FINDING OF NO SIGNIFICANT IMPACT

Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Borrow Area N-3 for the St. Johns County, Florida Coastal Storm Risk Management Project (South Ponte Vedra Beach and Vilano Beach Reaches)

Pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), and Department of the Interior (DOI) regulations implementing NEPA (43 CFR 46), the U.S. Army Corps of Engineers Jacksonville District (Corps) (lead agency), with the Bureau of Ocean Energy Management (BOEM) serving as a cooperating agency, prepared an Environmental Assessment (EA) in April 2022 that considers the use of Outer Continental Shelf (OCS) sand for two adjacent beach renourishment projects along shorelines of St. Johns County (SJC), Florida (hereafter referred to as Project). BOEM contributed to the preparation of the 2022 EA, then conducted an independent review before adopting the document. This Finding of No Significant Impact only considers the next construction cycle of the SJC Coastal Storm Risk Management Project (hereafter referred to as the Project) despite the scope of the 2022 EA (Attachment 1).

Proposed Action

The purpose of the Project is to reduce future storm damages to coastal infrastructure, increase and maintain recreational opportunities, and improve environmental habitat along SJC. The Project would initially dredge up to 2.5 million cubic yards (MCY) of OCS sand for placement sand along the SJC shoreline for the SJC, Florida Coastal Storm Risk Management Project (South Ponte Vedra Beach and Vilano Beach Reaches) (SJC CSRM). The SJC CSRM Project area consists of 2.6 miles of shoreline from Florida Department of Environmental Protection (FDEP) reference monument R-102.5 to R-117.5 in Vilano Beach, St. Johns County, Florida.

Since 2016, the SJC beaches have been severely impacted by coastal storms (most notably Hurricanes Matthew, Irma, and Dorian). In November 2021, a strong and long-lasting nor'easter impacted SJC and compounded intense erosion throughout the project area. The storm caused significant sand loss from the beach berm and dune with severe scarping of the dune along most of the project footprint. Following this event, Corps funding was provided for an emergency renourishment using Flood Control and Coastal Emergencies (FCCE) funding. The existing sand borrow source for the SJC CSRM beaches has historically been the St. Augustine Inlet and Ebb Shoal Complex. After the aforementioned FCCE funded event (1.3 MCY), post construction surveys indicate that there is limited remaining volume (200,000 - 400,000 CY) within the St. Augustine Inlet Complex borrow areas. In addition to the limited quantity, the sand exists in a very thin layer and the removal would be inefficient and likely lead to diminished quantities of beach compatible sand. Therefore, this EA analyzed the use of a new borrow source for the SJC CSRM project for up to two scheduled renourishments during its remaining authorized project lifecycle. The Project renourishment interval was

initially assessed to be every 12 years (Corps 2017) but has been reassessed since the most recent renourishment effort (2021; 1.3 MCY placed) and a more frequent interval is necessary to maintain the template. BOEM only proposes to authorize the use of Borrow Area N-3 for the next construction cycle.

BOEM's action is to enter into a three-party Non-competitive Negotiated Agreement (NNA) with the Corps and SJC to authorize the use of up to 2.5 MCY of OCS sand for construction of the Project from offshore Borrow Area N-3 for the SJC CSRM. Borrow Area N-3 is located about 8.4 miles offshore the city of Vilano Beach, FL. The Project features an authorized design beach fill template includes a 60-foot berm extension (+8 ft-NAVD88) from the contour of the idealized existing (August 2015) beach profile between the berm (+8 ft-NAVD88) and the estimated depth of closure (-20 feet NAVD88). The authorized design template also includes a dune feature that reflects maintenance of the existing (August 2015) dune condition. Beach fill material includes an average of 866,000 CY for periodic nourishment events. The Project renourishment interval was initially assessed to be every 12 years (Corps 2017) but has been reassessed since the most recent renourishment effort (2021; 1.3 MCY placed) and a more frequent interval is necessary to maintain the template. BOEM only proposes to authorize the use of Borrow Area N-3 for the next construction cycle.

Alternatives to the Proposed Action

Previous environmental documents identified beach nourishment as the preferred alternative to address coastal erosion and storm damage in SJC. In the 2022 EA, the Corps considered four alternatives to the Project: 1) no action, 2) beach nourishment with one of the new Borrow Areas, N-3, 3) beach nourishment with unproven offshore borrow areas, and 4) beach nourishment with upland sand sources. Alternatives 3 and 4 were considered, but were eliminated from further evaluation. Alternative 3 (unproven offshore borrow areas) was not carried forward because the closest unproven area (SJ1-R134) is undeveloped and would require significant bathymetric, geotechnical, and cultural investigations that would not align with the timeline of for the CSRM need and may ultimately prove unfruitful. Alternative 4 (upland sand sources) was not carried forward due to the lack of known available sources and availability of access points to the beach. The no action alternative represents the conditions if no future beach nourishment occurred and is a comparison for other alternatives. The preferred alternative in the 2022 EA is to use the currently proven Borrow Area N-3 to obtain beach compatible fill material for the renourishment of the South Ponte Verde and Vilano Beach authorized projects shorelines.

Environmental Effects

Project sponsors previously evaluated impacts associated with dredging and placement operations for beach nourishment activities along South Ponte Vedra and Vilano Beaches in the following environmental documents:

- SJC and BOEM 2020. *Environmental Assessment: Use of Outer Continental Shelf Sand from Borrow Area N-3 for the South Ponte Vedra Beach Restoration*

Project. This EA evaluates the use of OCS sand from N-3 and placement at specified areas in a FEMA-funded project at South Ponte Vedra.

- FEMA 2019. *Environmental Assessment: St. Johns County Emergency Beach Berms, St. Johns County, Florida*. This EA evaluates placement impacts to South Ponte Vedra Beach, SJC.
- Corps 2017. *St. Johns County Coastal Storm Risk Management Project, Final Integrated Feasibility Study and Environmental Assessment (EA) and Findings of No Significant Impact (FONSI). South Ponte Vedra Beach, Vilano Beach, and Summer Haven Reaches St. Johns County, Florida.* This EA evaluates placement impacts along South Ponte Vedra and Vilano Beach.

The Corps and BOEM prepared the 2022 EA to evaluate the potential environmental effects associated with dredging the OCS Borrow Area (N-3) and transporting sand for placement along the SJC coast. This EA incorporates by reference the aforementioned NEPA analyses. As a cooperating agency, BOEM participated in the NEPA process, contributed to the preparation of the EA, conducted an independent review and provided comments on draft documents, and worked with the Corps to address all comments prior to adoption of the Final EA.

The Corps and BOEM identified a suite of environmental commitments necessary to avoid, minimize, and/or reduce and track any foreseeable adverse effects that may result from the Project. The Corps and SJC are responsible for implementing all environmental requirements prior to, during, and after construction, as described in the 2022 EA (for dredging and conveyance from N-3), the 2020 EA (for dredging and conveyance from Borrow Area N-3 for placement along South Ponte Vedra), and the 2017 EA (for placement along South Ponte Vedra and Vilano Beach.

Significance Review

Pursuant to 40 CFR 1501.3(b), BOEM analyzed the significance of potential effects of the proposed action considering both the potentially affected environment and the degree of effects. Connected actions (defined per 40 CFR 1501.9(e)(1)), including on-and-off site mobilization and beach placement activities, were considered in previous NEPA analyses and those analyses were incorporated by reference in the 2022 EA.

BOEM considered the affected area and resources potentially present in both spatial and temporal contexts. The proposed action is considered site-specific. The area of direct fill placement includes dry sandy beach, intertidal flat/surf zone, and shallow subtidal habitat. Borrow Area N-3 includes similar sandy submerged habitat. Effects would be limited to the placement site (including the pipeline corridors for conveying sediment to the beach) and the immediate dredging area, both of which are dominated by storms and physical processes of waves and currents. Effects of the Project would generally be limited to the 3-month to 6-month construction window and the time interval associated with equilibration of the placement material, recovery of the disturbed borrow area, and any habitat change along the beach. BOEM evaluated the following when evaluating the degree of effects:

(i) Short- and long-term effects

Potential effects associated with the Project would be localized, short-lived, and generally reversible as described below. The only long-term effect within Borrow Area N-3 would be related to physical geomorphologic change due to the removal of OCS sand and limited infilling or reshaping expected. Borrow area N-3 was dredged in summer 2022 and 1 MCY was removed. The 2022 event removed sand from a relatively thin layer along the surface of the borrow area leaving behind beach compatible sand with suitable habitat for recovery. The total volume for borrow area N-3 is 10 MCY.

For the 2023 event, analyzed here, the Corps proposes to minimize the impact footprint by dredging a deep layer of sand from a smaller portion of the borrow area. However, the Corps or the contractor must limit cut thicknesses to avoid the creation of pits or deep furrows. Impacts to wave and current patterns are not anticipated, and most effects are expected to be limited to the immediate dredging area. Dredging in the borrow area is likely to permanently reduce the size of the shoal that coincides with the borrow area (see Attachment 1) and available sand resources. The removal of sand from Borrow Area N-3 over multiple dredging cycles could change the shape and characteristics of the bottom habitat in that limited area. The effects would not be significant, since Borrow Area N-3 is one shoal associated with a larger shoal complex that has similar habitat for species potentially displaced by the alteration of N-3.

Dredging of Borrow Area N-3 could temporarily impact benthic epifauna and infauna and result in the loss of some infaunal species. Dredging design includes largely preserving similar sediment types at the bottom of the dredge template ensuring that the sediments exposed by dredging are similar to those previous surface sediments and will therefore remain suitable for expected rapid benthic recolonization. Recruitment and recolonization would occur in the short-term after dredging given similar species in surrounding habitat, including a refuge area proposed as mitigation. Recovery of the benthic population is expected within 1 to 2 years after dredging; therefore, the potential for significant or chronic impact would be avoided. Similar impacts are anticipated in the nearshore soft bottom communities of the beach placement site, and intertidal areas would recover through recruitment from surrounding communities.

Current sea turtle nesting opportunities along the Project's area are diminished because of long-term chronic beach erosion and frequent storm damage, resulting in lower-quality habitat. Despite this, loggerhead, green, and leatherback sea turtles nest within the Project's area. Hawksbill and Kemp's ridley sea turtles occur in coastal waters off St. Johns County, but do not currently nest within the Project area. The sand composition of the Borrow Area meets the State of Florida's sediment criteria for native beach compatibility. Construction activities and staging of equipment may affect existing dune vegetation; however, the Project includes revegetation of dune areas that would be disturbed. Nesting habitat may be affected over the short-term, until the beach and dune system equilibrate post-construction and provide improved habitat. The beach placement area lies within designated critical habitat unit LOGG-T-FL-09 and the marine waters adjacent to the beach are within designated nearshore reproductive and

migratory critical habitat unit LOGG-N-18. These critical habitats are not likely to be adversely affected. BOEM and the Corps will avoid and/or minimize effects to protected species and designated critical habitat in accordance with requirements outlined the U.S. Fish and Wildlife Service (USFWS) Statewide Programmatic Biological Opinion (SPBO) for beach placement activities (2015), the USFWS Piping Plover Programmatic Biological Opinion (P3BO, 2013), and the National Marine Fisheries Service (NMFS) South Atlantic Regional Biological Opinion (SARBO, 2020).

The Project's area falls under NMFS and the South Atlantic Fisheries Management Council (SAFMC) jurisdiction. NMFS has designated Essential Fish Habitat (EFH) in and adjacent to the Project's area for various demersal, pelagic, and highly migratory species. The Project will have temporary effects on EFH from dredging and placement activities. The Corps will implement avoidance and minimization measures to minimize effects on those fish species and fish habitat including but not limited to: adherence to the State Water Quality conditions at the edge of a 150-meter mixing zone, avoiding/minimizing construction overlap with peak recruitment windows for benthic infaunal assemblages and federally managed species, and avoidance of hard bottom. The effects would not be significant, as there is comparable, undisturbed habitat adjacent to the borrow area.

Other expected short-term effects from the Project include interruptions of shorebird foraging and resting at the placement site, noise and beach access closure effects on the local socio-economics and aesthetics, impediments to recreational usage at the placement site, restricted boating navigation at the dredge and placement sites, increases in turbidity at the construction sites, localized and minor noise level increases at the dredge site, and public safety risks posed by the construction equipment. These effects are likely limited to the 3-month to 6-month construction period.

(ii) Beneficial and adverse effects

BOEM considered potential effects to the physical environment, biological resources, cultural resources, and socioeconomic resources. Some coastal sand dependent species (*e.g.*, native and migratory shorebirds, sea turtles) may experience temporary disruptions to foraging and nesting during and following construction. However, the birds and sea turtles that use the beach for foraging or nesting should benefit in the long-term from higher quality habitat. St. Johns County plans to implement standard shorebird monitoring (as required by the SPBO and P3BO if the project timing overlaps with the nesting season) and sea turtle nesting protocols (if the project construction is delayed thus overlapping nesting season). Dune vegetation would help create higher quality habitat to improve ecosystem function.

Dredging activities within Borrow Area N-3 overlaps with the distribution of threatened loggerhead (Northwest Atlantic Distinct Populations Segment (DPS)) and green sea turtles (North Atlantic DPS), and endangered leatherback, hawksbill, and Kemps Ridley sea turtles protected under the Endangered Species Act (ESA). Placement of sediment within the designated beach placement site may affect nesting sea turtles (loggerhead, leatherback, and greens) and piping plovers. Adherence to state and federal

requirements, including sediment compatibility requirements, dredging operational constraints, endangered species observers, sea turtle nest monitoring, *etc.* would avoid and /or minimize effects. The Project would not occur in “optimal” piping plover habitat and is not likely to adversely affect the piping plover. The threatened West Indian manatee occurs in coastal and estuarine habitat within St. Johns County where they primarily use inlet estuaries and shallow coastal waters to migrate and forage. The dredge and support vessels associated with the Project will be operating in deeper waters offshore and not in these migratory and foraging habitats. Therefore, minimal effects to the West Indian manatee are expected.

Seafloor-disturbing activities (*e.g.*, dredging, anchoring, pipeline placement, etc.) would occur during proposed construction activities. The Corps conducted cultural resources and hard bottom resource clearance surveys in Borrow Area N-3, pipeline corridors, and the beach placement area. No hard bottom resources were identified in the borrow area or placement area. Within the nearshore pipeline corridors, 51 magnetic anomalies were identified. Only two of the 51 magnetic anomalies are interpreted to represent potential submerged cultural resources (Target 01; Target 02). Target 01 represents a previously recorded shipwreck site (FMSF Site No. 8SJ03525). The magnetic signature of Target 02 shares characteristics of previously recorded cultural resources. Both of these anomalies will be avoided by a minimum distance of 50 m (164 ft) from the outer extent of the magnetic anomalies. If any other potential hard bottom or cultural resource anomalies are identified, avoidance buffers will be implemented. No adverse effects to historic or pre-contact resources or hard bottom resources within the borrow area, placement area, or pipeline corridors are expected with implementation of recommended avoidance measures.

Beach placement would not directly bury pre-construction onshore coquina outcroppings, or indirectly bury pre-construction nearshore hard bottom inshore of the Equilibration Toe of Fill (ETOF) through beach profile equilibration and along-shore/ cross-shore transport of sediment. A beach nourishment project conducted by the County previously resulted in the burial of ephemeral hard bottom. The County complied with all previously assigned mitigation to compensate for that adverse impact. Project construction activities are required to meet all state Water Quality Certification conditions, including turbidity monitoring, in accordance with FDEP Joint Coastal Permit (JCP) requirements.

Indirect effects are also likely to occur. The Project could increase the capacity for recreational activity (*e.g.*, beach access, surfing, shore fishing, wildlife viewing). The SJC shoreline is already at near maximum capacity, so increased potential for development is not likely.

(iii) Effects on public health or safety

Significant effects to public health and safety are not expected. The Project would provide for increased recreational opportunity from the improved beach and dune habitat. Temporary disruption to recreation would occur in small alongshore stretches as the construction progresses along the beach. The Project would result in improved

visual amenity and long-term recreational improvements. Construction of the beach would provide protection of existing infrastructure as well. Emissions from construction equipment may temporarily affect air quality in the immediate vicinity of operations. Noise would temporarily increase at the placement locations during construction, and then would return to ambient levels after project completion. The construction equipment at the beach placement site could pose a minor public safety risk. BOEM used the EPA EJscreen (EJScreen (epa.gov)) to determine that there are no minority or low-income populations in the Project area; therefore, the Project would not disproportionately affect populations outlined in Executive Order 12898.

A review for the potential concern of munitions and explosives of concern (MEC) for Borrow Area N-3 was completed in the 2020 EA and it was determined that risk of encountering MEC is low. The 2020 EA stated that, in the larger OCS region, the nearest identified MEC areas occurs 80 miles to the east and about 95 miles to the south at Cape Canaveral (NOAA 2019), well beyond the Project area for the South Ponte Vedra and Vilano Beach Project. BOEM reviewed the unexploded ordnance data layers on the Marine Cadastre website (Marine Cadastre National Viewer) and found no Formerly Used Defense Site Locations or areas/locations of know unexploded ordnance in the South Ponte Vedra Beach or Vilano Beach placement area, borrow area, or pipeline corridors. Since completion of the 2022 EA, the Corps completed a risk assessment specific to the potential for encountering MEC in Borrow Area N-3 and found limited risk for MEC encounter.

(iv) Effects that would violate a Federal, State, Tribal, or local law protecting the environment

Endangered Species Act and Magnuson-Stevens Fishery Management and Conservation Act consultations have been completed. The Corps and BOEM determined that beach placement of sediment associated with the Project is within scope of the USFWS Statewide Programmatic Biological Opinion (revised 2015) and Programmatic Piping Plover Biological Opinion (2013). The Corps and BOEM have determined that dredging activities associated with the Project are within scope and will operate under the NMFS SARBO (2020). The Corps and SJC will comply with all relevant reasonable and prudent measures (RPMs) and associated terms and conditions (T&Cs).

The proposed action complies with the Marine Mammal Protection Act. Marine mammals are not likely to be adversely affected by the Project and incorporation of safeguards to protect threatened and endangered species during project construction (*e.g.*, vessel speed requirements, protected species observers, etc.) would also protect non-listed marine mammals in the area.

Migratory birds may experience minor, short-term interruptions to foraging or resting activities linked to prey smothering or turbidity increases. The Corps and SJC will implement measures to avoid effects to migratory birds, hatchlings, or eggs along with pre- and post-project monitoring requirements.

The Corps and BOEM coordinated with the Florida Division of Historical Resources and State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officers (THPOs), as required by Section 106 of the National Historic Preservation Act. The SHPO concurred with the determination that the proposed project would have no adverse effect to historic properties listed, eligible, or potentially eligible for listing in the National Register of Historical Places provided avoidance of the nearshore targets. The Corps will immediately cease operations and notify BOEM and SHPO if an unexpected discovery occurs. The Corps transmitted tribal consultation letters on March 25, 2016 and received a “no objection” response letter from the Seminole tribe on April 27, 2016. No additional correspondence was received from other tribes within the review period.

The Corps requested a modification (for the use of the offshore borrow area) from the FDEP to an existing consolidated JCP associated with a prior project within the same beach placement footprint. The JCP constitutes a finding of consistency with Florida’s Coastal Management Program, as required by Section 307 of the Coastal Zone Management Act (CZMA); the JCP also constitutes certification of compliance with Florida water quality standards pursuant to Section 401 of the Clean Water Act (CWA) (33 U.S.C. 1341).

Consultations and Public Involvement

The EA was made available for public review in January 2022. The Corps and BOEM considered all comments and integrated responses, as appropriate (EA App C). This Finding will be made available to the public on boem.gov.

Mitigation and Monitoring

The Corps and SJC are responsible for complying with all mitigation measures and monitoring requirements engendered by Federal, State, Tribal, and local laws, including those identified in the 2022 EA and related consultations (EA Attachment 2). The Corps will prepare an environmental compliance matrix to document and track all environmental mitigation requirements and identify roles and responsibilities for implementation to ensure compliance prior to, during, and after construction. Additionally, the dredging contractor will be required to provide an environmental protection plan that verifies compliance with relevant environmental requirements. Implementation of mitigation measures and monitoring requirements will ensure effects are not significant.

Any mitigation or monitoring uniquely specified by BOEM in its negotiated agreement is done pursuant to the authority established by the Outer Continental Shelf Lands Act and 30 CFR 583. Other Project mitigation is engendered by various authorities, including the vested authority of the Corps, as well as environmental laws, such as ESA, CWA, and CZMA. Other federal or state agencies shall be responsible for enforcement of other mitigation measures. BOEM may terminate its authorization, or refer the Corps to enforcing agencies, if the Corps does not comply with mitigation measures (30 CFR 583).

Conclusion

BOEM considered the consequences of entering into a negotiated agreement authorizing use of OCS sand from Borrow Area N-3 in this Project. BOEM contributed to the preparation of the 2022 EA and then conducted its own independent review before adopting it. BOEM finds that the EA complies with the relevant provisions of the CEQ regulations implementing NEPA, DOI regulations implementing NEPA, and other Bureau requirements.

Based on the evaluation of potential effects and associated mitigation measures discussed in the 2022 EA, BOEM finds that entering into a negotiated agreement, with the implementation of the mitigating measures, does not constitute a major Federal action significantly affecting the quality of the human environment, in the sense of NEPA Section 102(2)(C), and would not require preparation of an EIS.

Attachments

Attachment 1 – Project Maps
Attachment 2 – Environmental Assessment - Additional Offshore Borrows Areas - St. Johns County, Florida Shore Protection Project and St. Johns County, Florida Coastal Storm Risk Management Project (South Ponte Vedra Beach and Vilano Beach Reaches)

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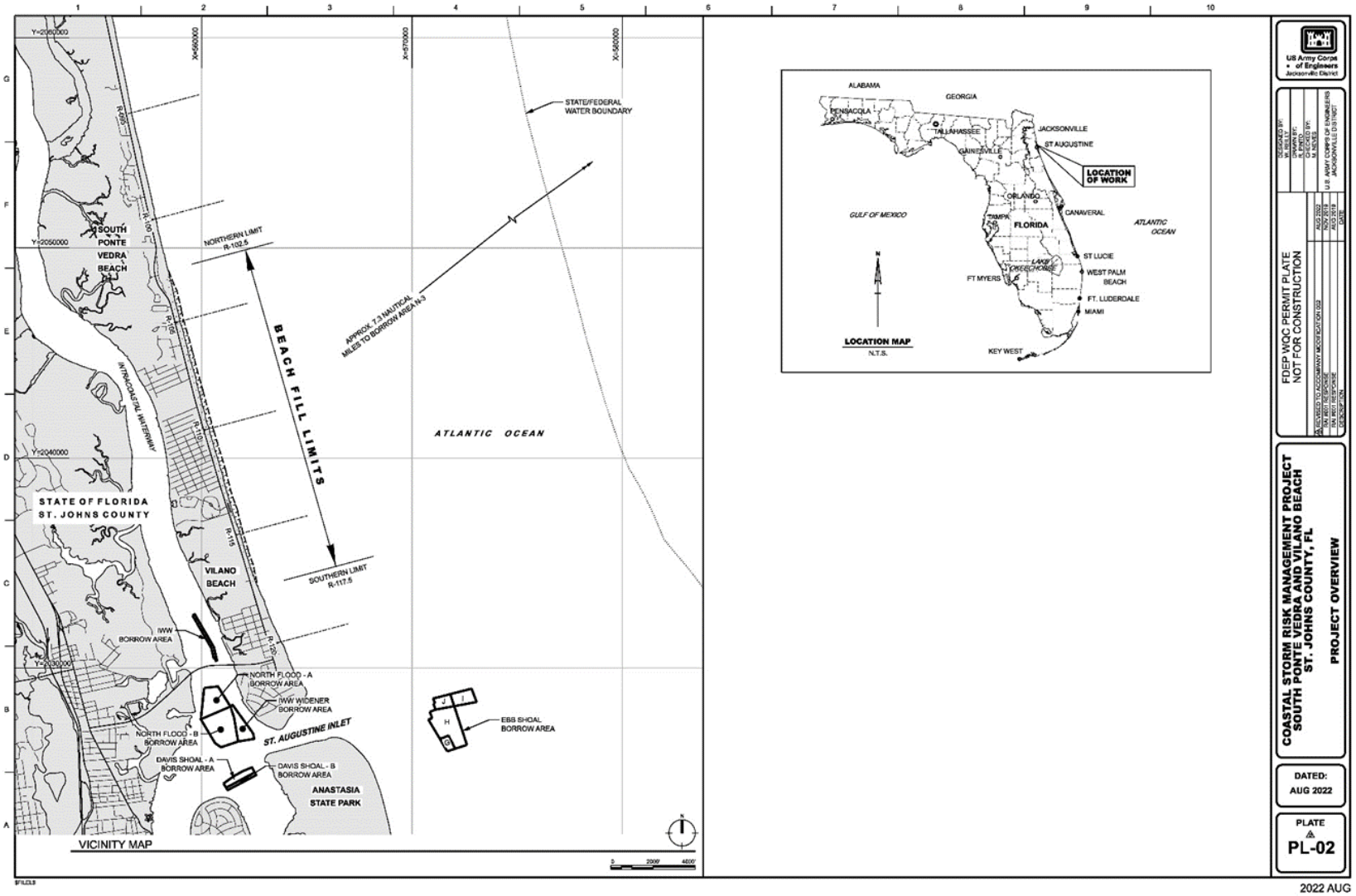
Date

ATTACHMENT 1
Project Map



Borrow Area N-3 Project map.

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ATTACHMENT 2

ENVIRONMENTAL ASSESSMENT FOR ADDITIONAL OFFSHORE BORROW AREAS – ST. JOHNS COUNTY, FLORIDA SHORE PROTECTION PROJECT AND ST. JOHNS COUNTY, FLORIDA COASTAL STORM RISK MANAGEMENT PROJECT (SOUTH PONTE VEDRA BEACH AND VILANO BEACH REACHES)