

# ENGINEERING THE FIRST COAST

*Promoting Engineering to Future Generations*



**NORTHEAST FLORIDA  
ENGINEERS WEEK**

**ENGINEERS WEEK:  
FEBRUARY 19 - 25**

**2023**

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# CITY OF JACKSONVILLE

## PROCLAMATION



**WHEREAS:** Since 1951, February has been recognized by The National Society of Professional Engineers as National Engineers Week (EWeek). February was first chosen to recognize EWeek to be concurrent with George Washington’s birthday, in acknowledgement and recognition of the first president, the nation’s first noteworthy engineer, and surveyor; and

**WHEREAS:** EWeek is a formal coalition of more than 70 engineering, education, and cultural societies, and over 50 corporations and government agencies. Dedicated to raising public awareness of engineers’ beneficial contributions to quality of life, EWeek advances recognition and appreciation among parents, teachers, and students of the importance of a technical education and a high level of math, science, and technology literacy, and motivates and influences youth to pursue engineering careers in order to develop a more diverse and vigorous engineering workforce; and

**WHEREAS:** Engineering professions play a pivotal role in providing citizens with numerous everyday necessities, including the design and construction of computer systems, water systems, mechanical systems, electrical transmission and distribution systems, industrial facilities, and complex medical devices; and

**WHEREAS:** Through their hard work, engineers tackle the technological challenges of our times by analyzing and researching sustainable energy sources, studying new techniques to upgrade and enhance safety, and expanding the nation’s worldwide communication potential; and

**WHEREAS:** Jacksonville continues to support and encourage engineers and relies heavily on their extensive knowledge and expertise to meet the needs of our future in Northeast Florida and throughout the world.

**NOW, THEREFORE, I, LENNY CURRY,** by virtue of the authority vested in me as mayor of Jacksonville, Florida, do hereby proclaim February 19 - 25, 2023 as

#### ENGINEER’S WEEK

in Jacksonville and encourage all citizens to acknowledge the extensive contributions engineers continue to make in our community.



IN WITNESS THEREOF, this 31st Day of Jan. in the year Two Thousand and Twenty-Three.

*Lenny Curry*  
 \_\_\_\_\_  
 MAYOR

CITY OF JACKSONVILLE, FLORIDA



## CO-CHAIRPERSON'S MESSAGE

**DANIELLE BLANCHARD, PE | VIA CONSULTING**

Happy Engineers Week! On behalf of the Northeast Florida E-Week Committee, I would like to thank our company sponsors and all other attendees for supporting our events this year. We greatly appreciate your participation and hope you enjoy the programs our Committee has put together. As we began emerging from "COVID times" and started planning for 2023, the Committee was inspired to bring more to NEFL, and so began the revival of our Scholarship Golf Tournament and the Boy Scout Engineering Merit Badge events. We are thrilled to bring these back to our community as they are a huge part of our initiative to promote Engineering to future generations. Connecting with young people and promoting our industry is the one of the most personally rewarding experiences for me, which is why E-Week is my favorite time of year! I feel so proud to share this passion with the Committee and our professional community. Thank you again for your continued support, and I wish you all a fun and successful week!

## CO-CHAIRPERSON'S MESSAGE

**NICOLE BOHACZYK, PE | USACE**

Welcome to the 2023 Engineers Week. As my first year as E-Week Co-Chair, I am excited to be involved in this event that recognizes and celebrates the engineering profession.

As an undergraduate student, I began as a Business Administration major. I was always drawn to math and science, but never considered engineering as a profession. It was not until my physics professor, Dr. Tulsian, encouraged me to explore engineering and challenge myself. Now, I couldn't see myself to anything different as a career. As a civil engineer, I take pride in being a civil servant. To design and build infrastructure, and improve my local community, is the greatest blessing. Similarly, other engineering disciplines challenge old ways of thinking and develop new ideas to improve the world around them and take us to places we've never been before. I'd like to personally thank the teachers, parents, students, and mentors that encourage and champion the next generation of engineers. Keep dreaming, growing, and engineering the world.



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# SR200 (A1A) CONVERSION

BY: JOEY WOOD, PROJECT ENGINEER, EISMAN & RUSSO, INC.

## PROJECT DESCRIPTION AND LOCATION

SR200 (A1A) from I-95 to W. of Still Quarters Road was a complete roadway reconstruction and widening from 4 lanes to 6 lanes including the addition of a new Diverging Diamond Interchange (DDI) under I-95 at SR200 (A1A) in Nassau County. This was the first DDI constructed in North Florida while maintaining high traffic volumes in a major hurricane evacuation corridor. The project added/improved 13.3 lane-miles from 4-lane rural to 6-lane divided urban including curb & gutter, bike lanes, and sidewalk. The project included raising the profile grade for 9.2 lane-miles of 10.5" thick concrete pavement, 4.1 lane-miles of asphalt pavement, ramp widening, 3 box culvert extensions, water, force main, reclaim, utility relocations, extensive drainage, signalization, ITS, LED high mast and underdeck lighting. The project also included extensive coordination with adjacent new construction and Utility Agency Owner (UAO) facility upgrades.

With the new DDI format, the stability of the roadway and lifespan will be much longer because congestion is greatly reduced. Westbound traffic queues are reduced from nearly 3,000 feet to only 110 feet while waiting to enter the interchange. This allows cars in total to use 1 million gallons of gas less than the traditional diamond interchange pattern.

## Owner

Florida Department of Transportation

## Designers

Jacobs (EOR/Roadway)

Kimley-Horn & Associates (Signalization)

Peters & Yaffee (Signing/Pavement Markings)

## CCEI

Eisman & Russo

## UNUSUAL FEATURES OF THE PROJECT

### Complexity of the Project

The project team had to maintain 2 through-lanes in each direction & one dedicated turn lane (5 lanes) in a space under I-95 that was designed for 3 lanes, while minimizing impacts to the traveling public. The overpass also has an existing center pier that greatly restricts MOT options. DDI's are designed to fit within the current diamond interchange configuration. However, converting an existing diamond interchange into a DDI was easier said than done. The most complex portion of this project was maintaining traffic while taking away half of the existing travel lanes & working around a center pier that cannot be touched. A second complex portion of this project was constructing concrete pavement at a higher-grade elevation than existing with intersections.

### Hurricanes

Hurricane Irma added 39 days to the contract with minimal contract price increase. The Contractor was well prepared and was able to utilize his personnel on various non-FDOT Emergency Debris Removal Contracts, thus minimizing the impacts during the declared emergency. Hurricane Dorian added 4 days to the contract but only a \$1,157.71 contract increase. Again, the Contractor was able to utilize his resources on non-FDOT operations.

### COVID-19

The project team took advantage of the Department's agreement to extend lane closure hours. Construction progressed to get ahead of schedule and minimize impacts and exposure to the traveling public.



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### RURAL AREA GROWTH DURING CONSTRUCTION AND COORDINATION WITH LOCAL AGENCIES AND DEVELOPERS

This project had extreme challenges with local growth occurring during construction. Developers were looking to capitalize on residential growth in NE Florida as quickly as possible. This further created opportunities for commercial growth and the need for local agencies to expand and upgrade their facilities.

#### Wildlight Development

A 3,000-acre phase 1 initiative included a new elementary school, 1,000+ new homes, and several multi-unit retail developments.

#### UF Health Facility

43K SF medical office building adjacent to SR200 began and completed construction during this project. This required coordination with UAOs, sidewalk connections, and entrances.

#### Publix

90K SF retail development along SR200 and the first grocery store in the Wildlight community. This required coordination with the developers and local agencies.

#### JEA Water & Sewer

JEA expanded side street facilities to accommodate new growth. This required the local agency to tie into the newly constructed facilities while SR200 was under construction. To minimize liability, the Contractor agreed to perform the tie-ins within FDOT R/W, especially since the Contractor installed the original facilities along SR200. The Contractor was able to perform this work at no additional cost or time to the Department.

#### JEA Water & Sewer

JEA needed to expand their FM facilities from either side of the Interstate. This work would have required complete HDD boring from either side of the Interstate limits if performed after the DDI was complete. The Contractor agreed to perform the extra work while the roadway was under construction. This allowed for open trench installation and major cost savings to the UAO. The Contractor was able to perform this work at no additional cost or time to the Department.

### INNOVATIVE CONSTRUCTION METHODS

**Concrete Paving Operation** 9.2 lane miles was paved utilizing stringless paving with GPS.

**SynchroGreen** takes a holistic approach when optimizing traffic signals by considering side-street and pedestrian traffic, in addition to mainline traffic. SynchroGreen allocates time to each vehicle and pedestrian phase in real time, without any additional modules. SynchroGreen optimizes signal timing and enhances safety features, while maximizing the use of available roadway capacity.

**SMO Laser Profile** With 9.2 lane miles of concrete pavement, the Contractor allowed SMO to collect research data by profiling the concrete pavement and comparing the results to the profilograph results.

Concrete Paving Subcontractor utilized the **Split Header Method** (Dummy Basket Assembly). Basket assembly was used as an end of the day pour / header when another pour was picked up within 7 days of production. This is used in lieu of drilling.

**Quality of Materials** 449 QC samples with 2 exceptions (99.6% success), including 186 QC concrete samples with all samples meeting strength specification. 200 comparison packages with 97.5% comparison success. 33 asphalt LOTS averaging 1.03 CPF. 9.2 lane miles of concrete pavement with 3 uncontrolled cracked slabs. Concrete pavement was produced with an on-site batch plant.

**Cost Savings Initiative** One Cost Saving Initiative (CSI) was proposed and approved by FDOT. Because the project was complete reconstruction, the Contractor incorporated the existing limerock into the roadway system as either stabilization for the subgrade or as the roadway base. The total savings to the Department was over \$55,000.



### CHALLENGES/SUCCESES

**Scheduling Challenges** Working with a major development to incorporate three new entrances from SR200 with one of them being signalized.

**Public Involvement/Support** This was the first DDI in Northeast Florida, so educating the community occurred frequently during the first few years. The Contractor continuously provided construction progress updates and planned MOT to FDOT and CEI attended regular social clubs and events to present the final configuration of the corridor and educate regarding the functionality and safety enhancements of a DDI.

**Educational Opportunities** The Contractor graduated 7 OJT Trainees. In addition, the contractor allowed FDOT PE Trainees and FDOT Interns to observe numerous construction operations to promote exposure and hands-on experience for future construction professionals.

**Minimization of Negative Impacts** In order to minimize impacts to the traveling public, (1) Lane closures were only allowed at night or on the weekends, (2) traffic shifts were performed at night or during extreme non-peak hours, (3) the implementation of the DDI occurred on a Saturday night into Sunday morning. This was to introduce the new traffic pattern to the traveling public on the least traveled day of the week.

**Technical/Engineering Challenges Overcome** MOT throughout the corridor while raising the profile grade of SR200, widening from 4-lane to 6-lane, constructing a concrete pavement intersection at a heavily traveled signalized crossing that included a new major development and an elementary school to the north and the County Courthouse, sheriff's office, and satellite college campus to the south. Temporary closures and detours had to be planned well in advance and could not conflict with school testing schedules or bus arrival/departure times.

**Safety Improvements** Adding a DDI at the intersection of I-95 and SR200. Added one signalized intersection at the entrance to a major private development. Completing a fiber optic backbone along SR200 allowed the incorporation of SynchroGreen signal controller software that can communicate with other signalized intersections along SR200 and adjust signal timing in real-time based on current demands.

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# FDOT CONCRETE TEST TRACK

BY JAMES GREENE, PE, FDOT, TURNPIKE PAVEMENT MATERIALS ENGINEER

## PROJECT OVERVIEW

As part of the Florida Department of Transportation's commitment to economical and sustainable pavements, the Department has recently completed construction of a state-of-the-art Concrete Test Road on US-301 in Clay County. The test road is planned to open in early 2023 and consists of nearly 2.5 miles of concrete pavement that includes 52 test sections. The Concrete Test Road will provide a comprehensive in-service performance assessment of emerging concrete pavement technologies and innovative concepts while giving a full consideration to the interaction of factors such as traffic loading, design features, materials properties, construction practices, and environmental conditions. Ultimately, findings from the test road will be incorporated into future FDOT concrete pavement practices that will result in more cost-effective and longer-lasting pavements.



## PROJECT SCOPE AND OBJECTIVES

A committee consisting of members from the Department, industry, and academia developed the primary experiments that will be initially investigated. While several materials and design concepts were initially discussed, the committee recommend three primary experiments that will provide insight into FDOT's current concrete pavement design practices as well as generate data that will be used to locally calibrate the existing mechanistic-empirical design procedure. These main experiments are described below.

1. Structural Experiment: The Structural Experiment consists of 20 test sections (see figure below). The primary purpose of this experiment is to investigate different concrete thicknesses and base types. Concrete thickness range from 6 inches to 10 inches and five different base configurations were utilized. In addition, the use of reclaimed asphalt pavement (RAP) as a concrete pavement aggregate source will be studied.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length (ft)	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Joint Spacing (ft)	15	15	15	15	13	12	13	15	15	13	13	13	13	15	15	15	15	15	15	15
Edge Condition	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

2. Drainage Experiment: The Drainage Experiment includes 16 test sections constructed with and without edge drains (see figure to the right). Concrete pavement joints were also left unsealed in some sections to study the effect of water infiltration through joints. Two concrete pavement thicknesses were used while keeping the base type constant. The primary purpose of this experiment is to study the effectiveness of edge drains.
3. Calibration Experiment: The Calibration Experiment consists of 16 test sections (see figure to the right) that will be used to locally calibrate the fatigue cracking model more accurately within the mechanistic-empirical design guide developed by the American Association of Highway and Transportation Officials (AASHTO). Concrete pavement joints were sawed at two different lengths and the application rate of the curing compound was modified to ensure crack initiation at different ages.

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Length (ft)	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Joint Spacing (ft)	15	15	15	15	13	13	13	13	13	13	13	13	13	15	15	15
Edge Condition	Y	N	Y	Y	N	N	N	N	N	Y	N	N	N	Y	Y	N
Joint Sealed	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Length (ft)	234	234	238	238	234	238	234	238	234	238	238	234	234	238	234	238
Joint Spacing (ft)	13	13	17	17	13	17	13	17	13	17	17	13	13	17	13	17
Set Gradient	Low	High	Low	High	High	High	Low	Low	High	Low	High	Low	High	Low	Low	High

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In addition to the experiments listed above, a new surface texture technique combining longitudinal diamond grinding and grooving known as the Next Generation Concrete Surface (see photo below) was placed in parts of the passing lane. Longitudinal diamond grinding, the standard surface texturing method on FDOT concrete pavements, was performed on the entire travel lane.



#### PERFORMANCE MEASUREMENTS

The State Materials Office in Gainesville will monitor the performance of the test road. Two pavement performance surveys are planned each year; one in the summer and one in the winter. Additional surveys will be performed following extreme events such as hurricanes and tropical storms. At a minimum, pavement performance measurements will include the following:

1. Structural capacity and load transfer capability of joints
2. Surface distresses (e.g., number and severity of cracks)
3. Pavement smoothness
4. Joint faulting
5. Surface friction and texture

Two slabs within each of the 52 test sections were instrumented with strain gauges and thermocouples to measure the pavement response to traffic loads and daily temperature cycles. The photo below shows instrumentation clusters installed prior to concrete paving. Moisture sensors were placed at strategic locations within the Drainage Experiment to understand how water moves through a pavement system. Edge drains within the Drainage Experiment have also been instrumented to measure the volume of water being drained from the pavement system. Monitoring wells throughout the project will also be used to track the water table and two weather stations will record rainfall and temperature. Finally, a Weigh-in-Motion system installed south of the experimental sections will characterize traffic traveling through the test road.

#### WHAT TO EXPECT

While traffic will not shift to the Concrete Test Road until February or March 2023, data collection has already started. A research level material sampling plan was conducted during construction providing in-depth knowledge of material properties. Concrete strain and temperature measurements began as concrete was placed. Nondestructive pavement performance measurements have been made to characterize the initial structural capacity, smoothness, and friction. These measurements have already provided insight into the early performance of concrete pavements and will serve as a baseline for upcoming performance comparisons. Future specifications and pavement design methodologies will be revised based on findings from these experimental sections. The Concrete Test Road is expected to become a permanent component of FDOT's research program and experimental sections will be replaced with other new and innovative materials and designs emerge.



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# A SYNERGY OF GEOTECHNICAL FOUNDATION SOLUTIONS AT THE BOLLES SCHOOL

BY: VENKATA MUPPANA, MENARD USA, DESIGN ENGINEER

While visiting The Bolles School campus at San Jose Boulevard in Jacksonville, Florida, one may immediately observe the magnificent school campus and a picturesque view of the gentle flowing St. Johns River. The school features a synergy of foundation solutions, not visible to the naked eye, that were recently installed to support the construction of the new Center for Innovation Building, located in the southwestern portion of the school campus, fronting the St. Johns River.

The soils at the site of the new Center for Innovation Building were reported to consist predominantly of loose to very loose sands extending to depths of approximately 65 feet below the existing

ground surface followed by the Florida limestone. The existing soil profile at the site would be subjected to excessive settlements to the proposed school building if supported on conventional shallow foundations without any ground improvement. To limit settlements to allowable tolerances, Menard USA, a specialty design-build ground improvement contractor, brought on by the project general contractor – Stellar, designed and installed a system of Controlled Modulus Columns (CMC)® rigid inclusions at the site.

CMCs are specially designed cementitious lean mix elements installed using a displacement auger. CMCs work together with the surrounding soil to provide a stiff composite ground mass and help limit settlement of the foundations by transferring some load to the deeper competent layers below. CMC elements for the Bolles School were extended from the bottom of the foundations to the competent limestone layer. CMCs were chosen over other traditional methods of ground improvement such as vibro-replacement as they produce low vibrations during installation and limit noise and disturbance to the adjacent school facilities.

Another significant challenge to construction was the steep slope along the western portion of the site. The rig that was being used to install the CMCs was not able to safely access the locations adjacent to the slope. Future site development plans included the construction of a retaining wall to support the construction of building foundations along the slope. However, the wall construction was to follow the installation of the CMCs. Due to construction schedule constraints, Earth Tech, a Menard Company acquired in April 2022, was brought on board to install Driven Ductile Iron Pipe (DIP) elements adjacent to the steep slope. The DIP, which are frequently used as a deep foundation element were in this case specifically designed to serve as a type of rigid inclusion. Installed using a conventional excavator, this technique provides great flexibility with installation and allowed for safe access along the slope prior to the installation of the retaining wall. Similar to CMCs, they also produce limited spoils and vibrations during installation.

By creatively incorporating DIP elements into the rigid inclusion design, Menard and Earth Tech were able to complete the ground improvement construction by minimizing impact to regular school operations and minimizing significant delays and modifications to the construction schedule. This project is a great example of good team effort by all parties to successfully complete the job.

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Have an upcoming project with challenging soil conditions or have questions about ground improvement? Contact us today!



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# USACE, JAXPORT MARK MILESTONE: HARBOR DEEPENING PROJECT COMPLETE

BY MARK RANKIN, U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT

Federal, state, and local leaders joined U.S. Army Corps of Engineers, Jacksonville District and the JAXPORT team May 2022 to celebrate the long-awaited completion of the Jacksonville Harbor Deepening project through JAXPORT's Blount Island terminal.

The project deepened the federal shipping channel from 40 to 47 feet, providing the channel depth needed for larger container ships to call on City of Jacksonville, Florida - Government from destinations worldwide. A deeper harbor also allows ships currently calling Jacksonville to carry more cargo on board.

"This is a great ceremony, and a great opportunity to recognize all the efforts of the USACE, JAXPORT, federal, state and local leaders that has gone on for many, many years," said U. S. Army Corps of Engineers (USACE) Jacksonville District Commander Col. James L. Booth. "As a result of this team effort, we expect Jacksonville harbor will grow and prosper as a preferred destination and point of departure for the largest, most cost-effective commercial fleets of the mid-21st century."

Construction for the project began in 2018 and after many studies, independent review, public input and full regulatory approval, Booth said this is the moment USACE and JAXPORT leaders had been waiting for almost two decades.

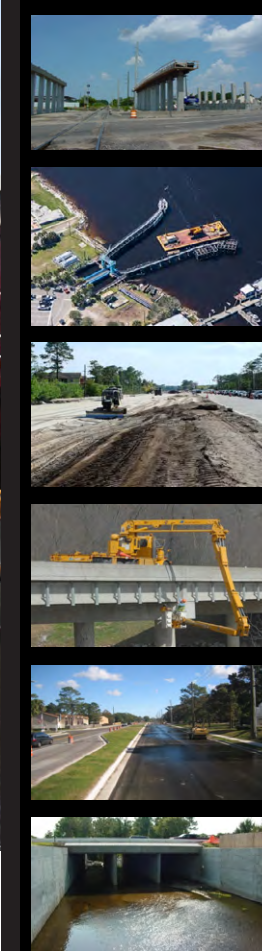


A clamshell dredger removes a batch from the river bed during a ribbon cutting ceremony that marked the completion of the Harbor Deepening Project at the Blount Island Marine Terminal Monday, May 23, 2022 at JaxPort in Jacksonville, FL. (USACE photo by Mark Rankin)



A clamshell dredger removes a batch from the river bed during a ribbon cutting ceremony that marked the completion of the Harbor Deepening Project at the Blount Island Marine Terminal Monday, May 23, 2022 at JaxPort in Jacksonville, FL. (USACE photo by Mark Rankin)

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### ABOUT US

Gibbs Group, Inc. is an engineering and construction services firm headquartered in Jacksonville, Florida. With a professional registration through the National Council of Engineers Examiners and Surveyors (NCEES), our capabilities and professional licensure(s) provides us the ability to provide professional engineering services across the United States. Having a unique blend of project experience, in both the public and private sectors, Gibbs Group, Inc. specializes in various aspects of construction engineering and inspection (CEI); civil and structural engineering; construction material testing and a variety of field and laboratory engineering services. Our professional creed is "To Provide Professional Quality Solutions for Today's Expanding Environment."

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- Sustainability Consulting
- Maintenance of Traffic

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To accompany our engineering expertise, The Gibbs Group holds several business certifications that include: Minority Business Enterprise (MBE), Disadvantaged Business Enterprise (DBE) and Jacksonville Small & Emerging Business (JSEB). Additionally, we are certified thru the Florida Department of Transportation in the areas of Conventional Bridge Inspections (Category 5.1), Bridge Load Ratings (Category 5.4) Roadway Construction Engineering and Inspection (Category 10.1) and Construction Materials Inspection (Category 10.3).

The number of federal, state and local officials here speaks to the magnitude of this project and its significance to our community," said JAXPORT CEO Eric Green. "As a Jacksonville native, one of my greatest joys, both professionally and personally is seeing this project come to fruition."

The welcomed project has now deepened the federal shipping channel of the St. Johns River from Mayport Naval Station to JAXPORT's Blount Island Marine Terminal. The additional seven feet provides the channel depth needed for JAXPORT to accommodate larger container cargo ships and allows existing ships calling Jacksonville to carry more cargo on board.

In coordination with deepening, JAXPORT completed more than \$100 million in berth enhancements this month to enable the SSA Jacksonville Container Terminal (JCT) at Blount Island to simultaneously accommodate two post-Panamax container ships. In early 2023, terminal operator SSA Atlantic will welcome three new eco-friendly 100-gauge container cranes, bringing the JCT's total to six.

"Anchored by harbor deepening, well over half a billion dollars in infrastructure improvements have been recently completed or are currently underway to improve our container capabilities at Blount Island," said JAXPORT CEO Eric Green. "With the support of our federal, state, and local partners, JAXPORT is open for business and ready to serve the needs of our customers while creating local jobs here in our community."

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"This project solidifies Northeast Florida as a top destination for worldwide commerce and shipping, with the ability to accommodate larger ships," said Congresswoman Kat Cammack. "Florida, with her 14 ports around the state, continues to lead the way for maritime transportation and I'm grateful for the hard work and investment in this project, which will only create more opportunities to strengthen our supply chain and make the Sunshine State a top gateway to domestic and international destinations."

The Jacksonville Harbor Deepening Project creates or protects 15,000 jobs throughout the supply chain, including trucking, warehousing, and distribution. The initial feasibility study for the project began in 2005, and construction started in February 2018.

Deepening through Blount Island was completed three years ahead of the original project schedule. The total funding to date is \$420 million funded through a public-private partnership between the federal government, State of Florida, City of Jacksonville, JAXPORT, and SSA Atlantic.

"I'm very happy and excited about this project," said USACE Jacksonville District Senior Project Manager, Jason Harrah from the Water Resources Branch. There has been a lot of Corps employees working on this project since 2005 with the feasibility agreement and we are here today to celebrate the completion."

The Jacksonville Harbor Deepening Project is a 13-mile federally authorized project. The current funding model covered the completion of the first 11 miles. The final two miles are authorized and under review.

JAXPORT is Florida's largest container port and one of the nation's top vehicle-handling ports. Jacksonville offers two-way ship traffic, no berth or terminal congestion, and same-day access to 98 million consumers.

Cargo activity through Jacksonville's seaport supports 138,000 jobs in Florida and \$31 billion in annual economic impact for the region and state. The port continues to make infrastructure improvements in support of JAXPORT's mission to create jobs and economic opportunity for the citizens of Northeast Florida.

"As with all Corps projects, this mammoth civil works effort was undertaken to upgrade the nation's waterways and ports, to strengthen supply chains and promote economic growth while protecting the environment," said Booth.

(The public can obtain news, updates and information from the U.S. Army Corps of Engineers Jacksonville District on the district's website at [www.saj.usace.army.mil](http://www.saj.usace.army.mil), on Facebook at [www.facebook.com/JacksonvilleDistrict](http://www.facebook.com/JacksonvilleDistrict) and on Twitter at [www.twitter.com/JaxStrong](http://www.twitter.com/JaxStrong).

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U.S. Army Corps of Engineers Jacksonville District Commander Col. James L. Booth thanks USACE team members who helped make the project possible during a ribbon cutting ceremony that marked the completion of the Harbor Deepening Project through Blount Island Marine Terminal Monday, May 23, 2022 at JaxPort in Jacksonville, FL. (USACE photo by Mark Rankin)

# 2023 EVENTS

<p>MONDAY <b>02.13</b></p>	<p><b>SCHOLARSHIP GOLF TOURNAMENT</b>  <b>DEERCREEK GOLF &amp; COUNTRY CLUB</b>          10:30 AM - 5:30 PM, 1:00 PM Tee-Off</p>
<p>FRIDAY <b>02.17</b></p>	<p><b>KICKOFF SCHOLARSHIP LUNCHEON</b>  <b>UNF UNIVERSITY CENTER</b>          11:00 AM - 2:00 PM</p>
<p>TUESDAY <b>02.21</b></p>	<p><b>HAPPY HOUR SOCIAL</b>  <b>THE MUSE BOURBON</b>          5:30 PM - Until</p>
<p>FRIDAY <b>02.24</b></p>	<p><b>FES MATHCOUNTS</b>  <b>UNF UNIVERSITY CENTER</b>          All Day</p>
<p>SATURDAY <b>02.25</b></p>	<p><b>AWARDS BANQUET</b>  <b>SAN JOSE COUNTRY CLUB</b>          5:30 PM - Until</p>



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