1. Administrative Details

Proposal Name: Charleston Harbor Post 45 Harbor Deepening Project

by Agency: South Carolina Ports Authority

Locations: SC

POC Name:

POC Phone:

POC Email:

Date Submitted: 09/17/2015

Confirmation Number: 01185a01-0be1-4af3-8d4b-aa6647d71c3a

Supporting Documents

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date Uploaded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim Newsome Post 45 Support Letter 9 14 15.pdf</td>
<td>09/17/2015</td>
</tr>
<tr>
<td>Charleston Harbor Post 45 Harbor Deepening Project Supporters of Record Final.pdf</td>
<td>09/17/2015</td>
</tr>
</tbody>
</table>
2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.
<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Letter of Support</th>
</tr>
</thead>
</table>
| South Carolina Ports Authority (Primary) | July 16, 2015  
Lieutenant Colonel Mathew Luzzatto Commander and District Engineer, Charleston District U.S. Army Corps of Engineers 69A Hagood Avenue Charleston SC 29403  
Dear Lt. Col. Luzzatto:  
The South Carolina Ports Authority (SCP A) strongly supports the Post-45 Harbor Deepening Project as described in the recently released Post 45 Final Report and EIS. Throughout the process, SCP A has worked closely with the Charleston District to complete a thorough analysis of the benefits that a 52-foot Charleston Harbor will bring to the nation. As you know, the extensive benefits of the project have resulted in the unanimous approval of the Post-45 Final Report and EIS by the Civil Works Review Board.  
U.S. container trade is expected to be export dominant again by 2020 and export containers are, on average, 3 tons heavier than import boxes. The Southeast is the largest exporting region, and the Charleston Harbor offers the best value for deepening both economically and environmentally. Trading partners who call in Charleston’s Harbor have all recognized the importance of facilitating the movement of the Generation 2 and Generation 3 container ships, and 12 of the 25 foreign ports currently have a depth greater than 50-feet. Combined, these 25 ports handle over 70 percent of Charleston’s loaded export trade. Given these market realities, the ability to handle fully-loaded post-Panamax vessels 24 hours a day is critical to the region’s continued economic growth.  
Elected officials from all levels of government, the business community and the public are united in their support of a 52-foot harbor. SCP A and our partners have committed to spending $2 billion dollars to upgrade the landside infrastructure to accommodate the ever-increasing size of container ships, while the South Carolina General Assembly ensured that the non-federal share of the harbor deepening project funding will be available when needed. This significant, unified expression of support for upgrading South Carolina’s land and water infrastructure demonstrates the importance of this project. Through our continued collaboration, South Carolina, the Southeastern region and our nation will enjoy the positive impacts of the Post 45 Charleston Harbor Deepening Project for years to come.  
Sincerely,  
James I Newsome President and CEO SC Ports Authority |
3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

[x] Modification to an Authorized USACE Project : Charleston Harbor Post 45 Harbor Deepening Project
4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The existing dimensions of the Charleston Harbor channels place constraints on deep draft containerships, which result in reduced efficiency and increased costs. Specific problems warranting Federal consideration include navigation safety considerations, engineering challenges, and citizen safety concerns based on insufficient Federal channel depths, difficult currents, and restrictive channel widths and turning basins. Larger ships currently experience transportation delays due to insufficient Federal channel depths. To reach port terminals, these larger ships must either light load, experience delays while waiting for favorable tide conditions, or both. Strong and unpredictable ebb tide crosscurrents at the confluence of the Wando and Cooper rivers make turns difficult in the channel reaches immediately north of the Ravenel Bridge. Restrictive channel widths limit ship passage to one-way traffic in many reaches and larger container ships require expanded turning basins. The need for modifications to the existing navigation system in Charleston Harbor is generated by physical constraints and the associated inefficiencies that limit the system’s ability to safely and efficiently serve the forecasted vessel fleet and process the forecasted cargo volumes. The purpose of the Charleston Harbor Post 45 Harbor Deepening Project is to construct a comprehensive set of navigation modifications that would reasonably maximize, consistent with protecting the Nation’s environment, Charleston Harbor’s contribution to net NED benefits by addressing those physical constraints and inefficiencies. The purposed modifications would improve the system’s ability to serve the cargo vessels that are expected to utilize the harbor in the foreseeable future. The purposes include reduction of transportation costs of import and export trade through Charleston Harbor and reduction in navigation safety-related constraints and operating practices including limited one-way traffic in some reaches.
5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>Non-Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Construction</td>
<td>$180,000,000</td>
<td>$341,000,000</td>
<td>$521,000,000</td>
</tr>
</tbody>
</table>

Explanation (if necessary)
6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

The Final Report of the Chief of Engineers, signed by LTG Thomas P. Bostick on September 8, 2015, recommends a plan of improvement for Charleston Harbor that would generate about $81M in net average annual transportation cost savings. The recommended plan (RP) is a locally preferred plan (LPP) with a benefit to cost ratio of about 3.9 to 1. In addition to the economic benefits to the nation, large vessels would be able to transit the harbor over a wider range of tides which would reduce congestion, increase safety and reduce shoreline erosion caused by the concentration of vessel traffic around high tides. The project also supports a variety of military and national security activities in the harbor.

The transportation cost savings are derived from the container vessel portion of the fleet. The LPP has more net benefits than the NED plan and the benefits of the LPP are similar in kind (i.e., transportation cost savings). The LPP derives its higher net benefits from the Post-Panamax Generation III container vessel that is a portion of the future vessel fleet calling on the Port of Charleston, with a slight shift to a deeper draft depth compared with a 50-foot channel.

The SCSPA has elected to pay for the additional 2 feet of project depth provided by the LPP versus the NED because of its belief that modern containerships requiring 48 feet of draft and appropriate under keel clearance will be the dominant vessels calling within the next 5 years. The SCSPA wants the ability to handle this class of Generation II and III containerships without tidal restrictions in order to serve one of the fastest growing regions in the country, which has experienced a resurgence of manufacturing and continued agricultural success. Additionally, the SCSPA has expressed a desire to avoid the need for, and costs associated with additional studies, separate construction, and impacts that would result if a follow-up feasibility study and project were needed in the near future.
7. **Does local support exist? If ‘Yes’, describe the local support for the proposal.**

[ ] Yes

**Local Support Description**

The Charleston Harbor Post 45 Harbor Deepening Project has broad support including President Barack Obama, Vice President Joe Biden, numerous members of the U.S. Senate, U.S. House, S.C. Senate, S.C. House, Mayors across SC, businesses, economic development groups, environmental groups and private citizens. A full list of supporters has been provided to USACE.

8. **Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?**

[ ] Yes
Primary Sponsor Letter of Support

(As uploaded)
September 16, 2015

Lieutenant Colonel Mathew Luzzatto
Commander and District Engineer, Charleston District
U.S. Army Corps of Engineers
69A Hagood Avenue
Charleston SC 29403

Dear Lt. Col. Luzzatto:

The South Carolina Ports Authority (SCPA) strongly supports the Post-45 Harbor Deepening Project as described in the recently released Post 45 Final Report and EIS. Throughout the process, SCPA has worked closely with the Charleston District to complete a thorough analysis of the benefits that a 52-foot Charleston Harbor will bring to the nation. As you know, the extensive benefits of the project have resulted in the unanimous approval of the Post-45 Final Report and EIS by the Civil Works Review Board and the signing of the Chief’s Report.

U.S. container trade is expected to be export dominant again by 2020 and export containers are, on average, 3 tons heavier than import boxes. The Southeast is the largest exporting region, and the Charleston Harbor offers the best value for deepening both economically and environmentally.

Trading partners who call in Charleston’s Harbor have all recognized the importance of facilitating the movement of the Generation 2 and Generation 3 container ships, and 12 of the 25 foreign ports currently have a depth greater than 50-feet. Combined, these 25 ports handle over 70 percent of Charleston’s loaded export trade. Given these market realities, the ability to handle fully-loaded post-Panamax vessels 24 hours a day is critical to the region’s continued economic growth.

Elected officials from all levels of government, the business community and the public are united in their support of a 52-foot harbor. SCPA and our partners have committed to spending $2 billion dollars to upgrade the landside infrastructure to accommodate the ever-increasing size of container ships, while the South Carolina General Assembly ensured that the non-federal share of the harbor deepening project funding will be available when needed. This significant, unified expression of support for upgrading South Carolina’s land and water infrastructure demonstrates the importance of this project.
Through our continued collaboration, South Carolina, the Southeastern region and our nation will enjoy the positive impacts of the Post 45 Charleston Harbor Deepening Project for years to come.

Sincerely,

James I. Newsome, III
# Mitigation Matrix Summary

<table>
<thead>
<tr>
<th>Alternative</th>
<th>50/48</th>
<th>52/48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacts (acres)</td>
<td>202</td>
<td>281</td>
</tr>
<tr>
<td>Mitigation (acres)</td>
<td>596</td>
<td>831</td>
</tr>
<tr>
<td>Costs ($)</td>
<td>$3.3M</td>
<td>$4.6M</td>
</tr>
<tr>
<td>Incremental Increase ($)</td>
<td>N/A</td>
<td>$1.3M</td>
</tr>
</tbody>
</table>

### Wetlands

| Direct impacts (acres) | 28.6 |
| Mitigation (acres) | 29.7 |
| Costs ($) | N/A |

### Hardbottom

<table>
<thead>
<tr>
<th>Monitoring and Adaptive Management</th>
<th>Costs ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0,000,000</td>
</tr>
</tbody>
</table>

### Forecasts Growth Rates by Trade Lane

<table>
<thead>
<tr>
<th>Trade Lane</th>
<th>Low</th>
<th>Base</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICA</td>
<td>2.0%</td>
<td>2.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>CARIBBEAN</td>
<td>2.0%</td>
<td>2.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>CSBA</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
</tr>
<tr>
<td>FE (Panama)</td>
<td>3.2%</td>
<td>4.2%</td>
<td>4.8%</td>
</tr>
<tr>
<td>FE (Suez)</td>
<td>3.2%</td>
<td>4.2%</td>
<td>4.8%</td>
</tr>
<tr>
<td>FE ECUS Neur Pen</td>
<td>2.7%</td>
<td>3.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>ISOME</td>
<td>3.9%</td>
<td>4.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>MED</td>
<td>2.8%</td>
<td>3.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>NEUR</td>
<td>1.9%</td>
<td>2.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>WISCA</td>
<td>1.2%</td>
<td>1.9%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

### Benefit/Cost Summary Table

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Average Annual Benefits</th>
<th>AA1</th>
<th>AA2</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Growth</td>
<td>$21,410,000</td>
<td>$65,819,000</td>
<td>$101,638,000</td>
<td>$53,659,000</td>
</tr>
<tr>
<td>Low Growth</td>
<td>$24,619,050</td>
<td>$44,272,950</td>
<td>$61,091,900</td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>$17,018,942</td>
<td>$48,786,050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net</td>
<td>$12,073,200</td>
<td>$34,516,200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC Rate</th>
<th>No Growth</th>
<th>Low Growth</th>
<th>Base</th>
<th>Net</th>
<th>Base %</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-49</td>
<td>0.87</td>
<td>2.6%</td>
<td>4.10</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td>52-49</td>
<td>0.79</td>
<td>2.47</td>
<td>3.74</td>
<td>1.86</td>
<td></td>
</tr>
</tbody>
</table>
Additional Proposal Information

(This is as uploaded, a blank page will show if nothing was submitted)
Charleston Harbor Post 45 Harbor Deepening Project Supporters of Record Final.pdf
Federal Elected Officials:
U.S. President Barack Obama
U.S. Vice President Joe Biden
U.S. Transportation Secretary Anthony Foxx
U.S. Senator Lindsey Graham
U.S. Senator Tim Scott
Congressman Mark Sanford
Congressman Joe Wilson
Congressman Jeff Duncan
Congressman Trey Gowdy
Congressman Mick Mulvaney
Congressman Jim Clyburn
Congressman Tom Rice

State Elected Officials:
Governor Nikki Haley
Lieutenant Governor Henry McMaster
SC Senate District 3 Kevin L. Bryant
SC Senate District 4 William H. O’Dell
SC Senate District 8 Ross Turner
SC Senate District 13 Shane Martin
SC Senate District 15 Robert W. Hayes Jr.
SC Senate District 17 Creighton B. Coleman
SC Senate District 24 Tom Young Jr.
SC Senate District 26 Nikki G. Setzler
SC Senate District 28 J. Gregory Hembree
SC Senate District 30 Kent M. Williams
SC Senate District 31 Hugh K. Leatherman, Sr.
SC Senate District 35 J. Thomas McElveen III
SC Senate District 37 Lawrence K. Grooms
SC Senate District 38 Sean M. Bennett
SC Senate District 39 John W. Matthews
SC Senate District 43 Chip Campsen
Local Elected Officials:
Mayor of Beaufort, SC Billy Keyserling
Mayor of Cayce, SC Elise Partin
Mayor of Charleston, SC Joseph P. Riley Jr.
Mayor of Easley, SC Larry Bagwell
Mayor of Florence, SC Stephen J. Wukela
Mayor of Gaffney, SC Henry L. Jolly
Mayor of Goose Creek, SC Michael J. Heitzler
Mayor of Greenville, SC Knox H. White
Mayor of Greer, SC Richard W. Danner
Mayor of Lexington, SC Steve MacDougall
Mayor of Mount Pleasant, SC Linda Page
Mayor of Newberry, SC Foster Senn
Mayor of North Charleston, SC R. Keith Summey
Mayor of Orangeburg, SC Michael C. Butler
Mayor of Rock Hill, SC Doug Echols
Mayor of Summerville, SC Williams C. Collins
Mayor of Sumter, SC Joseph T. McElveen, Jr.
Mayor Pro Tempore City of North Charleston, SC Ron Brinson

Port Related Industries, Organizations, and Affiliated Agencies:
“K” Line America, Inc.
Abbeville County
Adidas Group
Agriculture Transportation Coalition
Air Hub, LLC
Allstate Insurance Company
American Society of Civil Engineers Member Communities Committee
Anderson County
Anderson Trucking Service
Aoh Occupational Health, LLC
A-Plus Staffing, LLC
Averitt Express
Avison Young
AZ Charleston, Inc.
Baker Motor Company
BMW Manufacturing
Boeing South Carolina
Bulldog Hiway Express
C&C Warehouse & Distribution Co, Inc.
Cantey Technology Consulting
Canusa-Hershman Recycling Company
Carolina National
Carolina Starches
CC&T Real Estate Services
CH Powell
Charleston Branch Pilots’ Association
Charleston County Public Works
Charleston Freight Station
Charleston Freight Station, Inc.
Charleston Motor Carriers Association
Charleston Women in International Trade
China Ocean Shipping Company Inc.
Clemson University James P. Clements (President)
Cline Engineering, Inc.
Coastal Corrugated, Inc.
College of Charleston, Glen F. McConnell (President)
Colliers International
Consolidated Chassis Management, LLC
Container Maintenance Corporation
Courtyard by Marriott
Crescent Insurance Agency
CSX Transportation
Cullum Interests, Inc.
Customs Brokers and Freight Forwarders Association of Charleston
Daimler Vans Manufacturing LLC
DASH Courier & Logistics
Duke Energy Carolinas
Dupuy Storage Charleston
Eastern Industrial Support, Inc.
Evans General Contractors
Evergreen
Export & Domestic Packing, Inc.
Farahat & Co.
First Citizens Bank
Fleet Landing
Free Medical Clinic of Darlington County
GEL Engineering, LLC
Grand Forest
Greater Lexington Chamber and Visitors Center
Greenville Technical College
Gregory Pest Solutions
GSP International Airport
Gullah Sentinel Newspaper
H&J Trucking Company, Inc.
Hamburg Sud North America, Inc.
Hanjin Shipping Company
Hapag-Lloyd
Hapag-Lloyd (America), Inc.
Home Builders Association of South Carolina
Hunter Transportation
International Forest Products
International Industries Corporation
International Paper
ISHPI Information Tech Inc.
J.B Hunt Transport, Inc.
John S. James Co.
Johnson Development
Jupiter Holdings, LLC
Kinder Morgan Terminals
Kontane Logistics
Laurens County Development Corporation
Lightening Transportation, Inc.
Lowcountry Manufacturers
Lowcountry Urology Clinics
Maersk Line
Maritime Association of South Carolina
Marsh USA
Maxwood Furniture
Maybank Industries, LLC
MeadWestvaco Company (Community Development)
Medical University of South Carolina, David J. Cole (President)
Mediterranean Shipping Company (USA) Inc.
Michelin North America, Inc.
Moran Charleston
MRS-CMC Marine Repair Services
Mungo Homes
NAACP Charleston Branch
NAI Earle Furman (Commercial Real Estate)
Nelson Mullins Riley & Scarborough LLP
Nensey Logistics India Pvt. Ltd.
Nephron Pharmaceuticals Corporation
New Orleans Cold Storage
Newmark Grubb Wilson Kibler (Commercial Properties)
Norfolk Southern Corporation
Norton Lilly International
Ogletree, Deakins, Nash, Smoak & Stewart P.C
Pacolet Milliken Enterprises, Inc.
Palmetto Agribusiness Council
Palmetto Railways
Panalpina Inc.
Panama Canal Authority
Popowski Law Firm LLC
Port City Warehouse Company
Poston & Co. Inc.
Premier Logistics
Propeller Club of the Port of Charleston
Rogers & Brown Custom Brokers Inc.
RTR Incorporated
S&ME, Inc.
Salmons Dredging Company
Santee Cooper
SC Biz News, LLC
SC Department of Transportation
SC Farm Bureau Federation
SCS Engineers
Seidler & Associates, LLC
Shipco Transport Inc.
Shoreline International R.E
South Carolina BIPEC
South Carolina Federal Credit Union
South Carolina International Trade Conference
South Carolina Manufacturers Association
South Carolina Tire Manufactures Council
South Carolina Trucking Association
Southeast Region Kinder Morgan Terminals
Spring Creative Products
Stevens Towing Co., Inc.
Streit USA Armoring LLC
Summit Commercial Properties, Inc.
SunTrust Banks
Superior Transportation
Superior Transportation, Inc.
TDL Council
The Conner Law Firm
The Intertech Group
The Stoney Company Inc. (Real Estate Broker)
The Sunnie & DeWorken Group
Tri-County Technical College, Ronnie Booth (President)
Trident CEO Council
Trucking, Association, Inc.
UCW Logistics
Urban League of the Upstate
Wando Trucking
Welded Tube Berkeley
White Knight Engineering
Womble, Carlyle, Sandridge & Rice
World Trade Center of Charleston
Yang Ming (America) Corp.
Yeargin Potter Shackelford Construction
Z-Man Fishing Product, Inc.

**Economic Development Agencies:**
Abbeville County Development
Alliance Pickens
Beaufort, SC Regional Chamber of Commerce
Berkeley Chamber of Commerce
Central SC Alliance
Charleston Metro Chamber of Commerce
Cherokee County Development Board
Edgefield County Chamber of Commerce
Greater Florence Chamber of Commerce
Greater Hartsville Chamber of Commerce
Greater Irmo Chamber of Commerce
Greenville Chamber of Commerce
Oconee County Economic Development Commission
Oconee Economic Alliance
Orangeburg County Development Commission
Richland County Economic Development
South Carolina Chamber of Commerce
South Carolina Economic Developers Association
South Carolina Economic Development Association
South Carolina Hispanic Chamber of Commerce
The Greater Summerville/Dorchester County Chamber of Commerce
Upstate Alliance

Environmental Groups:

American Lung Association
Castle Pinckney Historic Preservation Society
Charleston Waterkeeper
Coastal Conservation League
Lowcountry Open Land Trust
Southern Environmental Law Center