

# BRANDON ROAD INTERBASIN PROJECT (BRIP)

**GREAT LAKES COMMISSION SEMI ANNUAL  
MEETING, Chicago, IL**

Briefer: Scott D. Whitney, Chief of Project  
Management Branch

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**US Army Corps  
of Engineers®**



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# BRANDON ROAD INTERBASIN PROJECT

## BACKGROUND



**PROJECT GOAL:** Ecosystem Restoration Project to prevent movement of Aquatic Nuisance Species (ANS) to the greatest extent possible from Illinois Waterway (IWW) to Great Lakes, while minimizing impact to Navigation.

**PROJECT SCOPE:** Implement and execute innovative series of deterrents that together minimize risk of ANS movement.

**NON-FEDERAL SPONSOR:** State of Illinois (State of MI with separate funding agreement between IL & MI)

### KEY EVENT TIMELINE:

- MAY 2019 Report of the Chief of Engineers submitted to Congress, Total Project Certified Cost \$1,014,696,000, 65% cont.
- DEC 2020 WRDA (Sections 401 & 402) Authorizes project and changes to 80% Federal/20% Non-Federal for Construction
- DEC 2020 Design Agreement Signed for \$28.84M Preconstruction Engineering and Design (PED) 65% Fed/35% NonFed
- JAN 2022 Bipartisan Infrastructure Law (BIL) provides Const. New Start Authorization and \$225,838,000 CG Appropriation
- DEC 2022 WRDA (Section 8337) provides cost share change to 90% Federal/10% Non-Federal for Construction
- DEC 2022 DRAFT PPA delivered by HQUSACE to initiate negotiations
- JAN 2023 Amendment to Design Agreement - Accelerated Funds and \$48.8M additional Federal CG funds appropriated
- FEB 2023 MI Governor Whitmer budget request for \$64M and IL Governor Pritzker budget request for \$50M
- MAR 2023 New Total Project Certified Cost \$1,146,093,000 with 52% contingency
- JUN 2023 Increment I-A 95% Plans and Specifications

### CONSTRUCTION START CHECKLIST

- ✓ Project new start received from Congress
- ✓ Federal Appropriations
- Project Partnership Agreement Signed
- Design Completed
- Receipt of Non-Federal Funds
- Necessary permits and Real Estate Acquired



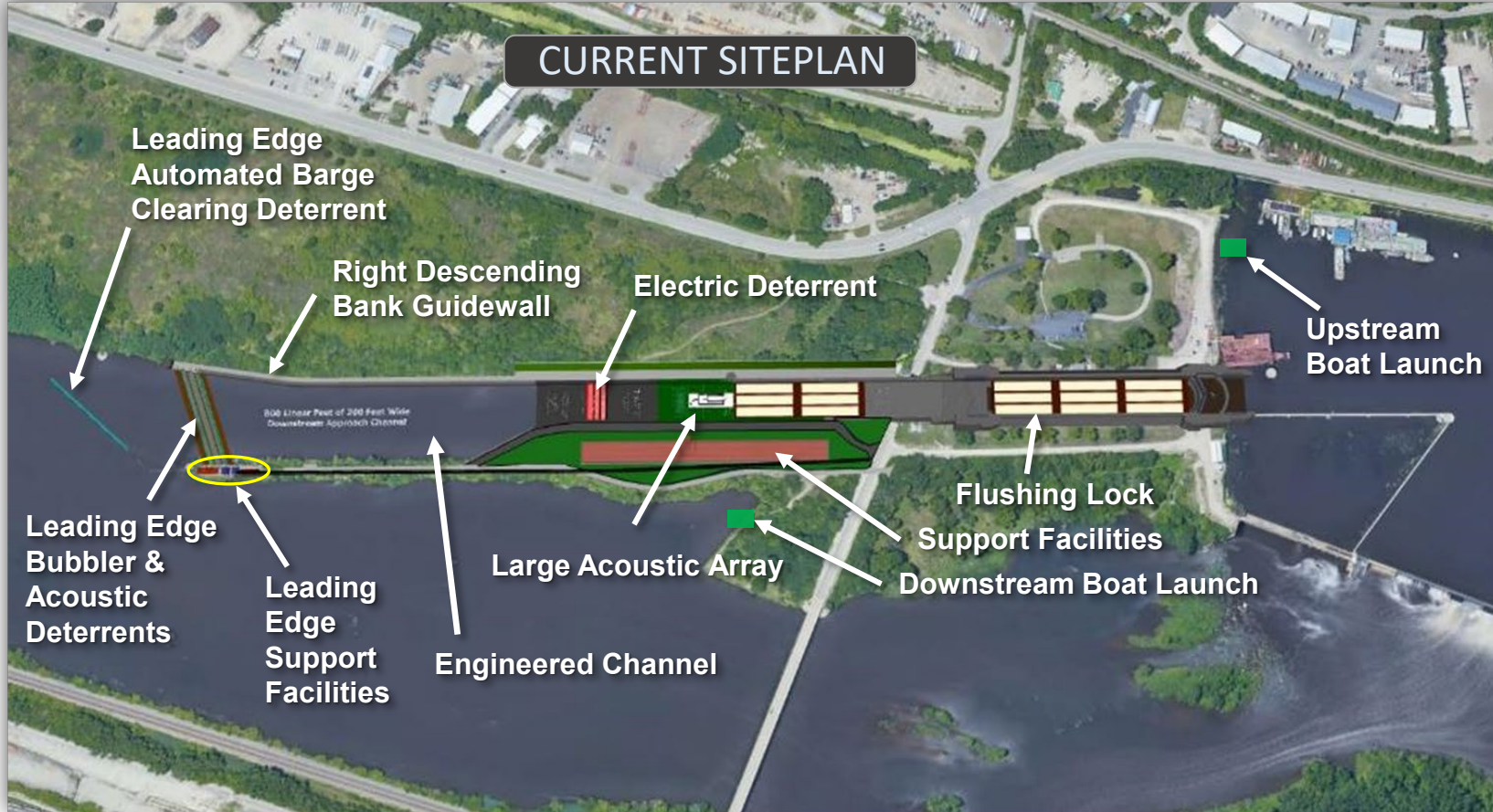
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## SITE LAYOUT AND CONSTRUCTION INCREMENTS



### PROPOSED INCREMENTS

\*Subject to change pending completion of design and execution of PPA.

#### INCREMENT I-A

- Automated Barge Clearing (ABC) Deterrent
- Leading Edge Bubble Deterrent
- Leading Edge Acoustic Deterrent Array
- Leading Edge Support Facilities
- Upstream Boat Launch

#### INCREMENT I-B

- Site Prep
- Channel Rock Excavation

#### INCREMENT II

- Electric Deterrent
- Wide Acoustic Deterrent Array
- Complete Control Building
- RDB Wall Connect to Lower Guidewall
- Flushing Lock
- Downstream Boat Launch

#### INCREMENT III

- Finish Engineered Channel

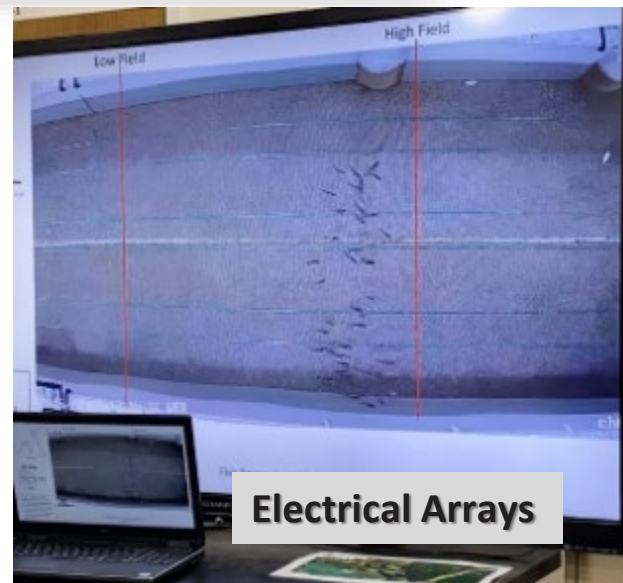
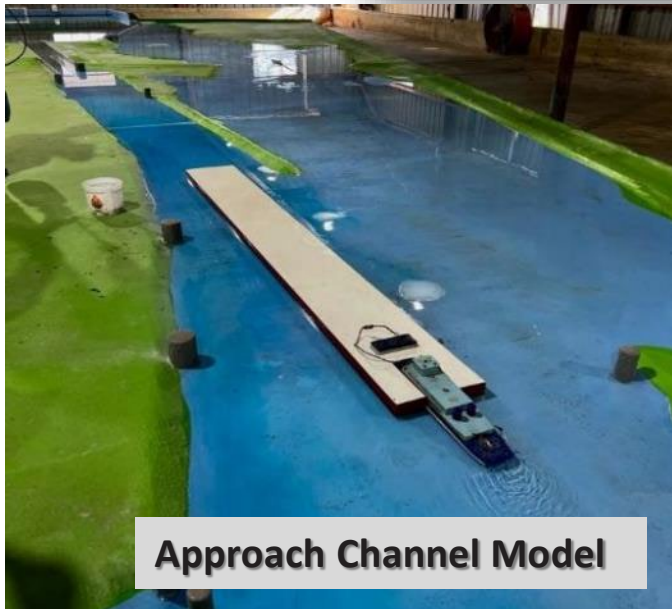
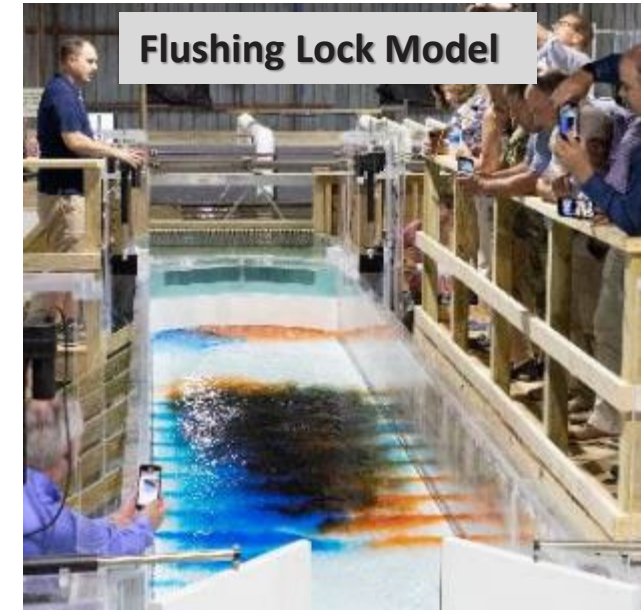


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## MODELING AND TESTING

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## CHARRETTE

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**Value Based Design Charrettes:** collaborative team of technical experts critically evaluating and innovating all relevant project features and considerations.

- ✓ **Charrette #1 – Focus on Overall Project**  
Proposals to reduce height, width, length of engineered channel
- ✓ **Charrette #2 – Focus on Engineered Channel**  
Proposals for channel layout, materials, alternative construction methods of the channel
- ✓ **Charrette #3 – Focus on Flushing Lock**  
Refinement of feasibility concept remote gate operation, flushing valve alternatives
- ✓ **Charrette #4 – Focus on Deterrents**  
Refinement of feasibility concept layout for all deterrents (electric, acoustic, and bubblers)
- ✓ **Charrette #5 – Support Facilities and Site Plan**  
Support building(s), equipment, site operations, logistics, utilities, backup power, future considerations

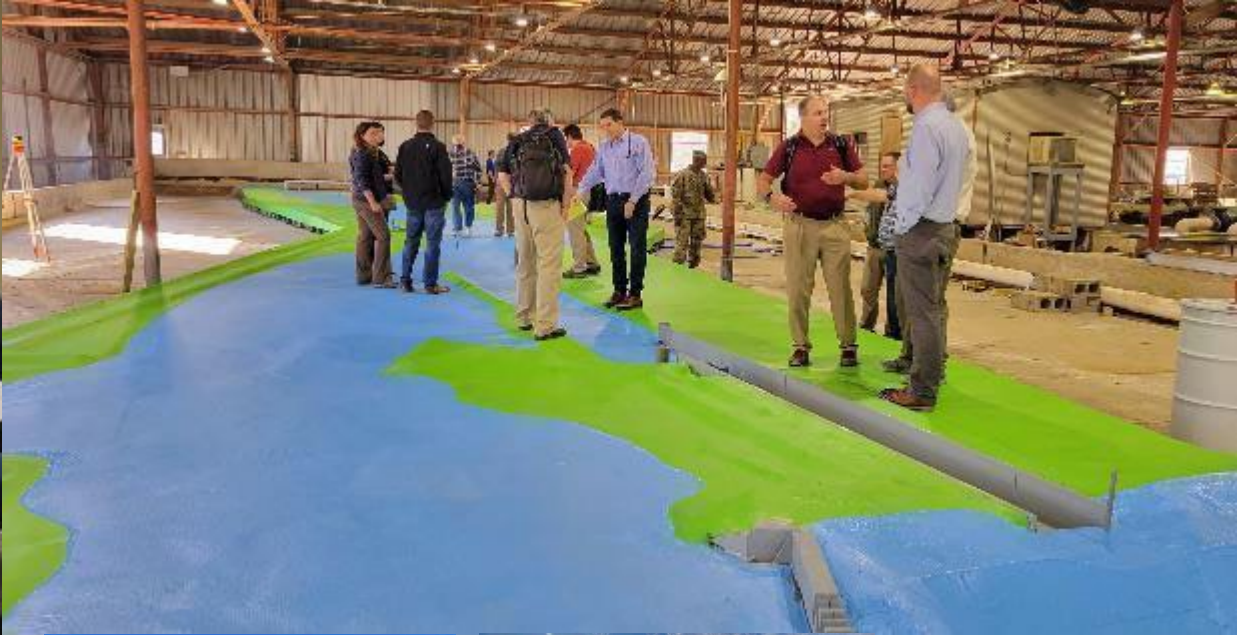




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# BRANDON ROAD INTERBASIN PROJECT NAVIGATION & INDUSTRY WORKSHOPS

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## CERTIFIED TOTAL PROJECT COST ESTIMATE



Total Project Cost Summary (TPCS)	BRIP Certified Total Cost Estimates	
	Feasibility (MAR 2019)	10% Design (MAR 2023)
Total First Cost	\$858,047,000	\$1,008,332,000
Average Contingency (%)	65%	52%
Total Project Cost	\$1,014,696,000	\$1,146,093,000
Federal Cost (90%)	\$913,226,400	\$1,031,484,000
Non-Federal Cost (10%)	\$101,469,600	\$114,609,000

### TOTAL PROJECT COST SUMMARY COMPARISON

2019 (MARCH)	2023 (MARCH)
Class 4 Cost Estimate	Class 3 Cost Estimate
2000' x 200' Engineered Channel	1200' x 110' Engineered Channel
Engineered Channel Constructed in the Wet	Engineered Channel Constructed in the Dry
Control Buildings and Staging on Right Descending Bank (RDB)	Control Buildings and Staging on Left Descending Bank (LDB).
RE Acquisition on RDB 17.6 Acres, w/ high HTRW risk	RE Acquisition on RDB 3.6 acres, w/ lower HTRW risk based on smaller area.
Channel rock excavation higher quantity with majority hauled offsite	Channel rock excavation smaller quantity with majority used to build out LDB
Schedule start construction in 2022, complete in 6 to 8 years	Schedule start construction in 2024, complete in 6 to 8 years
Schedule called for Nav restrictions and closures through full construction period (Significantly greater cumulative Nav Impacts)	Schedule incorporates periodic Nav restrictions and five 45-day Nav Closures to remove rock and construct in dry (Significantly less cumulative Nav Impacts)
Large Acoustic Array 220' x 200' area	Large Acoustic Array 220' x 110' area
Electric Deterrent 220' wide	Electric Deterrent 110' wide
Leading edge deterrents acoustic and bubble curtain	Leading edge deterrents automated barge clearing, acoustic and bubble curtain



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## COMMUNICATION “NETWORK”

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The Brandon Road Interbasin Project is a long-term, complex, interagency project requiring extensive internal and external communications with partners, stakeholders and the public. It includes highly supported and opposed activities and large monetary expenditures which are likely to draw attention by the media and public audiences.

### Communication objectives:

- Bring about awareness and greater understanding of the project and its anticipated timeline.
- Ensure all partners, stakeholders and interested members of the public are kept up-to-date on project progression.
- Demonstrate progress and continued cooperation between USACE and the sponsor.

Communications tools being used to meet these objectives include: the project website, quarterly update newsletters webinars, fact sheets, and talking points.





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## FACILITATED PARTNERING

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**BRIP FP #5: Starved Rock, Illinois September 2023**



**BRIP FP #4: Rock Island, Illinois February 2023**



**BRIP FP #1: Moline, IL, April 2021**



**BRIP FP #2: Springfield, IL, November 2021**



**BRIP FP #3: Vicksburg, MS, June 2022**



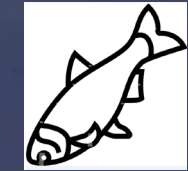
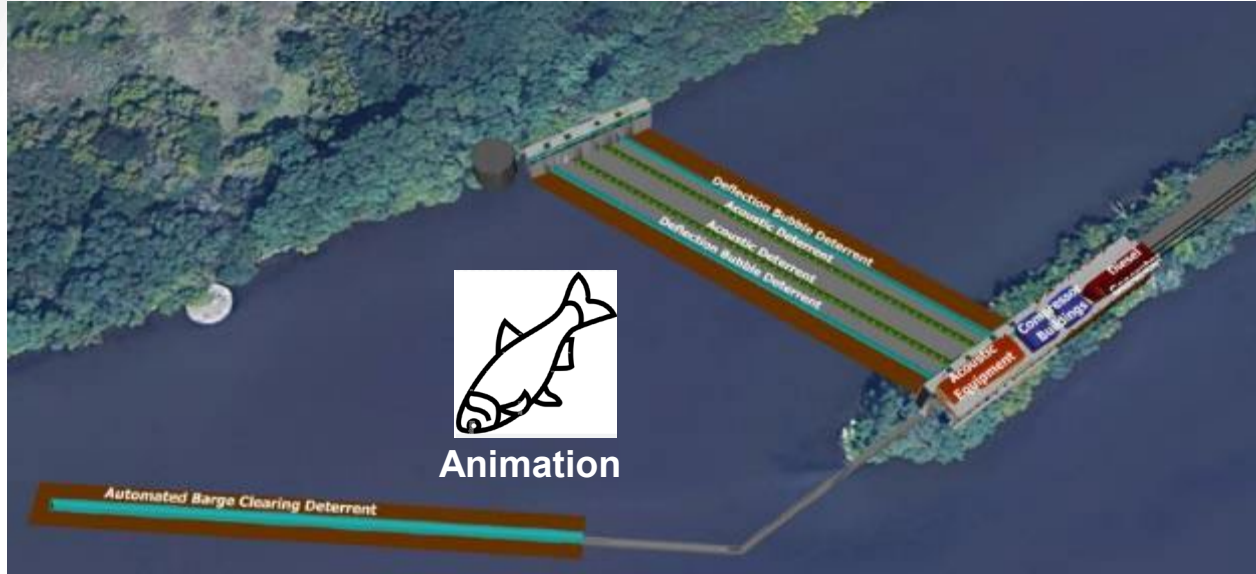


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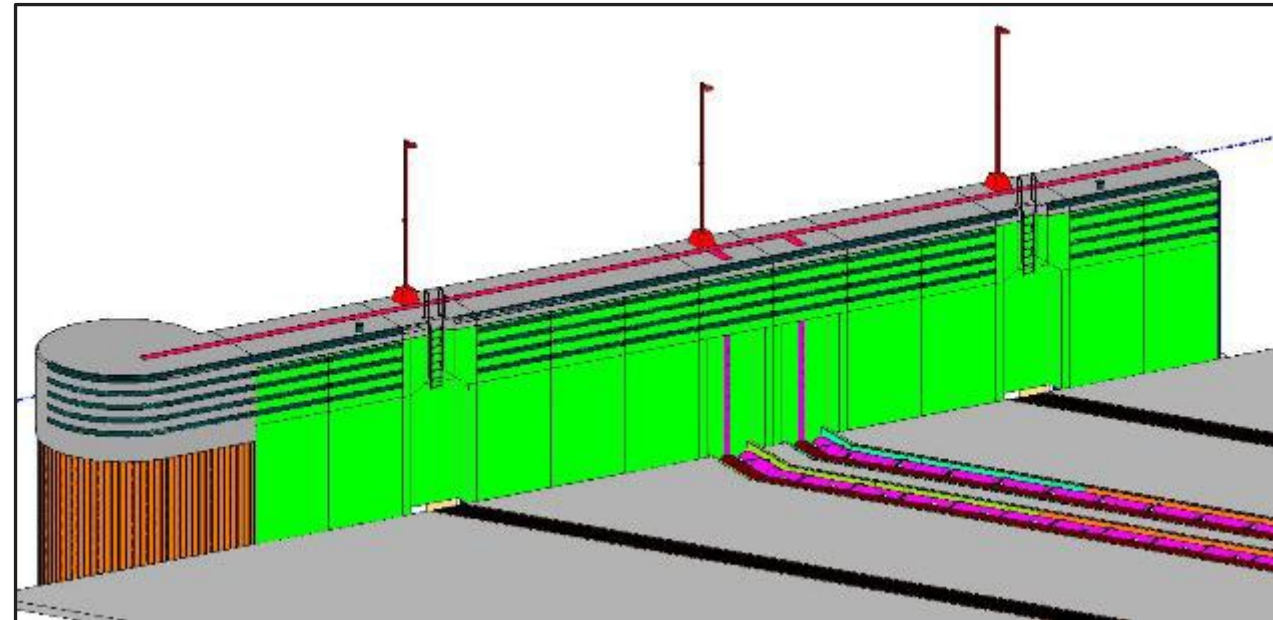
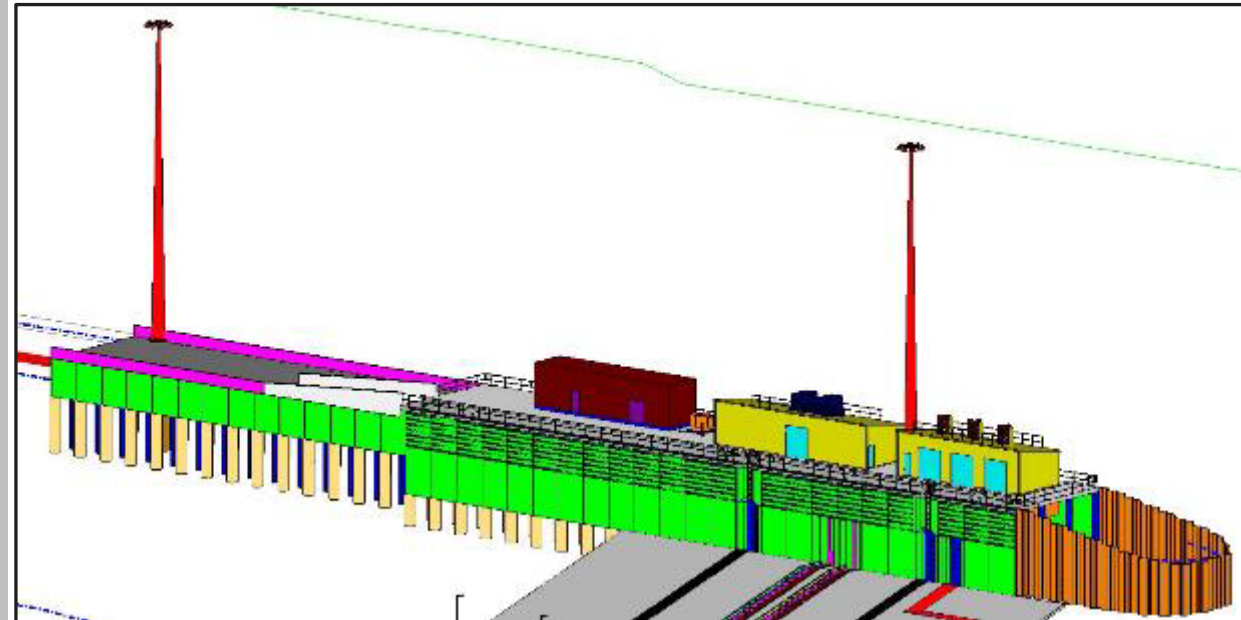
## INCREMENT I-A DESIGN STATUS

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Animation

- All 3-D model designs completed on 5May
- CAD team converting to Plan sheets
- ERDC Bubbler grating lab tests
- Site Plan Strategic Layout
- Installation Strategies (in the wet)
- Const. and Commissioning Schedule
- 95% Design complete by 23JUN23
- 100% Design and BCOES by 30SEP23



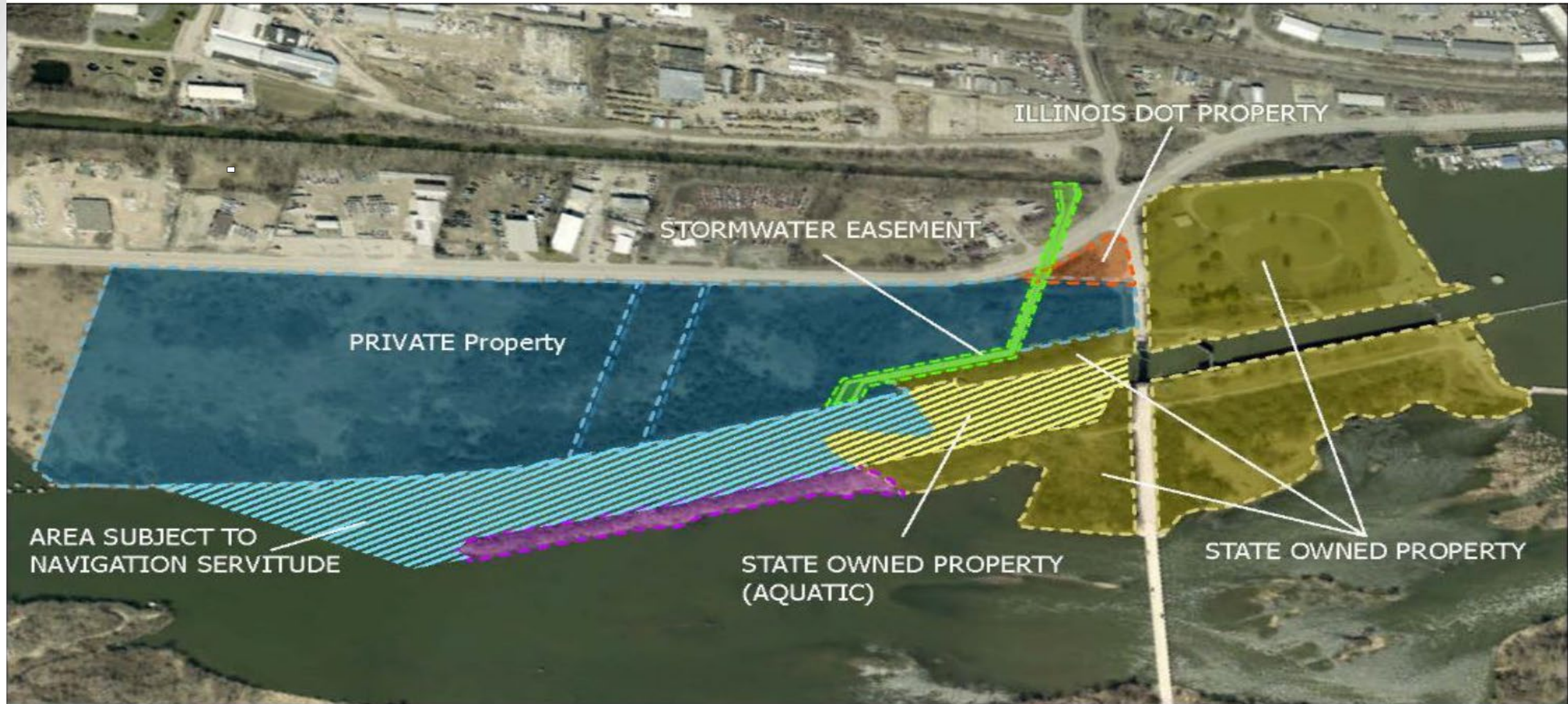


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## MOSAIC OF PROPERTY RIGHTS

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## SCHEDULE AND NEXT STEPS

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- PPA Negotiations Ongoing: 8 June PPA Negotiation meeting, Springfield, IL. Key issues: Real Estate/HTRW and State Water Permits.
- \$1.5M Sponsors Accelerated funds applied in late Feb 2023 will achieve 95% Inc 1-A Design Submittal by June 23.
- \$1.1M Sponsors Accelerated Funds applied in late June 2023 will progress Increment 1-A from 95%--->100% by 30 Sept. + Scoping/Market Research on contracting strategies for I-B (channel rock excavation) and II (engineered channel and flushing lock).
- Industry Days and Navigation Industry Coordination – Innovations & Scheduling to minimize Nav impacts during construction.
- Communication: Quarterly Updates & <https://www.mvr.usace.army.mil/Missions/Environmental-Stewardship/BR-Interbasin-Project/Documents/>

### FY23 Scheduled Activities

- PPA Negotiations
- Complete all remaining ERDC R&D efforts
- Complete Certified Cost Estimate: 10 MAR
- Increment I-A Design 95%: 23 JUN
- Increment I-A Design 100%: 30 SEP
- Initiate Scoping for I-B and II contracts

### FY24 Planned Activities

- PPA Executed
- Fabrication Contract (Speakers)
- Construction Contract Increment I-A
- Complete Designs of Increment I-B
- Initiate Construction of Increments I-A
- Initiate Design of Increment II

### FY25 Planned Activities:

- Continuation of Increment I-A Construction
- Continuation of Design of Increment II
- Construction Contract for Increment I-B
- Initiate Fabrication of New Lock Gates
- Initiate Const. of Flushing Lock (Phase 1 of 3)