DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
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CHARLESTON, SOUTH CAROLINA 29403-5107

FINDING OF NO SIGNIFICANT IMPACT

Charleston Harbor, General Reevaluation Report
Daniel Island Reach Turning Basin

May 6, 2011

The National Environmental Policy Act (NEPA) requires the U.S. Army Corps of Engineers, Charleston District (The Corps) to evaluate the effect of proposed projects on both the environment and human health and welfare. This Finding of No Significant Impact (FONSI) summarizes the results of The Corps' evaluation and documents The Corps' conclusions.

The Corps has prepared an Environmental Assessment (EA) that covers maintenance dredging for a turning basin that will serve Charleston Harbor (Figure 1). This turning basin will support operations of the proposed Marine Container Terminal at the North Charleston Naval Complex. The turning basin would be located partly within the access area to the terminal and partly within the Federal navigation channel.

A turning basin was originally authorized for the proposed Daniel Island Port Terminal as part of the Charleston Harbor Deepening and Widening Project in 1996. Since that time the project sponsor, the South Carolina State Ports Authority (SCSPA), has re-evaluated their options for new port terminal development. As a result of this re-evaluation the new port terminal has been relocated across the river to the former Charleston Naval Base. The new terminal would require the SCSPA to dredge an access area in order for the ships to navigate to the berthing area. As the access area is in the same location of the relocated Daniel Island Turning Basin and within the footprint of the originally authorized turning basin, the Federal government proposes to assume maintenance of a portion of that access area to maintain it as a turning basin after the terminal facility is constructed. Thus, the EA recommends acceptance of relocation of the authorized turning basin for maintenance dredging purposes only.

The Corps evaluated 3 alternatives in the EA: No action and two different configurations for a turning basin.

1. Turning Basin Alternative 1 (Figure 2)
2. Turning Basin Alternative 2 (Figure 3)
3. No Action: The "no action alternative" is considered to be the use of the Ordnance Site Turning Basin, located approximately 6.5 miles up the Cooper River, although the SCSPA has approval to use their access area and federal navigation channel to turn ships calling on the Port.

The economic analysis for this project determined that travel to the Ordnance Reach is not cost justified due to a number of factors, including the increased travel distance and time involved in this alternative. Also, because the role of USACE with respect to navigation is to "provide safe, reliable, and efficient waterborne transportation systems for movement of commerce, national security needs, and recreation", it is within the scope of Federal interest to maintain part of the access area as a turning basin for future use of the proposed port.

The predicted shoaling rates for alternative sites 1 and 2 are 94,000 cy/year and 112,000 cy/year, respectively. Since both alternatives 1 and 2 provide the same benefits and the sedimentation rate is higher with Alternative 2, resulting in greater maintenance costs, Alternative 2 was eliminated from further evaluation. Note that both of these alternatives utilize the federal navigation channel as a vast majority of their area. Figure 4 depicts the dredging responsibilities of the proposed project.

The Corps' criteria for evaluating the effect of various alternatives included the following:

- **Wetlands**: No adverse affect on wetlands are expected as a result of implementing the proposed project.
- **Water Quality**: A short-term increase in turbidity will occur during dredging activities associated with the proposed project. The temporary impact to water quality resulting from the proposed project was determined to be of short duration and cause minimal temporary disturbance to water quality. Additionally, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area to the new terminal.
- **Cultural Resources**: No effects on cultural resources are expected as a result of implementing the proposed project.
- **Aesthetics and Noise:** There would be temporary and minor impacts to receptors near the maintenance dredging operations; however, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area.
- **Environmental Justice:** Due to the location of the dredging site and the disposal area in the Cooper River and Clouter Island, respectively, and their relative distance from residential areas, there will be no impacts to any neighborhood communities.
- **Threatened and Endangered Species**: The proposed project may affect but is not likely to adversely affect threatened and endangered species. The maintenance dredging will comply with the 1997 Southeast Regional Biological Opinion. Additionally, these impacts would be no more than the current future without project

because the SCSPA would be dredging the area anyway to maintain it as an access area.

- **Benthic Organisms**: There will be impacts to benthic organisms associated with the proposed project; however, due to the rapid shoaling of sediment, benthic organisms will begin recolonizing the disturbed areas in a short time. The impact to benthic organisms resulting from the proposed project was determined to cause a temporary disturbance that would result in short term minimal impacts to benthic populations within the deepened navigation channel. Additionally, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area.
- **Fisheries**: There is a potential impact to fisheries associated with the proposed project. Dredge cutterhead action poses a threat of physical injury or mortality to species in its path. However, the mobility of the majority of fish species enables them to avoid this potential danger. Early life stages of fish species (e.g. embryonic and larval stages) would be more vulnerable to mortality from dredging activity due to their limited mobility. The impact to fisheries due to the proposed project was determined to result in minimal impacts to overall fisheries populations. Additionally, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area.
- **Socioeconomic**: No adverse affect on socioeconomic conditions are expected as a result of implementing the proposed project.
- **Air Quality**: There will be a minor impact to air quality as a result of implementing the proposed project. However, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area.
- **Cumulative Impacts**: The cumulative impacts resulting from maintenance dredging of the proposed turning basin are considered minor. Additionally, these impacts would be no more than the current future without project because the SCSPA would be dredging the area anyway to maintain it as an access area.

The Corps' findings are that the proposed project does not significantly adversely affect the environment or human health and welfare and, therefore, the preparation of an Environmental Impact Statement is not warranted. The full EA can be downloaded from the internet at *http://www.sac.usace.army.mil/?action=environmental.assessment* or a copy can be obtained by contacting Mr. Mark Messersmith by telephone at (843) 329-8162 or by email at *mark.j.messersmith@usace.army.mil*. The 1996 Feasibility Study and EA can also be downloaded from the internet at the same site listed above.

Date _____

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Figure 1. Location of Charleston Harbor Federal Navigation Channel and the proposed turning basin

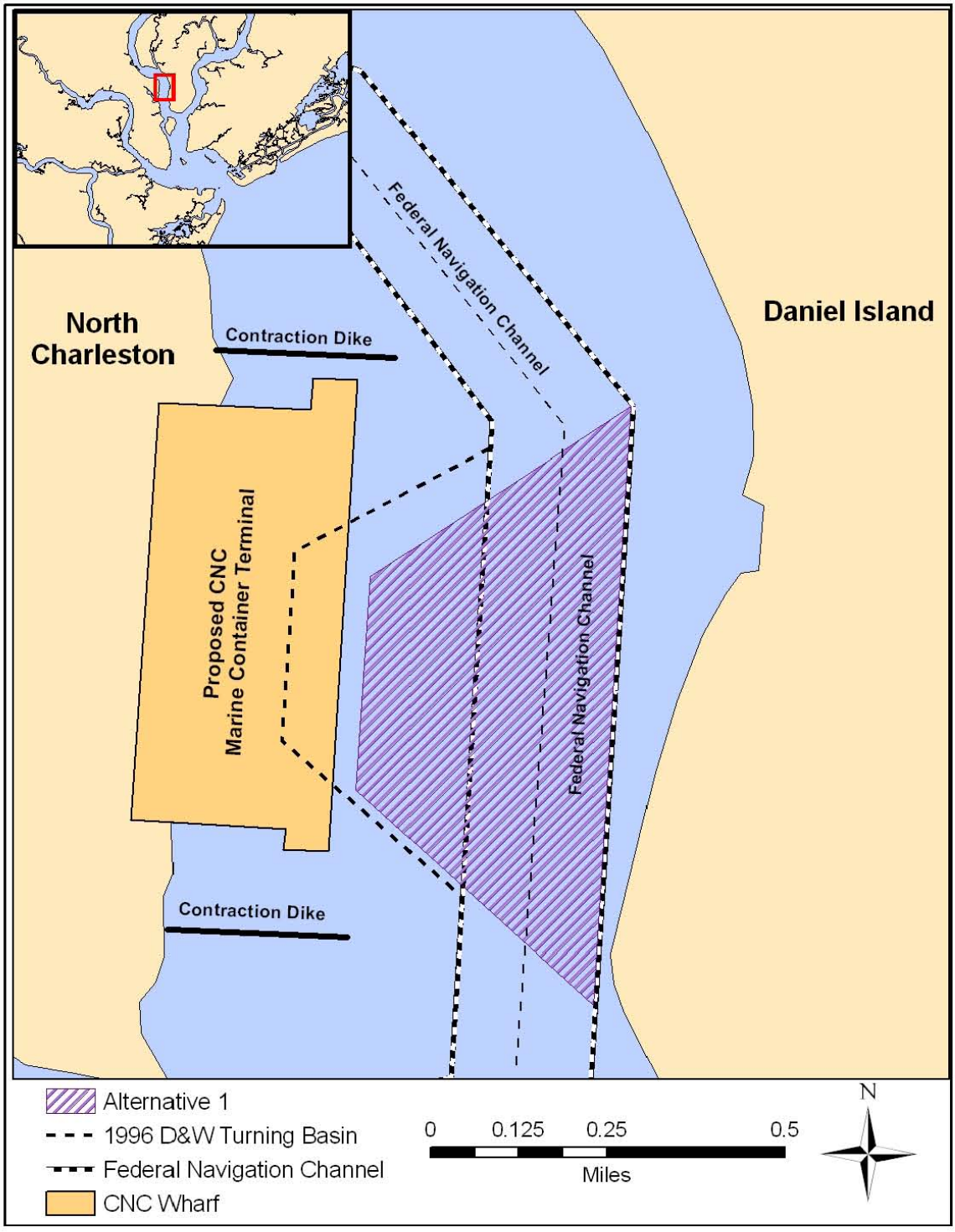

Figure 2. Turning Basin Alternative 1

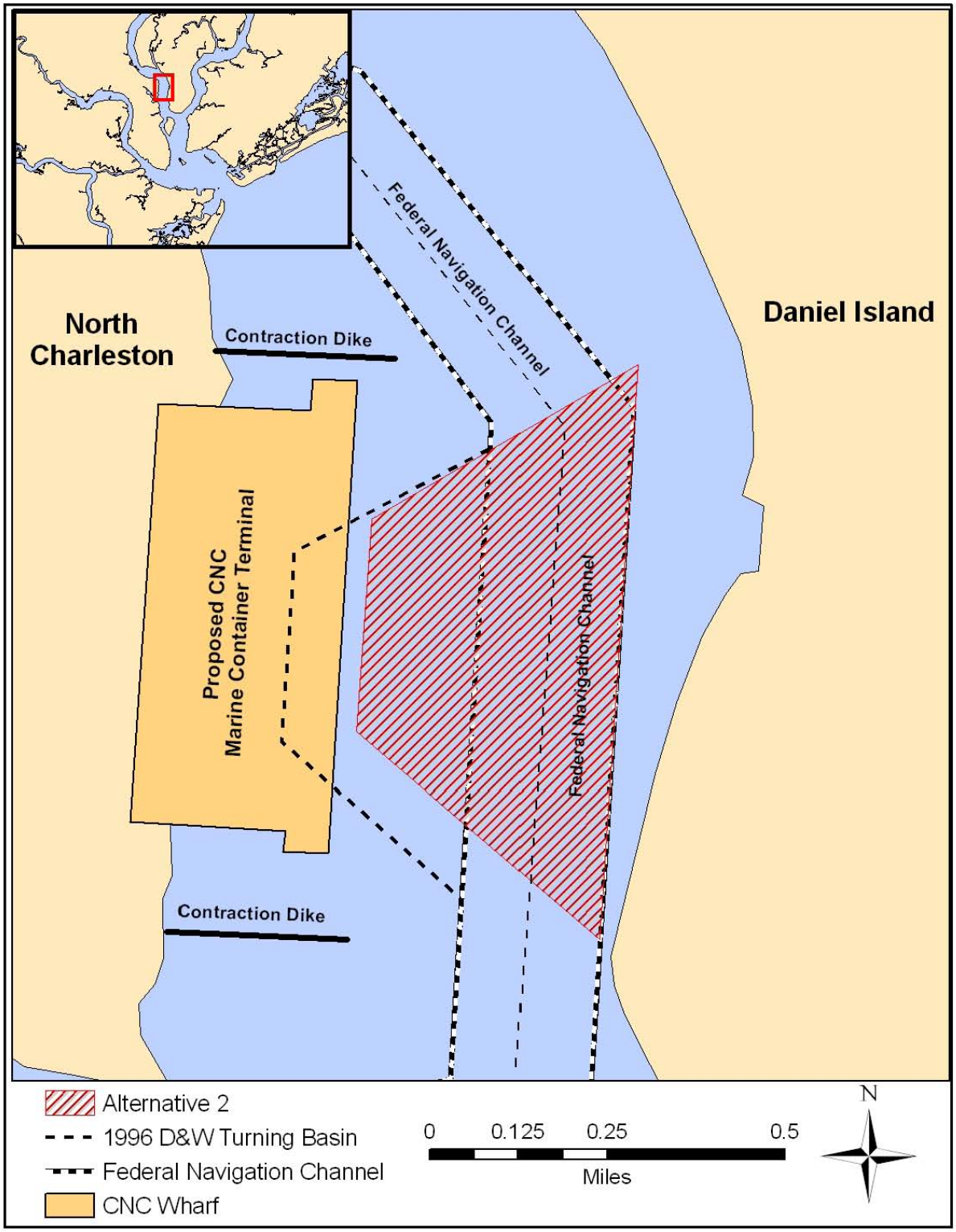

Figure 2. Turning Basin Alternative 2

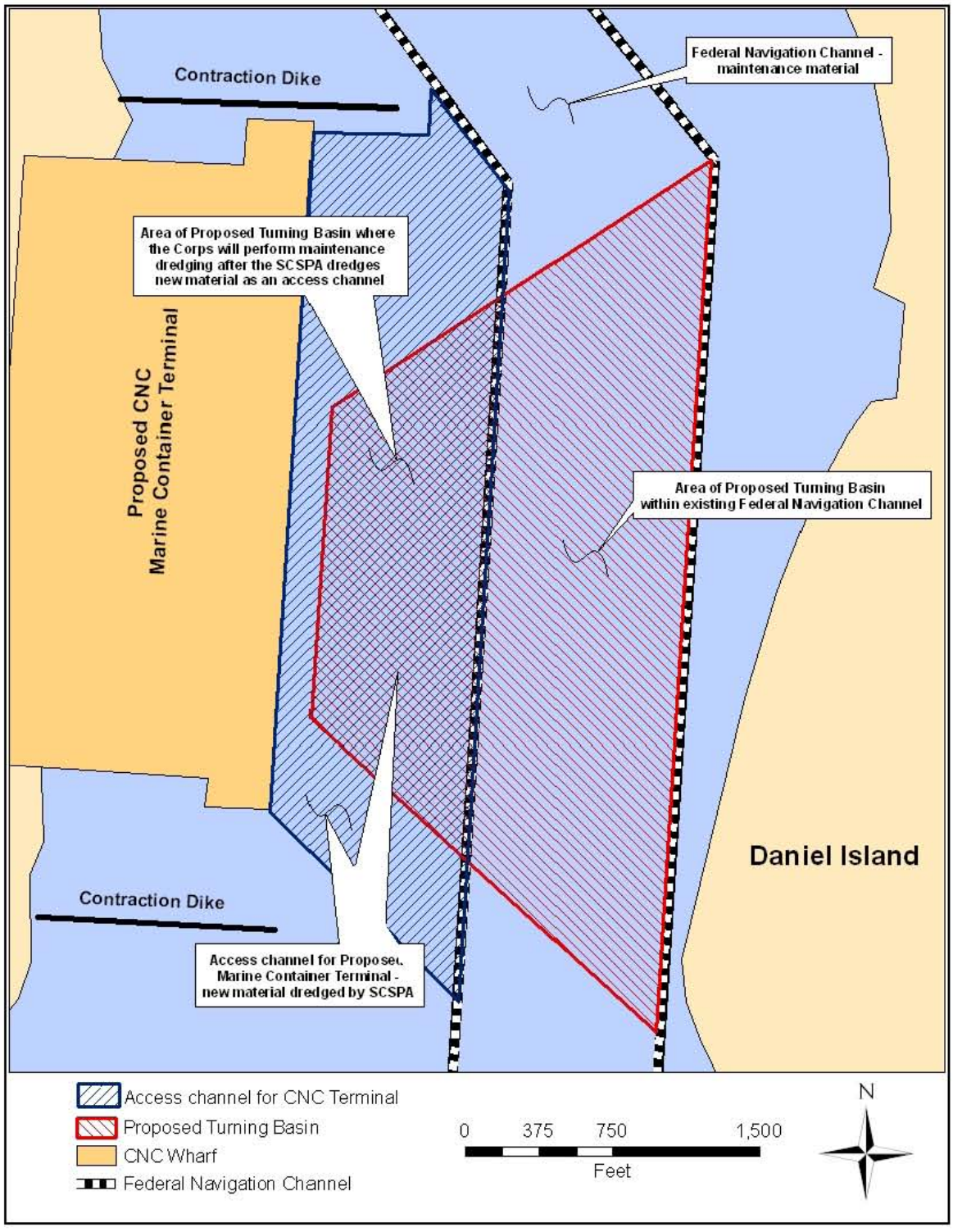

Figure 4: Location of access area, proposed turning basin, and dredged maintenance area