



Pier D2 Dock Extension (Project) FY 2023
Port Infrastructure Development Program (PIDP)
Grant Request



Submitted to:

U.S. Department of Transportation-Maritime
Administration

Submitted by:

Alabama State Port Authority (ASPA)
250 North Water Street
Mobile, AL 36602

April 28, 2023



Field Name	Guidance
Name of lead applicant	Alabama State Port Authority
Is the applicant applying as a lead applicant with any joint applicants?	No
Project name	Pier D2 Dock Extension
Project description	This project will design, permit and construct 203LF of new dock structure and fendering for the Alabama Steel Terminals' existing 900' dedicated Pier D2 located at the Port of Mobile's Main Docks complex on the Mobile River. This will improve operational efficiency, reliability and safety of cargo loading and unloading and eliminate the draying of cargo through the port.
Is this a planning project?	No
Is this a project at a coastal, Great Lakes, or inland river port?	Yes
Is this project located in a noncontiguous State or U.S. territory?	No
GIS Coordinates (in Latitude and Longitude format)	Latitude: 30.716753 Longitude: -88.041885 (30°43'00.3"N 88°02'30.8"W)
Is this project in an urban or rural area?	Rural
Project Zip Code	36602
Is the project located in a Historically Disadvantaged Community (HDC) or a Community Development Zone (CDZ)? (A CDZ is a Choice Neighborhood, Empowerment Zone, Opportunity Zone, or Promise Zone.)	Yes, Historically Disadvantaged Community, Community Development Zone 01097001200 (Census Tract #12).
Has the same project been previously submitted for PIDP funding?	No
Is the applicant applying for other discretionary grant programs in 2023 for the same work or related scopes of work?	No



Field Name	Guidance
Has the applicant previously received TIGER, BUILD, RAISE, FASTLANE, INFRA or PIDP funding?	Yes, TIGER 2012 & TIGER 2017
PIDP Grant Amount Requested	\$3,079,925
Total Project Cost	\$6,159,850
Total Federal Funding	\$3,079,925
Total Non-Federal Funding	\$3,079,925
Will RRIF or TIFIA funds be used as part of the project financing?	No



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Attachments in the narrative are available at <https://www.alports.com/aspa-fy2023-pidp/>.

- [ASPA PIDP FY23 BCA Narrative](#)
- [ASPA PIDP FY23 BCA Spreadsheet](#)
- [ASPA PIDP FY23 Project Engineering Drawings](#)
- [ASPA PIDP FY23 Pier D2 Dock Extension Project Location](#)
- [ASPA PIDP FY23 Pier D2 Operations Overview](#)
- [ASPA PIDP FY23 Incident Damage Reports](#)
- [Letters of Support](#)
- [SF-424 C Budget Information for Construction Programs](#)
- [SF-424 Project Description](#)



Section 1: Project Description

Section 1.1 Statement of Work (Scope)

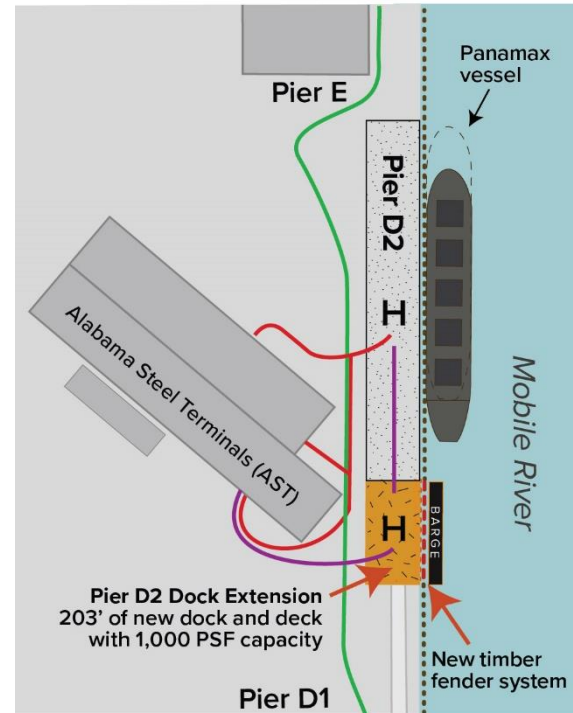
The Pier D2 Dock Extension (Project) is located within the main docks complex at the Port of Mobile (See Section 2: Project Location). The Project includes the design, permitting and construction of 203 Linear Feet (LF) of new berth area to improve the efficiency, reliability, and safety of the marine operations within the main docks complex at the Port of Mobile and at the Alabama Steel Terminals (AST) at Pier D2 (See Figure 1-1). The Project includes the removal of 203LF of existing retaining wall, relocation of the existing retaining wall land side of a new steel pile supported 1,000 Pounds Per Square Foot (PSF) capacity decking and construction of a new steel piles, timber wales and rubber unit fendering system. The Project also includes 90-ton capacity bollards spaced 60 feet on center. See Attachments: [Project Engineering Drawings](#). Professional services will be retained for environmental permitting, detailed design engineering, contract document preparation and construction management.

Section 1.2 Challenges Addressed by the Project

Existing Conditions

Alabama Steel Terminals (AST) leases land from the Port of Mobile for the warehousing, loading and unloading of import and export steel coils. The operate over one dedicated 900' berth at Pier D2 owned by the Port of Mobile. The terminal receives on average 60 handy and 40 panamax vessel calls per year with an average of 3.5 days at berth per vessel. In addition, AST handles 440 x 200' barges with an average of .5 days at berth per barge. See Attachments: [Pier D2 Operations Overview](#). On average, AST has a throughput of 1.1 million tons and handles 2.4 million tons of steel coils through its warehouse.

Project Improvements with new vessel and barge operations flows



LEGEND

- Vessel traffic
- Barge traffic
- Steel Docks Road
- Dedicated Pier D2 berth space
- H** Mobile Harbor Crane

Figure 1-1: Project Improvements with new vessel and barge operations flows



Table 1-1: Days at berth

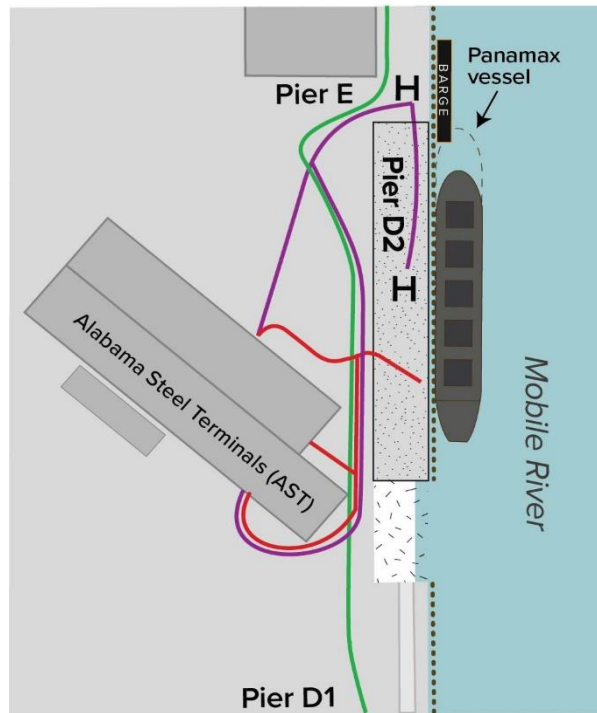
Vessels	Calls	Days at Berth	Total Days at Berth
Handy	60	3.5	210
Panamax	40	3.5	140
50'x200' barge	440	.5	220
Total at Berth Days			570

Due to the volume of vessel calls, there is a capacity limitation at Pier PD2, and AST must use berth space to the north at Pier E, when available, for barge operations. In addition, AST must divert Panamax vessel calls to Berth C, which is over a half-mile dray over the Alabama State Docks Blvd and 12th Street. Ten percent (10%) of the time, when a vessel is on Berth E, barges must be unloaded at Pier 2 which is over a two-mile dray. Unloading at Pier 2 increases a barge operational time by 2 hours (A barge worked at Pier D2 or Pier E takes 4 hours). Due to the over two-mile dray from Pier D2 a barge worked at Pier 2 takes 6 hours. See Figure 1-3. The draying adds 10 total trucks to the operation which travel over two miles in one direction. This causes congestion, roadway and rail crossing degradation and accidents to occur on the Alabama State Docks Blvd. These are the existing vessel and barge loading/unloading operating scenarios for AST.

The Project will allow AST to eliminate all draying by adding the capacity to handle all the current vessel and barge operations at their its dedicated berth space directly adjacent to AST's warehouse located at Pier D2.

The current best-case operational scenario for moving cargo into and out of AST's warehouse for vessel operations at Pier D2 includes intersecting barge unloading and vessel loading forklift operations (See Figure 1-2: Existing

Existing Operating Conditions



LEGEND

- Vessel traffic
- Barge traffic
- Steel Docks Road
- Dedicated Pier D2 berth space
- H** Mobile Harbor Crane

Figure 1-2: Existing Operating Conditions



Operating Conditions). Four forklifts work each vessel operation, and four forklifts work each barge operation. The intersecting forklift traffic has led to 3 recordable injury accidents. In addition, the travel distance for each barge forklift is 2,100'. The Project will reduce the travel distance for each barge forklift by 1,800'. Each forklift can handle one coil and annual coils moved at Pier D2 is 47,368. The Project will provide a dedicated barge berth at Pier D2 which will eliminate intersecting forklift traffic and will save over 16,000 miles of forklift travel distance.

The Project will reduce the number of forklifts utilized per barge loading or unloading operation by 50 percent, and travel distance to the AST warehouse at Pier D2 will be decreased by approximately 75 percent, reducing overall fuel consumption/emissions and general wear and tear on Pier D2. There will also be an added benefit of reducing general unmitigated congestion that is caused by the existing crossing of barge, Alabama State Docks Blvd, and vessel traffic.



Figure 1-3: Route Distance for Dray trucks to Pier C and Pier 2 from AST Warehouse at Pier D

Further, operational efficiency and reliability is weather dependent. Unloading at Pier 2 and Pier C is far from the warehouse and causes delays and standby time during times of heavy rain. This leads to several hours of lost production. The Project will eliminate weather induced efficiency and reliability impacts by enabling operations to take place in proximity to the AST warehouse at Pier D2.

In summary, the Project will eliminate cross traffic flow at the berth, creating safer working conditions and eliminate draying, saving travel distance and time by creating a dedicated barge berth. The Project will improve the operating efficiency, reliability and safety of daily operations. Dray truck emissions will be eliminated, and forklift emissions will be reduced by 70%.



Section 1.3 Historical Context for Project

On average, AST handles 2.4 million tons of steel coils. The need for the Project was identified in 2016, one year after AST began operations due to the operating challenges caused by draying over the Alabama State Docks Blvd. The expansion of Pier D2 will improve the efficiency, reliability and safety on the Port of Mobile’s roadways by eliminating the draying of steel coils and assist AST by improving the efficiency, reliability and safety of operations at Pier D2.

Materials coming from AST and AST’s sister companies - Tri-State and Richardson are a critical service provider in the Port of Mobile’s finished steel products line of business and are a critical link in the manufacturing supply chain that supports the steel and stainless-steel complex in Calvert, Alabama, a multimodal steel coil handling facility which supports everything from large scale infrastructure and construction projects to the manufacturing of automobiles.

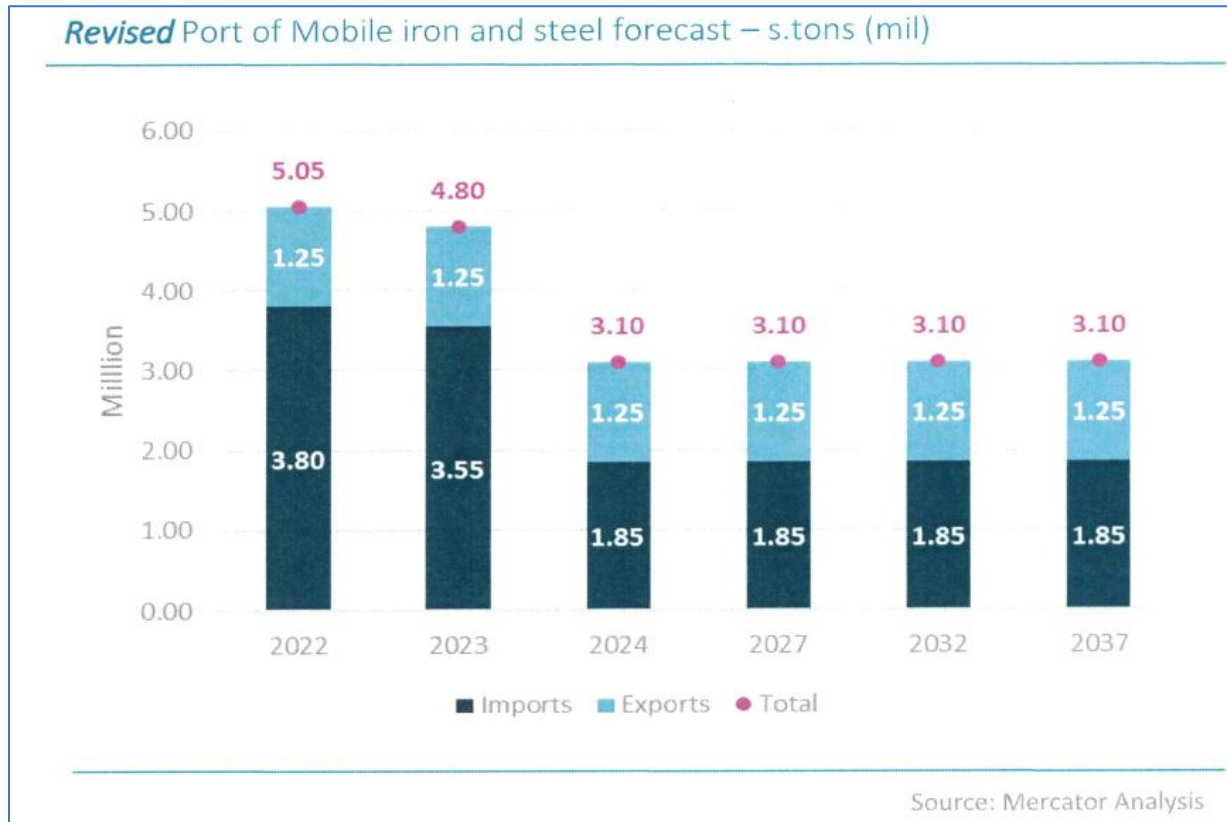


Figure 1-4: Port of Mobile iron and steel forecast

An import cargo for the Port of Mobile is import slab steel for the AM/NS Calvert plant at the Pinto Island Terminal where 1.1 million tons of the slabs are formed into steel coils and exported annually through AST’s Pier D2 steel coil terminal. The Pinto Island plant’s capacity is 5.3 million tons per year. In FY 2021, the Port of Mobile handled 1.25 million tons of iron and steel exports. The bar chart above shows the forecast for the iron and steel movements through the Port of Mobile.



Section 2: Project Location

The Port of Mobile is located within Mobile, Alabama, with a population of 184,960¹. The Port of Mobile is Alabama's only deep-water seaport. It is located in the southernmost part of the state (Mobile County), and its facilities are only 3-hours from open water in the Gulf of Mexico. Pier D2 Dock Extension (See Attachments: [ASPA PIDP FY23 Pier D2 Dock Extension Project Location](#)). Figure 2-1 shows Pier D2 located at the Port of Mobile along the West Bank of the Mobile River.

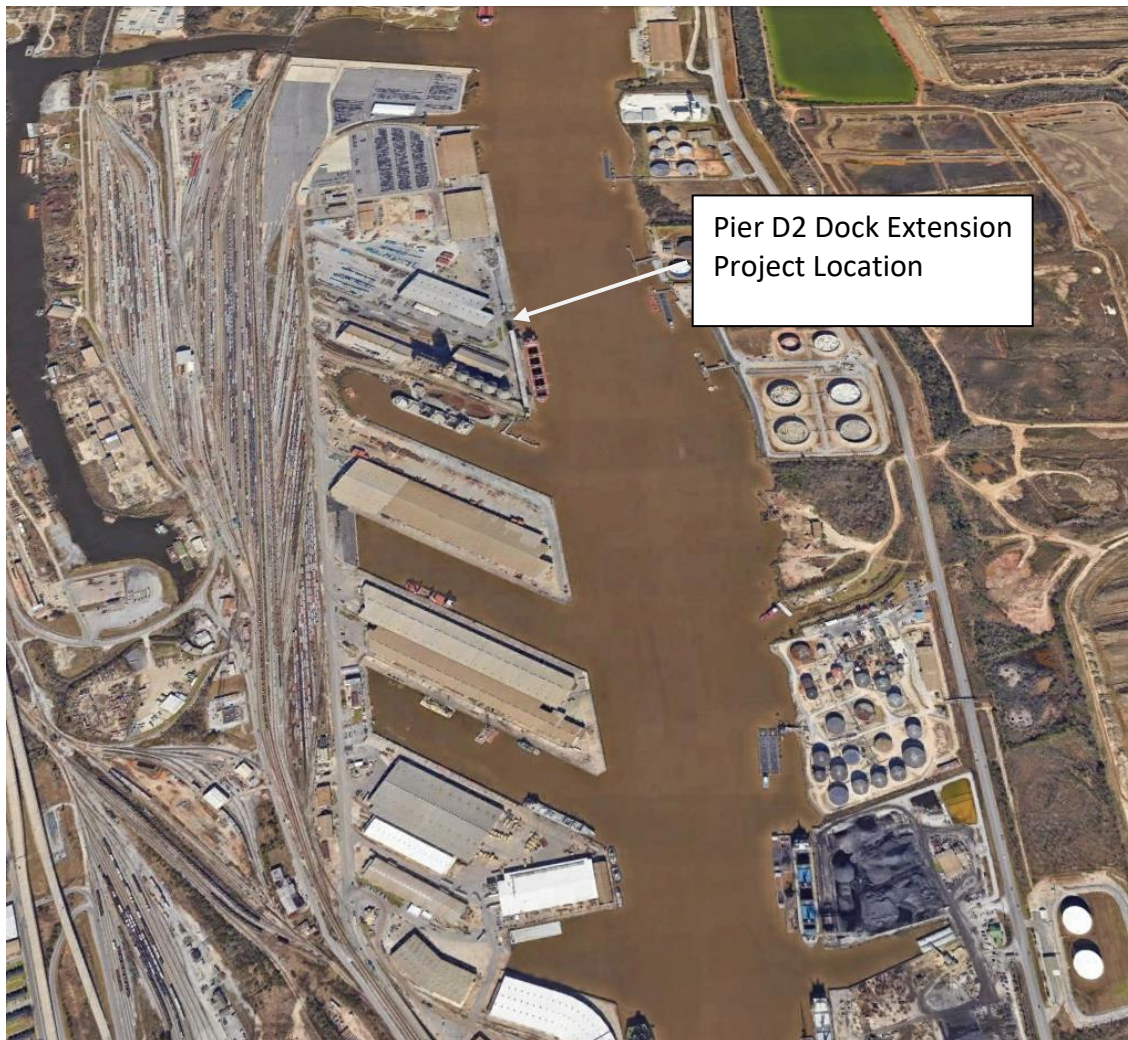


Figure 2-1: PIER D2 location

¹ [Census Reporter, from U.S. Census Bureau, 2021. American Community Survey 5-year estimates:](#)

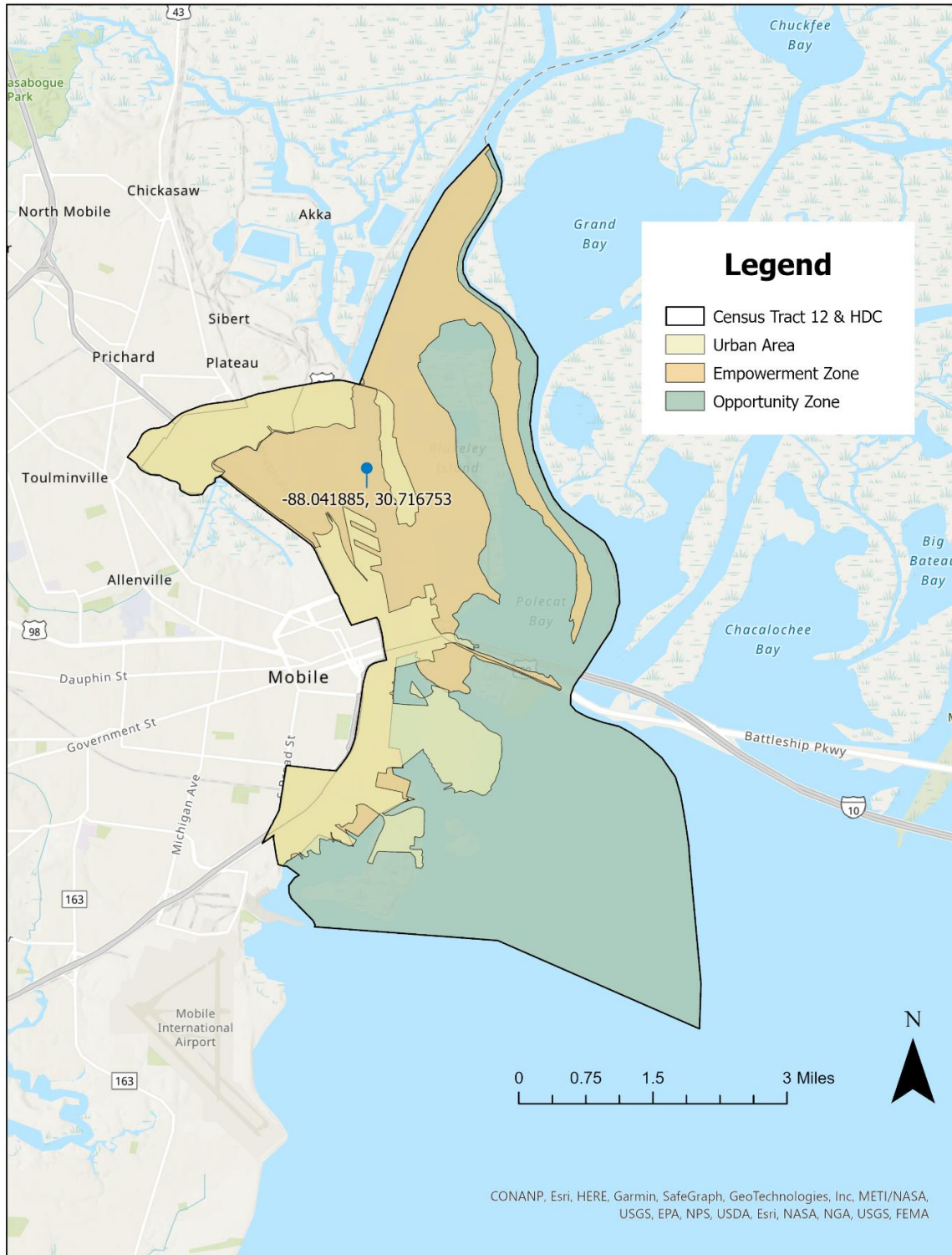


Figure 2-3: Project Location Identification with HDC, CDZ and 2010 Census Urban/Rural Area



Section 3: Grant Funds, Sources and Use of Project Funds

The total cost of the Pier D2 Dock Extension project is estimated at \$6,159,850. The Port is allocating \$3,079,925 to the Project, but \$3,079,925 is still needed. If federal grant funds are not awarded, construction of the Project will be delayed as the Port will need to seek alternate sources of funding. The delay will result in additional Project costs due to rising construction costs and constrain the opportunity to provide needed additional efficiency, reliability and safety.

Table 3-1: Project funding breakdown

	Project Funding Breakdown
PIDP Funds	\$3,079,925
Other Federal Funds	\$0
Non-Federal Funds	\$3,079,925
Total:	\$6,159,850

No other Federal funds are available for this project, and all non-Federal funds will be provided by ASPA. There are no conditions on the ASPA funds, and the funds can be made available from the Port’s general funds as soon as Federal grant funds are obligated. Additional information on leveraging Federal funding can be found in Section 4.3 Section C.



Section 4: Merit Criteria

ASPA’s Pie D2 Extension project will support the key objectives of the PIDP program of improving the safety, efficiency, or reliability of goods movement. This project meets all key merit criteria objectives, including achieving safety, efficiency and reliability improvements; supporting economic vitality at the regional/national level; leveraging federal funding to attract non-federal sources of infrastructure investment; and port resilience.

4.1 Section A: Achieving Safety, Efficiency or Reliability Improvements

a. Safety

Draying to Pier D2

The capacity limitations of one dedicated 900’ berth require AST to unload import vessels at Pier 2 and Pier C (See Section 1.2).

Coils must be drayed from Piers 2 and Pier C and the draying is the highest risk point in AST’s operation. It requires ten drivers hauling twenty-to-twenty-five-ton coils over up to a two-mile trek. This trek involves crossing two active railways, making four turns (two of which are an extreme one hundred and thirty degrees), while sharing the road with other heavy lift equipment, state workers, and other regular drivers and pedestrians. The figure below represents the high risk turns for dray and the critical angles for dray trucks returning with cargo from any pier that isn’t Pier D2.

There have been 9 recorded incidents from 2017 to 2022 caused by the need to dray cargo to Pier D2 warehouse which are summarized in the table below. See Attachment: [Incident Damage Report](#). The Project will allow AST to eliminate all draying by providing the additional capacity to allow for all vessel operations to be accommodated at Pier D2.

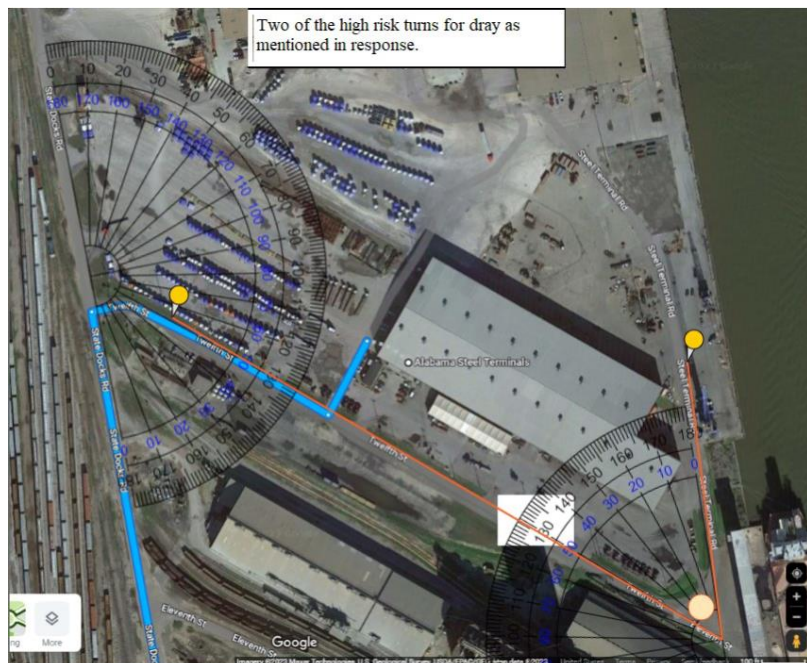


Figure 4-1: High Risk Dray Turns



Table 4-1: Incident information

Incident Location	Incident Type
Pier D2	Cross traffic
Pier D2	Cross traffic, forklift collision
Pier E	Cross traffic, forklift collision
Pier 2	Draying, forklift collision
Pier 2	Draying
Pier 2	Draying, sharp turn
12 th St to ASD Blvd, grain conveyer near east side of the warehouse	Draying, sharp turn
Pier 5	Draying
Pier 5	Draying

Cross Traffic Loading and Unloading Operations at Pier D2

The capacity limitations of one dedicated 900' berth require AST to unload barges at Pier E (See section 1.2). This causes vessel loading operations to intersect with barge unloading operations which has led to three injury accidents. See Attachment: [Incident Damage Report](#). The Project will eliminate all intersecting loading and loading operations.

The Project also will allow for the repositioning of cranes during idle times and provide options to place cranes away from Steel Docks Road (See Figure 1-1). This will improve overall safety by reducing blind spots in the roadway, created by the cranes, to regular port traffic serving both Pier D2 and Pier E.

In addition, the Project will provide space to place the barge lid covers and coil inventory away from Steel Docks Road during barge operations (See figure 1-1), thereby reducing congestion and expanding space within this entire area. This will improve safety conditions for both labor and prevent damage to the equipment used for barge operation

The total safety benefits calculated for the Pier D2 project are based on the estimated number of accidents that will be eliminated or avoided because of the Project. The accident data used for the analysis are based on experienced rates for National highways as found in *Traffic Safety Facts Annual Report Tables* published by the National Highway Transportation and Safety Administration.² Such rates were applied to avoided truck vehicle miles traveled to generate direct avoided accident costs related to reduced truck mileage. An undiscounted sample of these calculations is shown in Table 4-2.

² [Traffic Safety Facts Annual Report Tables](#)



The total safety benefits calculated for the Pier D2 Dock Extension project are based on the estimated number of accidents that will be eliminated or avoided because of the Project. The accident data used for the analysis are based on experienced rates for National highways as found in *Traffic Safety Facts Annual Report Tables* published by the National Highway Transportation and Safety Administration.³ Such rates were applied to avoided truck vehicle miles traveled to generate direct avoided accident cost related to reduced truck mileage. An undiscounted sample of these calculations is shown in Table 4-2: Accident Savings.

Table 4-2: Accident Savings

ACCIDENT SAVINGS							
Year	Operational Year #	Truck 100MVT Avoided	People Killed	People Injured	PDO	Killed Cost	Injured Cost
			1.34	79.00	125.00	\$ 11,800,000	\$ 213,900
			100MVT	100MVT	100MVT	Per Accident	Per Accident
							\$136,806/Inj.
2026	1	0.0008	0.00	0.07	0.10	\$ 12,133	\$ 9,815
2027	2	0.0008	0.00	0.07	0.10	\$ 12,133	\$ 9,815
2028	3	0.0008	0.00	0.07	0.10	\$ 12,133	\$ 9,815
2029	4	0.0008	0.00	0.07	0.10	\$ 12,133	\$ 9,815
2030	5	0.0008	0.00	0.07	0.10	\$ 12,133	\$ 9,815

b. Efficiency

The Pier D2 Extension will create new dock capacity by:

- Eliminating 1,800’ of forklift travel distance will reduce barge cycle times and will allow the barges, which are also used for pinto island slabs, to be used more efficiently. More efficient barge operations will also help alleviate potential barge supply issues for the Pinto Island slabs, which will improve the overall efficiency of the barge operations.
- Allowing AST to serve both vessels and barges simultaneously at Pier D2. This will increase the overall utilization of the dock for other import coil vessels which are currently drayed from Pier C (with similar numbers of dray trucks used as Pier 2, at .7 miles away) at around 200,000 tons per year.
- Eliminating barge operations at Pier 2 which are unreliable and depend on other cargo being handled at the time of discharge. This uncontrolled variable has created congestion issues in the past and creates additional operational reliability reductions.
- Freeing up capacity at Pier E, Pier C and Pier 2 for other cargo handled through ASPA.
- Improving operational efficiency in wet weather. Unloading at Pier 2 and Pier C is far from the warehouse and causes delays and standby time during times of heavy rain. This leads to several hours of lost production. The Project will eliminate weather induced

³ [Traffic Safety Facts Annual Report Tables](#)



efficiency impacts by enabling operations to take place in proximity to the AST warehouse at Pier D2.

- Providing alternative placement and mobility of (2) two Gottwald Mobile Cranes (110 t and 80 t capacity). These cranes would have additional operating capacity for working both vessel and barges simultaneously creating efficiency of production between the barge and vessel operations.
- Improving vessel and barge operations improve the schedule efficiency for vessels by reducing vessel wait times.
- Eliminating barge operations at Pier 2 which must change regularly depending on other cargo being handled on Pier 2 at the time of discharge. This uncontrolled variable has created congestion issues in the past and creates additional operational capacity reductions. Efficiencies gained by the Pier D2 Dock Extension project in fuel savings and reduced dray truck and forklift hours saved was used to develop the Pier D2 Dock Extension Benefit Cost Analysis (BCA) and is summarized in the table below. See [BCA Narrative Attachment](#) and [BCA Spreadsheet Attachment](#).

Table 4-3: Fuel savings and reduced dray truck and forklift hours saved

Year	Truck-Miles Saved	Reduced Truck Hours	Truck Fuel Avoided (Gallons)	Forklift Miles Saved	Forklift Hours Saved	Forklift Fuel Saved
2026	41,820	7,000	6,745	6,962	3,520	12,320
2027	41,820	7,000	6,745	6,962	3,520	12,320
2028	41,820	7,000	6,745	6,962	3,520	12,320
2029	41,820	7,000	6,745	6,962	3,520	12,320
2030	41,820	7,000	6,745	6,962	3,520	12,320

c. Reliability

The Pier D2 Dock Extension will provide the following reliability benefits:

- The barges that AST unloads are also used for other steel cargo. More efficient barge operations at Pier D2 will help alleviate potential barge supply issues for the Pinto Island slabs, which will improve the overall reliability of the barge operations.
- Barge operations at Pier 2 which are unreliable and depend on other cargo being handled at the time of discharge will be eliminated. This uncontrolled variable has created congestion issues in the past and creates operational reliability reductions.



- Reliability is weather dependent. Unloading at Pier 2 and Pier C is far from the warehouse and wet weather causes delays and creates standby time. This leads to several hours of lost production. Weather induced reliability impacts will be eliminated by enabling operations to take place in close proximity to the AST warehouse at Pier D2.
- Barge operations at Pier 2 adds 10 total dray trucks which travel over two miles of roadway with sections of single lane traffic and with overly sharp turns. Weather, accidents and roadway congestion all add to the unreliability of draying operations. The Project will eliminate barge operations at Pier 2, greatly increasing operating reliability for all Port operations.
- Improving vessel and barge operations will improve the schedule reliability for vessels by reducing vessel wait times.

“From a vessel perspective the cost per day when having to wait will cost us anywhere from minimum \$10K/day and upwards depending on the vessel market at the time, using Taurus as an example will be USD 12500/day. Having the ability to handle a deep-sea vessel while discharging barges makes AST a “State of the art” facility.”

– Alabama Steel Terminals primary customer

4.2 Section B: Supporting Economic Vitality at the Regional or National Level

The Port has a significant economic impact on the state of Alabama, with a statewide total economic impact of \$85 billion, including nearly 313,000 direct and indirect jobs and more than \$2 billion in direct and indirect tax impacts. The entire economic impact report can be found at www.ALPorts.com/economic-impact.

For the Pier D2 project a quantitative benefit-cost analysis (BCA) was performed using available information about current truck drayage practices and current and proposed water operations, USDOT guidance, and supported by documentable costs and industry research data (See the [BCA Spreadsheet](#) and [BCA Narrative](#) Attachments. The BCA calculated benefit cost ratio is 1.13. The BCA calculated benefit cost ratio is 1.13. The Pier D2 Dock Extension project benefit is calculated using the safety and efficiency that will be gained by the Project on the Port of Mobile’s roadway system and at the existing Pier D2 steel coil terminal using existing throughput tonnages. No forecasts, or future growth predictions were used.

This BCA is not a comprehensive measure of the project’s total potential economic impact as many likely regional benefits related to increased competitiveness of Mobile area and Alabama firms and products and their employment and multiplier effects are not used in this type of analysis⁴. Identifiable future years’ costs and benefits have been projected, in constant 2021 dollars, for a period extending 20 years beyond construction. Per federal guidance, the monetized

⁴ USDOT, Office of the Secretary, “Benefit-Cost Analysis Guidance for Discretionary Grant Programs. January 2023.



value of these quantified future benefits and costs are discounted to Present Value at a discount rate of 7%, except for carbon emissions savings, which are discounted at 3%.

Table 4-4: Project cost

Tot. Project Cost including O&M and Match-- PV @ 7%	\$3,962,932
Quantified Benefits--PV @ 7%:	
Accident Reduction	\$79,239
Non-Carbon Emissions Reduction	\$72,273
Fuel Cost Savings	\$541,975
Social Cost of Carbon @ 3%	\$68,697
Additional Savings:	
Road Wear Savings	\$38,112
Operating Cost Savings	\$366,253
Travel Time Savings	\$2,406,127
Savings to Existing Users	\$835,460
Truck Externalities Cost	\$72,180
Total Quantified Benefits	4,480,316
Benefit Cost Ratio (BCR)	1.13

Figures are presented in 2021 dollars.

4.3 Section C: Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment

The Project has a federal share of 50% with a non-federal share of 50%, far exceeding the 20% minimum non-federal match requirement.

4.4 Section D: Port Resilience

The Pier D2 Dock Extension will help improve the overall resiliency of the port by adding additional Berth capacity at Pier D2. Currently AST operates at Pier E, Pier C and Pier 2. The Pier D2 Dock Extension will increase berth capacity to allow AST to conduct marine operations fully within their lease area. If a major disaster event occurs, that has city, state or regional impacts, the Port of Mobile will be able to utilize these piers to help the city, state and region recover more quickly.

The Pier D2 Dock Extension will eliminate draying trucks from AST’s operations on Alabama State Docks Blvd, creating capacity for the Port of Mobile to move cargo through-out the city, state and region to aid in the recovery from a major disaster event.



Section 5: Selection Considerations

5.1 Section E: Climate Change and Sustainability

A primary impact of the Pier D2 Dock Extension will be to reduce emissions by eliminating draying on State Docks Road and forklift operations at Pier D2 (See Section 1.2).

Emissions reductions are estimated for carbon and for non-carbon emissions and displayed in Table 5-1. For the purposes of calculating fuel consumption and emissions benefits, heavy-duty combination (tractor-trailer) drayage trucks are assumed.

- Carbon emissions are estimated based on estimated reduction of fuel consumption using an assumed 1.6 KG of CO₂ per mile for heavy trucks.
- Unit costs for the social cost of carbon per year as presented in the 2023 BCA Guidance Table A-6, are applied to net savings in metric tons to calculate carbon-based emissions avoided.⁵
- Non-carbon emission quantities were estimated based on EPA metrics. The appropriate unit price for each type of emission was sourced from USDOT’s BCA Guidance.

Table 5-1: Emissions Reduction Quantities for Truck and Forklift.

	Fuel consumption (gal)	Carbon Tonnes	NO _x Tonnes	PM Tonnes	SOX Tonnes
Total savings over 20 years	13,279,148	182,537	273.5	6.7	24.1
Average annual savings	663,957	9,127	13.7	0.334	1.2
Average Annual Value of Fuel Consumption/ Emissions Savings	\$2,725,545	\$670,509	\$257,782	\$302,822	\$61,595

Because of this factor, it is likely that this impact will reduce emissions and fuel consumption due to the reduction in wait time at the dock. The potential for Port-related emissions savings is particularly important for ASPA. ASPA has demonstrated interest in taking action to reduce greenhouse gas (GHG) emissions and will fully weigh air quality and other environmental impacts of constructing and utilizing the infrastructure. Additional environmental benefits reaped result from the savings in the truck travel distance and resulting vehicle miles traveled (and ton-miles).

⁵ Social Cost of Carbon has been discounted at a 3% cost of capital, per USDOT’s BCA Guidance, which has been used here.



a. Equity Impact

The results of EPA's Environmental Justice Screening Tool (EJSCREEN) show that Census Tract 12 have the following seven categories that meet the criteria that identifies it as disadvantaged: Climate change, energy, health, legacy pollution, transportation, water and wastewater, and workforce development. ASPA understands that although there is no regional or state Climate Action Plan in place, EJ communities are more vulnerable and at risk when it comes to the impacts of pollution and climate change on their health and wellbeing. ASPA will use the DOT's Climate Action Plan as continuous guidance throughout construction. This project will reduce the long-term emissions compared to current operations.

5.2 Section F: Equity and Justice

As previously mentioned, the project site is in both an Area of Persistent Poverty and a Historically Disadvantaged County (Census Tract 12). In alignment with the DOT Climate Action Plan, ASPA considers environmental justice and has a multifactor determination process that evaluates various considerations including public access to information, project publicity, community expectations, and access to understandable information. ASPA ensures that traditionally underrepresented communities can participate in the public engagement and comment process if applicable.

Upon completion of construction, the Port of Mobile will have additional capacity at its piers and on its roadway system to continue to grow the economic impact it has on increasing incomes for those living in the surrounding APP and HDC communities. The largest impact on near and mid-term jobs will be directly related to the project construction contract. Any long-term benefits will be related to the increased economic output of the related businesses in the community.

The project location (Census Tract 12) and the surrounding community has a per capita income in 2021 was just \$27,432, well below the national average of \$70,480+. At the end of 2022, the unemployment rate for Alabama was 2.8%. However, in Mobile County the unemployment rate over the same period was 5.7% which is 2.3 points higher than the U.S. average of 3.4%. In general, the unemployment rate has been historically high in the region.

ASPA incorporates environmental justice into economic sustainability and climate adaptation planning and programs, including decision-making regarding facilities, operations, and workforce. At present, ASPA has three full time employees dedicated to environmental management. Their responsibilities include ensuring permit compliance, serving as a technical advisor to ASPA divisions, and coordinating with ASPA's Senior Staff to achieve the goals of Green Marine, a voluntary environmental stewardship and certification program.

ASPA is committed to increasing equity and environmental justice awareness, skills, and abilities. ASPA continues to take additional steps to educate its staff on environmental justice, including disproportionate impacts from climate change, and how mitigating these impacts and promoting equitable distribution of benefits relates to ASPA-related programs and activities. Other ASPA planned and completed actions include, but are not limited to:



- Weaving environmental justice into the development of ASPA organization-level climate adaptation plans; and
- Aligning efforts that address climate change, equity, and environmental justice.

A grant application is underway to fund a full environmental resilience study over all the Port Authority's facilities both in Mobile and across the State of Alabama.

In addition to supporting the overall jobs numbers, the Port expects one-time jobs associated with the engineering and construction of the project and the ongoing induced and direct jobs from the project to be well above the local median income. Therefore, the Port expects the project will provide much-needed stimulus to the local economy by employing local construction employees, engineers, logisticians, stevedores, and longshoremen. The Port also expects many of the jobs generated to be served by local Union labor such as the ILA. These outcomes support the Justice 40 initiative for the benefits of federal investment to flow to underserved communities.

Soon to be the deepest port along the country's Gulf Coast, the Port of Mobile is the hub for nearly 313,000 people throughout the State of Alabama whose jobs and families depend on the Port. Additionally, the project could positively benefit nearly 187,000 people who live in the City of Mobile, 52.5% of whom are African American. Within Mobile, and adjacent to the Port, is Africatown, a place of historical importance for the African American community.

The Port of Mobile is a significant employment generator, including a substantial number of minority-held jobs. Over the last decade, Black employee hours for direct ASPA employees have averaged approximately 30% of total employee hours, compared with a Mobile County population that is approximately 36% Black. Black International Longshoremen's Association (ILA) employment on the container terminal or the rail intermodal facility is even stronger. Black employee hours in the container terminal and rail intermodal facilities averaged 41% of total employee hours, compared with a Mobile County population that is approximately 36% Black.

Work within the Port of Mobile delivers competitive compensation and benefits. The International Longshoremen's Association (ILA Local 1410, 1985, and 1459) represents all skilled labor in the container terminal and the rail intermodal facility. Many direct ASPA employees also choose to join the ILA Local 1984 for their representation. Under Alabama law, public agencies cannot directly enter into project labor agreements, but many private contractors choose to work with and through labor-affiliated subcontractors.

The sustained capacity of the warehouses and piers in the Port's General Cargo facility is key to creating greater opportunities for employment to the local population base and the underemployed. The current annual economic impacts generated through Pier D2 of over \$6M will be sustained. The Pier D2 Dock Extension will help sustain the existing 38 jobs at the Pier D2 terminal and in the warehouses and piers in the Port's General Cargo facility of 521 direct jobs.



5.3 Section G: Workforce Development, Job Quality and Wealth Creation

Any short-term jobs will be related to the construction of the project and long-term jobs will be related to the operation and maintenance of the new infrastructure.

Short-term Jobs (via project construction) – Estimated at 61

<https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/>

As is standard protocol with the Port’s public bid process, ASPA will work with local unions and other job employment services to ensure that all local construction and support businesses will have the opportunity to bid on the eventual project alternative construction. When feasible, ASPA will also seek to prioritize hiring workers through community training centers and re-entry programs. ASPA plans to also partner with Bishop State University, other local trade schools and the Mobile County Public School system to provide project exposure to potentially qualified individuals and students that may have the opportunity to be employed by ASPA, its contractors and subcontractors, or other port-related businesses.

a. Partnership & Collaboration

The Alabama State Port Authority (ASPA) is one of the five (5) certifying members of the Alabama Unified Certification Program (ALUCP). The ALUCP is responsible for certifying Disadvantaged Business Enterprise (DBE) firms in the state of Alabama. The project bidding process project will provide opportunities for small businesses and disadvantaged business enterprises, including disabled veteran-owned DBE firms to bid. ASPA currently has a goal of 7.68% DBE participation on all federally funded projects.

ASPA collaborates with local and state agencies on the planning of DBE outreach events. These events inform and educate the minority and small business community and promulgate procurement.

The Port of Mobile is a significant employment generator, including a substantial number of minority-held jobs. Over the last decade, minority employee hours for direct ASPA employees have averaged approximately 30% of total employee hours, compared with a Mobile County population that is approximately 42% minority. International Longshoremen’s Association (ILA) employment is even stronger. Minority ILA employee hours averaged 41% of total employee hours.

Work within the Port of Mobile is attractive due to its competitive compensation and benefits. The International Longshoremen’s Association (ILA Local 1410, 1985, and 1459) represents all skilled labor at the Port of Mobile. Many direct ASPA employees also choose to join the ILA Local 1984 for their representation. Under Alabama law, public agencies cannot directly enter into project labor agreements, but many private contractors choose to work with and through labor-affiliated subcontractors.



Section 6: Project Readiness

Section 6.1 Section A: Technical Capacity

a. Experience Working with Federal Agencies

ASPA has extensive experience in partnering with Federal agencies including USACE, Department of Homeland Security, US Coast Guard, HUD, and MARAD from both a permitting and a funding perspective. ASPA is the project sponsor working with USACE on the \$365.7 Mobile Ship Channel Deepening and Widening project that will provide -50+ ft. draft for New Panamax ships to call on Mobile Container Terminal. ASPA has a full-time grants coordinator who tracks and manages the requirements of grant funding and works with respective project managers to ensure the accurate and timely deliverability of each grant program. ASPA is in regular compliance with all state and Federal audits of grant funding. ASPA's engineering and environmental planning and permitting divisions ensure that each project meets all applicable safety, construction, and environmental requirements. ASPA's inspectors monitor all construction projects to ensure the project's compliance with applicable requirements.

b. Experience with BUILD, INFRA and PIDP Awards

ASPA has been the recipient of two TIGER grant awards, one for the Garrows Bend Rail Bridge project and one for the development of a Ro-Ro Terminal at the Main Docks. Both projects were completed successfully. ASPA is familiar with MARAD protocols regarding NEPA approval, progress reporting, invoicing, and project close-out.

c. Technical Experience and Resources

ASPA has an in-house engineering department that procures and manages capital projects from planning through final design, then through construction. This project will be procured using the established ASPA Design-Bid-Build delivery method. ASPA has several professional consultant firms under contract which offer a wide range of expertise under an on-call basis. The intent is to designate the consultant firm that has been involved with this project from the concept stage up to this point in time as Engineer of Record for final design and construction support services. The Gulf Coast area is served by multiple heavy construction contractors that are experienced in marine construction. Previous contracts, similar in scope, have attracted heavy bidder interest by qualified contractors.

d. Feasibility/Constructability

The proposed improvements consist of wharf construction elements that have been successfully constructed for many years at the Port of Mobile. The Port of Mobile owns 4,000 acres and has constructed and maintained more than 30 similarly constructed bulkhead and pile structures. The proposed project is highly feasible and constructible. As discussed previously, all work would occur on Port of Mobile property and the berth dredging prism for the Project is currently in place and is currently maintained at 40' as part Port of Mobile's maintenance dredging program.



e. Critical Infrastructure Security & Resilience

If ASPA is selected for PIDP program funding, it will be prepared to demonstrate, prior to the signing of the grant agreement, efforts to consider and address physical and cyber security risks relevant to the transportation mode and type and scale of the project. In 2022, the Director and CEO of the ASPA created a Chief Information Officer position, which has been filled by an information security expert. The IT team continues to invest in security programs and apply for port security grants. An assessment of security has been conducted for the Pier D2 Dock Extension project and it has been determined that additional security platforms are not required.

Section 6.2: Project Schedule and Budget

ASPA owns all the property at Pier D2, therefore there is no right of way acquisition required. NEPA - Categorical Exclusion complete by 5/1/2023 and HUD anticipated approval by 6/15/2023. No FONSI required. The budget below is a summary of the projects and the breakdown of funding sources. Project Planning and Preliminary Engineering Start Date: 2016 Submittal of Applicable Permitting Applications (see below):

- NEPA - Categorical Exclusion complete by 5/1/2023 and HUD anticipated approval by 6/15/2023. No FONSI required.
- 404 Permit submitting on 5/1/2023, Permit Approval expected for Fall 2023
- PIDP Notice of Award: Fall 2023
- Completion of 50% Plans, Specifications and Estimates: November 2023
- Complete of 90% Plans, Specifications and Estimates: December 2023
- Local, and state Building Permits and Planning Approvals: Not required
- State and Federal Permit Approvals: 404 Approval expected for Fall 2023
- Start/End Dates for NEPA: Categorical Exclusion complete by 5/1/2023 with HUD approval anticipated by 6/15/2023. No FONSI required.
- PIDP Estimated Date of Funding Obligation: May 30, 2025
- Project Invitation to Bid: March 2025 – April 2025
- Bid Opening: 14 April 2025
- Issuance of Contractor Notice to Proceed: May 2025
- Assumed In-Water Work Window #1: Not applicable (no in-water work windows apply)
- Assumed In-Water Work Window #2: Not applicable (no in-water work windows apply)
- Project Substantial Completion: April 2026
- Project Final Completion: May 2026



All necessary property for this project is owned by the Port. There are no right of way acquisitions or intergovernmental agreements necessary for the execution of this project.

The Table below is the estimate of cost for the Pier D2 Dock Extension. The estimate was prepared in 2022 based on 10% design and includes 15% contingency.

Table 6-1: Estimated Pier D2 Dock Extension cost

Pier D2 Dock Extension	Project Cost
Demolition	\$172,500
Relocation of Existing Retaining Wall	\$908,500
New Structure	\$3,967,500
Fender System and Mooring Bollards	\$701,500
Engineering	\$409,850
Pier D2 Extension TOTAL	\$6,159,850

a. Risk Mitigation

Potential risks associated with the design and construction of the project are low. Budget risk is also low because ASPA will set aside budget in its approved capital improvement program budget, is familiar with the subsurface conditions in the project area and has extensive experience building this type of project. There is higher risk that there will be continued price escalation due to continued inflation.

Schedule risks are associated with potential delays in receiving the necessary approvals and/or being able to obtain needed equipment. Because the project would be constructed on ASPA land, limited approvals are required. Therefore, schedule risk due to delays in approvals is low. There could be minimal risk to the schedule due to ship and barge calls interfering with construction activity. However, this will be mitigated through communications and would be identified early and begin prior to construction.

As shown in the project schedule, design would begin by November of 2023, following grant approval and obligation of funds. Overall design and construction of the project is expected to take 36 months, easily allowing for all obligated funds to be expended within 5 years of obligation, even should there be substantial delays in obtaining needed components. The project will be constructed in a location not known to have any environmental contamination. Regardless, Port Environmental staff will be able to address any unforeseen environmental conditions during the construction process.



Section 6.3 B: Environmental Risk

The small footprint of the project will not substantially change the existing character of the area and the Project will reduce the environmental impacts of the warehouse and loading operations within the Port of Mobile area by reducing emissions. ASPA is conducting public engagement as part of the NEPA process and as described in Section F.

NEPA Status of the Project

Due to the small physical footprint of the project, lack of sensitive resources on the site, and the low level of impacts, the project qualifies for a Categorical Exclusion under NEPA which is underway, will be complete by 5/1/2023 with HUD approval anticipated by 6/15/2023. No FONSI is required.

The only environmental permit that is required is Section 404 of the Clean Water Act which will be submitted on 5/1/2023. The Permit Approval is expected for Fall 2023. See Section 6.2.

Environmental Reviews, Approvals, and Permits

The status of all environmental permits and approvals related to the Project can be found at [Environmental Reviews, Approvals, and Permits](#). The following is a list of the environmental reviews, approvals and permits:

- NEPA class of action status – Categorical Exclusion
- US Army Corps of Engineers (USACE) Section 10/404 Permit
- National Marine Fisheries (NMFS)
- National Marine Mammals Protection Act MMPA
- US Fish and Wildlife Service (USFWS) Endangered Species Act (ESA)
- State Department of Fish and Wildlife
- 401 Water Quality Certification

State and Local Approvals

There are no state or local building permits or planning approvals required for this project.



Section 7: Domestic Preference

All iron, steel, manufactured products and construction materials used in the Project will be produced in accordance with the Build America, Buy America Act (BABAA) (Pub. L 117-58, Division G §§ 70901-27). Both the bid and construction contract documents issued by ASPA will stipulate that all iron, steel, materials and manufactured products shall comply with all BABAA requirements.



Section 8: Determinations

Statutory Determination	Guidance
The project improves the safety, efficiency, or reliability of the movement of goods through port or intermodal connection with the port.	As detailed in Section 4: Merit Criteria, the Project improves the safety, efficiency and reliability of the Port of Mobiles roadway system by eliminating the draying of steel coil cargo on Alabama State Docks Blvd creating additional roadway efficiency, more reliable travel times and safer roadway conditions. The Berth D2 coil terminal will realize more reliable, efficient, and safer operations be eliminating the draying of cargo from their operations on Alabama States Dock Blvd. The Project will eliminate cross traffic forklift operations at the Pier D2 steel coil terminal, creating safer working conditions, more efficient vessel loading distances, and more reliable barge operations by creating a dedicated barge berth.
The project is cost effective.	The project is cost effective. BCA calculated benefit cost ratio is 1.13. The Pier D2 Dock Extension project benefit is calculated using the safety and efficiency that will be gained by the Project on the Port of Mobile’s roadway system and at the existing Pier D2 steel coil terminal using existing through-put tonnages. No forecasts, or future growth predictions were used.
The eligible applicant has the authority to carry out the project.	Authority: The Alabama State Port Authority (ASPA), pursuant to Alabama Code Title 33-1-12, has the power to engage in improvement, promotion, development, construction, maintenance and operations of the harbors, terminal railways, seaports and riverports within the State of Alabama and its jurisdiction. Ownership: ASPA owns the project site for this grant application.
The eligible applicant has sufficient funding to meet the matching requirements.	All non-Federal funds will be provided by ASPA. There are no conditions on the ASPA funds, and the funds can be made available from the ASPA’s general fund as soon as Federal grant funds are obligated.
The project will be completed without unreasonable delay.	As detailed in Section 6, ASPA is prepared to move ahead quickly with the project and be ready for obligation of grant funds (completed design, bidding, and obtained all necessary governmental approvals) prior to May 2025. The construction start date is May 2025. The project is highly feasible and constructible, and construction is scheduled to be completed in one year.
The project cannot be easily and efficiently completed without Federal funding or financial assistance available to the project sponsor.	ASPA has numerous long term financial commitments and is unable to fund the Project for the foreseeable future. Without Federal funding assistance, the Project will be delayed indefinitely, and its costs will increase due to commodity and wage inflation.



Attachments

Attachments in the narrative are available at <https://www.alports.com/aspa-fy2023-pidp/>.

- [ASPA PIDP FY23 BCA Narrative](#)
- [ASPA PIDP FY23 BCA Spreadsheet](#)
- [ASPA PIDP FY23 Project Engineering Drawings](#)
- [ASPA PIDP FY23 Pier D2 Dock Extension Project Location](#)
- [ASPA PIDP FY23 Pier D2 Operations Overview](#)
- [ASPA PIDP FY23 Incident Damage Reports](#)
- [Letters of Support](#)
- [SF-424 C Budget Information for Construction Programs](#)
- [SF-424 Project Description](#)