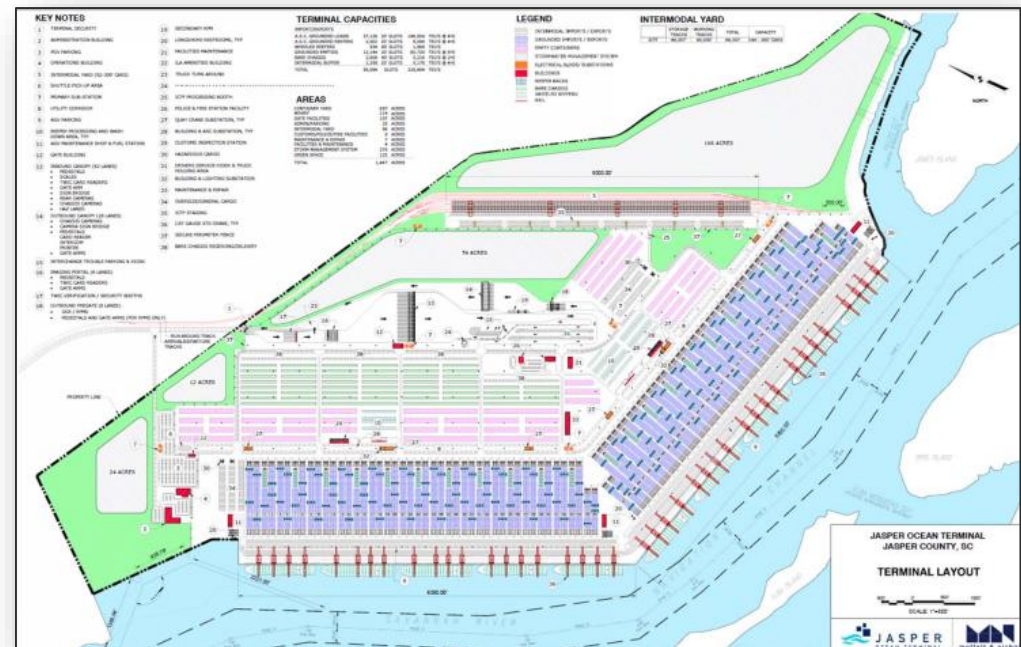


Outline:

- Cost Information
- Ongoing Environmental Impact Statement Work
- Basis of Concept – TBA Simulation
- SCPA Capacity
- Containerized Cargo Forecast
- Timeline for Completion
- Landside Infrastructure Needs
- Waterway Infrastructure Needs



Fiscal Year 2019 Budget



Total Operating Revenue for FY 2020 is \$1,294,000

Operating Expenses	FY 2019
Program Mgmt/Consolidation	
Task 1 - Basis of Design	\$100,000
Task 2 - Easement Release Plan - Sediment Tracing	
Task 3 - Access Corridor, Alt 4	
Task 4 - Geotechnical Test Embankment Monitoring	
Task 5 - Economic Impact Study	
Task 6 - Third-Party Contractor Solicitation	
Task 7 - Channel Modifications	
Task 8 - Property Management & Geotechnical Support	
Task 9 - Section 10/404 Review Process Support	\$829,000
Task 10 - Section 408 Review Process Support	
Task 11 - Section 4084/204 Review Process Support	
Task 12 - Planning and Design	
Task 13 - Geotechnical Investigation	
Task ?? - Section 203	
Total Development Expenses	\$929,000
Total Office & Admin Expenses	\$365,000
Total Operating Expenses	\$1,294,000

JOT Joint Venture – Expenses to Date



FY11 Contributions From Sponsors	\$3,800,000
FY12 Contributions	\$800,000
FY13 Contributions	\$800,000
FY14 Contributions	\$600,000
FY15 Contributions	\$2,100,000
FY16 Contributions	\$2,000,000
FY17 Contributions	\$3,750,000
FY18 Contributions	\$3,340,931
FY19 Contributions	\$934,618
Total	\$18,125,549

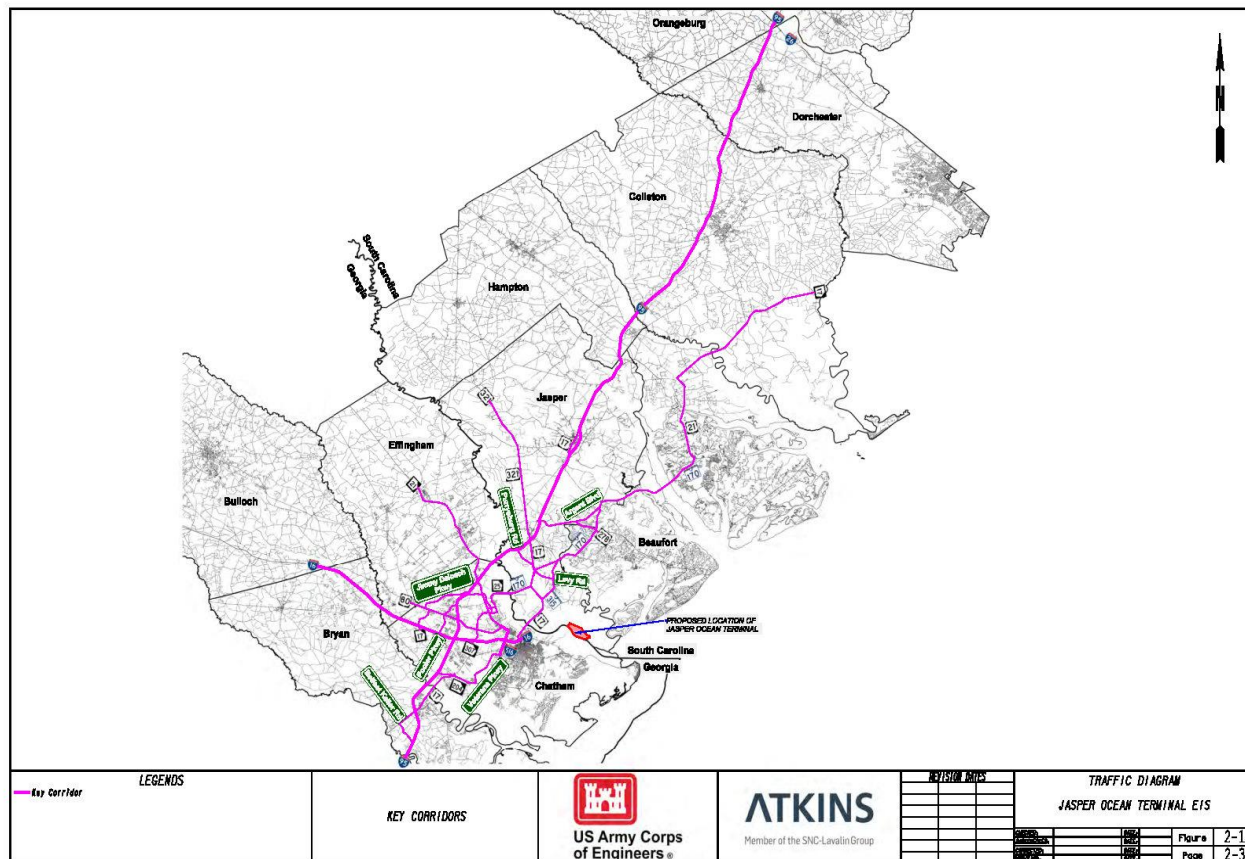
Environmental Impact Statement (EIS) Scope:

- **Brief Description:** Atkins North America, Inc. is the Third-Party Contractor working with the U.S. Army Corps of Engineers, Charleston District to prepare the EIS for the proposed JOT. The scope of work for FY 20 includes the following tasks:
 - Traffic Capacity Analysis
 - Cultural Resources Phase 1 Survey Report
 - Shoreline Erosion/Groundwater Assessments
 - Existing Conditions Report for draft EIS
- **FY20 Budget:** \$829,000
- **Projected expenses:** \$829,000
- **Funding source:** JOT Joint Venture

JOT Environmental Impact Statement – Transportation/ Traffic Capacity Analysis Task Status

Traffic Capacity Analysis (end FY19
– FY20 [December 2019])

- Collected all traffic count data for the detailed transportation study area in May 2019
- Completed travel model updates for JOT Open Year (2035) and Design Year (2055), assuming annual throughput capacity of 8M TEUs for JOT and 8.5M TEUs for Garden City Terminal
- Completed level-of-service (LOS) analysis for Existing Conditions (2019), as well as crash analysis and at-grade rail crossing analysis
- Transportation Analysis currently on hold by JOT JV, awaiting updated container forecasts for SCPA & GPA and confirmation on Open Year and Design Year for JOT with the proposed Hutchinson Island Terminal project

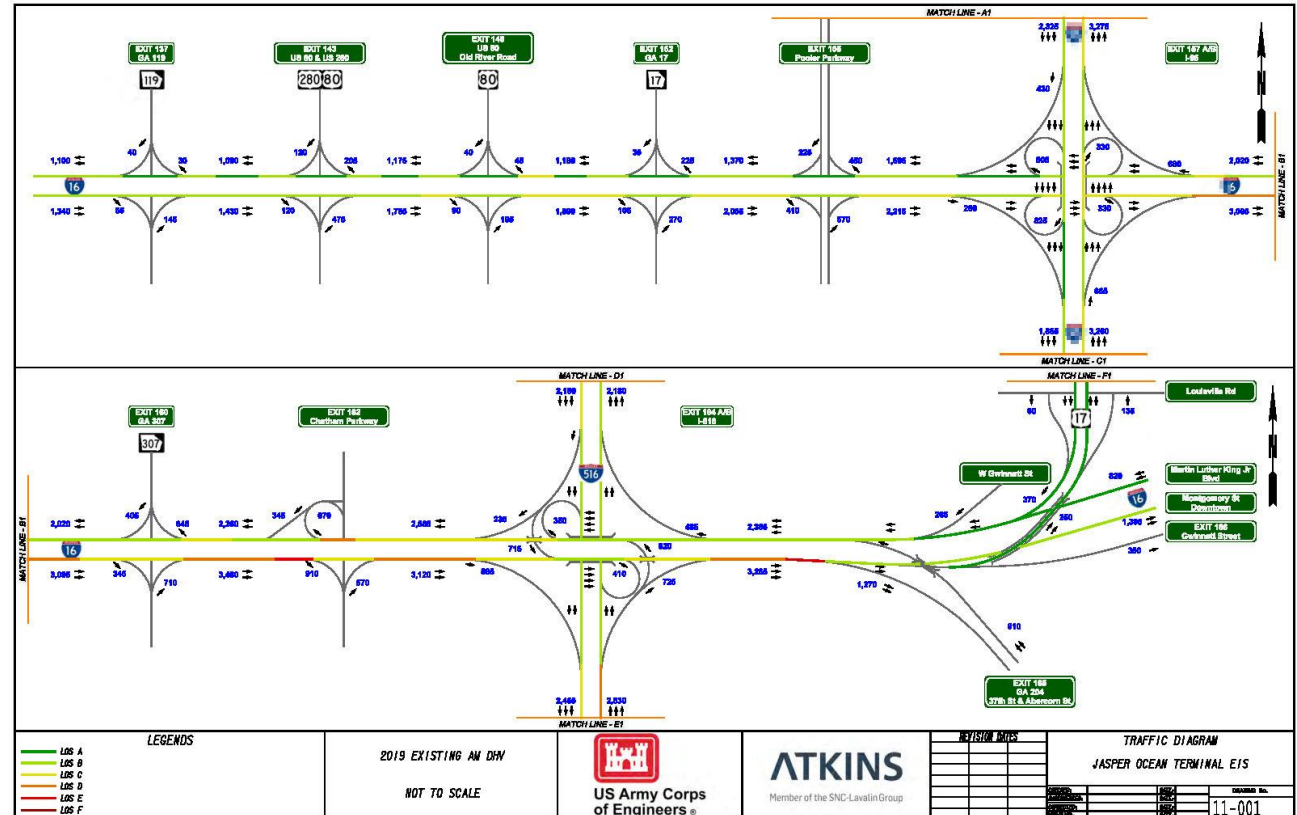


JOT Environmental Impact Statement – Transportation/ Traffic Capacity Analysis - Next Steps



Traffic Capacity Analysis (January – June 2020)

- Rerun regional travel demand model with new assumptions regarding updated container forecasts for SCPA & GPA and Open Year and Design Year for JOT
- Perform LOS analysis for JOT Open and Design years
- Re-engage the Transportation Analysis Working Group on the analysis and findings
- Complete Traffic Capacity Analysis Technical Memo to document findings



JOT Environmental Impact Statement – Cultural Resources Phase I Survey Task Status

Cultural Resources Phase I Survey
(end FY19 – FY20 [December
2019])

- Completed Phase 1 cultural resources field surveys of portions of proposed terminal site and access corridor in May 2019, certain parcels were inaccessible due to inundation or access restrictions to certain parcels
- Prepared a Preliminary Draft Cultural Resources Assessment Survey Phase 1 report for review by the Corps



JOT Environmental Impact Statement – Cultural Resources Phase I Survey - Next Steps

Cultural Resources Phase I Survey
(January - June 2020)

- Finalize the draft Cultural Resources Assessment Survey Phase 1 Report
- Coordinate available information/draft report with the Cultural Resources Working Group (GA and SC SHPOs and consulting parties)



JOT Environmental Impact Statement – Alternative Sites Screening Process Task Status

Alternative Sites Screening Process
(end FY19 – FY20 [December
2019])

- Prepared draft Summary of Project Alternatives Identification and Screening Process report
- Preliminary findings revealed that of the 8 project alternatives evaluated including the proposed JOT site, the other 7 alternative sites to the proposed JOT were not considered reasonable and practicable alternatives
- Distributed draft report to Cooperating Agencies (USFWS, NPS, EPA, NMFS, USCG) and SCPA & GPA
- Update draft report with revised container forecasts, need statement, and information regarding Hutchinson Island Terminal to be provided by SCPA & GPA



JOT Environmental Impact Statement – Schedule Overview

- Prepare Draft EIS (~3 years)
- Prepare Final EIS/ROD (~2 years)
- Schedule drivers:
 - Section 408 review and approval of impacts to Savannah Harbor and existing Dredged Material Containment Areas
 - Section 203 Feasibility Study (according to JOT JV deepening and widening of Savannah Harbor would be required to achieve the JOT JV’s project purpose)
 - Compatibility Determination from USFWS for proposed impacts to Savannah National Wildlife Refuge

A

Section 10 – Rivers and Harbors Act of 1899 (33 U.S.C. 403), USACE Guidance

Section 404 – Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500; 33 U.S.C. 1344), as amended by the Clean Water Act of 1977 (P.L. 95-217; 33 U.S.C. 1251 et seq.), Environmental Protection Agency (EPA)’s 404(b)(1) Guidelines

***Section 103** – Marine Protection, Research, and Sanctuaries Act of 1972

Regulatory Division Actions

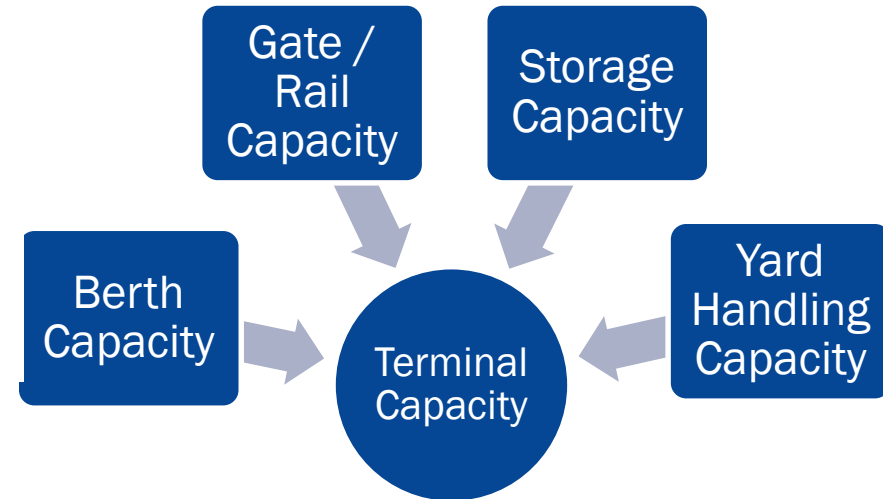
B

Section 408 – Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408 (commonly referred to as “Section 408”) and Engineer Circular (EC) 1165-2-216, *Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*

Planning Division Actions

JOT Capacity Basis of Concept – TBA Analysis

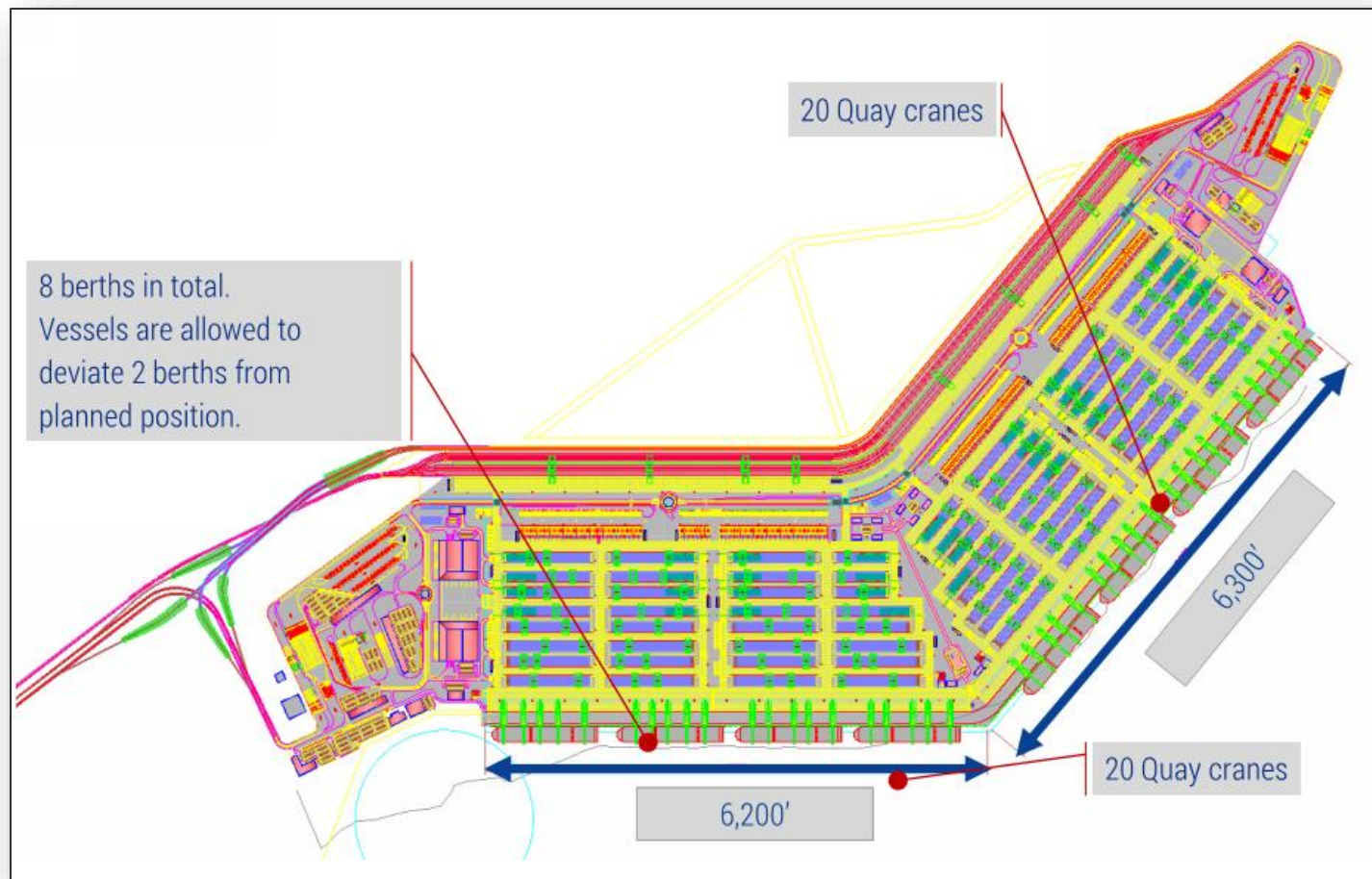
- TBA reevaluated the Basis of Concept design to verify capacity
- Evaluated 5 operational concepts using variations of parallel and perpendicular yard arrangements for manual and automated transport equipment
 - Option 0: E-RTG + terminal truck (reference design)
 - Option 1: Parallel cantilever RMG + terminal truck
 - Option 2: Parallel RMG + automated shuttle carrier
 - Option 3: Perpendicular RMG + manual shuttle carrier
 - Option 4: Perpendicular RMG + Battery Lift AGV
- All options achieve approximately 8.0M TEU operational capacity at full build out
 - RTG option limited by storage capacity
 - RMG options limited by handling capacity



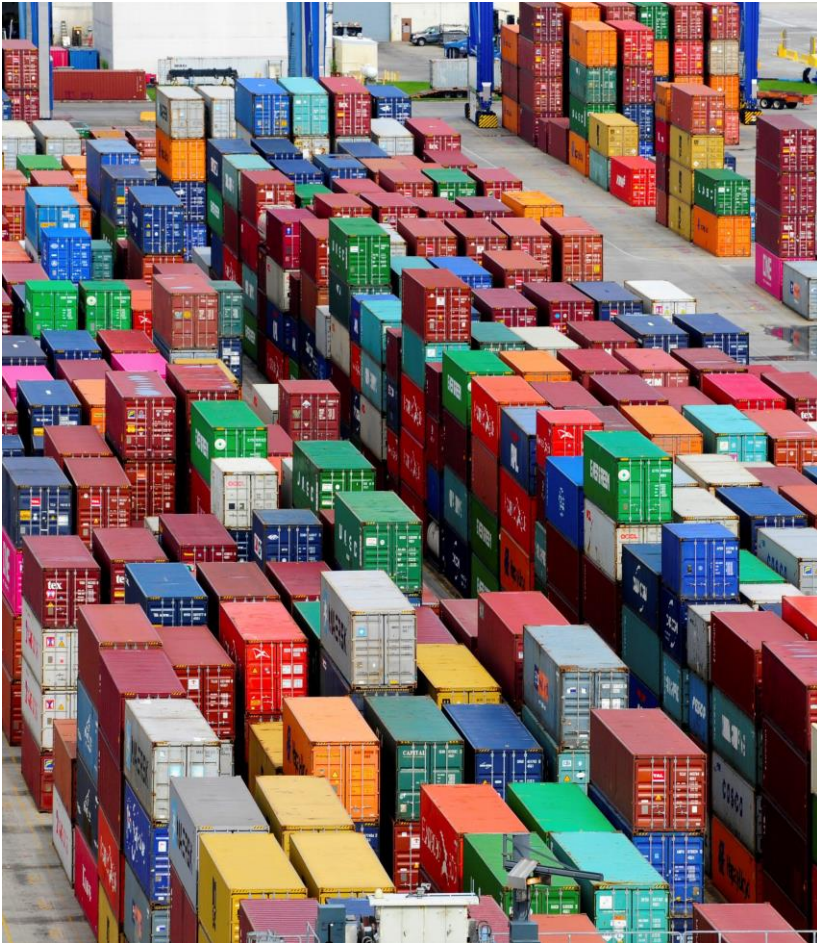
RTG = Rubber Tire Gantry Crane
RMG = Rail Mounted Gantry Crane

JOT - TBA Recommendation

- A perpendicular RMG yard layout
- Both manual shuttle carrier and Lift AGV are suitable



SCPA CONTAINER CAPACITY BY EARLY 2030



WANDO WELCH TERMINAL
2.4 MILLION TEU
(READY 2020)

HUGH K. LEATHERMAN, SR. TERMINAL
2.4 MILLION TEU
(2021-2032)

NORTH CHARLESTON TERMINAL
0.5 MILLION TEU
(NOW)

TOTAL CAPACITY
5.3 MILLION TEU

GPA and SCPA Combined Capacity and Cargo Forecast



Year	Containerized Cargo Forecast (TEU)	Annual Throughput Capacity of Existing and Planned GPA Marine Container Terminals	Annual Throughput Capacity of Existing and Planned SCPA Marine Container Terminals
2015	5,782,412	6,500,000	2,625,000
2020	7,285,493	6,500,000	3,200,000
2025	8,801,607	9,000,000	3,700,000
2030	10,551,446	11,000,000	4,100,000
2035	12,234,796	12,000,000	5,300,000
2040	14,065,731	12,000,000	5,300,000
2045	16,074,054	12,000,000	5,300,000
2050	18,281,593	12,000,000	5,300,000

SCPA New Facilities Timeline

2003

- Filed permit application for Navy Base Terminal

2007

- Permit received for Navy Base Terminal

2008

- Intergovernmental Agreement for JOT signed by SCPA/GPA
- Lawsuit by CCL against Navy Base Terminal

2009

- SC Ports completes loss of 40% of container volume and delays need for Navy Base Terminal

2010

- Navy Base Terminal lawsuit settled

2012

- Original intended opening date of Navy Base Terminal
- Savannah Harbor Expansions Chief's Report

2015

- First Federal funding for SHEP
- JOT Intergovernmental Agreement replaced by JV Agreement

2017

- Begin pre-permitting effort on JOT

2019

- GPA announces 8 Million TEU capacity goal at September State of the Port address

2021

- Spring opening of Navy Base Terminal Phase One in Charleston

2026 (based on demand)

- Phase Two Navy Base Terminal

2032 (based on demand)

- Phase Three Navy Base Terminal

2035 (based on demand)

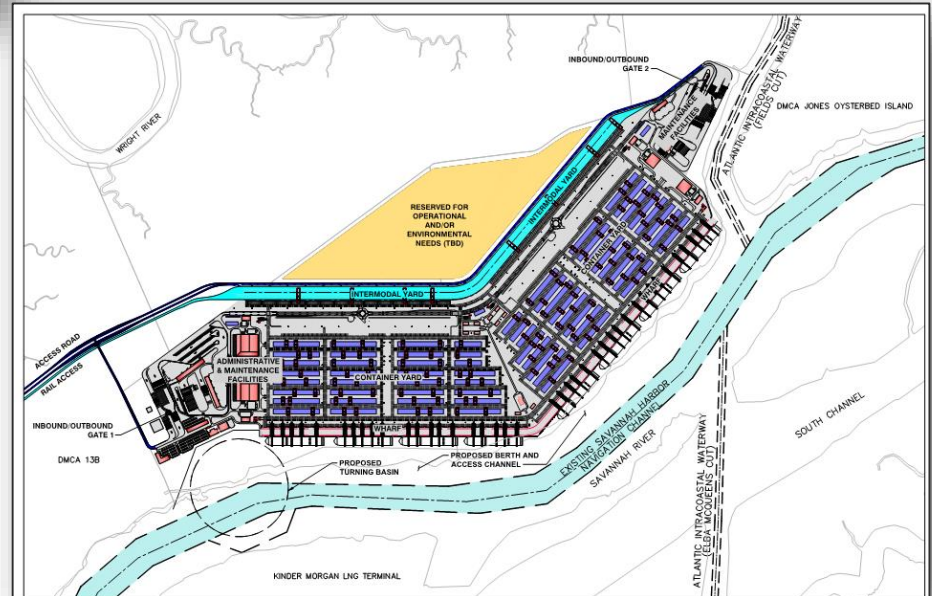
- Phase One JOT

Joint Venture Agreement Goals and Objectives



- JOT shall have handling capacity of 7 million TEU
- JOT shall accommodate draft and beam requirements of a fully loaded 14k – 20k TEU vessel without tidal restriction

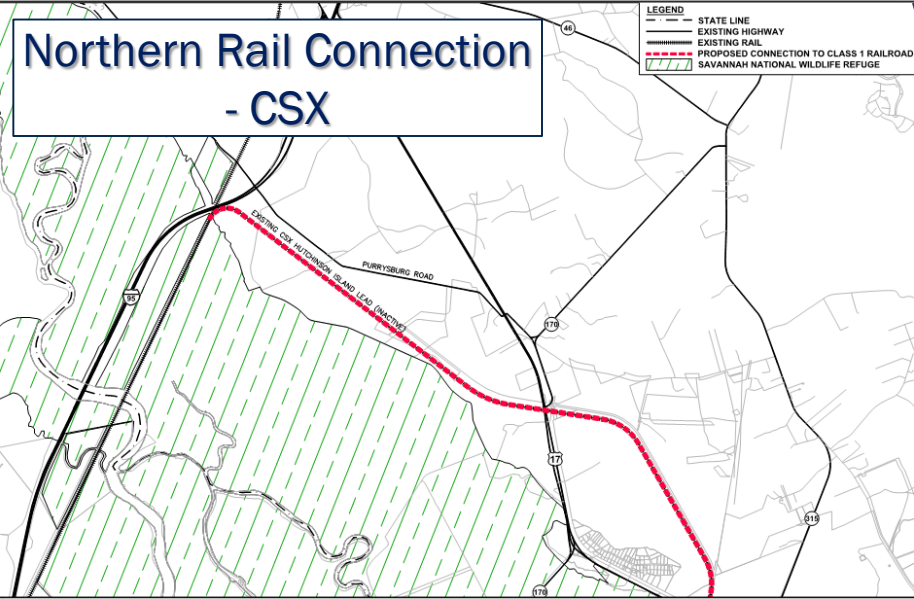
- Savannah River channel shall be modified as authorized in future WRDA to provide for 2 way traffic
- Dual rail access on terminal
- Sufficient highway access



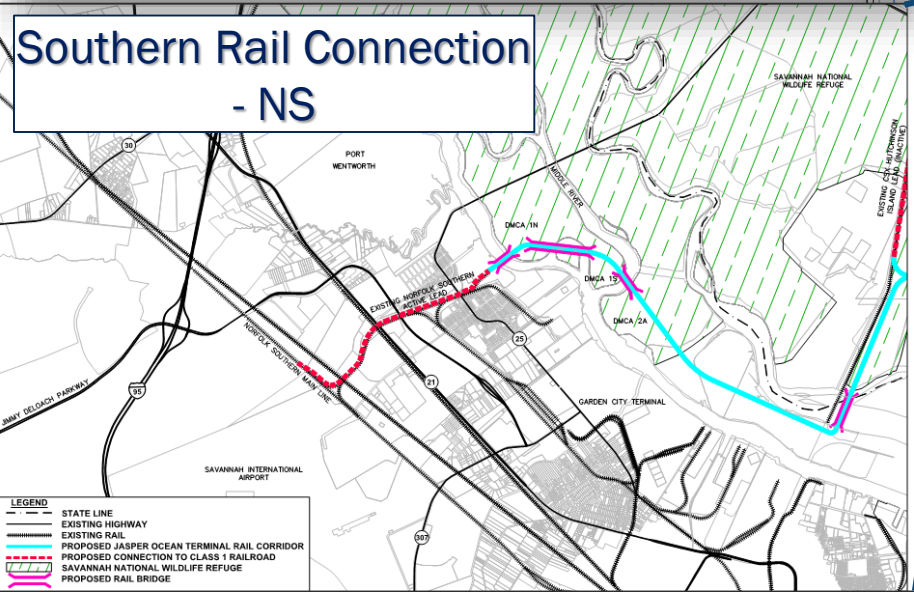
Landside Infrastructure Needs – Road and Rail

Northern Rail Connection - CSX

- LEGEND**
- STATE LINE
 - EXISTING HIGHWAY
 - EXISTING RAIL
 - PROPOSED CONNECTION TO CLASS 1 RAILROAD
 - SAVANNAH NATIONAL WILDLIFE REFUGE

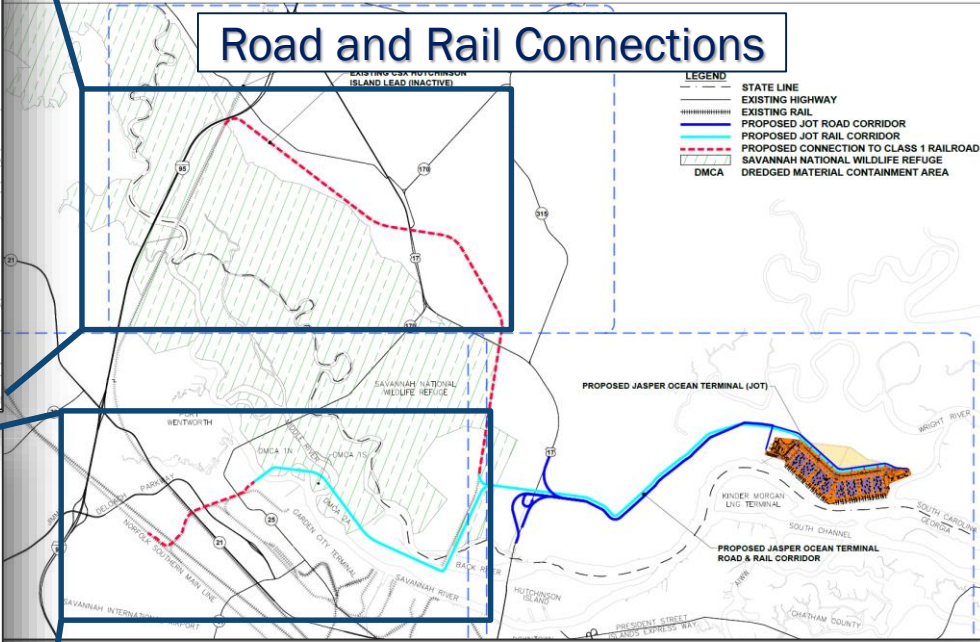


Southern Rail Connection - NS



Road and Rail Connections

- LEGEND**
- STATE LINE
 - EXISTING HIGHWAY
 - EXISTING RAIL
 - PROPOSED JOT ROAD CORRIDOR
 - PROPOSED JOT RAIL CORRIDOR
 - PROPOSED CONNECTION TO CLASS 1 RAILROAD
 - SAVANNAH NATIONAL WILDLIFE REFUGE
 - DMCA
 - DREDGED MATERIAL CONTAINMENT AREA



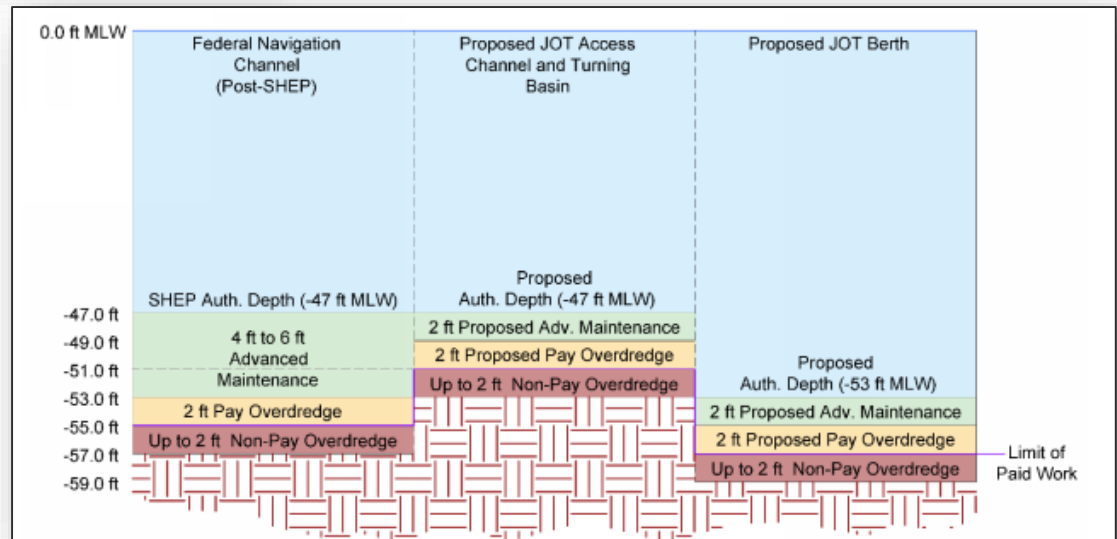
Atkins is preparing a traffic analysis during FY 19 to address any road network deficiencies

Waterway Infrastructure Needs



- JOT needs include additional dredging for:
 - Access channel
 - berth area
 - Turning basin

- The without project condition is the Post – SHEP channel conditions (e.g., -47ft MLW)



Waterway Infrastructure Needs

- Future conditions need to consider further deepening of the Federal Channel to accommodate larger ships
- Proposed dredging for JOT may be updated following analysis of sedimentation conditions for the Section 408 Study

