compensatory mitigation" and recommended two additional items:

⁵ Memorandum of Agreement among U.S. Army Corps of Engineers, Charleston District; Federal Railroad Administration or Other U.S. Department of Transportation Agency; Palmetto Railways; Advisory Council on Historic Preservation; Muscogee (Creek) Nation; and the South Carolina State Historic Preservation Officer Regarding the Navy Base Intermodal Facility Project in Charleston County, South Carolina;

Memorandum of Agreement between the S.C. Department of Health and Environmental Control and Palmetto Railways Regarding the Navy Base Intermodal Facility Project in Charleston County, South Carolina Memorandum of Agreement between Palmetto Railways and the Chicora-Cherokee Neighborhood Association, the Union Heights Community Council, the Lowcountry Alliance for Model Communities, and the Metanoia Community Development Corporation Related to the Use of Mitigation Funds in Connection With the Redevelopment on the Navy Base Intermodal Facility Project in Charleston County, South Carolina.

- 1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.
- 2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

Response

Comment noted. The Applicant has revised their Mitigation Plan to include the following items which address NMFS recommendations:

1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.

The road that extends into the mitigation site is currently not within the mitigation area controlled by the Applicant. Additionally, the hydraulic models used to demonstrate that inundation would occur at the mitigation site did not account for the flow of water through the culverts. Nonetheless, Palmetto Railways has agreed to amend their Mitigation Plan to include adaptive management measures that ensure inundation at the site in the event that the planned tidal inundation does not occur.

2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

Palmetto Railways has amended their Mitigation Plan to include sampling of nekton and establish success criteria that relate to the reference sites for the restoration.

Comments from Organizations

Omar Muhammad (organization): Omar Muhammad, the Executive Director with the Lowcounty Alliance for Model Communities (LAMC), submitted a comment on July 31, 2018 on behalf of his organization and the Community Mitigation Workgroup (Chicora/Cherokee Neighborhood Association, Union Heights Community Council, LAMC and Metanoia) stating that they support the application to build the ICTF. He noted that LAMC worked with the Applicant to develop community mitigation and execute a MOA as part of the Community Mitigation Working Group. Mr. Muhammad expressed continued concern with air quality and health impacts and the potential for flooding in the area. LAMC felt that the EIS did not take into "...consideration the cumulative impacts of pollution exposure on residents nor the adverse impacts of these exposures on the residents living near this project. However, Palmetto Railways have provided resources to the community to research and understand the health impacts of cumulative risk exposure." He also acknowledged: "a great group of individuals from community associations, organizations and Palmetto Railways staff that helped to negotiate our mitigation with Palmetto Railways. It is also important to understand that this group genuinely represents a cross section of groups who have worked for many years to improve the impacted communities and have the respect of the community. Coming together in this manner, strengthens our community efforts to enhance neighborhood cooperation rather than encouraging divisions or competitiveness between community representatives."

Response

Comment noted.

Don Campagna (organization): Don Campagna with the Naval Order of the United Stated submitted a letter on July 31, 2018 to address the Project and the Cultural Memorandum of Agreement. He expressed his concern that the Project has not meet the requirements of regulations to preserve and protect historic properties including the NEPA and Section 106 consultation process and the Section 4(f) requirements. He expressed concern that that the agencies involved have not made an informed decision and objects to the impacts to the historic district. He ascertains that a feasible alternative is available using the existing "S-Line" corridor. He expressed, "In the matter of this permit, the finding is that the most adverse effect possible will be the result of issuance of the permit. The existence of an alternative is a given and failure to exercise all effort to that end is to completely disregard the letter, spirit and intent of the will of Congress."

Response

The Applicant has considered the historic properties in the area in the planning and design of Project and sought to avoid impacts, where feasible; however, the Project would result in adverse effects to historic properties. The Applicant consulted with several agencies (state and federal) as well as local historic foundations, including the Historic Charleston Foundation, the Naval Order of the United States-Charleston Commandery, and the Preservation Society of Charleston regarding proposed impacts from the project and potential mitigation measures as part of the Section 106 process. The ACHP and the Muscogee (Creek) Nation also participated in the Section 106 consultation. A NHPA MOA was executed and provides for multiple mitigation measures to reduce and offset the adverse impacts to cultural resources that would result from the Project, including the establishment and funding of \$2,000,000 for a CNB Historical Trust for rehabilitation of historic structures. The NHPA MOA was agreed to and signed by the Corps, the Federal Railroad Administration (FRA), Palmetto Railways, the ACHP, the Muscogee (Creek) Nation, and the SHPO. The Historic Charleston Foundation, the Preservation Society of Charleston, and the Naval Order of The United States Charleston Commandery also signed the MOA as concurring parties. The Corps believes that the potential impacts to cultural resources associated with the Project have been addressed fully in the EIS and the ROD and suitable mitigation has been developed and agreed to as part of the Section 106 process and documented in the MOA.

The Historic Charleston Foundation/Preservation Society of Charleston/Naval Order of the United States (organizations): The three historic organizations that participated as consulting parties thought the Section 106 process submitted a joint letter on July 31, 2018 expressing their continued concern about the project. While they signed the Cultural Resource MOA and generally feel the proposed mitigation is adequate, the organizations want to memorialize their concern over evaluation of alternatives and the project impacts to historic properties. They contend that sufficient evidence to rule out the availably the S-line alternative has not been sufficiently provided and that it may still be a viable alternative to avoid the historic district. They feel that the project has been improperly evaluated and the Historic Charleston Foundation, Preservation Society of Charleston, and Naval Order of the United States requested that "should any new information demonstrating the availability of the S-line be introduced to the record for this permitting, our three organizations respectfully ask that the Corps re-open the EIS to re-evaluate Alternative #2."

Response

The Corps believes that the potential impacts to historic properties and cultural resources associated with the Project have been addressed fully in the EIS and the ROD, and suitable mitigation has been

developed and agreed to as part of the Section 106 process and documented in the NHPA MOA. Furthermore, as discussed in Section 4.2, the Applicant has also clearly demonstrated that Alternative 2 is neither practicable nor feasible due to the logistical obstacles associated with CSX's stated position on the S-Line corridor. Additional details are provided in Section 4.18 of the Final EIS and Section 4.2 of this ROD.

Comments from the Public (Citizens and Businesses)

Frank Atkinson (resident): This citizen, a resident of Park Circle Northwest, submitted a comment on the project website inquiring when the next community meeting on the project would be held. He stated: "From the description and pictures of the proposed rail lines, it is next to impossible to decipher what effects we will experience. Rail lines have for years have been an issue in our area, so what benefit, if any, will the proposed rail lines be to our particular area mentioned above."

Response

The Corps provided several opportunities and mechanisms to share and receive information with the public, stakeholders, governmental agencies, tribes, and non-governmental organizations (NGOs). Opportunities and mechanisms for information sharing include: a scoping process, public meetings, community and stakeholder meetings, a project website, newsletter, public hearing, and public notice and comment periods. See Chapter 9.0 of the Final EIS for documentation of all public, agency, and stakeholder coordination and consultation. The Corps has determined that an additional public meeting on the project is not warranted.

The Applicant's Community Mitigation Plan includes a measure for the establishment of a Community Advisory Panel. The panel includes members of the affected community, interested stakeholders, and businesses. The panel meets to gather feedback and keeps the public informed about the Project. Information on the Community Engagement and Awareness Plan and the Community Advisory Panel is included in the Community Mitigation Plan in Appendix N of the Final EIS. The Applicant's website, www.palmettorailways.com, has additional information on community engagement for the Project.

Benefits to surrounding communities as a result of the Project, such as a major short-term benefit and an indirect, long-term benefit to the local and regional economy, are described in Section 4.16 of the Final EIS.

Mary Mitchell (resident): This citizen submitted a comment on the website in support of the project and stated, "The study is well thought out and explained. I fully support the Intermodal Container Transfer Facility as it is needed to alleviate some of the traffic on congested roads."

Response

Comment noted.

South Federal Credit Union (business): Scott Woods, the President and CEO of South Carolina Federal Credit Union submitted a letter on July 26, 2018 expressing continued concern regarding impacts to the area, and their business in particular. The South Federal Credit Union has previously submitted comments regarding the fact that the area is experiencing revitalization of residential and commercial uses and the ICTF would be out of character with this revitalization. Mr. Woods' concern is that the ICTF project would result in additional industrial development, traffic impacts, noise and

vibration, and additional public health and safety concerns. He expressed concern thats these negative impacts would "diminish the economic productivity and socioeconomic quality of the area" and lead to a decrease in property values.

Response

Property values are discussed in Section 6.20 considerations of property ownership in this ROD. The Final EIS presents anticipated project impacts and proposes mitigation for these impacts. The proposed project will have major effect on land use. Corps regulations state that "The primary responsibility for determining zoning and land use matters rests with state, local and tribal governments. The district engineer will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance. Such issues would include but are not necessarily limited to national security, navigation, national economic development, water quality, preservation of special aquatic areas, including wetlands, with significant interstate importance, and national energy needs. Whether a factor has overriding importance will depend on the degree of impact in an individual case." C.F.R. § 320.4(j)(2) (emphasis added). The wetlands proposed to be impacted have no significant interstate importance and therefore the project has no significant issues of overriding national importance. Therefore, the primary responsibility for local zoning and land use matters for the proposed project fall upon the state, local and tribal governments, not the Corps.

Eric Deierlein (business): Eric Deierlein with Tekna Investments, Inc. submitted a comment on July 31, 2018 expressing concern that the southern rail loop at Meeting Street would negatively impact their business with additional traffic from the at-grade rail crossing. They recommended that the approval for the Project be deferred until the Surface Transportation Study is complete.

Response

The Corps conducted a transportation analysis to document the existing transportation network and evaluate the traffic operations in opening year 2018 and design year 2038 to determine the impact the Project would have on the roadway network. Impacts are detailed in Section 4.8.3 of the Final EIS. Coordination between the Applicant, the South Carolina Department of Transportation (SCDOT), the City of Charleston, the City of North Charleston, and the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) has been ongoing throughout the entire NEPA process. This coordination will continue as the Applicant, SCDOT, the South Carolina Ports Authority (SCPA), and the City of North Charleston have committed to complete a Surface Transportation Impact Study as part of a 2012 agreement. The City of Charleston has also been invited to participate in the study. The Surface Transportation Impact Study is independent from the Corps, therefore the findings of the study do not impact a final DA permit decision. The Applicant continues to coordinate with the City of Charleston and the City of North Charleston regarding agreement on mitigation for transportation impacts.

Cyrus Buffum (citizen): Mr. Buffum is a resident of the Windsor Place community and submitted a letter dated July 31, 2018. He expressed concern, as an oysterman and conservationist, regarding water quality impacts and feels the Applicants proposed Mitigation Plan "drastically neglects to achieve compensatory mitigation as required under law" and is off-site and not entirely in-kind. He states that he is satisfied with the proposed mitigation for impacts to freshwater wetlands, but does not agree with the accounting for mitigating impacts to saltwater wetlands and open waters of the United States.

He also noted that the proposed off-site wetland mitigation furthers impacts to Environmental Justice populations by "neglecting to account for the functions and services lost at the impact site, the proposed Kings Grant Country Club and Golf Course mitigation site further perpetuates the already disproportionate allocation of benefits away from Environmental Justice populations and towards nonminority and non-low-income populations". Mr. Buffum also stated that "in approving the proposed permittee responsible mitigation plan to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course, the Army Corps of Engineers becomes complicit in not upholding its obligations under the Clean Water Act and responsibilities outlined in Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". Finally, he suggested "that the district engineer direct the applicant to any number of degraded shorelines, wetlands, and waterways along the Cooper River, throughout North Charleston's jurisdiction, to serve as an alternative site in its permittee responsible mitigation plan."

Response

The Corps acknowledges that the impact site is located below the freshwater/saltwater dividing line described in South Carolina Code Section 50-5-80, while the Kings Grant mitigation site is above this line; however, both sites are tidal. In general, in-kind mitigation is preferable to out-of-kind mitigation because it is more likely to compensate for the functions and services lost at the impact site. A wetland functional assessment was conducted in December 2016 for all waters of the U.S. that were proposed to be impacted by the Project. Wetlands were classified as estuarine woody wetland, riverine swamp forest, brackish/salt marsh, non-tidal freshwater marsh, tidal freshwater marsh, and open water/tidal ditch. Wetlands were rated in accordance with the NCWAM methodology, with a crosswalk to Charleston District Guidelines for assessing existing conditions. Of the fourteen-individual brackish/salt marsh areas evaluated, one was very impaired, one was impaired, two were partially impaired, and ten were fully functional. Within the study area for the Final EIS, there is very little (approximately 0.3 acre) oyster reefs and shell banks habitat, which may indicate brackish conditions not conducive to oyster development. No oyster reefs and shell banks would be impacted due to the Project.

The planned restoration of the Kings Grant mitigation site involves a former wetland site, which was converted to an upland site used as a golf course. This area would be restored to a tidal marsh ecosystem adjacent to the Ashley River. The acreage impacted is 6.65 acres, while the restored acreage will be 40.61 resulting in a 6:1 ratio. Once restored, the physical, chemical and biological functions created at the restoration site will result in a net improvement and serve the aquatic resource needs of the watershed.

CSX Transportation (Class I Railroad): Jermaine Swafford, Senior Vice President with CSX, submitted a letter on July 31, 2018 expressing concern that the Final EIS did not consider the following issues:

- "Connectivity to the CSXT mainline will require significant investment;
- Surface Transportation Board ("STB") review was left out and may be necessary;
- There are no operating or property agreements to support the proposed project;

- The absence of these agreements invalidates the environmental analysis since there is no basis for analyzing impacts without these agreements;
- · CSXT will not subsidize the project with land, capital, or an agreement to pay fees; and
- The State of South Carolina is developing an island terminal disconnected from the national rail system as it is currently proposed."

In addition, they noted that the STB was left out as a cooperating agency and that the EIS does not take a "hard look" at the factors required as part of the environmental review process.

Response

The Corps has found, based on the Applicant's information and its own independent review, that the Applicant's stated need is not unduly speculative. Section 1.4.2 of the Final EIS details the Corps' evaluation of the Applicant's need statement, which this ROD summarizes in Section 9.a.

In 2014, the Corps coordinated with the STB to inquire if the agency wanted to participate in the EIS as a cooperating agency. In a conversation with the STB on February 24, 2014 the STB declined to participate as a cooperating agency. However, this does not indicate whether the STB would or would not require an environmental review of areas required to connect the Project to the CSXT mainline. The Final EIS only reviewed areas included in the attached permit drawings and approval is also limited to those areas. According to the Applicant, "...while the ICTF is STB-jurisdictional it is not STB-regulated and does not require STB approval in light of Section 10906's limitation on the agency's regulatory oversight".

The Corps is aware that no operating or property agreements with CSX or NS to support the proposed project currently exist and there will be significant improvements required to connect the Project to the CSXT mainline; however, the absence of these agreements does not invalidate the environmental analysis. According to the Applicant, "Palmetto Railways will obtain whatever requisite agreements are necessary to construct and operate the ICTF."

Norfolk Southern (NS) (Class I Railroad): Robert Martinez, Vice President of NS, submitted a letter on July 31, 2018, expressing concern that the Project design has not incorporated their repeated comments that their preference is for the southern-route. NS states that the analysis for Alternative 1 (Proposed Project) in the Final EIS is incorrect because it divides impacts such as noise, vibration, air, traffic and transportation, and at-grade rail crossings between the northern and southern rail connection. NS also stated reasons why the northern route is infeasible from their perspective due to safety and operational problems and would require significant infrastructure requirements that would result in additional impacts and additional construction costs of an "extraordinary magnitude". NS also inferred that since Alternative 1 (Proposed Project) did not include the additional infrastructure associated with accommodating NS's northern access and the Final EIS did not analyze impacts associated with the infrastructure, it renders the northern rail connection infeasible and therefore, not meeting the stated purpose and need. NS does not object to the project and agrees there is a need for track extending to the north to provide operational "headroom" to switch cars between tracks from the northern end of the terminal.

NS pointed out a potential error on page 1-37 in the Final EIS, stating that it was assumed that eight trains per day would access the ICTF initially, then ramp up to 8 trains per day by 2038. They also detailed additional design and infrastructure that would be needed for access at the southern route and

pointed out that this additional infrastructure was not included in the alternatives considered in the Final EIS or the cumulative effects section. In summary the letter concluded: "The only way Norfolk Southern can and will access the proposed ICTF is from the south. If the funding support necessary to provide for the infrastructure required to access the facility from the south does not materialize, Norfolk Southern will be unable fully to utilize the terminal and will have no choice but to stay at its existing Seven Mile Yard location."

Response

The design of Alternative 1 (Proposed Project), and the presence of two separate arrival/departure tracks that allow connectivity to both CSX and NS rail lines, provides the opportunity for equal access by the Class I rail carriers. The Proposed Project's design allows it to manage and switch two trains at the same time. For analysis in the Final EIS, assumptions for the number of train occurrences and average crossing time was based on a rail simulation model provided by Palmetto Railways and its consultants at the request of the Corps and included certain assumptions of Class I rail carrier service design that are outside the control of Palmetto Railways. In the initial years of operation, the analysis assumed that the facility would load/unload up to eight trains (i.e., two inbound and two outbound trains for NS and CSX for a total of eight train movements) every day. The Final EIS acknowledges that depending on capacity needs and service designs at facility opening and through initial years of operation, the distribution of arrival/departure trains connecting to NS or CSX rail lines may vary. Another assumption was that average train lengths initially may be less than 8,000 feet considering the TEU throughput that would occur at the ICTF. By the year 2038 (full build-out), the facility is expected to load/unload approximately eight trains (i.e., two inbound and two outbound trains for NS and CSX for a total of eight train movements) every day (based on assumed service design which may vary), although the average train lengths would be greater than 8,000 feet.

The opening year 2018 and design year 2038 Alternative 1 (Proposed Project) at-grade rail crossing analysis results are included in Section 4.8.3 of the Final EIS (Table 4.8-18 and Table 4.8-19, respectively). Average crossing durations for ICTF trains in Alternative 1 (Proposed Project) range from 5:31 (minutes:seconds) to 5:40 in 2018 while in 2038 they range from 10:46 to 11:34. The number of train occurrences and average crossing time was based on a rail simulation model provided by Palmetto Railways and included certain assumptions of Class I rail carrier service design that are outside the control of Palmetto Railways. The rail model data provided the average number of trains and duration of occurrences for both intermodal and other commodity trains. The number of daily ICTF trains analyzed as passing each rail crossing is four as four trains were anticipated in the rail simulation model to arrive or depart from the southern rail connection and the northern rail connection.

The above assumptions regarding the number of train occurrences, average crossing time, and direction were based upon the best available data and information from the Applicant at the time the analysis was completed. The Corps recognizes the inherent limitations of the available data and the uncertainties associated with the models and other predictions, however these limitations and uncertainties do not invalidate the extensive impact analysis conducted for the Final EIS.

The Corps decision whether to issue a DA permit is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on public interest. The project that was evaluated was the Applicant's proposed project as depicted in their December 2016 DA permit. The Final EIS recognized that additional construction of new track would be required in order to connect

the ICTF to existing Class I carrier rail networks. This construction was not a part of the Proposed Project and was assumed to be constructed by the Class I carriers and could require separate environmental permitting. This additional construction was collectively referred to as Related Activity and was described in Section 2.4.9 of the Final EIS. As for additional infrastructure indicated in NS's letter as required for the northern and southern rail connection, the Corps cannot evaluate actions by others as part the current Applicant's proposed project. Once a DA permit has been submitted by others for additional infrastructure, it can be evaluated. The additional infrastructure noted by NS in their letter was not evaluated in the cumulative impact analysis because those improvements were not discovered in the literature search conducted (e.g., South Carolina State Rail Plan) and entities consulted (e.g., Berkeley Charleston Dorchester Council of Governments) to discover reasonably foreseeable future actions. Section 5.3 and Appendix M of the Final EIS include a summary and full description, respectively, of the methodology used for this analysis.

Dan Ligon (citizen/business): Dan Ligon with Southern Craftsman construction submitted a letter on July 31, 2018 encouraging the reuse of the historic structures slated for demolition as part of the Project. He stated as follows: "These houses are all contributing buildings to the Charleston Naval Hospital National Historic District, and, as such, need to be saved and not destroyed. There is a suitable site for their relocation only a few blocks away on property currently owned by Palmetto Railways in front of and to the left of West Yard Lofts. The successful relocation of these properties would result in the creation of approximately twenty affordable or workforce housing units. The architectural style, after renovation, would resemble houses in Oak Terrace Preserve- another successful housing development in North Charleston." He also urged the Corps to save the structures from demolition and use them to create additional housing opportunities.

Response

A NHPA MOA was executed and provides for multiple mitigation measures to reduce and offset the adverse impacts to cultural resources that would result from the Project, including the establishment and funding of \$2,000,000 for a CNB Historical Trust for rehabilitation of historic structures. The NHPA MOA was agreed to and signed by the Corps, Federal Railroad Administration (FRA), Palmetto Railways, ACHP, Muscogee (Creek) Nation, SHPO, Historic Charleston Foundation, Preservation Society of Charleston, and Naval Order of The United States Charleston Commandery. The CNB Historical Trust will make the determination on what structures to rehabilitate.

4. Alternatives Analysis

An evaluation of alternatives is required under NEPA, which requires discussion of a reasonable range of alternatives, including the no action alternative, and the effects of those alternatives. In accordance with 40 C.F.R. § 1505.2(b), the summary below identifies all alternatives considered by the Corps in reaching its decision, specifying the alternative or alternatives which were considered to be environmentally preferable.

Furthermore, the Section 404(b)(1) Guidelines at 40 C.F.R. § 230.10(a)(3) state as follows: "Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not water dependent) practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed

discharge which do not involve a discharge into a special aquatic sites are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."

4.1. Alternatives:

As described in Chapter 2 of the Final EIS, the Corps completed a rigorous and comprehensive process to identify and evaluate alternatives to the proposed Project. The Applicant's analyses were documented in an undated report entitled *Navy Base ICTF Project Analysis and Information*.

In consideration of the purpose of and need for the proposed Project, the Corps developed screening criteria to identify possible alternative ICTF sites that would be evaluated in the EIS. Three different levels of screening were used: Initial, Tier I, and Tier II. Initial screening criteria narrowed the analysis to private/public intermodal container terminals in Charleston Harbor. Tier I screening criteria narrowed the realm of possible alternative ICTF locations to specific sites, and then Tier II screening criteria further narrowed these sites to those to be carried forward in the EIS.

The initial screening criterion used in the formulation of viable alternatives was the presence of private/public intermodal container terminals in the Charleston Harbor. Four public container terminals were carried forward into Tier I Screening: Wando Welch Container Terminal, HLT, Columbus Street Terminal, and North Charleston Container Terminal.

The Tier I screening criteria were used in a step-wise fashion to identify specific alternative sites for the Proposed Project. The criteria were:

- IA: Proximity (within 4 miles) to private/public intermodal container terminals in the Charleston Harbor, with a projected 400,000 TEU annual throughput by rail
- IB: Area required for an ICTF (65+ acres)

Out of the four container terminals in the Charleston Harbor that were identified during the initial screening process, Columbus Street Terminal and North Charleston Container Terminal were eliminated based on Screening Criterion IA, and Wando Welch Container Terminal and HLT were carried forward for evaluation based on Screening Criterion IB. This analysis resulted in twelve potential sites (Final EIS Figure 2.3-1) that were carried forward to evaluation by Tier II screening criteria. Descriptions of the 12 sites are available in Table 2.3-1 of the Final EIS.

Twelve sites near Wando Welch Container Terminal and the HLT were evaluated using Tier II screening criteria. Three of the 12 sites were previously identified in the *South Carolina State Rail Plan* as potential locations for an ICTF. These three sites are identified in this analysis as the Macalloy Site, the Project site (Former Clemson Site), and the River Center project site (Former Noisette Site). When the final 12 potential sites were determined (Final EIS Figure 2.3-1), each site was then evaluated to determine: (1) its proximity and distance to existing rail lines and highway networks; (2) the need to construct new, major road/rail improvements (e.g., highway and/or interstate bridges) to connect with existing rail and highway networks; (3) the impact (wetlands and rough cost) for connecting the existing road/rail connection to the potential site; and (4) proximity of the potential sites to the associated container terminal.

As a result of this screening criterion, the Corps eliminated eight sites from further Tier II screening, while the remaining four sites associated with the HLT (8, 10, 11, and 12) were carried forward to screening Criterion IIB. All were evaluated for the feasibility of constructing a private drayage road

linking the potential site with the HLT. Three sites (10, 11, and 12) were carried forward to screening Criterion IIC and were evaluated to determine whether the site's configuration would support an ICTF that would meet the purpose and need of the project. As a result of this screening criterion, one site (Site 12) was eliminated from further analysis. The remaining two sites, Sites 10 and 11, were carried forward for detailed evaluation in the EIS (Final EIS Figure 2.3-2).

In addition to the two arrival/departure track options presented under the Proposed Project, there were other alternative rail routes leaving the Project site that were considered but eliminated from further evaluation. This included placement along Noisette Boulevard, and placement along Spruill Avenue adjacent to the CSX ROW.

Several alignments for the drayage road were considered during the development of the Proposed Project and alternatives analysis but not further evaluated. These included an alignment along Bainbridge Avenue, and various alignments in the western portion of the FLETC-owned property to the north of the HLT.

In summary, based on the analyses of alternatives submitted by the Applicant, the Corps' review of those analyses, and the Corps' independent analysis of alternatives, the Corps initially determined that a number of alternatives for various components of the proposed Project did not warrant detailed evaluation in the Draft and Final EIS. The rationale for eliminating or retaining the alternatives that were considered by the Corps is summarized above.

The Corps concluded that seven alternatives (Table 3) should receive detailed evaluation in the Draft and Final EIS. In addition to the No-Action Alternative, four alternatives are associated with the Project site and three alternatives are associated with the River Center project site. Variations of alternatives within a Project site are primarily based on differing arrival/departure track alignments.

Table 3. Alternatives Recommended for Detailed Evaluation in the EIS

Alternative	Description
No-Action Alternative	Application for DA permit would be denied; the Proposed Project would not occur; CSX and NS would undertake operational and structural modifications to Ashley Junction and 7-Mile rail yards. Future use of the Proposed Project and River Center project sites would likely be mixed-use and industrial (e.g., rail-served warehousing distribution center).
Alternative 1: Applicant's Proposed Project (South via Milford / North via Hospital District)	Palmetto Railways Project would be constructed and operated as proposed.

Alternative	Description
Alternative 2: Proposed Project Site (South via Milford / North via S-line)	A variation of the Proposed Project where the northern rail connection would be relocated along Spruill Avenue within existing CSX ROW to the S-line, and turn east along Aragon Avenue to the existing NCTC rail line; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic as a result of the northern rail connection alignment.
Alternative 3: Proposed Project Site (South via Kingsworth / North via Hospital District)	A variation of the Proposed Project where the southern rail connection would connect to an existing rail line near Kingsworth Avenue (and adjacent to existing rail and ROW); road and rail improvements would be adjusted accordingly to facilitate rail and road traffic as a result of the southern rail connection alignment.
Alternative 4: Proposed Project Site (South via Milford)	A variation of the Proposed Project where trains would enter and exit the Navy Base ICTF from a southern rail connection only. An additional parallel track would enter and exit the Navy Base ICTF as described in the Proposed Project, and connect to an existing rail line near Milford Street (and adjacent to existing rail and ROW). Proposed rail for train switching (building) through the Hospital District would stop short of Noisette Creek.
Alternative 5: River Center Project Site (South via Milford / North via Hospital District)	A variation of the Proposed Project with the Project site being moved to the River Center project site; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.
Alternative 6: Alternative 6: River Center Project Site (South via Kingsworth / North via Hospital District)	A variation of the Proposed Project with the Project site being moved to the River Center project site and the southern rail connection would connect to an existing rail line near Kingsworth Avenue (and adjacent to existing rail and ROW). Road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.

Alternative	Description
Alternative 7: River Center Project Site (South via Milford)	A variation of the Proposed Project with the Project site being moved to the River Center project site and trains would enter and exit the Navy Base ICTF from a southern rail connection; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.

4.2. Least Environmentally Damaging Practicable Alternative (LEDPA) 6:

As discussed above, the Corps determined that seven alternatives, including the Applicant's Proposed Project (Alternative 1), warranted further evaluation in detail in the Final EIS. The range of alternatives was formulated based on comments and information received from the public (e.g., surrounding landowners), non-governmental organizations (NGOs) (e.g., historic preservation groups), stakeholders, governmental agencies, and tribes.

A full discussion concerning the impacts of each of these alternatives is provided in Chapters 2 and 4 of the Final EIS. In summary, four alternatives are associated with the Project site as on-site alternatives (i.e., Alternatives 1, 2, 3, and 4), and three off-site alternatives are associated with the River Center project site (i.e., Alternatives 5, 6, and 7) as off-site alternatives. Furthermore, variations of on-site alternatives within the Project site are primarily based on differing arrival/departure track alignments.

As discussed in Chapters 1 and 2 of the Draft and Final EIS, the Corps evaluates 'practicable' alternatives for purposes of the Section 404(b)(1) Guidelines (and "reasonable" alternatives for purposes of NEPA). With regard to the alternatives analysis conducted pursuant to the Section 404(b)(1) Guidelines, the Corps' review concludes with a determination of whether an applicant has met its burden to clearly demonstrate that there are no practicable upland sites or less vulnerable parts of the aquatic ecosystem, which is commonly referred to as identification of the Least Environmentally Damaging Practicable Alternative (LEDPA). Specifically, the Section 404(b)(1) Guidelines at 40 C.F.R. § 230.10(a) state that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." In other words, the Corps must consider impacts to aquatic resources, as well as other significant adverse environmental consequences when reviewing alternatives.

With respect to impacts to waters of the U.S., the Proposed Project (Alternative 1) has 15.84 acres of anticipated wetland impacts, while the other six alternatives compare to Alternative 1 as follows:

-two alternatives have less impacts (Alternative 6 [10.82 acres] and Alternative 3 [11.80 acres]);

⁶ The Applicant and other stakeholders provided additional information during the EIS development and DA permit application review process. Text on the following pages that is indented and italicized indicates quoted comments from the Applicant or other stakeholders.

-three have similar (within 1 acre) impacts (Alternative 5 [14.75 acres], Alternative 7 [15.01 acres], and Alternative 4 [15.98 acres]); and

-one alternative has more impacts (Alternative 2 [17.92 acres]).

No-Action Alternative

The No-Action Alternative represents the future without the Proposed Project, and is used as a baseline from which to compare alternatives. Under the No-Action Alternative, the Corps would not issue a DA permit. As the Project is currently proposed, impacts to waters of the U.S., including wetlands at Shipyard Creek and Noisette Creek would be unavoidable, and a DA permit would be required for the Project to proceed. As a result, the second scenario would not be feasible. Therefore, under the No-Action Alternative, the Corps would not issue a DA permit, and construction and operation of the Navy Base ICTF would not occur. The No-Action Alternative assumes that the SCDOT would construct the Port Access Road, which would elevate Stromboli Avenue.

Related to the purpose and need as stated by the Applicant, the No-Action Alternative assumes that the two existing rail yards (Ashley Junction/Bennett Yard and 7-Mile) would continue to handle and process current and projected future intermodal container traffic that would be transported by rail. CSX and NS would implement operational and structural modifications to their respective rail yards to increase their capabilities; however, the capacities and size limitations of the two rail yards would constrain the region's ability to accommodate the projected 25–30 percent of intermodal containers that could be transported by rail in 2038. Intermodal containers would continue to be delivered by truck to the two rail yards. The majority of intermodal containers coming through the Port's container terminals would continue to be transported by truck to their destinations, using public roadways.

For the purposes of this EIS, the No-Action Alternative assumes that the Project site and the River Center project site would continue to include mixed use (residential and commercial) and industrial land uses. In light of Palmetto Railways' ownership of the properties, there would be the potential for redevelopment of these areas to include rail-served warehousing and distribution. A rail-served warehousing and distribution center typically consists of a yard in the center of the property, with either multiple "smaller" warehouses or the construction of a large warehouse (1,000,000+ SF). Rail tracks could be placed alongside the warehouse(s). Other features associated with a rail-served buildings, stormwater retention, and other infrastructure. Truck traffic to a rail-served warehousing and distribution center would most likely occur using the Cosgrove Avenue exit on I-26.

The No-Action Alternative does not meet the stated Purpose and Need of the Project.

Alternatives 3 and 6:

As an initial matter, Alternatives 3 and 6 have substantial practicability issues when compared to the other alternatives due to adverse impacts to Cooper Yard, which is owned and operated by CSX. Specifically, Alternatives 3 and 6 require a southern rail connection, at Kingsworth Avenue, that passes on the west side of Cooper Yard, which would adversely affect (e.g., reduce capacity) of this CSX rail yard by adding through train traffic immediately adjacent to the yard. The southern rail connection for Alternative 3 and 6 continues south from Cooper Yard then makes a turn to the west in the vicinity of Kingsworth Avenue. Unlike Alternatives 3 and 6, the other alternatives evaluated in the Final EIS have a southern rail connection that passes on the east side of CSX's Cooper Yard, which preserves its full use.

Although Palmetto Railways has state condemnation authority, it is the Corps' understanding that this authority does not extend to ROW and/or property associated with Class I railroad operations, as these railroad companies are generally independently owned and impacts to their operations are protected by law. Furthermore, it is the Corps' understanding that Palmetto Railways did discuss potential use of CSX ROW for the southern rail connection with CSX, and in a DEIS comment letter from CSX to the Corps dated July 15, 2016, CSX provided the following position to the Corps with regard to Cooper yard:

"CSA will also continue to preserve the S-Line corridor, and will work with [Palmetto Railways] to assure that the corridor south of the planned ICTF can be shared where practical, provided that CSX's operations and access to Cooper Yard are not compromised. CSX also plans to continue to serve the existing and future customers and Industrial sites accessible from Cooper Yard and will retain the ability to reactive the S-Line north of that yard in the future."

(Final EIS Appendix O).

The Section 404(b)(1) Guidelines state that "[i]f it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered." 40 C.F.R. § 230.10(a)(2). With regard to the adverse operational impacts to Cooper Yard created by the southern rail connection (Alternatives 3 and 6), CSX has made clear that is unwilling to allow operations and access to Cooper Yard to be compromised, and Palmetto Railways is unable to force CSX to contribute ROW through condemnation or provide operational control of CSX facilities for use in this Project. Therefore, due to the unique protections for properties associated with Class I railroad operations and CSX's stated position on Cooper Yard, Palmetto Railways has clearly demonstrated that it cannot reasonably obtain, utilize, expand, or manage the property needed for the southern rail connection (Alternatives 3 and 6). Furthermore, an alternative is only "practicable" if it is available and capable of being done in terms of cost, technology, and logistics, and in this regard, the Applicant has clearly demonstrated that Alternatives 3 and 6 are neither practicable nor feasible due to the logistical obstacles associated with CSX's stated opposition to any adverse impacts to its operations at Cooper Yard.

Beyond the logistics and availability concerns discussed above, Alternatives 3 and 6 also have additional impacts to Environmental Justice communities and Alternative 6 has additional impacts to NHPA historic properties (e.g., the Charleston Naval Hospital [CNH] Historic District, Charleston Navy Yard [CNY] Historic District, U.S. Marine Corps [USMC] Barracks, the Charleston Navy Yard Officer's Quarters [CNYOQ] Historic District); multiple public commenters strongly encouraged the Corps to examine alternatives that would avoid and/or minimize impacts to the Environmental Justice communities and NHPA historic properties. (Final EIS Appendices C and O).

Alternatives 3 and 6 would result in additional impacts to the human environment over Alternative 1 (Proposed Project) because the southern rail connection for both alternatives is located in an Environmental Justice community. An Environmental Justice analysis has been conducted (see Section 3.16 and 4.16) to access whether the population meets the criteria for the presence of minority and/or low-income population. This area of potential impact is located within block groups CT 54 BG 1 (Final EIS Figure 3.16-1). CT 54 BG 1 both have Black or African American minority Environmental Justice populations (see Table 3.16-19) and a low-income Environmental Justice population (see Table 3.16-20). As a result, impacts within this section of the study area would result

in additional impacts to an Environmental Justice community. Specifically, Alternatives 3 and 6 would have eight additional residential relocations from the Union Heights neighborhood for a total of 144 compared to Alternative 1 (Proposed Project) (134). The eight additional residential relocations represent the relocations due within the limits of construction; however, an undetermined number of additional residential and commercial structures would have to be removed for construction of Alternatives 3 and 6, all of which are in the Environmental Justice community. Impacts due to the southern rail connection associated with Alternatives 3 and 6 would clearly result in an impact to the Environmental Justice community where the southern rail connection associated with Alternative 1 traverses an area that is mainly industrial. During coordination on the Community MOA (Final EIS Appendix N) between the Applicant and impacted neighborhoods, representatives from LAMC and City leaders were opposed to Alternative 3 because of the impacts to the Union Heights neighborhood.

Impacts due to at-grade rail crossings for Alternative 3 and 6 would result in moderate, permanent adverse impacts on the opening year (2018) and major, permanent adverse impacts for design year (2038) at-grade crossing operations. Alternative 1 (Proposed Project) would have one new at-grade crossing, while Alternative 3 and 6 would have two (Meeting Street and Spruill Avenue at Kingsworth Avenue). Alternative 3 is similar to Alternative 1 (Proposed Project) except off-site roadway and rail improvements would cause the demolition of approximately 2 more structures (Final EIS Section 4.9.11). Vibration impacts for Alternative 3 and 6 differ slightly from Alternative 1 (Proposed Project) as there is potential impact for one or two receptors near the curved track at Kingsworth Avenue; all other impacts are negligible (below 80 VdB). In addition, Alternative 3 differs from Alternative 1 (Proposed Project) in that there would be localized moderate impacts to emergency response (Final EIS Section 4.16.11).

Alternative 6 includes a drayage road that is approximately 1-mile longer than the drayage road in Alternative 1 (Proposed Project). This increased distance would produce increased drayage cost in terms of labor and fuel, which would be less efficient. The longer drayage road also effectively acts as a barrier for west-east travel. Alternative 6 would have a major adverse socioeconomic impact to emergency response as a result of delay at at-grade crossings and limited east-west access to the study area, which is an area of concern with the City of North Charleston (see comment letter on Final EIS from R. Keith Summey, Mayor, dated July 31, 2018).

The magnitude of impacts to NHPA historic properties for Alternative 6 is also greater than Alternative 1 (Proposed Project). Specifically, impacts to historic properties for Alternative 6 includes adverse effects to the Charleston Naval Hospital (CNH) Historic District, Charleston Navy Yard (CNY) Historic District, and U.S. Marine Corps (USMC) Barracks from demolition of contributing elements to the historic districts and an adverse effect to the Charleston Navy Yard Officer's Quarters (CNYOQ) Historic District from altered setting of the historic district. The Proposed Project's impacts to historic properties include an adverse effect to the CNH Historic District from demolition of contributing elements to the historic district and an adverse effect to the parade ground of the USMC Barracks.

Finally, although Alternatives 3 and 6 both have less impacts to waters of the U.S. (than the Proposed Project), the Preamble to the Section 404(b)(1) Guidelines recognizes that "where there is no significant or easily identifiable difference in impact, the alternative need not be considered to have 'less adverse' impact." (Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 45 Fed. Reg. 85336 (Dec. 24, 1980)). The Final EIS studied and compared impacts to waters of the

U.S. amongst the seven alternatives, and concluded in Sections 4.5.5 and 4.5.8, for Alternatives 3 and 6, respectively, that "[i]mpacts to waters of the U.S. . . . would be similar to those discussed under Alternative 1 (Proposed Project), with roadway and rail improvements having the largest overall impact to waters of the U.S." Similarly, Section 4.5.3 of the Final EIS documented that "[w]hile the construction of the ICTF would be the largest land disturbance associated with Alternative 1 (Proposed Project), the roadway and rail improvements have the largest overall impact to waters of the U.S." Therefore, it is the Corps' determination that there is no significant or easily identifiable difference in impacts to water of the U.S. amongst Alternatives 1, 3, and 6 that would compel permit denial pursuant to the Section 404(b)(1) Guidelines of the Applicant's proposed discharges associated with Alternative 1.7

In summary, as a result of the aforementioned additional socioeconomic impacts and environmental justice impacts, as well as the practicability issues associated with adverse impacts to CSX's Cooper Yard, Alternative 3 should be rejected from being the LEDPA. Likewise, as a result of additional negative impacts to historic properties (CNH Historic District, CNY Historic District, USMC Barracks, and CNYOQ Historic District) and emergency response (from the extended drayage road), as well as the practicability issues associated with adverse impacts to CSX's Cooper Yard, Alternative 6 should be rejected from being the LEDPA.

Alternatives 4, 5, and 7:

Alternative 4 has comparable impacts to Alternative 1 (Proposed Project) for most of the other resources evaluated. However, noise impacts for Alternative 4 differ slightly from Alternative 1 (Proposed Project) as rail noise impacts would be concentrated in the southern rail connection, but the magnitude of impacts is the same (minor to moderate impact [3 to 10 dB(A)] along several segments). Also, impacts to socioeconomics and environmental justice from Alternative 4 are similar to Alternative 1 (Proposed Project) except for localized moderate impacts to emergency response from Alternative 4.

As described above, the magnitude of impacts to NHPA historic properties for the River Center Alternatives (Alternatives 5 and 7) are greater than Alternative 1 (Proposed Project). Specifically, impacts to historic properties for Alternatives 5 and 7 include adverse effects to the Charleston Naval Hospital (CNH) Historic District, Charleston Navy Yard (CNY) Historic District, and U.S. Marine Corps (USMC) Barracks from demolition of contributing elements to the historic districts and an adverse effect to the Charleston Navy Yard Officer's Quarters (CNYOQ) Historic District from altered setting of the historic district.

Similar to Alternative 6, Alternatives 5 and 7 include a drayage road that is approximately 1-mile longer than the drayage road in Alternative 1 (Proposed Project). This increased distance would

⁷ An EPA memo by Robert M. Perry, Associate Administrator and General Counsel, entitled "Legal Issues Concerning Section 404(b)(1) Guidelines," and dated March 17, 1983, is instructive on this issue, stating as follows: "Whether the guidelines must require that permits be denied because reasonable, environmentally preferable alternatives exist is a somewhat more complicated question, and probably depends in part on the environmental effects of the proposed discharge. For example, where the proposed discharge would have environmental effects of serious concern and a reasonable environmentally preferable alternative is available, the statutory scheme and legislative history virtually compel denial. On the other hand, where the impact of the discharge in question is insignificant we would justify not requiring selection of a 'better' alternative (or even, as noted above, not doing an alternatives analysis at all)."

produce increased drayage cost in terms of labor and fuel, which would be less efficient. The longer drayage road also effectively acts as a barrier for west-east travel. Alternatives 5 and 7 would have a major adverse socioeconomic impact to emergency response as a result of delay at at-grade crossings and limited east-west access to the study area.

Impacts to waters of the U.S. for Alternatives 4, 5, and 7 are within 1 acre of impact to the Proposed Project (Alternative 1) and are therefore considered effectively the same. The Final EIS studied and compared impacts to waters of the U.S. amongst the seven alternatives, and concluded in Sections 4.5.6, 4.5.7, and 4.5.9, for Alternatives 4, 5, and 7, respectively, that "[i]mpacts to waters of the U.S. . . . would be similar to those discussed under Alternative 1 (Proposed Project), with roadway and rail improvements having the largest overall impact to waters of the U.S." Similarly, Section 4.5.3 of the Final EIS documented that "[w]hile the construction of the ICTF would be the largest land disturbance associated with Alternative 1 (Proposed Project), the roadway and rail improvements have the largest overall impact to waters of the U.S." Therefore, it is the Corps' determination that there is no significant or easily identifiable difference in impacts to water of the U.S. amongst Alternatives 1, 4, 5, and 7 that would compel permit denial pursuant to the Section 404(b)(1) Guidelines of the Applicant's proposed discharges associated with Alternative 1.

As a result of additional negative impacts (noise and socioeconomic / environmental justice for Alternative 4, and historic properties and emergency response (from the extended drayage road) for Alternatives 5 and 7), and because the wetland impacts are effectively the same as the Proposed Project, the Applicant has clearly demonstrated that Alternatives 4, 5, and 7 should be rejected from being the LEDPA.

Alternative 2:

Alternative 2 was evaluated in the Final EIS for comparative analysis purposes in response to scoping meeting comments (Final EIS Appendix C) to evaluate whether an existing, inactive CSX-owned rail ROW known as the S-Line could potentially be used for the Proposed Project. Since inception of the Proposed Project, the Applicant has examined the use of the S-Line as a potential alternative.

Alternative 2 would require additional infrastructure when compared with Alternative 1 and other project alternatives. According to the Applicant, the

"additional infrastructure alterations and improvements in the City of North Charleston, [are] including, but not limited to:

- the permanent closure of St. John's Avenue, south of the Turnbull gate;
- the construction of an arrival/departure track on the S-line right of way (ROW) in order to connect the NBIF to the existing CSX line and ROW;
- the replacement and reactivation of track within the existing CSX ROW that runs parallel to Spruill Avenue;
- the construction of a new multiple track rail bridge [replacing the existing single-track bridge] within the existing ROW across Noisette Creek;

- improvements to ROW and construction of new trackage east of Spruill and Aragon Avenues to connect to existing North Charleston Terminal Company track along Virginia Avenue; and
- the construction of a [new] rail bridge [to replace the existing inadequate structure] across Noisette Creek between O'Hear and NCTC ROW along Virginia Avenue.

These additional infrastructure improvements would substantially increase the cost of the NBIF [ICTF] to Palmetto Railways"

(Final EIS Appendix B - Jan. 11, 2017, Palmetto Railways – NBIF Responses to Dec. 13, 2016, Corps of Engineers RFAI).

Alternative 2 would result in increased impacts to the natural environment over Alternative 1 (Proposed Project) and other project alternatives as it would require a new multiple track bridge over Noisette Creek to replace the existing single-track bridge. Alternative 2 has the most (17.92 acres) impacts to waters of the U.S. (Final EIS Table 4.5-10) and EFH (Final EIS Table 4.7-2) compared with Alternative 1 (Proposed Project) and other project alternatives.

Alternative 2 would also result in increased impacts to the human environment over Alternative 1 (Proposed Project). The northern rail connection in Alternative 2 is located in an Environmental Justice community. An Environmental Justice analysis has been conducted (see Section 3.16 and 4.16) to assess whether the population meets the criteria for the presence of minority and/or low-income population. This area of potential impact is located within block groups CT 37 BG 3 and CT 55 BG 1 (Final EIS Figure 4.18-1). CT 37 BG 3 and CT 55 BG 1 both have Black or African American minority Environmental Justice populations (Final EIS Table 3.16-19). In addition, CT 55 BG 1 also has a low-income Environmental Justice population (Final EIS Table 3.16-20). As a result, impacts within this section of the study area would result in additional impacts to an Environmental Justice community. Specifically, Alternative 2 would have the most residential relocations (167) compared to Alternative 1 (Proposed Project) (134) and other project alternatives.

Increased traffic impacts would result under Alternative 2 with an additional at-grade crossing at O'Hear Avenue (Final EIS Table 4.8-23). The northern rail connection would route trains along residences along St Johns Avenue, Reddin Road, O'Hear Avenue, and Bexley Street and in proximity to Edmund A. Burns Elementary School (outside of the cultural resources study area). Alternative 2 would also result in a major noise impact [above 10 dB(A)] for land uses such as residential homes and St. John Catholic Church and School along the new build rail segment from O'Hear to the ICTF facility (Final EIS Section 4.12.4.2). Finally, additional socioeconomic impacts would result from the closure of St. Johns Avenue and creation of a cul-de-sac at St. Johns Avenue and McMillian Avenue affecting access and mobility (Final EIS Section 4.16.4). Further, according to the Applicant,

"although the S-line alternative may avoid Section 4(f) properties, it would require displacement of a greater number of residences in areas with a greater percentage of homes from a minority community. In addition to the safety and disruption concerns caused by the S-line route, the acquisition costs associated with the condemnation (or diminution in value) of required commercial and residential structures along the proposed ROW of the alternative would be significantly higher than the proposed alternative [Alternative 1 (Proposed Project)], where Palmetto Railways already owns a significant portion of the land and structures required for the

route, which mostly avoids the impacts to majority minority communities that would be caused by adopting the S-line route"

(Final EIS Appendix B - Jan. 11, 2017, Palmetto Railways – NBIF Responses to Dec. 13, 2016, Corps of Engineers RFAI).

For the northern rail connection, Alternative 1 (Proposed Project) would result in impacts to 14 structures, none of which are residential and all Palmetto-Railways-owned, while Alternative 2 would result in impacts to 17 structures, 8 of which are residential (3 are multi-family).

During FRA's Section 4(f) analysis that was conducted during the preparation of the Final EIS, additional information was provided by the Applicant (Section 4.18) that showed safety and operational problems associated with Alternative 2. According to the Applicant,

"Palmetto Railways conducted an evaluation of the feasibility of using the CSX "S-Line" and its ROW as a part of its analysis of feasible alternatives. As a part of that evaluation, Palmetto Railways determined that utilization of the S-Line in its ROW alignment would be challenging due to the horizontal and vertical curvature of the track. From an engineering perspective, the radius of a curve on a track should not be more than 10 degrees, and should also not be combined with a grade change (as is presented by the topography of that area) in order to allow for mainline engines and intermodal railcars to traverse safely around the curve. Multiple-well articulating intermodal railcars, which are the type of railcars that the Class I carriers utilize for intermodal transport that will be arriving and departing the NBIF [ICTF], and which are typically much longer than standard railcars and cannot traverse the tighter degree curves that shorter railcars can, even at the lower speeds that are seen within city limits. The combination of curves tighter than 10 degrees, topography changes, and longer railcars increases the possibility of derailment occurrences exponentially. The existing curvature of the S-Line connection exceeds the safety tolerances that Palmetto Railways can accept because of the increased derailment risk to railcars that would traverse the northern lead in the S-Line alignment"

(Final EIS Appendix B - Palmetto Railways' response to FRA comments, January 29, 2018).

Access to the S-line is problematic because it is owned and operated by CSX, which creates substantial practicability issues for Alternative 2. In general, Class I railroads are independently owned, and the Applicant cannot make decisions on their behalf or force them to contribute ROW through condemnation or provide operational control of their facilities for use in this Project. It is the Corps' understanding that the Applicant attempted to purchase CSX ROW at the north end of the Project site referred to as the S-line (Shipyard Creek to Bexley Avenue) in 2012 (see Appendix B, Response to Request for Additional Information, October 17, 2016, Exhibit 1); however, CSX in a November 2, 2012, letter to the Applicant stated:

"CSXT respectively declines SCPR's offer at this time. Changing market conditions dictate that CSXT retain its current infrastructure in Charleston for the foreseeable future"

(see Appendix B Response to Request for Additional Information, October 17, 2016, Exhibit 2).

Furthermore, in a DEIS comment letter from CSX to the Corps dated July 15, 2016, CSX again stated their position on the S-Line:

"CSX will also continue to preserve the S-Line corridor, and will work with Palmetto to assure that the corridor south of the planned ICTF can be shared where practical, provided that CSX's operations and access to Cooper Yard are not compromised. CSX also plans to continue to serve the existing and future customers and industrial sites accessible from Cooper Yard and will retain the ability to reactivate the S-Line north of that yard in the future"

(Final EIS Appendix O).

In a January 29, 2018, response to a request for information from the FRA, the Applicant indicated:

"CSX declined Palmetto Railways' inquiries and has, to date, declined to further negotiate Palmetto Railways' offer to either acquire the trackage rights to or purchase the S-Line"

(Final EIS Appendix B - Palmetto Railways' response to FRA comments, January 29, 2018).

As such, the Applicant has clearly demonstrated that it is unable to gain ownership or operational control of this track from CSX. According to the Applicant,

"...the term "operational control" means, simply, complete control over operations [...].

Operational control would mean that Palmetto Railways would have the complete, autonomous authority to conduct, perform, manage and maintain all rail operations and activities on or associated with the subject line without the input or directives from third parties, regardless of the line's ownership" (see Appendix B Palmetto Railways' response to FRA comments, January 29, 2018). Further, "[...] if "operational control" or "operational control with ownership" is not achieved, and CSX would maintain ownership or some measure of operational control, then CSX would perpetually maintain a singular advantage over its competitors with respect to pricing, usage, and operational fluidity of train movements at the [ICTF]. Thus, equal access would either be unachievable or subject to the discretion of CSX, thereby impacting a primary characteristic and criteria of the project"

(Final EIS Appendix B - Palmetto Railways' response to FRA comments, January 29, 2018).

Equal access is part of the Applicant's defined purpose and need (Final EIS Section 1.4.1), and this alternative is not available due to CSX ownership and operational control in concert with its stated position. Logistical concerns associated with Alternative 2 would compromise the project to an unreasonable degree, in light of the project's purpose and need, and would result in unacceptable operational problems. Furthermore, the additional infrastructure improvements required for Alternative 2 would substantially increase the cost of the ICTF over the Proposed Project. Due to the unique protections for properties associated with Class I railroad operations and CSX stated position on the S-Line corridor, Palmetto Railways has clearly demonstrated that it cannot reasonably obtain, utilize, expand, or manage the property needed for the S-Line (Alternative 2). Furthermore, an alternative is only "practicable" if it is available and capable of being done in terms of cost, technology, and logistics, and in this regard, the Applicant has clearly demonstrated that Alternative 2 is neither practicable nor feasible due to the logistical obstacles associated with CSX's stated position on the S-Line corridor.

After a careful and thorough consideration of the Applicant's additional information regarding Alternative 2, as well as the information documented in the Final EIS, the Applicant has clearly demonstrated that Alternative 2 is not practicable in consideration of existing technology, logistics, and cost in light of the overall Project purpose and should be rejected. Beyond the logistics and

availability concerns discussed above, Alternative 2 also results in severe impacts to environmental resources and the human environment, which includes Environmental Justice communities.

Section 404 (b)(1) LEDPA and NEPA Summary:

After the Corps' independent evaluation of the probable impact of Alternative 1 (Proposed Project) in accordance with the Section 404(b)(1) Guidelines, the Corps has determined that Palmetto Railways has met its burden to clearly demonstrate that practicable alternatives that do not involve impacts to special aquatic sites do not exist, and, further, that Alternative 1 (Proposed Project) is considered to be the least environmentally damaging practicable alternative (LEDPA) that meets the overall project purpose. For purposes of NEPA and based on the alternatives analysis described in Chapter 2 of the Final EIS and summarized above, the Corps has also determined that Alternative 1 (Proposed Project) is considered to be environmentally preferable. This alternative has been clearly demonstrated to be the LEDPA because it meets all of the evaluation criteria defined above that were used to evaluate and compare alternatives to the project proposed in the Palmetto Railways' DA permit application. In addition, this alternative is the LEDPA because it represents the maximum amount of wetland impact avoidance and minimization that can be achieved and still meet the overall project purpose. Although Alternatives 3 and 6 have less impacts to waters of the U.S., Palmetto Railways has clearly demonstrated that it cannot reasonably obtain, utilize, expand, or manage the property needed for the southern rail connection (Alternatives 3 and 6), and these alternatives are neither practicable nor feasible due to the logistical obstacles associated with CSX's stated opposition to any adverse impacts to its operations at Cooper Yard. Furthermore, there is no significant or easily identifiable difference in impacts to water of the U.S. amongst Alternatives 1, 3, 4, 5, 6, and 7 that would warrant an environmental preference over Alternative 1 when considering the additional adverse environmental concerns associated with Alternatives 3, 4, 5, 6 and 7. In summary, the identification of Alternative 1 as the LEDPA was made with careful consideration of each of the alternative's potential impacts to aquatic ecosystems, as well as other significant adverse environmental consequences for the alternatives studied in the Final EIS.

5. Further Evaluation of the 404(b)(1) Guidelines

For each evaluation criterion listed below, this section describes the potential impact, any minimization measures that will be used to reduce the level of impact, and the resultant impact level. This analysis addresses the impacts associated with placement of dredged or fill material into waters of the U.S., including special aquatic sites.

Potential effects on physical and chemical characteristics of the aquatic ecosystem (Subpart C)

Sec. 230.20 Substrate

The substrate of the aquatic ecosystem underlies open waters of the U.S. and constitutes the surface of wetlands and streams. It consists of organic and inorganic solid materials and includes water and other liquids or gases that fill the spaces between solid particles.

The discharge of dredged or fill material into waters of the U.S. associated with the Project will result in the loss of approximately 15.84 acres of waters of the U.S. within the Project boundary. Substrates will be shaded or filled by construction. Improvements that would result in direct impacts include the drayage road, the Hobson/Bainbridge realignment, the ICTF, the northern rail connection, the bridge over Noisette Creek, and the southern rail connection. Substrates that will be permanently lost as a

result of these activities are described in the Final EIS in Sections 3.1 and 4.1, "Geology and Soils"; Sections 3.5 and 4.5, "Wetlands and Other Waters of the United States"; and Sections 3.7 and 4.7, "Essential Fish Habitat." In wetlands, substrates include a variety of hydric and partially hydric loam and sandy-loamy soils that largely overlap with areas associated with stormwater controls and freshwater wetlands. Substrates associated with natural drainages such as freshwater creeks and tidal salt marsh consist of silt, sand, and a mix of sand and gravel (gravel related to anthropogenic activities).

Altered drainage areas and patterns of runoff caused by the fill and construction of the ICTF, northern and southern rail connection, Noisette Creek bridge, roads, and other Project facilities, including localized erosion and sedimentation, will result in some adverse localized changes in substrates of freshwater creeks and tidal salt marsh through scouring and sedimentation outside the perimeters of the fill areas. The amount and composition of the discharged material and the location, method, and timing of discharges may influence the degree of impact on the substrate. In addition to temporary effects on creek, marsh, and wetland habitats, sediment deposition will affect bottom-dwelling organisms at the site by smothering immobile or sedentary forms or forcing mobile forms to migrate. To a lesser degree, fill and construction will affect surface water runoff, water depth, and stream water temperatures.

The Permittee will be required to implement a number of minimization measures proposed as part of the Project and also required by state regulations. The Permittee will implement sediment and erosion control measures to reduce sediment and sediment-associated pollutant loading from disturbed areas. These measures include: (1) implementing Storm Water Pollution and Prevention Plans (SWPPPs) as required by the NPDES permit, including management of sediment and erosion control; (2) managing sediment and erosion control during construction as specified in the SCDHEC stormwater management Best Management Practices Handbook, (3) performing all land disturbance activities in compliance with the U.S. Navy Construction Process Document (Navy "Dig" Permit), which identifies the permit process and requirements for conducting construction or other land disturbing activities in LUC Areas at the former Navy Base (Charleston Naval Complex); (4) implementing an SPCC plan and Stormwater Master Plan; (5) including a forebay in the stormwater management system to provide pretreatment of stormwater runoff before it discharges to Pond A; (6) constructing five stormwater detention ponds located at the topographical low points of the site and in close proximity to the existing outfalls to contain and manage stormwater runoff; and (7) capping much of the Project site with pavement to mitigate spread of existing contaminants. The use of these BMPs and other measures will further ensure that any proposed work will not cause significant adverse impacts on waters of the U.S. outside of the filled areas.

The proposed discharge will cause a permanent adverse effect on the substrates of the filled wetlands and streams, but will not cause significant, long-term adverse effects on substrates outside the filled areas. Consequently, the Corps has determined that none of the impacts identified for substrate were of a severity that will cause or contribute to significant degradation of waters of the U.S.

Sec. 230.21 Suspended particulates and turbidity

Suspended particulates in the aquatic ecosystem normally consist of fine-grained mineral particles, usually smaller than silt, and organic particles. Suspended particulates may enter waterbodies as a result of natural events such as runoff, flooding, vegetative and planktonic breakdown, and resuspension of bottom sediments. Human activities, such as dredging and filling of waters of the

U.S., also may cause turbidity in said waters. The level of impact and the degree of the turbidity depend on factors such as the amount of agitation in the water, particulate-specific gravity, particle shape, and physical and chemical properties of particle surfaces.

There are open waters within which fill will be discharged; therefore, re-suspension of particulates through currents or tides may occur due to the disturbance of the bottoms and banks of Shipyard and Noisette creeks during construction of the drayage road over Shipyard Creek and rehabilitation of the existing railroad bridge over Noisette Creek. Construction in these locations would require construction sequencing BMPs such as installation of a silt fence along the perimeter of the site, as well as the stabilization of construction entrances prior to commencing construction operations. Previously installed BMPs would be maintained and incorporated into subsequent construction phases. During grading operations and stormwater construction, inlet filters and inlet/outlet rip-rap would be installed as work progresses. Silt fencing would be used during the lifespan of all construction activities. Temporary and permanent seeding would also be used during the stabilization phase. During in-water work, a floating semi-permeable turbidity curtain will be deployed around areas where pile driving is taking place.

Construction activities on the Project site will periodically increase the suspended particulates (e.g., total suspended solids or TSS), primarily during runoff events, including dust and dirt from roads, discharges from stormwater ponds, and areas of erosion—resulting in secondary effects. The Permittee will be required to implement a number of measures proposed as part of the Project and also required by state regulations to minimize erosion and sedimentation. The Permittee will implement sediment and erosion control measures to reduce sediment and sediment-associated pollutant loading from disturbed areas. These measures include: (1) implementing Storm Water Pollution and Prevention Plans (SWPPPs) as required by the NPDES permit, including management of sediment and erosion control; (2) managing sediment and erosion control during construction as specified in the SCDHEC stormwater management Best Management Practices Handbook; (3) performing all land disturbance activities in compliance with the U.S. Navy Construction Process Document (Navy "Dig" Permit), which identifies the permit process and requirements for conducting construction or other land disturbing activities in LUC Areas at the former Navy Base (Charleston Naval Complex); (4) implementing an SPCC plan and Stormwater Master Plan; (5) including a forebay in stormwater management system to provide pretreatment of stormwater runoff before it discharges to Pond A; (6) constructing five stormwater detention ponds located at the topographical low points of the site and in close proximity to the existing outfalls to contain and manage stormwater runoff; and (7) capping much of the Project site with pavement to mitigate spread of existing contaminants. The WQC issued on July 2, 2018 by the SCDHEC sets forth BMPs that the Permittee must follow in order to reduce or eliminate the chances of particulates being transported downstream and being released into the watershed.

After construction is completed, all disturbed areas will be stabilized according to the SWPPPs, including stabilization and vegetative cover, considerably decreasing the potential for suspended particulates and turbidity. Nevertheless, runoff from eroded areas or areas lacking vegetative cover could continue to contribute suspended particulates and turbidity to streams during periods of runoff.

Based on the above, the proposed discharge will not cause significant, long-term adverse effects on suspended particulates or turbidity. Consequently, the Corps has determined that none of the impacts identified were from suspended particulates and turbidity of a severity that will cause or contribute to significant degradation of waters of the U.S.

Sec. 230.22 Water

Water is the part of the aquatic ecosystem in which organic and inorganic constituents are dissolved and suspended. It constitutes part of the liquid phase and is contained by the substrate. Water forms part of a dynamic aquatic life-supporting system. Water clarity, nutrients and chemical content, physical and biological content, dissolved gas levels, pH, and temperature contribute to its life-sustaining capabilities.

As discussed in the Final EIS (Section 4.2, "Hydrology" and Section 4.3, "Water Quality"), construction and operational activities at the Project site have the potential to affect hydrology and water quality. Pollutant loading, which can increase the biological oxygen demand and result in decreased dissolved oxygen, may increase locally due to construction in and operation proximal to respective sections of Noisette and Shipyard Creek. Short-term effects may be experienced upstream through the transport of pollutants during incoming tides. In addition, pollutant loading, including increased nutrient concentrations from stormwater runoff resulting from land use changes, is possible. The Applicant's proposed Stormwater Management System, described in Section 4.3.3.3 of the Final EIS, would provide pretreatment of stormwater runoff before it discharges to receiving waterbodies, thereby reducing water quality impacts. The Stormwater Management System would result in a reduction of TN, TP, and TSS as compared to existing and future without-Project conditions. All design requirements would be in compliance with the TMDL for DO established for the Charleston Harbor, Cooper River, Ashley River, and Wando River and SCDHEC regulations. Applicantproposed sediment and erosion control practices designed as specified in the SCDHEC stormwater management Best Management Practices Handbook, include over 80,000 linear feet of new pipe or underdrain, five dry detention ponds (A, B, C, D1, and D2) located at the topographical low points of the site and in close proximity to the existing outfalls, and two sediment forebays to provide pretreatment of stormwater runoff before it discharges to pond A. Accordingly, the construction and operation-related impacts on surface water quality are considered minor.

Overall, impacts on water quality are anticipated to be minor and will be greatest during active construction. The proposed discharge will have no significant adverse effects on water quality. Consequently, the Corps has determined that none of the impacts identified on water were of a severity that will cause or contribute to significant degradation of waters of the U.S.

Sec. 230.23 Current patterns and water circulation and Sec. 230.24 Normal water fluctuations

Current patterns and water circulation are the physical movements of water in the aquatic ecosystem. Currents and circulation respond to natural forces as modified by basin shape and cover, physical and chemical characteristics of water strata and masses, and energy dissipating factors. Normal water fluctuations in a natural aquatic system consist of daily, seasonal, and annual tidal and flood fluctuations in water levels. Biological and physical components of such a system are either attuned to or characterized by these periodic water fluctuations.

As discussed in the Final EIS (Section 4.2, "Hydrology" and Section 4.3, "Water Quality"), the discharge of dredged or fill material at the Project site have the potential to affect current patterns and water circulation. Project-related impacts on surface water hydrology, including surface water flows and circulation, may occur during construction and operation of the ICTF as a result of placement of fill, embankment construction, placement of additional pilings within Noisette Creek and Shipyard Creek, and increased impervious surface. Proximal waters of the U.S. may be altered by the amount of runoff that reaches receiving waterbodies and the amount of water that percolates to the

groundwater. The addition of a new bridge over Shipyard Creek for the drayage road would be predominantly pile supported and not result in a hydrologic constriction that could adversely impact flow patterns in Shipyard Creek. The construction of arrival/departure tracks crossing tidal marsh habitat upstream of Shipyard Creek, however, may slightly reduce localized tidal flushing, resulting in the potential for negligible changes in the current patterns and water circulation of Shipyard Creek. However, the Applicant has designed culverts (e.g., under the arrival/departure tracks) and bridges to maintain existing flow and hydrology for circulation and to prevent flooding upstream.

Overall, impacts on current patterns, water circulation, and normal water fluctuations are anticipated to be minor to moderate and temporary resulting in no significant adverse effects. Consequently, the Corps has determined that none of the impacts identified were of a severity that will cause or contribute to significant degradation of waters of the U.S.

Sec. 230.25 Salinity gradients

Salinity gradients form where salt water from the ocean meets and mixes with fresh water from land. As discussed in the Final EIS (Section 4.2, "Hydrology" and Section 4.3, "Water Quality"), construction and operational activities at the Project site have the potential to affect salinity gradients.

Construction of the bridges associated with the drayage road over Shipyard Creek, as well as new arrival and departure tracks across the creek's associated tidal salt marsh, would not result in channel impacts that would significantly change circulation patterns. The addition of a new bridge over Shipyard Creek for the drayage road would be predominantly pile supported and not result in a hydrologic constriction that could adversely impact flow patterns in Shipyard Creek. The construction of arrival and departure tracks crossing tidal marsh habitat upstream of Shipyard Creek, however, may slightly reduce localized tidal flushing, resulting in the potential for negligible changes in the range of salinity levels of Shipyard Creek. Even so, the Applicant has designed culverts (e.g., under the arrival and departure tracks) and bridges to maintain existing flow and hydrology for circulation and to prevent flooding upstream. As a result, potential changes to existing salinity gradients within Shipyard Creek under Alternative 1 (Proposed Project) would be negligible.

Potential effects on biological characteristics of the aquatic ecosystem (Subpart D)

Sec. 230.30 Threatened and endangered species

The Section 404(b)(1) Guidelines at 40 C.F.R. § 230.30(c) specifically state that "where consultation with the Secretary of the Interior occurs under Section 7 of the Endangered Species Act, the conclusions of the Secretary concerning the impact(s) of the discharge on threatened and endangered species and their habitat shall be considered final."

The EIS process analyzed the Project's potential to affect several federally-listed species and/or their critical habitat as a result of the construction of Alternative 1 (Proposed Project). No critical habitat for any of the federally listed species is present. The majority of impacts to federally listed species anticipated as a result of Alternative 1 (Proposed Project) would be short-term in nature. Specific activities associated with Alternative 1 (Proposed Project) that could result in short-term displacement of individuals and/or alterations to habitat include the construction of the drayage road and arrival/departure tracks near tidal salt marsh and Shipyard Creek (physical alterations to habitat and fragmentation) and bridge improvements, including any temporary construction work areas, in

Noisette Creek (shading and sedimentation). Details regarding the species involved and potential impacts are included in Section 4.6 and Table 4.6-2 of the Final EIS.

Under Alternative 1 (Proposed Project), construction and/or improvements to the rail bridges and dravage road and arrival/departure tracks could affect the aquatic federally-listed species that may inhabit the tidal open waters within the Action Area (see Section 3.3 of this ROD). As summarized in Final EIS Table 4.6-2, the tidal open waters of the Protected Species study area provide marginally suitable foraging habitat for the green, loggerhead, and Kemp's ridley sea turtles; suitable estuarine habitat for the West Indian manatee; suitable spawning habitat for adult Atlantic sturgeon due to the presence of flow, salinity, and certain substrates, and suitable foraging habitat for juveniles, subadults, and adults and potential overwintering habitat for shortnose sturgeon. The Action Area may contain marginal habitat for the spotted turtle in freshwater wetlands and ditches and nearby terrestrial habitats. Potential short-term indirect impacts on these species if present during construction include turbidity, sedimentation, and chemical contamination. Potential permanent direct impacts include the permanent loss of open marine waters that provide suitable foraging habitat for species. Accidentally spilled liquids onsite should be intercepted and temporarily contained by the storm sewer system to prevent draining directly into onsite or nearby surface waters. Off-site truck and rail traffic could result in the potential for minor and/or major (depending on location) indirect impacts to protected aquatic species from accidental pollutant spills. However, there are BMPs, mandated requirements, and regulations that cover spills (Final EIS Section 4.15.3.2); therefore, construction and operation activities within or adjacent to Shipyard and Noisette creeks may result in negligible effects to these aquatic federally-listed species.

To reduce potential construction-related impacts to the manatee to discountable and insignificant levels, the USFWS Standard Manatee Construction Conditions have been included as Special Conditions of the DA permit (see Attachment A, Special Conditions).

Furthermore, the Applicant has committed to implementation of the following BMPs and/or mitigation measures, which would reduce the potential for construction impacts:

- The permittee shall instruct all personnel associated with the project of the potential presence of and the need to avoid collisions with protected species, which may include but is not limited to West Indian manatees, Atlantic sturgeon, shortnose sturgeon, sea turtles, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale.
- The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing protected species which are protected under the Marine Mammal Protection Act of 1972 and/or the Endangered Species Act of 1973.
- Any siltation barriers used during the project shall be made of material in which protected species cannot become entangled and must be properly secured, and regularly monitored to avoid protected species entrapment.
- All vessels associated with the project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

- If protected species are seen within 100 yards of the active construction area all appropriate precautions shall be implemented to ensure protection of the protected species. These precautions shall include the operation of all moving equipment no closer than 50 feet to a protected species. Operation of any equipment closer than 50 feet to a protected species shall necessitate immediate shutdown of that equipment. Activities will not resume until the protected species has departed the project area of its own volition.
- Incidents where any individuals of sea turtles, Atlantic sturgeon, shortnose sturgeon, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this DA permit shall be reported to NOAA Fisheries, Office of Protected Species at (727) 824-5312, the SCDNR Hotline at 1-800-922-5431, and the Regulatory Office of the Charleston District of the U.S. Army Corps of Engineers at (843) 329-8044. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure, or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.
- In order to insure protection and reduce potential construction-related impacts to West Indian manatees that may enter the project area during dredging activities performed outside the winter months (November thru April), to discountable and insignificant levels, the permittee will comply with the following:
 - a. All construction personnel must monitor water-related activities for the presence of manatee(s) during May October.
 - b. Any collision with and/or injury to a manatee shall be reported immediately to Mr. Jim Valade of the U.S. Fish and Wildlife Service, North Florida Field Office, at (904) 731-3116, and the SCDNR Hotline at 1-800-922-5431.
- The permittee understands and agrees that pilings will be installed using a water jet or vibratory hammer. In the event standard pile driving (impact hammer) is utilized, the permittee understands and agrees that a soft-strike procedure (three strikes at 40%-60% energy level once a minute for 3 minutes) must be conducted prior to beginning pile driving activities and after any pile driving interruptions of more than 30 minutes.
- That the permittee understands and agrees that pile driving activities must be limited to 12 hours per day with a 12-hour rest period between pile driving activities.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the Action Area, and independently examined all information provided by the Applicant. The Corps has determined that the Project is not likely to adversely affect the west Indian manatee, will have no effect on other federally-listed species, and will not result in the destruction or adverse modification of designated (or proposed) critical habitat.

As discussed in Section 7, "Effects, Policies and Other Laws" of this ROD, final coordination with the USFWS occurred on November 10, 2016. The USFWS concurred with the Corps' determination that the proposed construction of the Project is "not likely to adversely affect federal protected species."

Sec. 230.31 Fish, crustaceans, mollusks, and other aquatic organisms in the food web

Aquatic organisms in the food web include, but are not limited to, finfish, crustaceans, mollusks, insects, annelids, planktonic organisms, and the plants and animals on which they feed and depend upon for their needs. All forms and life stages of an organism, throughout its geographic range, are included in this category. The discharge of dredged or fill material can variously affect populations of fish, crustaceans, mollusks and other food web organisms through the release of contaminants that adversely affect adults, juveniles, larvae, or eggs, or result in the establishment or proliferation of an undesirable competitive species of plant or animal at the expense of the desired resident species. Suspended particulates settling on attached or buried eggs can smother the eggs by limiting or sealing off their exposure to oxygenated water. Discharge of dredged and fill material may result in the debilitation or death of sedentary organisms by smothering, exposure to chemical contaminants in dissolved or suspended form, exposure to high levels of suspended particulates, reduction in food supply, or alteration of the substrate upon which they are dependent. Mollusks are particularly sensitive to the discharge of material during periods of reproduction and growth and development due primarily to their limited mobility. They can be rendered unfit for human consumption by tainting, by production and accumulation of toxins, or by ingestion and retention of pathogenic organisms, viruses, heavy metals or persistent synthetic organic chemicals. The discharge of dredged or fill material can redirect, delay, or stop the reproductive and feeding movements of some species of fish and crustacea, thus preventing their aggregation in accustomed places such as spawning or nursery grounds and potentially leading to reduced populations. Reduction of detrital feeding species or other representatives of lower trophic levels can impair the flow of energy from primary consumers to higher trophic levels. The reduction or potential elimination of food chain organism populations decreases the overall productivity and nutrient export capability of the ecosystem.

The 6.65 acres of tidal salt marsh and 1.14 acres of tidal open waters proposed to be filled is subject to the ebb and flood of the tide. The fluctuating water levels allow for the presence of fish, crustaceans, mollusks and other aquatic organisms in the food web. The saltmarsh is dominated by smooth cordgrass and black needle rush. The mudflat substrate is dominated by mud with some scattered oyster shells. However, submerged aquatic vegetation and oyster beds were not observed in impact areas. The proposed fill material will have a minor, short-term effect as it will impact nonmotile benthic organisms and will result in the loss of tidal habitat for both non-motile and motile benthic organisms. However, there are sufficient areas of tidal habitat within the Noisette and Shipyard Creek estuary for motile species to relocate. As previously described in 230.21, the Applicant will implement stormwater and other BMPs to manage runoff and comply with SCDHEC regulations. Because BMP's will be incorporated into the project, impacts to water quality constituents which may affect benthic aquatic organisms such as turbidity, nutrients and chemical content, physical and biological content, dissolved oxygen levels, pH, and temperature, are anticipated to be minor and temporary during construction. Impacts to existing salinity gradients within Shipyard and Noisette Creeks would be negligible. For these reasons, the discharge of fill material will have no significant adverse effects on fish, crustaceans, mollusks, or other aquatic organisms in the food web.

Overall, impacts on aquatic organisms in the food web are anticipated to be minor and short-term with no significant adverse effects. Consequently, the Corps has determined that none of the impacts identified were of a severity that will cause or contribute to significant degradation of waters of the U.S.

Sec. 230.32 Other wildlife

Wildlife associated with aquatic ecosystems includes resident and transient mammals, birds, reptiles, and amphibians. The discharge of fill material can result in the loss or change of breeding and nesting areas, escape cover, travel corridors, and preferred food sources for resident and transient wildlife species associated with the aquatic ecosystem. These adverse impacts upon wildlife habitat may result from changes in water levels, water flow and circulation, salinity, chemical content, and substrate characteristics and elevation. Increased water turbidity can adversely affect wildlife species which rely upon sight to feed, and disrupt the respiration and feeding of certain aquatic wildlife and food chain organisms. The availability of contaminants from the discharge of dredged or fill material may lead to the bioaccumulation of such contaminants in wildlife. Changes in such physical and chemical factors of the environment may favor the introduction of undesirable plant and animal species at the expense of resident species and communities. In some aquatic environments lowering plant and animal species diversity may disrupt the normal functions of the ecosystem and lead to reductions in overall biological productivity.

The potential impacts of the Project on terrestrial resources, including wildlife species and their habitats, are fully described in Section 4.4, "Vegetation and Wildlife" in the Final EIS. Discharge of dredged and fill material for the Project will result in 15.84 acres of impacts to waters of the U.S. These impacts from fill, shading and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts. Some individual resident and transient mammals, birds, reptiles, and amphibians occupying these areas will be lost or displaced. While sedentary species will not be able to move from the impact area and will be lost, more mobile organisms may move to other suitable habitats as fill activities commence. In proportion to the overall resource types within the Project area, these impacts are considered to be minor based on the small amount of area to be lost. Habitats important for wildlife species using or depending on aquatic habitats may be lost or degraded, such as a loss or change of breeding and nesting areas, escape cover, travel corridors, and preferred food sources for resident and transient wildlife species associated with the aquatic ecosystem.

Overall, impacts on other wildlife are anticipated to be minor and with no significant adverse effects. Consequently, the Corps has determined that none of the impacts identified were of a severity that will cause or contribute to significant degradation of waters of the U.S.

Potential effects on special aquatic sites (Subpart E)

Sec. 230.40 Sanctuaries and refuges

No sanctuaries or refuges are in the immediate vicinity of the Project area.

Sec. 230.41 Wetlands

Wetlands consist of areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The potential impacts of the Project on wetlands are described in Section 4.5, "Waters of the United States" of the Final EIS. The discharge of dredged and fill material for the Project will impact approximately 15.84 acres of waters of the United States. These impacts from fill, shading and excavation would include 6.07 acres of tidal wetlands, 7.99 acres of freshwater wetlands and 1.78 acres of temporary impacts.

These losses will result from the drayage road, Hobson/Bainbridge realignment, ICTF, northern rail connection, bridge over Noisette Creek, and southern rail connection. Details of these direct impacts are summarized in Section 4.5, Table 4.5-2 of the Final EIS. The impacts primarily will affect freshwater wetlands (8.01 acres) and tidal salt marsh (6.65 acres); however, tidal open waters (1.14 acres) and Other Open Water (0.04 acre) also will be directly lost.

Impacts on aquatic ecosystems associated with the discharge of dredged or fill materials that do not result from the actual placement of the dredged or fill material (secondary impacts [40 C.F.R. § 230.11(h)]) are expected to be minimal. These impacts include reduction in wetland size, altered water levels and flow patterns, and water quality effects that will affect freshwater wetlands, tidal salt marsh, tidal open waters, and Other Open Water wetlands. Stormwater discharges also can change the wetland habitat value for fish and wildlife, as discussed in Subpart D. To minimize water quality impacts on wetlands, the Permittee will implement sediment and erosion control measures to reduce sediment and sediment-associated pollutant loading from disturbed areas. These measures include: (1) implementing Storm Water Pollution and Prevention Plans (SWPPPs) as required by the NPDES permit, including management of sediment and erosion control; (2) managing sediment and erosion control during construction as specified in the SCDHEC stormwater management Best Management Practices Handbook; (3) performing all land disturbance activities in compliance with the U.S. Navy Construction Process Document (Navy "Dig" Permit), which identifies the permit process and requirements for conducting construction or other land disturbing activities in LUC Areas at the former Navy Base (Charleston Naval Complex); (4) implementing an SPCC plan and Stormwater Master Plan; (5) including a forebay in stormwater management system to provide pretreatment of stormwater runoff before it discharges to Pond A; (6) constructing five stormwater detention ponds located at the topographical low points of the site and in close proximity to the existing outfalls to contain and manage stormwater runoff; and (7) capping much of the Project site with pavement to mitigate spread of existing contaminants.

The proposed discharge will have adverse effects to wetlands, but it will not cause or contribute to significant degradation of waters of the U.S.

Sec. 230.42 Mud flats

Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds and riverine systems. When mud flats are inundated, wind and wave action may re-suspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

There are several areas of mud flat located between the mean low water line and the mean high-water line within the proposed 6.65 acres of fill within tidal salt marsh. The Applicant has designed culverts and bridges to maintain existing surface drainage patterns and to prevent erosion by limiting the placement of pilings for bridges within waterways (where possible), and by designing culverts

(e.g., under the arrival/departure tracks) and bridges to maintain existing flow and hydrology for wetland areas and to prevent flooding upstream. The addition of a new bridge over Shipyard Creek for the drayage road is predominantly pile supported and would not result in a hydrologic constriction that could adversely impact flow patterns in Shipyard Creek. The construction of arrival/departure tracks crossing tidal marsh habitat upstream of Shipyard Creek, however, may slightly reduce localized tidal flushing, resulting in the potential for negligible changes in the range of BOD and salinity levels of Shipyard Creek. The existing rail bridge over Noisette Creek is being rehabilitated and appropriate BMPs (e.g., floating semi-permeable turbidity curtain) will be deployed during inwater work to control the potential release of pollutants into the water column during construction. Based thereon, the discharge of fill will have no effect on mud flats within the ecosystem.

Sec. 230.43 Vegetated shallows

Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as freshwater species in rivers and lakes. Discharge of dredged or fill material can smother vegetation and benthic organisms. It also may create unsuitable conditions for their continued vigor by changing water circulation patterns; releasing nutrients that increase undesirable algal populations; releasing chemicals that adversely affect plants and animals; increasing turbidity levels, thereby reducing light penetration and hence photosynthesis; and changing the capacity of a vegetated shallow to stabilize bottom materials and decrease channel shoaling. Discharge of dredged or fill material may reduce the value of vegetated shallows as nesting, spawning, nursery, cover, and forage areas and may reduce their value in protecting shorelines from erosion and wave actions. It also may encourage the growth of nuisance vegetation.

Vegetated shallows within the Project boundary are limited to the following wetland types: brackish/salt marsh, tidal freshwater marsh, non-tidal freshwater marsh, and open water. Dominant species found in these wetland types include: smooth cordgrass, black needlerush, common rush, cattail, and common reed. The vegetated shallows impacted as a result of the Project would be much less than the total 15.84 acres of impacts to waters of the U.S., and these impacted areas are a small fraction of the vegetated shallows within the greater Cooper River estuary. Overall, impacts on vegetated shallows are anticipated to be minor and temporary with no significant adverse effects. Consequently, the Corps has determined that impacts to vegetated shallows will not cause or contribute to significant degradation to waters of the U.S.

Sec. 230.44 Coral reefs

There are no coral reefs present in the immediate vicinity of the Project area.

Sec. 230.45 Riffle and pool complexes

Steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a streaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife.

There are no riffle and pool complexes present in the immediate vicinity of the Project area.

Potential effects on human use characteristics (Subpart F)

Sec. 230.50 Municipal and private water supplies

Municipal and private water supplies consist of surface water or groundwater that is directed to the intake of a municipal or private water supply system. Discharges can affect the quality of water supplies with respect to color, taste, odor, chemical content, and suspended particulate concentration, in such a way as to reduce the fitness of the water for consumption. Water can be rendered unpalatable or unhealthy by the addition of suspended particulates, viruses and pathogenic organisms, and dissolved materials. The expense of removing such substances before the water is delivered for consumption can be high. Discharges also may affect the quantity of water available for municipal and private water supplies. In addition, certain commonly used water treatment chemicals have the potential for combining with some suspended or dissolved substances from dredged or fill material to form other products that can have a toxic effect on consumers.

The potential effects of the Project on surface water and groundwater uses and supplies are addressed in the Final EIS, in Section 3.3, "Water Quality" and Section 4.17, "Human Health and Safety." Municipal water supplies for the City of North Charleston, where the Project site is located, are served by the Charleston Water System. This utility gets their water primarily from Bushy Park Reservoir and secondarily from the Edisto River. The Charleston Water System has no operating groundwater wells in the study area and therefore would not be impacted by others from construction activities or disturbance of known contaminated groundwater sources.

The Corps has determined that the proposed discharge will have no significant adverse effects to municipal and private water supplies.

Sec. 230.51 Recreational and commercial fisheries and Sec. 230.52 Water-related recreation

Recreational and commercial fisheries consist of harvestable fish, crustaceans, shellfish, and other aquatic organisms used by humans. Discharge of dredged or fill material can affect the suitability of recreational and commercial fishing grounds as habitat for populations of consumable aquatic organisms. Discharges can result in chemical contamination of recreational or commercial fisheries. They also may interfere with the reproductive success of recreational and commercially important aquatic species through disruption of migration and spawning areas. The introduction of pollutants at critical times in their life cycle may directly reduce populations of commercially important aquatic organisms or indirectly reduce them by reducing the organisms upon which they depend for food. Any of these impacts can be of short duration or prolonged, depending on the physical and chemical impacts of the discharge and the biological availability of contaminants to aquatic organisms.

Water-related recreation encompasses activities undertaken for amusement and relaxation. These activities encompass two broad categories of use: consumptive (e.g., harvesting resources by hunting and fishing) and non-consumptive (e.g., canoeing and sight-seeing). One of the more important direct impacts of dredged or fill disposal is to impair or destroy the resources that support recreation activities. Disposal of dredged or fill material may adversely modify or destroy water use for recreation by changing turbidity; suspended particulates; temperature; dissolved oxygen; dissolved materials; toxic materials; pathogenic organisms; quality of habitat; and the aesthetic qualities of sight, taste, odor, and color.

There is no existing water-related public recreation access to the Project site and no public recreation areas are located on parcels immediately adjacent to the Project site. Located in the northeast of the study area, Riverfront Park is set on the banks of the Cooper River. The only access to this park is through the study area via McMillan Avenue to Hobson Avenue from the west and south, and via Noisette Boulevard from the north. The northern border of the park is Noisette Creek. Water related recreation at Riverfront Park includes a crabbing dock, fishing pier, and views of the Cooper River. Several large-scale City of North Charleston events are held here throughout the year, including the 4th of July celebration, concerts, and arts festivals. Section 3.9 (Land Use and Infra-structure) and Section 3.16 (Socioeconomics and Environmental Justice) of the Final EIS describe water-related recreation resources in the study area.

The Cooper River Marina, administered by the Charleston County Park and Recreation Commission, is located on the Cooper River north of the mouth of Shipyard Creek. This marina leases deepwater slips long-term for vessels up to 42 feet in length and for transient vessels up to 125 feet in length. The marina also provides boat storage and pump-out services. The marina is accessed through the study area from Naval Base Road off of Spruill Avenue.

Recreational kayaking and canoeing occurs within Noisette Creek and to a lesser extent within the Cooper River and Shipyard Creek. Power boating and recreational sailing occurs on the Cooper River. Recreational fishing for saltwater species such as redfish and seatrout occurs within the Cooper River and could occur within Noisette and Shipyard Creeks. Impacts that could affect water-related recreational experiences include changes to the recreational setting and experience caused by Project-related noise or visual changes.

The Corps has determined that the impacts on recreational and commercial fisheries and water-related recreation associated with discharge of dredged or fill materials within the Project boundary are expected to be negligible with no significant adverse effects.

Sec. 230.53 Aesthetics

Aesthetics associated with the aquatic ecosystem consist of the perception of beauty by one or a combination of the senses of sight, hearing, touch, and smell. Aesthetics of aquatic ecosystems apply to the quality of life enjoyed by the general public and property owners. Discharge of dredged or fill material can mar the beauty of natural aquatic ecosystems by degrading water quality; creating distracting disposal sites; inducing inappropriate development; encouraging unplanned and incompatible human access; and destroying vital elements that contribute to the compositional harmony or unity, visual distinctiveness, or diversity of an area. Discharge of dredged or fill material can adversely affect the particular features, traits, or characteristics of an aquatic area that make it valuable to property owners. Activities that degrade water quality, disrupt natural substrate and vegetation characteristics, and deny access to or visibility of the resource—or result in changes in odor, air quality, or noise levels—may reduce the value of an aquatic area to private property owners.

Section 4.11 of the Final EIS addresses the potential impacts of the discharge of dredged or fill material on visual resources and aesthetics within the Project area, which is comprised of residential and industrial areas. Construction and operation of the Proposed Project would be consistent with existing visual elements since the dominant visual element is the Port with its industrial buildings and associated structures (e.g., cranes); however, the replacement of the mature tree line along the right of way with an earthen berm/sound wall would lessen visual quality for residential viewers and motorists, especially for residents in the Chicora-Cherokee neighborhood east of North Carolina

Avenue and residents on the southern end of St. Johns Avenue. Wide-span gantry cranes would be visible above the earthen berm/sound wall, and the presence of an elevated rail bridge and more frequent train activity across Noisette Creek would adversely impact this scenic resource. Introduction of high-mast lighting (illuminated from dusk until dawn) would introduce substantial new sources of light, and nighttime train head lamps have the potential to disturb sleep or nighttime activities for residences along curvatures in the arrival/departure tracks from the ICTF.

Impacts on aesthetics from discharge of dredged or fill materials within the Project boundary range from major, permanent, and adverse, to minor, permanent, adverse, and even negligible, depending on the scale and location of the modifications, potential screening or visual obstructions; and the proximity of key viewing areas, sensitive features, and public access features to the Project area.

The Applicant has committed to several measures (detailed in Section 4.11.12.1 of the Final EIS) that avoid and/or minimize potential the visual impacts of Alternative 1 (Proposed Project).

Noise and vibration levels from construction and operations may negatively affect the aesthetics of the surrounding area and may reduce the value of nearby aquatic areas to users and private property owners. For the most part, however, noise levels outside the Project boundary will not exceed applicable standards. Details of the potential impacts from noise and vibration are included in the Final EIS in Section 4.12 and summarized in Table 4.12-27.

The Corps has determined that the impacts on aesthetics from discharge of dredged or fill materials within the Project boundary will be permanent and minor with no significant adverse effects.

Sec. 230.54 Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.

These preserves consist of areas designated under federal and state laws or local ordinances to be managed for their aesthetic, educational, historical, recreational, or scientific value. Discharge of dredged or fill material into such areas may modify their aesthetic, educational, historical, recreational, or scientific qualities, thereby reducing or eliminating the uses for which such sites were set aside and managed.

This Project will not encroach into or be located adjacent to parks, national monuments, national seashores, wilderness areas, research sites, or similar preserves. Therefore, the Corps has determined that there will be no impacts on these resources.

Evaluation and testing (Subpart G)

Sec. 230.60 General evaluation of dredged or fill material <u>and</u> Sec. 230.61 Chemical, biological and physical evaluation and testing.

Fill material may be placed into tidal open waters (1.14 acres) and Other Open Water (0.04 acre); however, the Applicant has committed to the use of clean fill material from upland sources, therefore no chemical, biological, or physical testing was required.

Actions to minimize adverse effects (Subpart H)

As discussed above and in the Final EIS, actions were considered regarding the location of the discharge, the material to be discharged, controlling the material after discharge, and the method of

dispersion, in addition to actions related to technology and plant and animal populations. In evaluating the application for a DA permit, the impacts from direct fill in waters of the U.S. has been minimized to the maximum extent practicable and Special Conditions have been included in the DA permit to minimize secondary impacts of the discharges. Attachment A of this ROD includes the list of Special Conditions to the DA permit.

Factual determinations (Subpart B, Section 230.11)

The permitting authority shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment in light of Subparts C through F. Such factual determinations shall be used in Sec. 230.12 in making findings of compliance or non-compliance with the restrictions on discharge in Sec. 230.10. The evaluation and testing procedures described in Sec. 230.60 and Sec. 230.61 of Subpart G shall be used as necessary to make, and shall be described in, such determination.

Physical substrate. (40 C.F.R. § 230.11[a]) Discharge of dredged or fill material into waters of the U.S. from the drayage road, the Hobson/Bainbridge realignment, the ICTF, the northern rail connection, the bridge over Noisette Creek, and the southern rail connection will result in the permanent loss of approximately 13.831 acres of wetland substrates. In wetlands, substrates include a variety of hydric and partially hydric loam and sandy-loamy soils that largely overlap with areas associated with stormwater controls and freshwater wetlands. Substrates associated with natural drainages such as freshwater creeks and tidal salt marsh consist of silt, sand, and a mix of sand and gravel (gravel related to anthropogenic activities).

As a result of earthwork and other construction activities, the proposed Project also will result in localized alterations of topography, geology, and soils on other areas of the Project site. As construction materials are added to and removed from the Project site, soils will be replaced, redistributed, and/or compacted. The addition or subtraction of material also will raise or lower the elevation of specific areas on the Project site. Stormwater runoff may cause erosion of steeper slopes, especially during storms. Impacts from earthwork activities will be minimized by the use of BMPs. The Permittee will be required to implement a number of BMPs and minimization measures as required by state and federal permits.

The proposed discharge will cause a permanent adverse effect on the substrates of the wetlands and streams that are directly filled, but will not cause significant, long-term adverse effects on substrates outside the filled areas.

Water circulation, fluctuation, and salinity. (40 C.F.R. § 230.11[b]) The Project will result in discharge of dredged or fill material into waters of the U.S. Since there are open waters within which fill will be discharged, resuspension of particulates through currents or tides may occur. Tidally influenced waters are within the Project; however potential changes to existing salinity gradients within Shipyard Creek would be negligible.

Discharge of dredged or fill materials will result in changes in topography, soil permeability, vegetative cover, runoff and infiltration, and routing and storage of water in the Project area that may affect receiving waterbodies. However, stormwater management improvements by the Applicant, including placement of pipe of varying sizes, underdrains, construction of five dry detention ponds, and vegetated swales, as well as other BMPs associated with roadway and rail improvements, would

collect and slowly release stormwater runoff. As a result, these mitigation measures would minimize the potential for adverse impacts to Noisette Creek, Shipyard Creek, and the Cooper River.

Overall, impacts on current patterns, water circulation, and normal water fluctuations are anticipated to be minor to moderate and temporary resulting in no significant adverse effects.

Suspended particulates/turbidity. (40 C.F.R. § 230.11[c]) There are open waters within which fill will be discharged; therefore, resuspension of particulates through currents or tides may occur due to the disturbance of the bottoms and banks of Shipyard and Noisette creeks during construction of the drayage road over Shipyard Creek and rehabilitation of the existing railroad bridge over Noisette Creek. Construction activities on the Project site will periodically increase the suspended particulates (e.g., total suspended solids or TSS), primarily during runoff events, including dust and dirt from roads, discharges from stormwater ponds, and areas of erosion.

In consideration of the findings of Subpart C, the stormwater measures and BMPs required herein, and the mandatory conditions of the WQC, the Project-related discharge of dredged or fill materials will cause minor, temporary, adverse effects on suspended particulates/turbidity.

Contaminant availability. (40 C.F.R. § 230.11[d]) Existing onsite contamination also has the potential to contribute to water quality degradation if the contaminated soil is improperly disturbed.

The Project would require soil excavation to construct or rebuild roadways and railways and to construct facilities (such as buildings, work yards, and railyards, etc.) within the Project site. These excavation activities may involve contaminated soils. The study areas have been subject to numerous and extensive environmental studies and assessments; thus, the potential for the Project to encounter large quantities of previously-unknown buried or stored hazardous materials or hazardous wastes is considered unlikely. The Project site contains large areas that are subject to the following BMP: perform all land disturbance activities in compliance with the U.S. Navy Construction Process Document (Navy "Dig" Permit), which identifies the permit process and requirements for conducting construction or other land disturbing activities in LUC Areas at the former Navy Base (Charleston Naval Complex). The Navy permitting process requires stoppage of work if discovery of unknown contamination occurs. As with other construction projects involving contaminated soils, the soils impacted by the Project would require testing and proper disposal at an approved facility if they exceed given regulatory thresholds.

For areas of deeper excavations, such as installation of stormwater infrastructure (dry detention ponds), foundation footers, roadway and rail pilings, and other deeper excavations, contaminated groundwater may be encountered, which would require proper disposal of the dewatering effluent. Provisions for addressing groundwater use restrictions and proper disposal of dewatering effluent are included in the "Charleston Naval Complex LUC Area Construction Permit" process. The potential for the Project to have involvement with contaminated groundwater is probable; however, avoidance and minimization measures (such as avoiding excavation activities in known active sites and adherence to the Navy permitting process) would help to keep potential impacts to a minimum adverse impact. The Navy is currently conducting periodic groundwater monitoring at AOCs 569, 570, 578, 607, 728, and SWMUs 9 and 196, which would be impacted by the railroad infrastructure planned immediately northwest and south of the Project site. Thus, affected groundwater monitoring wells may need to be relocated.

The Applicant has conducted voluntary cleanup and site preparation of the Project site that was undertaken regardless of whether a DA permit was ultimately issued or not. Voluntary cleanup and site preparation activities have included tasks such as the demolition of a tank farm and the Viaduct Road overpass, and long-term monitoring and removal of hazardous wastes. The following hazardous materials have already been removed from the intermodal site: 10,860 linear feet of fuel lines, 2,110 linear feet of natural gas lines, 4,570 linear feet of underground asbestos lines, 530 linear feet of asbestos stream lines, 980 square feet of transite panel, 96,150 gallons of product, and 206 cubic yards of asbestos containing materials.

The Applicant has committed to the use of clean fill material from upland sources and a number of additional mitigation measures (detailed in Section 4.15.12.1 of the Final EIS) designed to reduce the potential to introduce, relocate, or increase contaminants.

Based on the above, the Corps has determined that the Project will not result in the introduction, relocation, or increase of contaminants into the environment.

Aquatic ecosystem effects. (40 C.F.R. § 230.11[e]) The Project will result in the loss of wetland habitat. Direct impacts on aquatic ecosystems from the placement of fill in wetlands will be minor and short-term. Secondary impacts on aquatic ecosystems outside the specific fill areas will be minor and short-term. Sedentary organisms unable to move away from the impact area will be lost, but more mobile organisms may move to other aquatic areas once the excavation and fill activities commence. Although development of the Project site will result in the loss of aquatic resources within 15.84 acres of waters of the U.S., the available habitat is widespread within the region, and the loss of these aquatic resources will be offset by the Mitigation Plan.

The Corps has determined that impacts on the aquatic ecosystem and the organisms supported by the aquatic ecosystem will cause minor and short-term effects from the placement of fill in wetlands, but not to any particular aquatic species. This determination also is based on completion of consultation with the USFWS under Section 7 of the ESA, where a determination of "not likely to adversely affect" for the west Indian manatee and no effect on other threatened or endangered species or their critical habitat was made for the Project. In NMFS' July 31, 2018 letter regarding the Final EIS, there were no comments provided that objected to, or contradicted, the Corps' 'no effect' determination for protected species under NMFS' purview. Consultation with NMFS regarding compliance with the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act resulted in the following EFH Conservation Recommendations:

- 1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.
- 2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

The Applicant has revised their Mitigation Plan to include the following items which address NMFS recommendations:

1. The permittee-responsible mitigation plan should include improvements to the drainage system-culverts located under the existing road to ensure natural tidal exchange throughout the site.

The road that extends into the mitigation site is currently not within the mitigation area controlled by the Applicant. Additionally, the hydraulic models used to demonstrate that inundation would occur at the mitigation site did not account for the flow of water through the culverts. Nonetheless, Palmetto Railways has amended their Mitigation Plan to include adaptive management measures that ensure inundation at the site in the event that the planned tidal inundation does not occur.

2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

Palmetto Railways has amended their Mitigation Plan to include sampling of nekton and establish success criteria that relate to the reference sites for the restoration.

Proposed disposal site. (40 C.F.R. § 230.11[f][1]) A close evaluation of 40 C.F.R. § 230.11(f)(1) indicates that each disposal site shall be specified through the application of the guidelines defined within this section. These guidelines relate specifically to disposal sites in open waters and the factors to consider when determining the acceptability of a proposed mixing zone. Discharges proposed to occur in wetlands and streams are not the subject of this section. There are no proposed discharges to open water habitat.

Cumulative effects. (40 C.F.R. § 230.11[g]) Project-induced changes in flows and seasonal hydrologic regimes for waters of the U.S. will result in minimal cumulative impacts because no other known past, present, or projected projects were identified that will cause more than minor impacts on the hydrology and flow regimes of the affected streams.

Based thereon, the Corps has concluded that the Project will cause minor long-term cumulative effects on the aquatic ecosystem.

Secondary effects. (40 C.F.R. § 230.11[h]) Secondary effects are defined under (40 C.F.R. § 230.11[h]) as "effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material." Secondary impacts associated with the placement of fill material include reduction in wetland size, altered water levels and flow patterns, and water quality effects. These impacts will be minor and short-term.

Restrictions on Discharges (Subpart B, Section 230.10)

(1) Alternatives (230.10 [a]):
There is no practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem that does not have other significant adverse environmental consequences. (See Section 4, "Alternatives" for supporting information on this determination.)
⊠ True □ False
(2) Other program requirements (230.10[b]):
(a) The proposed activity violates applicable State water quality standards or Section 307 prohibitions or effluent standards. (See Section 7 "Effects, Policies and Other Laws" for supporting information on this determination)
⊠ No □ Yes

(b) The proposed activity jeopardizes the continued existence of federally listed threatened or endangered species or affects their critical habitat. (See "Section 230.30" above and Section 7 "Effects, Policies and Other Laws" for supporting information on this determination)
⊠ No □ Yes
(c) The proposed activity violates the requirements of a federally designated marine sanctuary. (Section 7 "Effects, Policies and Other Laws" for supporting information on this determination)
⊠ No □ Yes
(3) Significant Degradation (230.10[c]):
The activity will not cause or contribute to significant degradation of waters of the United States. This finding is based on appropriate factual determinations, evaluations, and tests required by Subparts B and G, after consideration of Subparts C through F, with special emphasis on the persistence and permanence of the effects as discussed above.
⊠ True □ False
(4) Minimization of adverse effects (230.10[d]):
(a) Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.
⊠ True □ False

6. Public Interest Review

All public interest factors have been reviewed, as discussed below. Both cumulative and secondary impacts on the public interest were considered.

1. Conservation. (33 C.F.R. § 320.4[a], [m], [n]) Overall, the Project will result in adverse short-term impacts on natural resource conservation, fish and wildlife, wetlands, and energy and localized long-term effects on natural resource conservation and wetlands. Supporting discussions regarding impacts on the conservation of each of these resources are provided below and in other appropriate sections of this public interest review (see "14. Water supply and conservation" and "16. Energy needs" and the various referenced sections of the Final EIS). Project-related impacts on the conservation of each of these resources will vary in intensity and duration; many of the effects will be temporary.

Conservation is a broadly defined concept that typically includes the wise and efficient use, management, and protection of a natural resource; avoidance of wasteful or unnecessary use of the resource; and sustainability of the resource for a future or alternate use. The conservation aspects of a intermodal container transfer facility project are multi-faceted and complex. They involve the efficient transfer of international cargo containers from ships at port facilities to trucks and/or rail (e.g., trains), temporary and permanent losses or gains in other affected resources, and a variable duration of impacts on those resources. Some of the adverse impacts are partially or wholly reversible, such that the resource values that were temporarily altered can return over time for future conservation and sustainable use.

Society has demands for goods that enter the United States from the nation's ports and are delivered through rail transport. In Chapter 7, "Irreversible and Irretrievable Commitments of Resources," the Final EIS discusses the irreversible and irretrievable commitment of resources that may result from the Project. Impacts on some natural resources during construction represent permanent losses of conservable resources, such as impacts on waters of the U.S. and their aquatic resources, coastal resources, essential fish habitat, cultural resources, terrestrial resources, land uses, and visual and aesthetic resources. Some of these impacts are minor (e.g., visual resources), while others are moderate to major (e.g., land use). Depending on their extent and severity, these losses require mitigation, offsets, and compensation that involve conserving resources similar to those lost (see Section 8, "Compensation and Other Mitigative Actions" of this ROD).

The Project is not located adjacent or near to any conservation areas, national forests, scenic rivers, or wilderness areas designated by local, state, or federal governments. Consequently, the Project will not affect the ongoing conservation efforts for these resources. A notable conservation area is the Noisette Creek Nature Preserve, which is located near the mouth of Noisette Creek and along the Cooper River, but it will not be directly or indirectly adversely affected by the Project.

2. Economics. (33 C.F.R. § 320.4[q]) The Project will result in a major short-term and indirect long-term benefit to the local and regional economy and a minor indirect adverse impact to local businesses adjacent to project (access, relocations, and aesthetics). Section 3.16, "Socioeconomics and Environmental Justice" of the Final EIS describes the existing social and economic setting and conditions for the Project vicinity. Section 4.16, "Socioeconomics and Environmental Justice" of the Final EIS describes the potential economic effects of the Project, including effects on the local and regional economy, mobility and access, community safety and emergency response, community and neighborhood impacts (including housing), barriers to the elderly and handicapped, and environmental justice. Two economic analyses presented in Section 4.10 of the Final EIS were developed by the College of Charleston and the University of South Carolina and provide estimates of the Project's job creation and total economic impact, respectively.

An estimated \$150 million dollars will be used to develop and construct the Project. This expenditure would result in a major short-term benefit to the local and regional economy. As noted in a study completed in 2015 by Frank Hefner with the College of Charleston, 3,032 temporary construction jobs within the region would be created from construction, and a total of 55 direct jobs at the site after its completion (Hefner, 2016). In addition, the Project would provide indirect, long-term economic benefits to the regional and local community as employment opportunities are directly and indirectly created as a result of the Project. The Applicant estimates that the Navy Base ICTF would employ approximately 96 people by 2038.

However, the Project would result in minor indirect (noise and aesthetic) and direct (business relocations) adverse impacts to local businesses adjacent to the site. Relocation of businesses would comply with The Uniform Act of 1970, as amended and proposed mitigation to minimize noise and aesthetic impacts include features such as the vegetated earthen noise berm, sound walls, and electric wide-span gantry cranes. Overall, impacts to economic and business resources as a result of the Project would be minor adverse with the Applicant's proposed mitigation measures.

The Project has the potential for disproportionately high and adverse impacts to Environmental Justice populations. With regard to benefits and burdens, the benefits of the Project would extend to the greater Charleston region, while the burdens would be borne by the Environmental Justice

community adjacent to the facility (Chicora-Cherokee neighborhood). Therefore, the benefits and burdens of the Project are not equitably distributed. For additional information, please see "21. Needs and welfare of the people" of the ROD.

The Applicant has collaborated with the City of Charleston, the City of North Charleston, and multiple neighborhood organizations to develop various mitigation measures, which are included in the Applicant's Community Mitigation Plan, that help improve the quality of life in the surrounding community. Neighborhood organizations included the Chicora-Cherokee Neighborhood Association, the Union Heights Community Council, the Lowcountry Alliance for Model Communities (LAMC), and the Metanoia Community Development Corporation. LAMC represents seven neighborhoods (Accabee, Chicora/Cherokee, Union Heights, Howard Heights, Windsor Place, Five Mile, and Liberty Hill). The Applicant and the groups entered into a MOA on October 18, 2016 (see the Community Mitigation Plan and Community MOA in Final EIS Appendix N for additional details). As part of this agreement, the Applicant has committed to provide funding in the amount of \$3 million for the construction of a new recreation center to replace Sterett Hall and \$1 million to mitigate effects to neighborhoods and communities with a revolving fund for affordable housing, job training, educational initiatives, environmental research, and health impact studies. Mitigation measures outlined in this plan and agreement would mitigate the adverse burdens borne by the Environmental Justice community.

Overall, impacts to economic and business resources as a result of the Project would be relatively minor in light of mitigation measures.

3. Aesthetics. (33 C.F.R. § 320.4[e], 40 C.F.R. § 230.53) The potential impacts of the Project on aesthetics are presented in Section 4.14, "Visual Resources and Aesthetics" of the Final EIS. Construction and operation of the Proposed Project would be consistent with existing visual elements since the dominant visual element is the Port with its industrial buildings and associated structures (e.g., cranes); however, the replacement of the mature tree line along the right of way with an earthen berm/sound wall would lessen visual quality for residential viewers and motorists, especially for residents in the Chicora-Cherokee neighborhood east of North Carolina Avenue and residents on the southern end of St. Johns Avenue. Wide-span gantry cranes would be visible above the earthen berm/sound wall, and the presence of an elevated rail bridge and more frequent train activity across Noisette Creek would adversely impact this scenic resource. Introduction of high-mast lighting (illuminated from dusk until dawn) would introduce substantial new sources of light, and nighttime train head lamps have the potential to disturb sleep or nighttime activities for residences along curvatures in the arrival/departure tracks from the ICTF.

Impacts on aesthetics from discharge of dredged or fill materials within the Project boundary range from major permanent adverse, minor permanent adverse, to negligible depending on the scale and location of the modifications, potential screening or visual obstructions; and the proximity of key viewing areas, sensitive features, and public access features to the Project area. However, the Applicant has committed to several measures that avoid and/or minimize potential visual impacts of the Project such as a cut section (trench), a landscaped earthen berm, aesthetically pleasing noise/visual barriers, other facility landscaping, lighting with limited illumination off-site, four-container tall stacking limits, and buildings that architecturally match historical buildings in the area.

Overall, impacts to aesthetics as a result of the Project would be relatively minor in light of mitigation measures.

4. General environmental concerns. (33 C.F.R. § 320.4[a][1] and 33 C.F.R. § 320.4[p]) The Project will result in various short-term and long-term effects on general environmental concerns. During the comment period on the Draft EIS, 684 issue-specific comments were received from the public and local, state, and federal agencies. These specific environmental concerns are discussed in the Draft and Final EIS and elsewhere in this assessment. Concerns addressed under "general environmental concerns" include those not addressed elsewhere. The Corps has identified noise/vibration, traffic/transportation, and air quality as the top 3 matters of general environmental concern not addressed in a specific public interest topic and has chosen to address these topics in this section.

As described in Section 4.12, "Noise" of the Final EIS, construction of the Project would result in minor to moderate exterior daytime noise impacts in the immediate vicinity due to frequent operations of construction equipment. During operation of the ICTF, standard train/crane operations would cause minor to moderate exterior daytime noise impacts in the vicinity of the vegetated earthen berm, and major exterior impacts at night. The Project includes the construction of a noise abatement wall/berm along the western boundary of the site, between the ICTF and adjacent neighborhoods, to minimize noise impacts. Also, the Applicant will provide relocation services for a period of 3 years to owner-occupied residential property owners who reside in the Relocation Area from 100 feet of the Project up to North Carolina Avenue. The Project would have negligible noise impacts from traffic, including negligible beneficial effects for several streets. In contrast, minor to moderate rail noise impacts would occur along several modeled segments due to increased rail activity and new track builds; however, two sound attenuation walls will be used to minimize noise and visual impacts in two areas along the northern rail connection. Only negligible rail vibration impacts would occur.

As described in Section 4.8, "Traffic and Transportation" of the Final EIS, the Project will result in relatively minor impacts on the surrounding transportation network. The regional roadways of I-26, I-526, and US 17 mostly would not experience any change in operations. Within North Charleston, roadway improvements and connectivity changes would cause the operations to improve at some intersections while others would become worse. Overall, slightly more intersections would degrade than improve operations. At-grade rail crossing operations in North Charleston would be impacted due to an increase in the number of train occurrences, in addition to one new at-grade rail crossing.

The Applicant, in cooperation with the City of North Charleston, the South Carolina Ports Authority (SCPA), and the South Carolina Department of Transportation (SCDOT), has initiated an independent Surface Transportation Impact Study to further study potential transportation impacts associated with rail and highway traffic related to state port and rail operations in North Charleston. The study is part of a Settlement Agreement with the City of North Charleston. The Applicant also proposes to conduct a Crossing Analysis as part of a draft Transportation MOA with the City of Charleston to study traffic conditions and potential improvements within the southern portion of the Project area, within the City of Charleston. The draft Transportation MOA does not specifically identify, or commit the Applicant to construct, any new grade separated crossings; however, it proposes to study the impacts and needs for these improvements. In addition to the Crossing Analysis, the Applicant also proposes in the draft Transportation MOA to provide funds up to \$4.5 million to the City of Charleston (or another government body) for its use on mitigation measures for transportation improvements. The draft Transportation MOA is included in Appendix N. Although the Applicant and the City of Charleston have not reached a final agreement on the specific terms of mitigation for the City of Charleston, the Applicant has represented by letter dated December 6, 2017,

that it is "committed to fulfilling the items in Section 2 of the MOA as mitigation for the [ICTF] impact on the City [of Charleston]" (Appendix B).

The transportation study detailed in the Final EIS was designed to account for other Future Actions in the study area, such as the HLT, committed STIP projects and background traffic growth to 2038. For example, the transportation study took into account projected (2038) port operations at each terminal and the resultant change in intermodal distribution (i.e. less cargo traveling to other terminals as a result of the HLT). Therefore, the impacts outlined above reflect cumulative effects.

As described in Section 4.13, "Air Quality" of the Final EIS, the Project will result in relatively minor impacts on air quality. For the Project, construction criteria pollutant emissions would be short term and spread out over five years. Criteria pollutant emissions from the operation of the Project would each equal less than 1 percent of the total criteria pollutants emitted in the study area and the Project would not put the Tri-County area into non-attainment for any National Ambient Air Quality Standard (NAAQS). Impacts of non-diesel particulate matter (DPM) hazardous air pollutants (HAPs) from the Operational Inventory of the Project would each equal less than one-tenth of 1 percent of the total HAPs emitted in the study area and would be acceptable. Potential excess cancer risk associated with the Project would fall within the acceptable range. Impacts from cancer risk would be acceptable (EPA 2006b). The maximum noncancer hazard would be below 1. Potential impacts from noncancer hazard would be negligible.

The Project would have the potential to increase air pollutant emissions in the study area, including criteria pollutant and HAPs. The air quality analyses prepared for the cumulative projects determined that these projects would have a minimal impact on regional air quality from their operational emissions inventories. Therefore, although the Project would result in greater direct air pollutant emissions, the Project in combination with the reasonably foreseeable cumulative projects, would not result in a cumulative impact to the criteria pollutant emissions inventory of the study area. One significant reasonably foreseeable project, the HLT, included dispersion modeling in its air quality analysis to further analyze impacts to the NAAQS (Corps 2006). The HLT Final EIS determined that the total anticipated ambient concentration would remain at or below the NAAQS; however, when the anticipated ambient concentrations of the HLT project are added to the existing ambient concentrations and the anticipated ambient concentrations of the Project, the resulting cumulative concentrations would not exceed the applicable NAAQS; therefore, the Project would not put the Tri-County area into non-attainment for any NAAQS.

5. Wetlands. (33 C.F.R. § 320.4[b]) The Project will cause a long-term, adverse direct impact on the wetlands underlying the fill areas. The direct and indirect impacts of the Project will contribute to minor and moderate cumulative impacts on historical losses of forested wetlands at the national level and in South Carolina, respectively. Secondary and indirect impacts on wetlands and streams also will occur outside the periphery of the fill areas through reduction in wetland size, altered water levels and flow patterns, and water quality effects. Freshwater wetlandsand tidal salt marsh will be affected. These impacts are discussed in greater detail in Subparts C and D of this ROD. Secondary and indirect impacts on wetlands and waters of the U.S. will be greatest during construction. No further watershed alterations will take place following construction because Project facilities will be stabilized. The affected wetlands will stabilize over time and some will return to near construction conditions.

6. Historic and cultural resources. (33 C.F.R. § 320.4[e]) Because the Project will cause an adverse effect on multiple historic properties. * , the Section 106 process included mitigation proposed by the Applicant; and execution of a MOA among the South Carolina State Historic Preservation Officer (SHPO), the Corps, and the consulting parties. Furthermore, Palmetto Railways will implement a Cultural Resources Management Plan and an Unanticipated Discovery Plan should any previously unidentified historic properties be discovered during construction.

Extensive surveys were completed by the Applicant in consultation with the SHPO over several years before and after the submittal of the DA permit application on October 11, 2016. Upon submittal of the DA permit application, the Corps became the lead federal agency for compliance with Section 106 of the NHPA and has followed the procedures in 33 C.F.R. Part 325, Appendix C, the Corps' Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800 dated April 25, 2005; and the Corps' January 31, 2007 Clarification of Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800 dated April 25, 2005. The Corps has consulted with SHPO, ACHP, and FRA regarding the Project. The Corps has also consulted with the Historic Charleston Foundation, The Preservation Society of Charleston, and the Naval Order of the United States, Charleston Commandery. These three organizations were all granted consulting party status and provided input on the effects of the Project on cultural resources. The Corps also notified federally-recognized tribes about the Project. The Muscogee (Creek) Nation requested to become a consulting party due to the Project's location within their historic area of interest. However, they have stated that "there is very little potential for intact archeological deposits, and if there are any, they are likely beneath the (existing) fill" (see letter dated January 20, 2016, in Final EIS Appendix G). The Corps consulted with the aforementioned cooperating federal and state agencies, Indian tribes, and other interested parties to locate and evaluate cultural resources in order to identify historic properties with the potential to be affected by the Project. In-depth consultation was completed with the SHPO to determine and agree upon the eligibility of historic resources for inclusion in the National Register of Historic Places (NRHP) and the assessment and determination of effects. The Corps has also consulted with interested Indian tribes for determinations of NRHP eligibility and project effects.

The impacts of the Project on NRHP-eligible historic resources are described in Section 4.10, "Cultural Resources" of the Final EIS. Two historic properties, the Charleston Naval Hospital (CNH) Historic District and USMC Barracks (CNC Building M-17) lie within the Cultural Resources Study Area (equivalent to the Area of Potential Effects) for the Project. The Corps determined, and the SHPO concurred, that there would be a permanent adverse effect from demolition of NRHP-listed buildings and altered setting of the CNH District from the Project. There would be a permanent adverse effect from the altered setting of the USMC Barracks. There would be no effect from vibration. Other properties or historic districts nearby would have no effect. A NHPA MOA was developed to mitigate the adverse effects to these resources. The NHPA MOA provides for multiple mitigation measures to reduce and offset the adverse impacts to cultural resources that would result from the Project, including the establishment and funding of \$2,000,000 for a CNB Historical Trust

⁸ For purposes of the NHPA Section 106 process, the Corps has defined the undertaking's Area of Potential Effects (APE) as all of the land (approximately 118 acres) between Hobson Avenue and the western edge of the CNC, and between Reynolds Avenue and the southern ramp connecting Viaduct Road and Bainbridge Avenue, as well as the land between Reynolds and McMillan Avenues and Hobson Avenue and Avenue E South (see Appendix A of the NHPA MOA).

for rehabilitation of historic structures. The NHPA MOA (Final EIS Appendix G) was executed on May 30, 2018 by the Corps, FRA, Palmetto Railways, ACHP, Muscogee (Creek) Nation, SHPO, Historic Charleston Foundation, Preservation Society of Charleston, and Naval Order of the United States, Charleston Commandery.

Indirect impacts on historic properties will be associated with the loss of vegetation, removal of aspects of the historic setting, addition of non-historic elements, noise, vibration, and infrastructure improvements. Indirect effects will be mitigated through the NHPA MOA. The Final EIS concluded that there will be negligible cumulative impacts on historic and cultural resources because the Future Actions are not located in the historic districts nor on or adjacent to the other historic properties within the study area.

The following special conditions have been included in the DA permit with regard to historic properties and cultural resources:

If any previously unknown historic, cultural or archeological remains and artifacts are discovered while accomplishing the activity authorized by this permit, the permittee must immediately notify the district engineer of what has been found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

That the permittee agrees to perform and comply with the signed Memorandum of Agreement to resolve adverse effects to historic properties entitled "MEMORANDUM OF AGREEMENT AMONG THE U.S. ARMY CORPS OF ENGINEERS, CHARLESTON DISTRICT; FEDERAL RAILROAD ADMINISTRATION OR OTHER U.S. DEPARTMENT OF TRANSPORTATION AGENCY; PALMETTO RAILWAYS; ADVISORY COUNCIL ON HISTORIC PRESERVATION; MUSCOGEE (CREEK) NATION; AND THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICER REGARDING THE NAVY BASE INTERMODAL FACILITY PROJECT IN CHARLESTON COUNTY, SOUTH CAROLINA," executed on May 30, 2018.

7. Fish and wildlife values. (33 C.F.R. § 320.4[c]) The Project will cause short- and long-term, minor to moderate, adverse effects on fish and wildlife values. The fish and wildlife values in the Project vicinity, including habitats, species, and populations, are described in the Final EIS in Sections 3.4, "Vegetation and Wildlife"; 3.6, "Protected Species"; and 3.7, "Essential Fish Habitat." The effects of the Project on these resources are described in the corresponding sections in Chapter 4 of the Final EIS, "Environmental Consequences." Further information also is provided in Section 5, "Further Evaluation of the 404(b)(1) Guidelines" in this ROD, with a focus on aquatic ecosystems.

In accordance with the Fish and Wildlife Coordination Act, the Corps consulted with the USFWS, NMFS, and the SCDNR (the state agency responsible for fish and wildlife) concerning the conservation of wildlife resources by prevention of their direct and indirect loss and damage due to the activity proposed in a permit application. As discussed in Section 7, "Effects, Policies and Laws" in this ROD, final coordination with the USFWS occurred on November 10, 2016, and the USFWS ultimately indicated concurrence with the Corps' determination that the proposed project is "not likely to adversely affect" any federally-listed species and will not result in the adverse modification of proposed or designated critical habitat. USFWS also stated that the proposed salt water resource

impact compensation was not appropriate and objected to the use of credits from the Clydesdale Mitigation Bank and the Daniel Island Salt Water Mitigation Bank. The USFWS recommended that the Applicant seek an alternate location or plan to satisfy mitigation needs. Consultation with NMFS regarding compliance with the EFH provisions of the Magnuson-Stevens Fishery Management Act resulted in the following EFH Conservation Recommendations:

- 1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.
- 2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

The SCDNR, submitted a letter dated November 14, 2016. They stated that "the project as currently proposed involves less impacts to tidal resources than described in the DEIS and in the opinion of the DNR represents the least damaging, practicable alternative." SCDNR did express concerns with the proposed compensatory mitigation. They oppose the use of the Clydesdale Mitigation Bank, but support the use of the Daniel Island Salt Water Mitigation Bank. They also stated: "The applicant proposes to mitigate for the permanent loss of 5.389 acres of Critical Area at a 1:1 ratio with 5.389 acres of Critical Area restoration through mitigation credit purchase from an approved bank. We recommend mitigation requirements for tidal impacts be consistent with those for freshwater wetland impacts and in accordance with the Corps' Charleston District Guidelines for Preparing a Compensatory Mitigation Plan dated October 7, 2010. The calculation of total required mitigation credits should include compensation for the temporary loss of wetland functions associated with proposed temporary impacts to 1.775 acres of waters of the U.S.:"

The Applicant revised their Mitigation Plan in December 2017 to no longer propose the use of credits from the Clydesdale Mitigation Bank or the Daniel Island Salt Water Mitigation Bank. The Applicant's Mitigation Plan proposes to purchase 86.3 wetland mitigation credits from Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permittee-responsible mitigation plan.

As discussed in Chapter 5, "Cumulative Impacts" of the Final EIS, Project-related impacts on aquatic resources did not have potential to contribute to cumulative impacts in more than a minor way and were therefore not evaluated further.

8. Flood hazards. (33 C.F.R. § 320.4) The Project will result in a negligible short-term impact on flood hazards. Most of the Project site lies within the Special Flood Hazard Area (SFHA), or 100-year floodplain. Approximately 58.5 percent of the site is within zone AE, 3.4 percent in zone VE, with the remainder in 0.2 percent annual chance flood hazard (24.6 percent) and zone X (13.5 percent) (see Section 4.2, "Hydrology" of the Final EIS). Zone A and Zone AE represent those areas subject to inundation by the 1-percent-annual-chance flood event or the 100-year floodplain, with Zone AE including Base Flood Elevations (BFEs) and Zone A not including BFEs. Zone VE are coastal high-hazard areas where wave action and/or high-velocity water can cause structural damage during the 100-year flood. The 0.2 percent annual chance flood hazard is also known as the 500-year flood. Zone X is outside the 500-year floodplain.

The ICTF design was based on the preliminary Flood Insurance Rate Map (FIRM) data at the time of the EIS, and the design requires the placement of fill within the Project site. Accordingly, surface elevations may increase in the Project site; however, the BFEs would not change. Therefore, the ICTF would not increase the flood hazard to other properties and impacts to floodplains would be negligible. If the floodplain zone(s) changes for the Project site as a result of upcoming updates to the FIRMs (but not the BFEs), then Palmetto Railways would need to coordinate with the local National Flood Insurance Program (NFIP) to obtain any necessary permits.

9. Floodplain values and management. (33 C.F.R. § 320.4[1]) The Project will result in a negligible short-term impact on floodplain values and management. As described above, the Project is located in a FEMA-regulated floodplain, and the placement of fill will be required within the Project site. Accordingly, surface elevations may increase in the Project site; however, the BFEs would not change. Therefore, the ICTF would not increase the flood hazard to other properties and impacts to floodplains would be negligible. If the floodplain zone(s) changes for the Project site as a result of upcoming updates to the FIRMs (but not the BFEs), then Palmetto Railways would need to coordinate with the local National Flood Insurance Program (NFIP) to obtain any necessary permits.

The Project will result in a negligible, long-term impact on floodplain values and management. Floodplain values therefore will be negligibly affected by the Project, and floodplain management options and efforts will not be affected or precluded.

10. Land use. (33 C.F.R. § 320.4[a][1] and 33 C.F.R. § 320.4[j]) The Project will result in a major adverse, short-term impact on land use (see Section 4.9.3, "Land Use" of the Final EIS). The construction and operation of the Project would be consistent with the current zoning designation of M-2 (Heavy Industrial District) for the ICTF site. Container storage facilities are generally addressed as a conditional use under the M-2 classification. However, the Future Land Use element of the adopted Comprehensive Plan for the City of North Charleston identifies portions of the Project site as an Institutional future land use. Deviation from this future land use would require a Comprehensive Plan Amendment which would be a major impact to land use. The northern portion of the Project site is zoned (PD) Planned Development District, which has the flexibility for the industrial uses associated with the Project.

A berm and sound walls would be constructed within a 100-foot buffer along the western boundary of the ICTF site as mitigation to minimize noise impacts to the adjacent residents. The western boundary of the ICTF site and the buffer/berm and walls would extend into the adjacent Chicora-Cherokee residential neighborhood, which is currently zoned R-1 (Single Family Residential District) and R-2 (Multi-Family Residential District). The Corps anticipates that this action would require a zoning change and Comprehensive Plan amendment due to the conversion of the current residential zoning classification to an industrial classification and to bring the adopted Comprehensive Plan and accompanying Future Land Use Map (FLUM) into compliance, which would be a major impact to land use. For any proposed construction that is not consistent with the existing zoning codes and adopted Comprehensive Plan, it would be incumbent upon the Applicant to work with each municipality to go through the necessary processes to gain all administrative approvals related to land use to ensure compliance with all municipal land use regulations. In December 2012, the City of North Charleston and the South Carolina Division of Public Railways (now Palmetto Railways) entered into a Settlement Agreement and Release. Under the provisions of the Agreement, "City staff will support all reasonable rezoning, permitting and other administrative approvals necessary for implementation of the ICTF and associated railroad lines as well as any other activities required to

facilitate the movement of cargo to and from the Port of Charleston" (Section II(C)(2), Case No. 2011-CP-10-491 through 494, 2011-CP-10-5550, and 2011-CP-10-3147). Because of this agreement, the Corps anticipates that this conditional use will be successfully negotiated and approved and therefore a short-term impact on land use.

Further, as per Corps regulations, "the primary responsibility for determining zoning and land use matters rests with state, local and tribal governments. The district engineer will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance. Such issues would include but are not necessarily limited to national security, navigation, national economic development, water quality, preservation of special aquatic areas, including wetlands, with significant interstate importance, and national energy needs. Whether a factor has overriding importance will depend on the degree of impact in an individual case." 33 C.F.R. § 320.4(j)(2) (emphasis added). The wetlands proposed to be impacted have no significant interstate importance and therefore the project has no significant issues of overriding national importance. Therefore, the primary responsibility for local zoning and land use matters for the proposed project fall upon state, local and tribal governments, not the Corps.

As discussed in Chapter 5, "Cumulative Impacts" of the Final EIS, Project-related impacts on land use did not have potential to contribute to cumulative impacts in more than a minor way and were therefore not evaluated further.

Perimeter fencing and landscaping will be installed along the boundary of the Project area to separate the Project from adjacent land uses. Other potential impacts on adjacent land uses are described under the sections in this public interest review that address aesthetics, safety, economics, recreation, consideration of property ownership, and the needs and welfare of the people.

- 11. Navigation. (33 C.F.R. § 320.4[o]) Shipyard and Noisette Creeks are navigable waterways in and adjacent to the Project. U.S. Coast Guard Regulations, 33 C.F.R. Parts 1–200 specify requirements for applying for a permit to construct or modify bridges crossing the navigable waters of the United States. It also sets forth the procedures by which the application is processed by the USCG. Repairs to a bridge which do not alter the clearances, type of structure, or any integral part of the substructure or superstructure or navigation conditions, but which consist only in the replacement of worn or obsolete parts, may, if the bridge is a legally approved structure, be made as routine maintenance without a formal permit action from the USCG. Bridge construction and bridge repair is required for the Proposed Project (Final EIS Section 1.7); however, the USCG confirmed in letters dated November 7, 2017, that a USCG bridge permit would not be required for the Noisette Creek bridge and the Shipyard Creek bridges. Therefore, adherence to these regulations would not apply and the Corps has concluded that the Project will not affect navigation.
- **12. Shore erosion and accretion.** (33 C.F.R. § 320.4[a][1] and 33 C.F.R. § 320.4[g]) The Project will have minimal short term detrimental effects on shoreline erosion and accretion. The Project may result in a minimal temporary increase in turbidity during construction activities. However, BMPs will be utilized to ensure sediments suspended during construction do not impact the surrounding environment. There will be no long-term effects on shoreline erosion and accretion.
- 13. Recreation. (33 C.F.R. § 320.4[a][1] and 33 C.F.R. § 320.4[e]) The Project will result in a negligible effect on recreation. There is no existing water-related public recreation access to the project site and no public recreation areas are located on parcels immediately adjacent to the project site. Recreational kayaking/canoeing occurs within Noisette Creek and to a lesser extent within the

Cooper River and Shipyard Creek. Power boating and recreational sailing occurs on the Cooper River. Recreational fishing for saltwater species such as redfish and seatrout occurs within the Cooper River and could occur within Noisette and Shipyard Creeks. Impacts that could affect water-related recreational experiences include changes to the recreational setting and experience caused by Project-related noise or visual changes; however, this general area is already industrial in nature.

Sterett Hall was demolished in 2016 as part of site preparation activities. The Applicant worked with the community as part of the Community Mitigation Working Group to develop acceptable mitigation for the replacement of Sterett Hall, as detailed in the Community MOA. In the Community MOA, the Applicant agreed to provide funding in the amount of \$3 million for the construction of a new recreation center to replace Sterett Hall and support the City of North Charleston to rehabilitate the former Chicora Elementary School with the intent that the rehabilitation of the Chicora Elementary School auditorium combined with the Rec Center partially funded by the Applicant would replace the facilities at Sterett Hall.

No cumulative impacts on recreation are expected.

- 14. Water supply and conservation. (33 C.F.R. § 320.4[m]) The Project will result in no effects on water supply and conservation. The proposed project would not require water withdrawals. Demand for potable water would be generated by ICTF employees and occasional visitors during operation of the proposed ICTF. The operation of the facility would not require industrial water usage. Municipal water supplies for the City of North Charleston, where the Project site is located, are served by the Charleston Water System. This utility gets their water primarily from Bushy Park Reservoir and secondarily from the Edisto River. The Charleston Water System has no operating groundwater wells in the study area and therefore would not be impacted by others from construction activities or disturbance of known contaminated groundwater sources.
- 15. Water quality. (33 C.F.R. § 320.4[d]) The Project will result in minor short-term adverse impacts on water quality but will not result in violation of the South Carolina water quality standards. The potential effects of the Project on surface water and groundwater quality were addressed fully in the Final EIS, in Sections 4.3, "Water Quality" and are summarized in Section 5, "Further Evaluation of the 404(b)(1) Guidelines" in this ROD.

Construction and operational activities at the Project site have the potential to affect hydrology and water quality. Pollutant loading, which can increase the biological oxygen demand and result in decreased dissolved oxygen, may increase locally due to construction in and operation proximal to respective sections of Noisette and Shipyard Creek. Short-term effects may be experienced upstream through the transport of pollutants during incoming tides. In addition, pollutant loading, including increased nutrient concentrations from stormwater runoff resulting from land use changes, is possible. The Applicant's proposed Stormwater Management System would provide pretreatment of stormwater runoff before it discharges to receiving waterbodies, thereby reducing water quality impacts. The Stormwater Management System would result in a reduction of TN, TP, and TSS as compared to existing and future without-Project conditions. All design requirements would be in compliance with the TMDL for DO established for the Charleston Harbor, Cooper River, Ashley River, and Wando River and SCDHEC regulations. Applicant-proposed sediment and erosion control practices designed as specified in the SCDHEC stormwater management Best Management Practices Handbook, include over 80,000 linear feet of new pipe or underdrain, five dry detention ponds (A, B, C, D1, and D2) located at the topographical low points of the site and in close proximity to the

existing outfalls, and a sediment forebay to provide pretreatment of stormwater runoff before it discharges to pond A. Accordingly, the construction and operation-related impacts on surface water quality are considered minor.

There are multiple areas of groundwater monitoring would be impacted by the Project as well as potentially contaminated sites. In addition, contaminated groundwater may be encountered in areas of deeper excavations (e.g., the 5 dry detention ponds, roadway and rail pilings) which would require permitting, treatment, and proper disposal of dewatering effluent as described in Final EIS Section 4.15 (Hazardous, Toxic, and Radioactive Waste). With the use of avoidance and minimization measures, adverse direct and indirect impacts would be minor.

Overall, impacts on surface and groundwater quality are anticipated to be minor and will be greatest during active construction. The proposed discharge will have no significant adverse effects on water quality.

A WQC was issued on July 2, 2018 by the SCDHEC pursuant to Section 401 of the Clean Water Act, and by Special Condition of the DA permit, the Permittee will be required to comply with all of its requirements and conditions. This Section 401 Water Quality Certification verifies that state water quality standards will be met. This certification is required as part of a DA permit that authorizes discharges into waters of the U.S.

16. Energy needs. (33 C.F.R. § 320.4[n]) The Project will have a negligible adverse effect on energy needs. Energy conservation and development are major national objectives. Within the Corps, district engineers are to give high priority to processing permit actions that involve energy projects. The Project is not an energy production facility. Rather, the Project will create new base load electric demand for facility operation. The estimated usage of electricity for the Project is 18 million kilowatt hours/year.

Electricity to the Project site is to be provided by a partnership between the South Carolina Electric and Gas Company (SCE&G), a primary subsidiary of SCANA, and Santee-Cooper. Both electrical utilities have the capacity to serve the Project site. Peak service demands from the five electrical cranes on the Project site would require upgrades to the local infrastructure. SCE&G would serve the startup and future electrical demands for the ICTF from their onsite substation, which is located north of the truck gate on North Hobson Avenue. In addition, SCE&G built a 115 kilovolt (kV) transmission line in 2015 to meet the needs of the Clemson Wind Turbine Facility. Alternative 1 (Proposed Project) will benefit from this line by relocating their distribution lines to this pole. Santee-Cooper also has a 115-kV transmission line that enters the Project site from the west. Utility relocation plans call for the Santee-Cooper line to be relocated to the buffer/berm area along the western portion of the Project area. Additional electrical utilities within the Project site that cannot be used would be removed, altered, or relocated. Relocation of electrical infrastructure during construction efforts could result in an interruption of service to local area residents and businesses for less than 12 hours. No natural gas service is anticipated to be required for the Project.

17. Safety. The Project will result in negligible, minor, and major adverse, short-term and long-term effects on safety. Safety issues were addressed in the Final EIS by evaluating the potential effects on health and safety (Final EIS Section 4.17, "Health and Safety") and the use, handling, storage, and accidental release of hazardous wastes (Final EIS Section 4.15, "Hazardous, Toxic, and Radioactive Waste").

Construction and operation of the ICTF involves features and activities that can expose workers to potential injuries, illnesses, or fatalities; however, the potential risk of injury from Project facilities is considered low, because of the design features included with the Project, safety precautions and training measures that would be implemented by the Applicant during construction and operation of the facility, and compliance with safety guidelines (Final EIS Section 4.17.12.1). Therefore, there would be a negligible impact to worker health and safety with the Project.

Drinking water supply sources for all of North Charleston are located outside of the study area (Bushy Park Reservoir and Edisto River) and would not be impacted by the Project from construction activities or from disturbance of known contaminated groundwater sources. Therefore, there would be a negligible impact to human health and safety from drinking water quality impacts with the Project.

Within the study area, the composite impacts of noise and vibration would be negligible. However, in localized areas (within close proximity to the ICTF and/or several segments of new track [Final EIS Section 4.12]) impacts of exterior noise would be minor to moderate (daytime) and major (nighttime). Refer to Final EIS subsection 4.12.3.5 for information on exterior to interior noise reduction. Interior noise levels are not anticipated to disrupt sleep. Included as a mitigation measure, the construction of an earthen berm along the western boundary of the Project site boundary reduces the number of noise sensitive receivers affected by operational noise from the facility. Additional noise mitigation measures for the Project include a cut-section (trench), four sound walls, and the option for qualified owners to have the right to relocate if they so choose (see Final EIS Chapter 6 and Appendix N). As a result of proposed mitigation, the overall impact to human health and safety from noise and vibration with the Project would be minor.

The overall impact to human health and safety from air quality impacts by the Project would be minor permanent adverse. Due to air quality concerns in the community; an Air Quality MOA between the Applicant and SCDHEC was executed on October 26, 2016 and commits to several air quality initiatives (see the Community Mitigation Plan in Final EIS Appendix N for additional details).

Impacts to human health and safety from hazardous materials by the Project would be negligible. Minor impact results from the potential to encounter 23 known contaminated sites. Minor impacts result from excavation activities, exposure to contaminated groundwater from dewatering in excavation areas, and the demolition of approximately 150 structures with asbestos and/or metals-based paints. There is no anticipated involvement with the Macalloy Superfund site. There is potential for minor and/or major impacts from accidental spills on the Project site from the use of ASTs (diesel fuels), storage of other minor amounts of solvents on the premises, and from containers containing hazardous materials. However, with implementation of BMPs during construction and operation (Final EIS Section 4.15.11), there is a negligible impact to human health from hazardous waste and materials.

While there are short-term adverse construction related impacts and long-term adverse operational impacts to emergency response times under the Project, the overall impact is minor; however, alternate routes for emergency responders are available. In addition, transportation studies will be conducted to further examine potential impacts to surrounding the ICTF. The Surface Transportation Study and Crossing Analysis will examine impacts and make recommendations on potential transportation improvements that could potentially improve the surrounding transportation network and routes for emergency response. See Final EIS Section 4.8.1 for additional information on these

studies. The overall impact to human health and safety from community safety and emergency response impacts associated with the Project would be minor.

There would be minor adverse impacts to human health and safety from light and glare for the Project.

Community safety impacts associated with the Project are related to the construction of an additional at-grade crossing and an increase in truck volumes on local streets. Construction of the rail and ROW improvements at Meeting Street for the southern rail connection would result in one new major at-grade rail crossing. This new at-grade rail crossing would have a minor indirect adverse impact to community safety by introducing a new conflict point between trains and automobiles, bicycles, and pedestrians. There are existing bike lanes and sidewalks along Meeting Street at the location of this proposed new at-grade crossing.

As noted in the Final EIS, the Corps found that the Project will result in negligible, minor, and major, short-term, adverse impacts on safety; and that the plans, procedures, and standards to be implemented by the Permittee will considerably minimize potential safety-related impacts.

- 18. Food and fiber production. The proposed project does not involve food and fiber production and does not impact prime farmland.
- 19. Mineral needs. The Project does not involve mineral needs as the project involves the construction of an ICTF. No minerals are to be dredged, excavated, or removed in conjunction with the proposed project.
- 20. Considerations of property ownership. (33 C.F.R. § 320.4[g]) The Project will result in a range of adverse effects on property ownership. The Final EIS addressed a range of potential adverse and beneficial impacts related to property owners in the vicinity of the Project, including potential nuisance effects (Sections 4.13, "Air Quality" and 4.12, "Noise and Vibration"), health effects (Sections 4.13, "Air Quality" and 4.17, "Human Health and Safety"), socioeconomic effects and property values (Final EIS Section 4.16, "Socioeconomics and Environmental Justice"), and water supplies and water quality (Final EIS Sections 4.2, "Hydrology"; 4.3, "Water Quality"; and 4.9, "Land Use and Infrastructure"). Most of these resource areas have been addressed in prior sections of this public interest review. Some property ownership effects will be adverse in the short term during construction, such as minor noise effects and visual encroachment in certain areas, while others will be beneficial, such as the direct and indirect economic stimuli that the Project will provide.

The majority of the Project site in addition to a number of immediately adjacent parcels, is owned by the Applicant, however some parcels required to build the facility are owned by others; especially the area required to build the 100-foot landscaped berm and sound walls constructed to serve as a buffer between the facility and the neighborhood to help reduce impacts. Approximately 134 residential units in the Chicora-Cherokee neighborhood, an environmental justice community, will be displaced. Many of these units provide affordable housing to the community. The loss of housing from the Project represents approximately 8 percent of the housing units in the neighborhood. Available housing may not be available in the Chicora-Cherokee neighborhood for all of the people displaced who may wish to stay within the neighborhood, especially if they were all relocated at the same time. The Applicant has a plan to address this issue by conducting a phased relocation plan so that not all relocations will occur at once. In addition to providing relocation assistance to those displaced pursuant to the guidelines associated with the Uniform Relocation Act, the Applicant has consulted

with the City of Charleston and the City of North Charleston and multiple neighborhood organizations to develop various other mitigation measures, which are included in the Applicant's Community Mitigation Plan, that help improve the quality of life in the surrounding community. Neighborhood organizations included the Chicora-Cherokee Neighborhood Association, the Union Heights Community Council, the Lowcountry Alliance for Model Communities (LAMC), and the Metanoia Community Development Corporation. LAMC represents seven neighborhoods (Accabee, Chicora/Cherokee, Union Heights, Howard Heights, Windsor Place, Five Mile, and Liberty Hill) nearby the proposed ICTF. The Applicant and the groups entered into a MOA on October 18, 2016. Measures outlined in this agreement would mitigate the adverse burdens borne by the Environmental Justice community.

Property values are influenced by a number of variables including multiple economic forces (including interest rates and inflation), unemployment rates, population trends, surrounding development appreciation, construction costs and infrastructure improvements. The economic benefits that will be generated by the Project, including increases in employment opportunities and income at both the ICTF and in the larger economy, could increase the demand for housing, thereby driving prices higher in the local real estate market. Conversely, development of the Project could result in nuisance-related effects, such as dust, noise, nighttime light from the facility, and degradation of the visual character in the surrounding landscape, which could in turn result in declining property values during operation. These adverse effects would tend to be localized close to the ICTF site and likely will affect a small segment of the local housing stock. As such, effects on property values are difficult to quantify and forecast as they are impacted by so many known and unknown factors.

21. Needs and welfare of the people.

As noted in Section 4.16, "Socioeconomics and Environmental Justice" of the Final EIS, the population surrounding the Project is characterized by relatively low-income levels and high unemployment and poverty rates. The environmental and socioeconomic effects of the Project on the needs and welfare of these people will be varied. As discussed in the Final EIS, the Project has the potential to adversely affect local populations, including impacts associated with air quality (Section 4.13, "Air Quality"), noise and vibration (Section 4.12, "Noise and Vibration"), traffic and transportation (Section 4.8, "Traffic and Transportation"), in addition to socioeconomic and environmental justice concerns (Section 4.16, "Socioeconomics and Environmental Justice").

Within the study area, the composite impacts of noise and vibration would be negligible. However, in localized areas (within close proximity to the ICTF and/or several segments of new track) impacts of exterior noise would be minor to moderate (daytime) and major (nighttime). Included as a mitigation measure, the construction of an earthen berm along the western boundary of the Project site boundary reduces the number of noise sensitive receivers affected by operational noise from the facility. Additional noise mitigation measures for the Project include a cut-section (trench), four sound walls, and the option for qualified owners to have the right to relocate if they so choose. As a result of proposed mitigation, the overall impact to human health and safety in localized areas surrounding the ICTF from noise and vibration with the Project would be minor.

The overall impact to human health and safety from air quality impacts by the Project would be minor permanent adverse. Due to air quality concerns in the community; an Air Quality MOA between the

Applicant and SCDHEC was executed on October 26, 2016 and commits to several air quality initiatives (see the Community Mitigation Plan in Final EIS Appendix N for additional details).

Impacts to human health and safety from hazardous materials by the Project would be negligible due to the avoidance and minimization measures committed to by the Applicant and required by state and federal laws (e.g., compliance with Resource Conservation and Recovery Act and SCDHEC standards for storage and handling of wastes, and employee training).

While there are short-term adverse construction related impacts and long-term adverse operational impacts to emergency response times under the Project, the overall impact is minor; however, alternate routes for emergency responders are available. In addition, transportation studies will be conducted to further examine potential impacts to surrounding the ICTF. The Surface Transportation Study and Crossing Analysis will examine impacts and make-recommendations on potential transportation improvements that could potentially improve the surrounding transportation network and routes for emergency response. See Final EIS Section 4.8.1 for additional information on these studies. The overall impact to human health and safety from community safety and emergency response impacts associated with the Project would be minor.

There would be minor adverse impacts to human health and safety from light and glare for the Project.

Community safety impacts associated with the Project are related to the construction of an additional at-grade crossing and an increase in truck volumes on local streets. Construction of the rail and ROW improvements at Meeting Street for the southern rail connection would result in one new major at-grade rail crossing. This new at-grade rail crossing would have a minor indirect adverse impact to community safety by introducing a new conflict point between trains and automobiles, bicycles, and pedestrians. There are existing bike lanes and sidewalks along Meeting Street at the location of this proposed new at-grade crossing.

As noted in the Final EIS, the Corps found that the Project will result in negligible, minor, and major, short-term, adverse impacts on safety; and that the plans, procedures, and standards to be implemented by the Permittee will considerably minimize potential safety-related impacts. Overall, the Corps has concluded that the potential Project-related effects on the needs and welfare of the people related to environmental quality are neutral with the Applicant's mitigation measures.

From an economic perspective, the Project will result in a broad range of economic benefits in the Project vicinity and in the larger economy of South Carolina, as described in Sections 4.10 of the Final EIS. These economic benefits include the creation of jobs and employment locally and more broadly over the state. Collectively, the Project will support 3,032 temporary construction jobs within the region and a total of 55 direct jobs at the site after its completion. In addition, the Project would provide indirect, long-term economic benefits to the regional and local community as employment opportunities are directly and indirectly created as a result of the Project. The Applicant estimates that the Navy Base ICTF would employ approximately 96 people by 2038.

It is likely that the regional economic benefits generated from the Project will benefit the entire region, including minority and low-income workers, because these benefits will occur across a broader range of industries that are supported by a more diverse mix of workers. The fiscal benefits of the Project, including new tax and fee revenues, also could allow the City of North Charleston to provide additional or improved public services that will benefit all residents. The economic and fiscal

benefits of the Project are likely to benefit, and will not result in disproportionate adverse effects on, the minority and low-income populations in the area.

Overall, and taking into account the economic benefits and mitigation, the Project will result in negligible long-term effects on the needs and welfare of the people.

7. Effects, Policies and Other Laws

7.1. Public Interest Factors: See Section 6 of this ROD.

7.2. Endangered Species Act:

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the Action Area, and independently examined all information provided by the Applicant. The Corps has determined that the Project is not likely to adversely affect the west Indian manatee, and the proposed project will have no effect on other federally-listed species under the purview of USFWS and NMFS, and will not result in the destruction or adverse modification of designated (or proposed) critical habitat of such species.

The joint public notice issued on October 19, 2016 served as a request for written concurrence from the USFWS with regard to the 'may affect not likely to adversely affect' determination for the west indian manatee. Final coordination with the USFWS occurred on November 10, 2016, and the USFWS concurred with the Corps' determination that the proposed construction of the ICTF is "not likely to adversely affect federal protected species" with regard to work over water. In NMFS' July 31, 2018 letter regarding the Final EIS, there were no comments provided that objected to, or contradicted, the Corps' 'no effect' determination for protected species under NMFS' purview.

The Services \boxtimes concurred/ \square provided a Biological Opinion(s).

7.3. Magnuson-Stevens Fishery Conservation and Management Act:

Consultation with NMFS regarding compliance with the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act resulted in the following coordination. The NMFS completed a review of the *Draft Environmental Impact Statement for the Proposed Navy Base Intermodal Facility at the former Charleston Naval Complex, North Charleston*, dated April 2016 (Draft EIS), and the corresponding public notice (SAC-2012-0960), dated April 29, 2016. In response, by letter dated July 2016, NMFS recommended:

- 1. The Applicant should reduce the amount of fill proposed for salt marsh habitat.
- 2. The project should include BMPs to reduce direct and indirect impacts to salt marsh and the Cooper River.
- 3. The project should include a mitigation plan developed in coordination with the NMFS and resource agencies.

The Corps joint public notice issued on October 19, 2016 served to initiate consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the Project would impact 7.107 acres of estuarine substrates and emergent wetlands and 8.546 acres of wetlands upstream of estuarine substrates and emergent wetlands utilized by various life stages of species

comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination was that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS).

In a letter dated July 31, 2018, the NMFS concluded that the Project had changed since the Draft EIS stage and the Applicant had incorporated measures in response to earlier NMFS conservation recommendations. Specifically, potential impacts to Noisette Creek were reduced by reusing an existing bridge rather than construction of a new one. Potential impacts to Shipyard Creek were reduced by the redesign of the Drayage Road including single ingress/egress at the Drayage Road Bridge, elimination of a flyover at the Port Access Road, and change from a two-way roadway to a one-lane divided roadway. The Final EIS also identified a variety of avoidance and minimization strategies for EFH including environmental work windows for in-water construction activities, use of pile driving noise reduction techniques, in-water turbidity and sedimentation control measures, and plans to hire an on-site marine biologist during in-water construction activities to help avoid potential impacts.

The Final EIS included a compensatory mitigation plan. The NMFS provided the following EFH Conservation Recommendations:

- 1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.
- 2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

The Applicant has revised their Mitigation Plan to include the following items which address NMFS recommendations:

1. The permittee-responsible mitigation plan should include improvements to the drainage system culverts located under the existing road to ensure natural tidal exchange throughout the site.

The road that extends into the mitigation site is currently not within the mitigation area controlled by the Applicant. Additionally, the hydraulic models used to demonstrate that inundation would occur at the mitigation site did not account for the flow of water through the culverts. Nonetheless, Palmetto Railways has amended their Mitigation Plan to include adaptive management measures that ensure inundation at the site in the event that the planned tidal inundation does not occur.

2. The permittee-responsible mitigation plan should include nekton habitat utilization performance standards, relative to a reference site.

Palmetto Railways has amended their Mitigation Plan to include sampling of nekton and establish success criteria that relate to the reference sites for the restoration.

7.4. Section 106 of the National Historic Preservation Act (NHPA):

Because the Project will cause an adverse effect on multiple historic properties, the Section 106 process included mitigation proposed by the Applicant; and execution of a MOA among the South Carolina State Historic Preservation Officer (SHPO), the Corps, and the consulting parties. Furthermore, Palmetto Railways will implement a Cultural Resources Management Plan and an

Unanticipated Discovery Plan should any previously unidentified historic properties be discovered during construction.

Extensive surveys were completed by the Applicant in consultation with the SHPO over several years before and after the submittal of the DA permit application on October 11, 2016. Upon submittal of the DA permit application, the Corps became the lead federal agency for compliance with Section 106 of the NHPA and has followed the procedures in 33 C.F.R. Part 325, Appendix C, the Corps' Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800 dated April 25, 2005; and the Corps' January 31, 2007 Clarification of Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800 dated April 25, 2005.

The Corps has consulted with SHPO, the ACHP, and the FRA regarding the Project. The Corps has also consulted with the Historic Charleston Foundation, The Preservation Society of Charleston, and the Naval Order of the United States, Charleston Commandery. These three organizations were all granted consulting party status and provided input on the effects of the Project on cultural resources.

The Corps also notified federally-recognized tribes about the Project. The Muscogee (Creek) Nation requested to become a consulting party due to the Project's location within their historic area of interest. However, they have stated that "there is very little potential for intact archeological deposits, and if there are any, they are likely beneath the (existing) fill" (see letter dated January 20, 2016, in Final EIS Appendix G).

The terms and conditions of the Memorandum of Agreement entitled: Memorandum of Agreement among U.S. Army Corps of Engineers, Charleston District; Federal Railroad Administration or Other U.S. Department of Transportation Agency; Palmetto Railways; Advisory Council on Historic Preservation; Muscogee (Creek) Nation; and the South Carolina State Historic Preservation Officer Regarding the Navy Base Intermodal Facility Project in Charleston County, South Carolina (NHPA MOA) are incorporated by reference in this ROD, and will be made a special condition of the DA permit.

Finally, the fully executed NHPA MOA (signed and approved by the ACHP on May 30, 2018) has been filed with the ACHP to evidence the Corps compliance with NHPA Section 106.

7.5. Water Quality Certification under Section 401 of the CWA:

On July 2, 2018, SCDHEC-OCRM issued a Critical Area Permit that included a WQC pursuant to Section 401 of the Clean Water Act, and by Special Condition of the DA permit, the Permittee will be required to comply with all of its requirements and conditions. (See ROD Section 7.11, Table 4).

7.6. Coastal Zone Management Act (CZMA)

On July 2, 2018, SCDHEC-OCRM issued a Critical Area Permit that included a CZMA consistency concurrence for the Project (See ROD Section 7.11, Table 4).

7.7. Corps Wetland Policy:

Based on the public interest review herein, the beneficial effects of the Project outweigh the detrimental effects.

7.8.	Effect	on F	'ederal	Proj	ects

There are no proposed federal projects adjacent to the Navy Base ICTF.

7.9. Safety of Impoundment Structures:

The Applicant demonstrated that impoundment structures comply with established dam safety criteria or have been designed by qualified persons and independently reviewed:

☐ True ☐ False ☒ Not Applicable

7.10. Activities in Marine Sanctuaries:

If the proposed project would occur in a marine sanctuary, certification from the Secretary of Commerce was received:

☐ True ☐ False ☒ Not Applicable

7.11. Other Authorizations:

Table 4. Existing Authorizations held by the Applicant and Permits Granted for the Project

Agency	Permit/Authorization Number	Description
SCDHEC	CZC#: CZC-16-1601	Coastal Zone Consistency Determination for north lead, south lead, and NBIF intermodal rail yard
SCDHEC-OCRM	CZC#: CZC-16-1602	Coastal Zone Consistency Determination for construction of roadways associated with NBIF intermodal rail yard
SCDHEC	2012-00960(17)	Critical area permit/coastal zone consistency/water quality certification

7.12. Significant Issues of Overriding National Importance:

There are no significant issues of overriding national importance.

8. Compensation and Other Mitigative Actions

Compensatory mitigation:

Is compensatory mitigation required? 🗵 Yes 🗆 No (If no, do not complete the rest of this	section.
Is the impact in the service area of an approved mitigation bank? ✓ Yes □ No	

Application #SAC 2012-00960

Does the mitigation bank have appropriate number and resource type of credits available? ☑ Yes □ No
What is the name of the Bank? Congaree Carton Mitigation Bank
Is the impact in the service area of an approved in-lieu fee program? $\ \square$ Yes $\ \boxtimes$ No
Does the in-lieu fee program have appropriate number and resource type of credits available? \square Yes \boxtimes No
Check the selected compensatory mitigation option(s):
☑ mitigation bank credits
☐ in-lieu fee program credits
☑ permittee-responsible mitigation under a watershed approach
☐ permittee-responsible mitigation, on-site and in-kind
☐ permittee-responsible mitigation, off-site and out-of-kind

If a selected compensatory mitigation option deviates from the order of the options presented in § 332.3(b)(2)-(6), explain why the selected compensatory mitigation option is environmentally preferable. Address the criteria provided in §332.3(a)(1) (i.e., the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project).

The Applicant's initial Mitigation Plan proposed buying credits for freshwater impacts (Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank) and saltwater impacts (Clydesdale Mitigation Bank). The applicant proposed to mitigate for the permanent loss of 5.389 acres of Critical Area at a 1:1 ratio with 5.389 acres of Critical Area restoration through mitigation credit purchase from an approved bank. SCDNR and USFWS objected to use of the Clydesdale Mitigation Bank and the critical area impact compensation in letters commenting on the DA permit application. The USFWS recommended that the Applicant seek an alternate location or plan to satisfy mitigation needs. "We believe that the creation of a permittee responsible mitigation plan (PRM) is appropriate, and the applicant should seek an area within the watershed...".

The CAWS Basin Focus Area encompasses a total area of approximately 815,000 acres bordering the Cooper, Ashley, Wando and Stono rivers in the South Carolina Lowcountry. It includes the Charleston metropolitan area, as well as major portions of Berkeley and Charleston County. The CAWS Basin contains a large variety of coastal plain habitat, including pine uplands, estuaries and extensive wetland and river systems. This Focus Area is sub-divided into three initiative areas: the Ashley River Initiative, the Cooper-Wando Initiative and the Sea Islands Initiative. State, regional and local efforts were established in the 1990s to begin conservation of critical lands within the Coastal Plain watersheds and ecoregions. These efforts have successfully protected over 200,000 acres of lands and the efforts continue.

The Applicant selected a 40.63-acre PRM site at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC. On a regional and watershed context level, the site sits within the Greater Santee watershed. This site also sits squarely within the CAWS Basin Focus Area and significantly contributes to the conserved acreage and ecological values attributed to these lands.

The Applicant revised their Mitigation Plan to purchase 86.3 wetland mitigation credits from Pigeon Pond Mitigation Bank or Congaree Carton Mitigation Bank (ultimately choosing to purchase available credits at Congaree Carton) to compensate for freshwater impacts, and to restore and protect approximately 40.6 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC pursuant to a permittee-responsible mitigation plan.⁹

Congaree Carton Mitigation Bank – The Congaree Carton Mitigation Bank is a compensatory mitigation bank located in the Cooper River watershed in the headwaters of the Wando River. The proposed Congaree Carton Mitigation Bank is located in Charleston County in the Sewee Bay United States Geologic Survey Topographic Quadrangle. This site is located within the Cooper River watershed (Hydrologic Unit Code, HUC 03050201-050) in the headwaters of the Wanda River (HUC 03010201-080). The proposed project site includes 462.87-acres adjacent to the Wando River and the Francis Marion National Forest, roughly 0.5 miles west of U.S. Hwy 17, via Guerin Bridge Road, S-10-98 within the Carolinian Barrier Islands/Coastal Marshes and Mid-Atlantic Coastal Plain ecoregions. As of September 19, 2018, RIBITS database documents that 698.12 credits are available. The Applicant proposes to offset impacts to freshwater wetlands within the Project through the purchase of 86.3 credits from the Congaree Carton Mitigation Bank. In accordance with the special conditions of the DA permit, the purchase of 86.3 credits from the Congaree Carton Mitigation Bank must occur prior to the commencement of authorized work.

King's Grant Permittee Responsible Mitigation Site – The Applicant proposes to offset 6.65 acres of impacts to tidal waters/marsh areas through the restoration of approximately 40.61 acres of tidal marsh located within a portion of the former Kings Grant Country Club and Golf Course, resulting in a 6:1 ratio. The planned restoration of the Kings Grant Mitigation site involves a former wetland site, which was converted to an upland site used as a golf course. The overall concept of the restoration plan is to recreate natural conditions of the desired marsh ecosystem by breaching existing dikes and grading of the site such that normal hydrologic regimes and influences are restored and replanting of the site with indigenous species. General tasks of the restoration methodology and plan include the following restoration activities.

- Removal of existing vegetation;
- Breaching of dikes and grading; ,
- Planting of site;
- Monitoring; and
- Protection of the restored site.

As stated in the Final EIS, the Corps believes that the Mitigation Plan proposed by the Applicant, including a mitigation bank credit purchase in concert with a landscape scale permittee-responsible mitigation plan, adequately compensates for the aquatic resource functions that will be lost as a result of the Project. Once restored, the physical, chemical and biological functions created at the restoration site will result in a net improvement and serve the aquatic resource needs of the watershed. The Mitigation Plan meets the 12 elements required of compensatory mitigation plans consistent with the 2008 Mitigation Rule (33 C.F.R. Part 332). Based on the information contained in Chapter 6, "Mitigation" of the Final EIS, the Corps has determined that the Applicant's Mitigation Plan is

⁹ By email dated September 18, 2018, Palmetto Railways notified the Corps that it had elected to use the Congaree Carton Mitigation Bank because the Pigeon Pond Mitigation Bank did not have credits available.

environmentally preferable and adequately compensates for the Project's impacts on waters of the U.S.

Other Mitigative Actions:

A range of mitigation measures with the potential to reduce the impacts of the Project on environmental resources was presented in Chapters 4 and 6 of the Final EIS. Many of these measures have been included as a part of the Project or have been required by Special Condition of the DA permit and included in this ROD. Additional mitigation measures were identified by the Corps in Table 6-2 of the Draft and Final EIS. These measures were identified for further consideration by the Corps if in their authority, as well as for consideration by other agencies as appropriate under their authorities. Additional mitigation actions or measures were identified in Table 6-2 of the Draft and Final EIS for resources such as hydrology, protected species, essential fish habitat, and cultural resources.

9. Public Interest Review General Criteria (33 C.F.R. § 320.4[a][2])

The following general criteria were considered in the public interest review.

a. The relative extent of the public and private need for the proposed structure or work.

The Corps has reviewed the information provided by Palmetto Railways, including the need for a near-dock ICTF (Final EIS Appendix B) in the region to have capacity for existing and projected future growth of intermodal container traffic. The Corps recognizes the need and projected increase of rail-based TEUs in the *Final Environmental Impact Statement Proposed Marine Container Terminal at the Charleston Naval Complex* (2006), where the future projected rail-based TEUs would be approximately 20–25 percent of TEUs throughput from the Port of Charleston. This projection was validated by a September 2016 year-to-date statistic of 22 percent rail TEUs provided by the SCPA (2016). The Corps also recognizes the need for Palmetto Railways, a State agency, to provide equal access to both Class I rail carriers (CSX and NS). Equal access is necessary to ensure that the Port and Palmetto Railways remain neutral in business dealings with Class I rail carriers and do not provide preferential treatment to either carrier, in order to prevent giving one carrier an unfair competitive advantage over the other. Equal access also seeks to preserve competitive intermodal rail transport pricing for the Port as a destination for intermodal traffic versus its competitors (e.g., Port of Norfolk and Port of Savannah).

The Corps has found, based on the Applicant's information and its own independent review, that the Applicant's stated need is not unduly speculative.

The population surrounding the Project is characterized by relatively low-income levels and high unemployment and poverty rates. From an economic perspective, the Project will result in a broad range of economic benefits in the Project vicinity and in the larger economy of South Carolina, as described in Sections 4.10 of the Final EIS. These economic benefits include the creation of jobs and employment locally and more broadly over the state. Collectively, the Project will support 3,032 temporary construction jobs within the region and a total of 55 direct jobs at the site after its completion. In addition, the Project would provide indirect, long-term economic benefits to the regional and local community as employment opportunities are directly and indirectly created as a result of the Project. The Applicant estimates that the Navy Base ICTF would employ approximately 96 people by 2038.

b. Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work.

There are no unresolved conflicts as to resource use.

c. The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.

The Final EIS addressed a range of potential adverse and beneficial impacts related to the current and potential future public and private uses for which the area is suited. Industrial activity in one form or another has been ongoing in the Project area for over 100 years. The former Navy base (also known as the CNC) was closed in 1996 and the EIS for the Disposal and Reuse of the Charleston Naval Base North Charleston, South Carolina was prepared to evaluate the impacts of the closure and plan for the reuse of the nearly 1,500-acre complex. The recommended plan provided for civic and community uses with an emphasis on government and port-related activities recommending "high density" redevelopment with a mix of commercial, industrial and recreational activities.

Existing land use in the study area is predominantly high intensity urban development, with low intensity urban development, marsh and marine water. As of September 2015, the site contained both open land and developed areas interspersed within a network of private roads. Public uses of the area are generally limited; there are no public lands or conservation areas in the immediate vicinity, and recreation use and potential are low.

Active construction will occur for approximately 20 years, with full build-out in 2038; however, the majority of the planned infrastructure will be constructed and stabilized for facility opening. Construction impacts will be temporary, while most operational impacts will be long-term.

Potential detrimental impacts include:

- minor adverse impact to hydrology
- minor adverse impacts to vegetation and wildlife
- minor impact on loss of EFH
- minor permanent adverse impact on the opening year 2018 and design year 2038 North Charleston intersection operations
- minor to moderate rail noise impact
- minor to moderate construction noise impact
- minor to moderate exterior daytime operational noise impact
- minor short-term adverse construction emissions and minor permanent adverse operational criteria pollutant emissions

- minor adverse effects to climate change
- minor adverse impacts to groundwater
- minor adverse impacts to soils
- minor indirect adverse impact to local businesses adjacent to the Project
- minor short-term adverse impacts from construction
- minor adverse access impacts for Chicora-Cherokee residents
- minor adverse mobility impacts
- minor adverse emergency response time impacts
- minor safety impacts
- minor adverse impacts to Olde North Charleston

- minor to moderate impacts to Howard Heights, Union Heights, and Windsor neighborhoods from noise
- minor indirect impact from exacerbation of housing and population loss
- major adverse impacts to waters of the U.S., including wetlands;
- moderate permanent adverse impact on the opening year 2018 and major permanent adverse impact design year 2038 at-grade crossing operations;
- major permanent impact on land use change;

- major permanent impact on displacement of structures;
- adverse effect on CNH Historic District and USMC Barracks;
- major permanent adverse impact to scenic resources, visual quality, and character;
- major exterior nighttime operational noise impact;
- major adverse impacts to Chicora-Cherokee neighborhood from approximately 134 residential displacements (environmental justice).

A number of these impacts will be minimized through measures in MOAs to be implemented by the Permittee, through compliance with required state and federal regulations, and by specific permit conditions.

In terms of beneficial effects, there will be a minor beneficial impact from improved stormwater management and water quality for some parameters and a major short-term and indirect long-term benefit to local and regional economy. The Project will create some new infrastructure (e.g., electrical transmission, water mains, and roads) that could benefit future development, should it occur.

As stated in the Final EIS, the Corps believes that the Mitigation Plan proposed by the Applicant adequately compensates for the aquatic resource functions that would be lost as a result of the proposed Project.

10. <u>Determinations</u>

10.1. Public Hearing Request:

I here were no requests for a public hearing.
☑ I have reviewed and evaluated the requests for a public hearing. There is sufficient information available to evaluate the proposed Project; therefore, the requests for a public hearing were denied (or withdrawn).
☐ In response to the requests for a public hearing, I determined that a public hearing was appropriate.

10.2. Section 176(c) of the Clean Air Act General Conformity Rule Review:

The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit will not exceed *de minimis* levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 C.F.R. Part 93.153. Any later indirect emissions

are generally not within the Corps' continuing program responsibility and generally cannot be predictably controlled by the Corps. For these reasons, a conformity determination is not required for this permit action.

10.3. EO 13175 Consultation with Indian Tribes, Alaska Natives and Native Hawaiians:

This EO was designed to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications and to strengthen the U.S. government-to-government relationships with Indian tribes.

In the spirit of this EO, the Corps invited 16 Indian tribes to participate in the development of the environmental analysis for the project. No tribes responded by declining to participate and 15 tribes did not respond. The Muscogee (Creek) Nation requested to become a consulting party in the Section 106 process in November 2016, and was involved in the development of the MOA pursuant to Section 106 of the NHPA. The tribe requested additional information on the Project and requested to be a consulting party because the project is located within the Muscogee (Creek) Nation's historic area of interest and is of importance to the tribe. The Muscogee (Creek) Nation "agrees that there is very little potential for intact archaeological deposits, and if there are any, they are likely beneath the (existing) fill."

10.4. EO 11988 Floodplain Management:

		The	proposed	project	is	not	in	a	floodpl	ain.
--	--	-----	----------	---------	----	-----	----	---	---------	------

☑ The evaluations in this document considered alternatives to locating the project in the floodplain, and minimizing and compensating for effects on the floodplain and are discussed above.

10.5. EO 12898 Environmental Justice:

In accordance with Title III of the Civil Rights Act of 1964 and EO 12898, it has been determined that the adverse impacts associated with the Project would be predominantly borne by the minority and low-income population of the Chicora-Cherokee Neighborhood, and are appreciably more severe than the adverse effects that would be suffered by the non-minority and non-low-income population of the City of North Charleston and Charleston County. There would be a major adverse impact from displacement of approximately 134 residential units in the Chicora Cherokee Neighborhood. With regard to benefits and burdens, the benefits of the Project would extend to the greater Charleston region, while the burdens would largely be borne by the Environmental Justice community adjacent to the Project site. Therefore, the benefits and burdens of the Project are not equitably distributed. However, the Applicant and community groups entered into a Memorandum of Agreement on October 18, 2016 (see the Community Mitigation Plan and Community MOA in Appendix N of the Final EIS for additional details). Measures outlined in this agreement would mitigate the adverse burdens borne by the Environmental Justice community.

10.6. EO 13112 Invasive Species:

L	There	were no	mvasive	species	issues	involved.	
					-		

☑ The evaluation in this document included invasive species concerns in the analysis of effects at the project site and associated compensatory mitigation.

	☐ Through the following special conditions, the permittee will be required to control the introduction and spread of exotic species.
10.7.	EO 13212 and 13302 Energy Supply and Availability:
	\Box The proposed Project will not increase the production, transmission, or conservation of energy, or strengthen pipeline safety.
	☐ This review was expedited or other actions were taken to the extent permitted by law and regulation to accelerate completion of this energy-related (including pipeline safety) project while maintaining safety, public health and environmental protections.
10.8.	Findings of compliance or non-compliance with the restrictions on discharge. (Sec. 230.12 of the 404[b][1] guidelines):
	☐ The proposed site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines.
	☐ The proposed disposal site for discharge or dredged or fill material complies with Section 404(b)(1) guidelines with the inclusion of conditions contained in this ROD.
	☐ The proposed disposal site for discharge of dredged or fill material does not comply with the Section 404(b)(1) guidelines for the following reasons:
	☐ There is a less damaging practicable alternative
	☐ The proposed discharge will result in significant degradation of the aquatic ecosystem
	☐ The proposed discharge does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem.
10.9.	Public Interest Determination:
	The undersigned finds that the issuance of a Department of the Army permit is not contrary to the public interest.

The above determinations were based on consideration of the final Project description and the imposition of Special Conditions in the DA permit, which are also included in this ROD (see Attachment A, Special Conditions).

PREPARED BY: Shawn Boone Project Manager	Date 20 Sept 20
REVEIWED BY: Amanda L. Heath Chief, Special Project Branch	Date 20 Sept 2018
REVELWED BY: Travis G. Hughes Chief, Regulatory Division	Date 20Sept 2018
REVELWED BY: James F. Choate Assistant District Council	Date 20 Sept /8
APPROVED BY: Jeffrey Palazzini	Date 20 Sep 18

Lieutenant Colonel, U.S. Army Commander and District Engineer

ATTACHMENT A SPECIAL CONDITIONS

SPECIAL CONDITIONS FOR PERMIT #: SAC-2012-00960

- 1. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the U.S.
- 3. The permittee must install and maintain, at their expense, any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulations or otherwise, on authorized facilities. The USCG may be reached at the following address and telephone number: (as of February 2013) U. S. Coast Guard District Seven, Waterways Management Branch, 909 SE 1st Ave, Suite 406, Miami, FL. 33131, and 305-415-6755 or 305-415-6750.
- 4. That the permittee agrees to provide all contractors associated with construction of the authorized activity a copy of the permit and drawings. A copy of the permit will be available at the construction site at all times.
- 5. That the permittee shall submit a signed compliance certification to the Corps within 60 days following completion of the authorized work and any required mitigation. The certification will include:
 - a. A copy of this permit;
 - b. A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
 - c. A statement that any required mitigation was completed in accordance with the permit conditions;
 - d. The signature of the permittee certifying the completion of the work and mitigation.
 - e. As-built drawings which indicate all dimensions of the authorized structure. These drawings must be prepared by a registered land surveyor.
- 6. The permittee understands and agrees that the Department of the Army (DA) permit has been issued based upon the permittee's intended purpose to construct and operate an intermodal container transfer facility (ICTF) in accordance with the permitted plans. The permittee recognizes that its commitment to construct and operate the ICTF pursuant to the Project details described in the Department of the Army (DA) permit application received on October 11, 2016 (and amended by updated drawings dated February 9, 2017) was a deciding factor in the

- favorable and timely decision on this permit, and recognizes further that a deviation from such details may be grounds for modification, suspension or revocation of this DA authorization.
- 7. The permittee recognizes that their commitment to perform and implement the following conditions was a deciding factor in the favorable and timely decision on this permit and recognizes that a failure on their part to both actively pursue and implement these conditions may be grounds for modification, suspension or revocation of this DA authorization:
 - a. That as compensatory mitigation for the impacts to aquatic resources, the permittee agrees to implement and successfully complete the "Kings Grant Mitigation Site, North Charleston, SC, Palmetto Railways, PREPARED BY Newkirk Environmental," dated December 1, 2017, as amended by the "Addendum To: Kings Grant Mitigation Site, North Charleston, SC, Palmetto Railways, PREPARED BY Newkirk Environmental, Inc.," dated September 5, 2018 (collectively, the Mitigation Plan).
 - b. That, in accordance with the Mitigation Plan, and as compensatory mitigation for the impacts to aquatic resources, the permittee agrees to restore and preserve approximately 40.63 acres of tidal marsh at the former Kings Grant Country Club and Golf Course in North Charleston, Dorchester County, SC. Preservation shall be by means of a conservation easement. The conservation easement document and surveyed plat of the mitigation area must be submitted to the District Engineer or his designee for review and approval prior to execution.
 - c. That the permittee must submit evidence of the execution and recording of the conservation easement and surveyed plat of the mitigation area to both the Corps and DHEC prior to commencement of the authorized work. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 7.a. and b. will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps.
 - d. That as compensatory mitigation for impacts to aquatic resources, the permittee agrees to purchase or debit a total of 86.3 credits from the Congaree Carton Mitigation Bank. At least one half of the required credits (43.15 credits) must be restoration/non-buffer enhancement credits. In addition, no more than one half of the required mitigation credits (43.15 credits) may be preservation credits.
 - e. That the permittee must submit evidence of the purchase or debit of the required mitigation credits to both the Corps and DHEC prior to commencement of the authorized work. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 7.d. will not be considered fulfilled until you have received written verification from the Corps.
 - f. That the permittee agrees to perform and comply with the signed Memorandum of Agreement for environmental stewardship entitled "MEMORANDUM OF AGREEMENT BETWEEN THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL AND PALMETTO RAILWAYS REGARDING THE NAVY BASE INTERMODAL FACILITY PROJECT IN CHARLESTON COUNTY, SOUTH CAROLINA," dated October 26, 2016.

- g. That the permittee agrees to perform and comply with the signed Memorandum of Agreement for community mitigation entitled "MEMORANDUM OF AGREEMENT BETWEEN PALMETTO RAILWAYS AND THE CHICORA-CHEROKEE NEIGHBORHOOD ASSOCIATION, THE UNION HEIGHTS COMMUNITY COUNCIL, THE LOWCOUNTRY ALLIANCE FOR MODEL COMMUNITIES, AND THE METANOIA COMMUNITY DEVELOPMENT CORPORATION RELATED TO THE USE OF MITIGATION FUNDS IN CONNECTION WITH THE REDEVELOPMENT OF THE NAVY BASE INTERMODAL FACILITY," executed on October 21, 2016.
- h. That the permittee agrees to perform and comply with the signed Memorandum of Agreement to resolve adverse effects to historic properties entitled "MEMORANDUM OF AGREEMENT AMONG THE U.S. ARMY CORPS OF ENGINEERS, CHARLESTON DISTRICT; FEDERAL RAILROAD ADMINISTRATION OR OTHER U.S. DEPARTMENT OF TRANSPORTATION AGENCY; PALMETTO RAILWAYS; ADVISORY COUNCIL ON HISTORIC PRESERVATION; MUSCOGEE (CREEK) NATION; AND THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICER REGARDING THE NAVY BASE INTERMODAL FACILITY PROJECT IN CHARLESTON COUNTY, SOUTH CAROLINA," executed on May 30, 2018.
- 8. In order to ensure protection of any threatened or endangered species, and designated critical habitat that may be present in the project area during construction activities, the permittee will comply with the following:
 - a. The permittee shall instruct all personnel associated with the project of the potential presence of and the need to avoid collisions with protected species, which may include but is not limited to West Indian manatees, Atlantic sturgeon, shortnose sturgeon, sea turtles, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale.
 - b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing protected species which are protected under the Marine Mammal Protection Act of 1972 and/or the Endangered Species Act of 1973.
 - c. Any siltation barriers used during the project shall be made of material in which protected species cannot become entangled and must be properly secured, and regularly monitored to avoid protected species entrapment.
 - d. All vessels associated with the project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
 - e. If protected species are seen within 100 yards of the active construction area all appropriate precautions shall be implemented to ensure protection of the protected species. These precautions shall include the operation of all moving equipment no closer than 50 feet to a protected species. Operation of any equipment closer than 50 feet to a

- protected species shall necessitate immediate shutdown of that equipment. Activities will not resume until the protected species has departed the project area of its own volition.
- f. Incidents where any individuals of sea turtles, Atlantic sturgeon, shortnose sturgeon, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this DA permit shall be reported to NOAA Fisheries, Office of Protected Species at (727) 824-5312, the SCDNR Hotline at 1-800-922-5431, and the Regulatory Office of the Charleston District of the U.S. Army Corps of Engineers at (843) 329-8044. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure, or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.
- 9. In order to insure protection and reduce potential construction-related impacts to West Indian manatees that may enter the project area during dredging activities performed outside the winter months (November thru April), to discountable and insignificant levels, the permittee will comply with the following:
 - a. All construction personnel must monitor water-related activities for the presence of manatee(s) during May October.
 - b. Any collision and/or injury to a manatee shall be reported immediately to Mr. Jim Valade of the U.S. Fish and Wildlife Service, North Florida Field Office, at (904) 731-3116, and the SCDNR Hotline at 1-800-922-5431
- 10. The permittee understands and agrees that pilings will be installed using a water jet or vibratory hammer. In the event standard pile driving (impact hammer) is utilized, the permittee understands and agrees that a soft-strike procedure (three strikes at 40%-60% energy level once a minute for 3 minutes) must be conducted prior to beginning pile driving activities and after any pile driving interruptions of more than 30 minutes.
- 11. That the permittee understands and agrees that pile driving activities must be limited to 12 hours per day with a 12-hour rest period between pile driving activities.
- 12. If any previously unknown historic, cultural or archeological remains and artifacts are discovered while accomplishing the activity authorized by this permit, the permittee must immediately notify the district engineer of what has been found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.