

NEW LOCK AT THE SOO PROGRESS UPDATE HARBOR TECHNICAL ADVISORY COMMITTEE

Rachel Miller
Supervisory Civil Engineer
U.S. Army Corps of Engineers
Detroit District, New Lock Team
04 Sep 2024

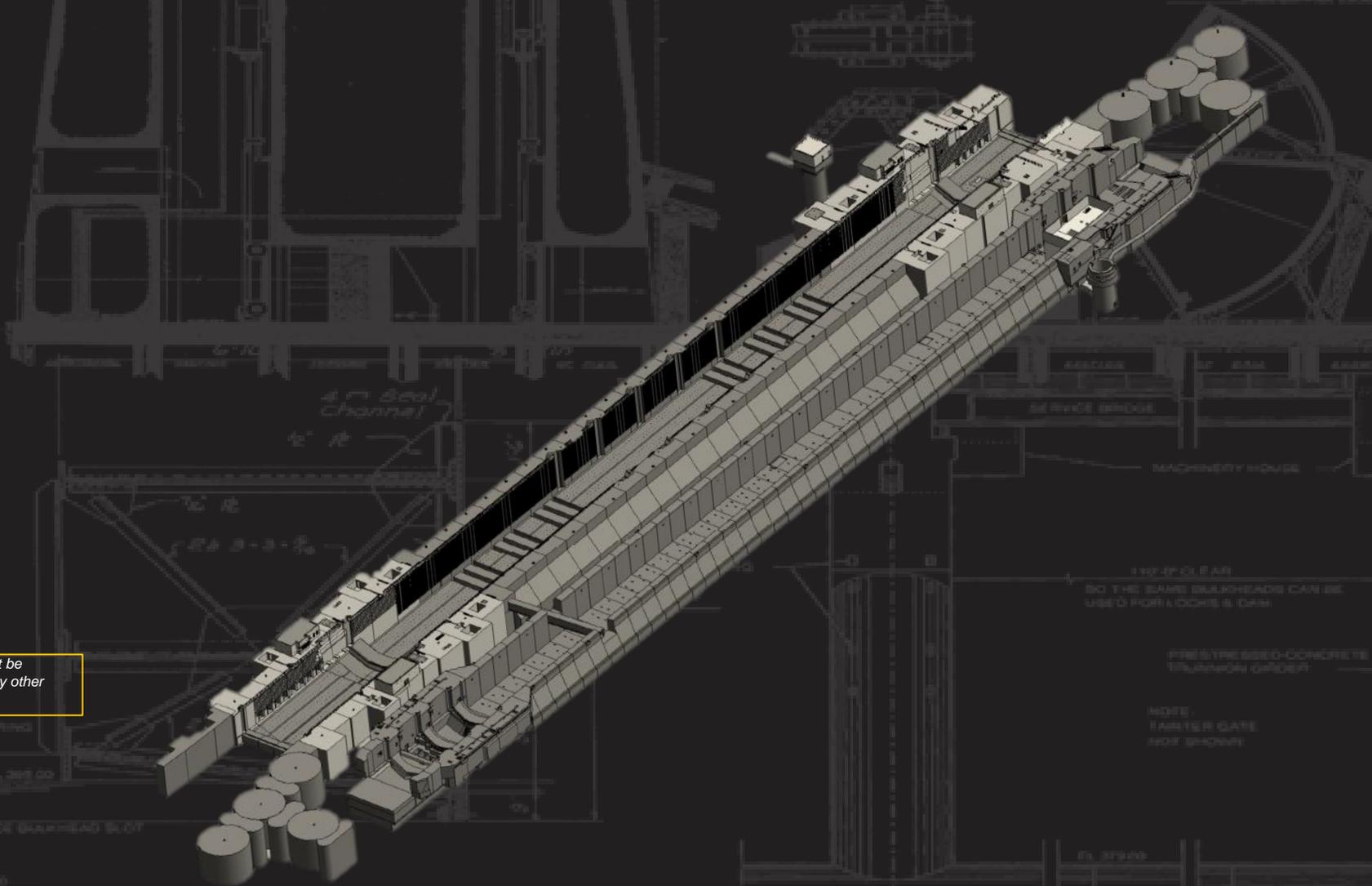
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SOO LOCKS IMPORTANCE

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- Nearly all domestically produced high strength steel is made with iron ore that transits the Poe Lock
- Within 2-6 weeks of an unscheduled Poe Lock outage, 75% of our nation's high strength steel production would cease
- Six-month unscheduled outage would result in 11 million jobs lost and \$1.1 trillion economic impact



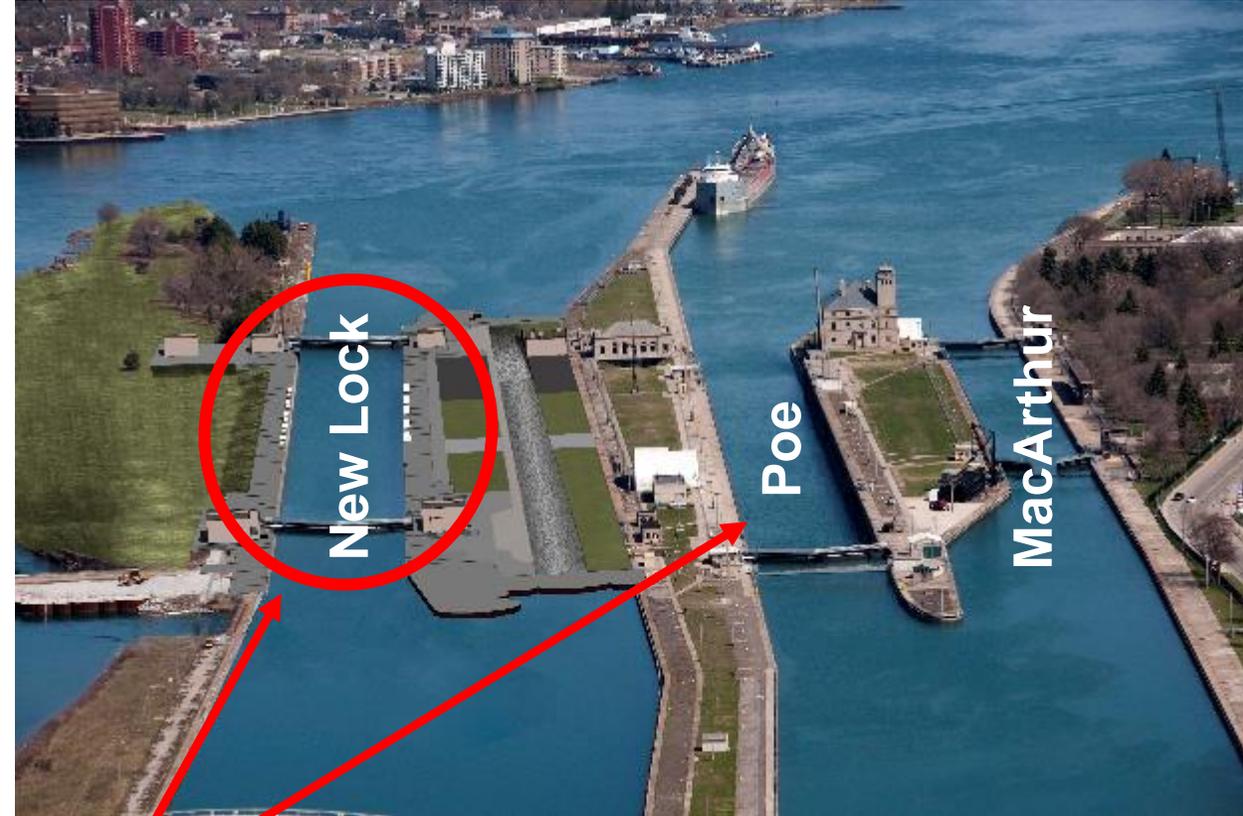


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NEW LOCK AT THE SOO



Current Facility



Future Facility

New lock will have **same dimensions** as existing Poe Lock (1200 ft length by 110 ft width and a depth of 32 ft)



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NEW LOCK AT THE SOO ALLOCATIONS & CAPABILITIES



\$1.967B
Allocated to Date

A Federal Allocation

B Bipartisan Infrastructure Law

M State of Michigan

C Capability



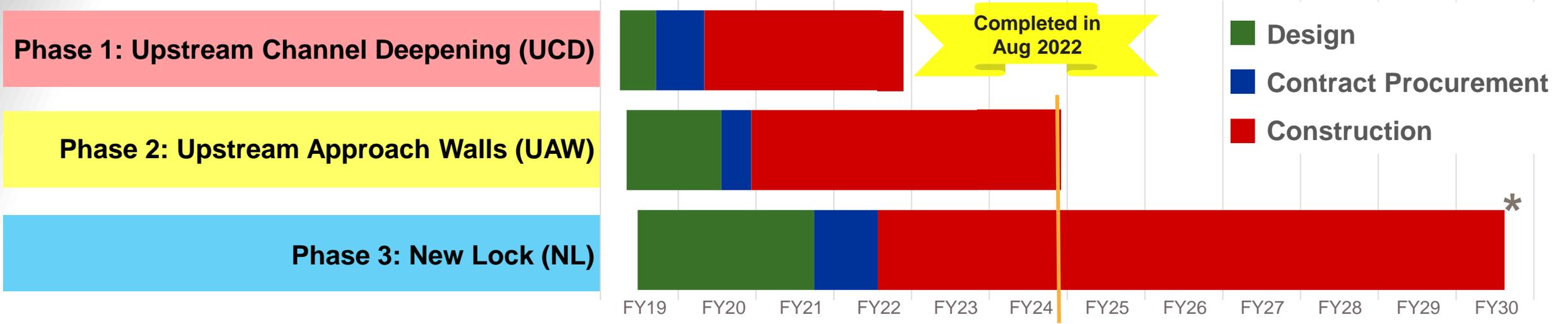
* Based on Authorized Project Cost of \$3.219B and includes a management reserve of \$617.9M that is not currently planned to be requested but could be requested for currently unknown contractual needs.

Activities	FY25 Capability		FY 26 Capability
	FY25 Pbud	FY25 Remaining	
Supervision and Administration (Labor)	\$11.0M		\$11.0M
Phase III - Option 3, "Lock Operational"	\$253.1M	\$7.3M	
Phase III - Option 4, "Downstream Work"		\$49.4M	
Phase III - Option 5, "Hands Free Mooring"		\$26.6M	
Phase III - Option 6, "Downstream Ship Arrestors"		\$28.8M	
Remaining Upper Approach Wall Work		\$74.1M	\$22.5M
TOTAL	\$264.1M	\$186.2M	\$33.5M



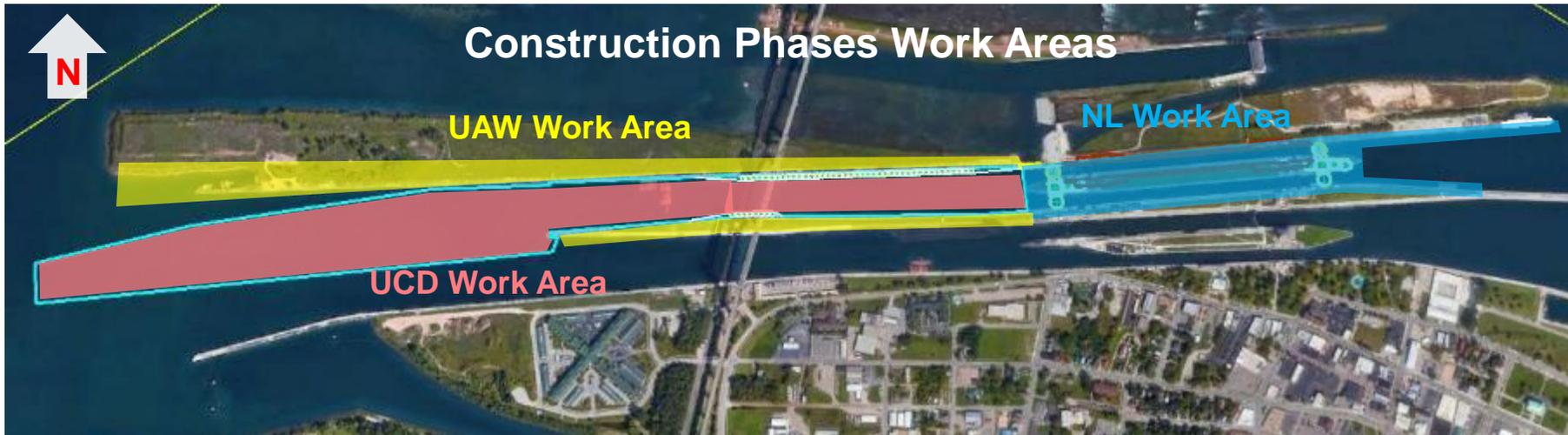
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NEW LOCK AT THE SOO CONSTRUCTION STATUS



WE ARE HERE

* Assumes efficient funding





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PHASE 2: UPSTREAM APPROACH WALLS UPDATE



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Scope: Rehabilitate approach walls upstream of new lock including reconstruction/refacing existing 100-year-old walls, installation of new lighting, bollards, and concrete cap repairs.

Construction Status:

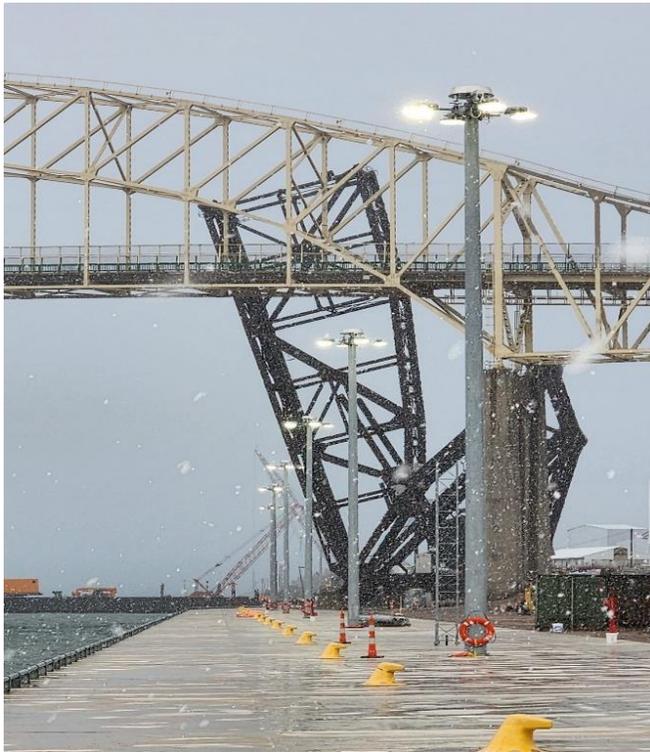
- \$117M Contract awarded in September 2020 to Kokosing-Alberici
- Contractor is generally working from East to West and has completed 95% of the required contract work.

Estimated Completion: Summer 2024

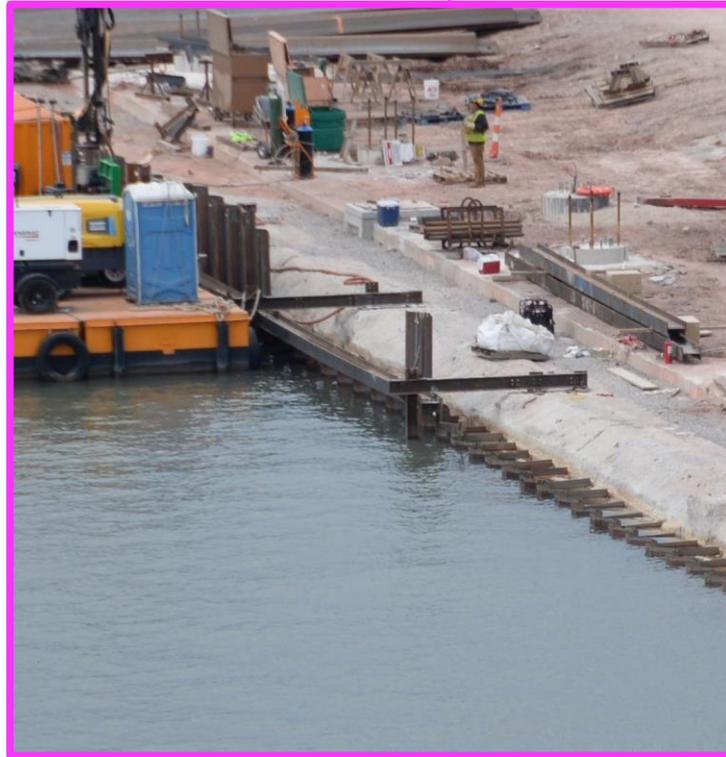


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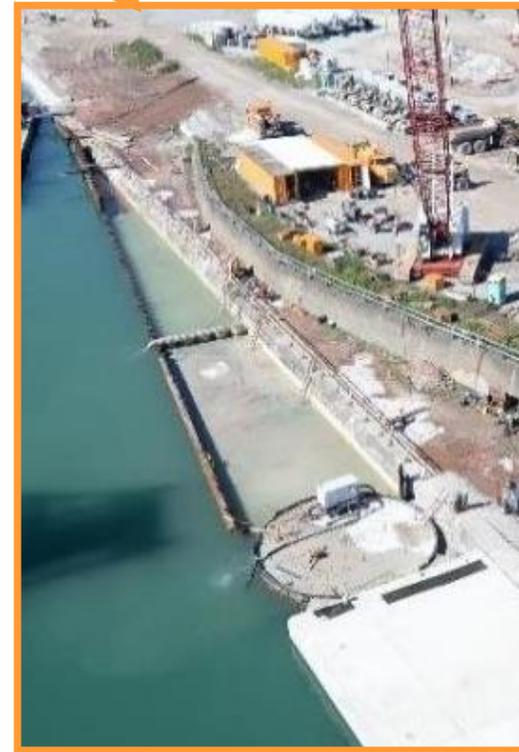
PHASE 2: UPSTREAM APPROACH WALLS PROGRESS



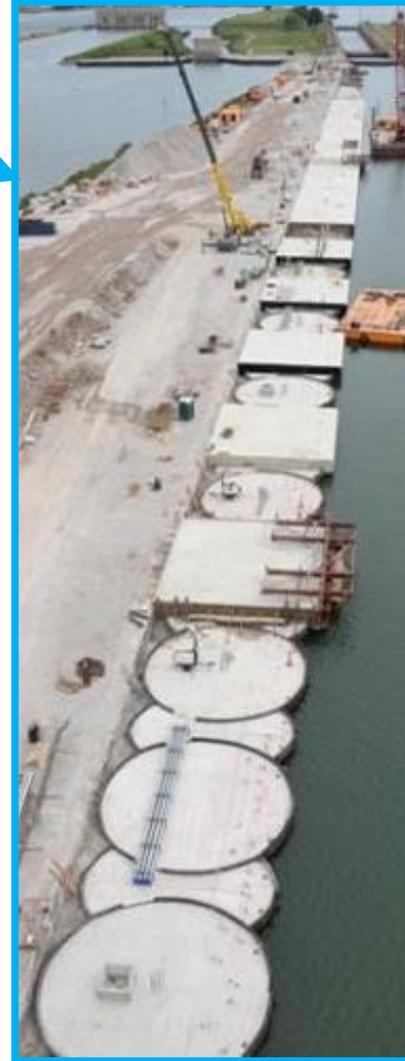
New guard rail, mooring bollards, and LED high mast light poles



SSP Face Wall: Placement of steel sheet piles



SSP Transition Wall: Tremie concrete placement behind SSP wall face



Circular SSP Walls: 34' dia. SSP Cells with cap placement in progress



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PHASE 2: UPSTREAM APPROACH WALLS PROGRESS



- 34 ft dia. Circular SSP Walls
- SSP Transition Walls
- SSP Faced Walls
- H-Pile & Concrete Panel Walls



Dead men tie back and mooring bollard foundation installation



Placement of tremie concrete behind concrete panels



Concrete panels



H-Pile, concrete panel, waler, and tie rod



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PHASE 3: NEW LOCK



Scope: Construct new 1,200' long by 110' wide by 32' deep chamber, New Pump Well, and New Power Plant Bridge, and rehabilitate downstream approach walls.

Construction Status:

- Contract awarded in July 2022 to Kokosing Alberici Traylor, LLC
- Current contract award valued at \$1.556B (83% of total contract cost)



- \$366M of work completed through end of June 2024

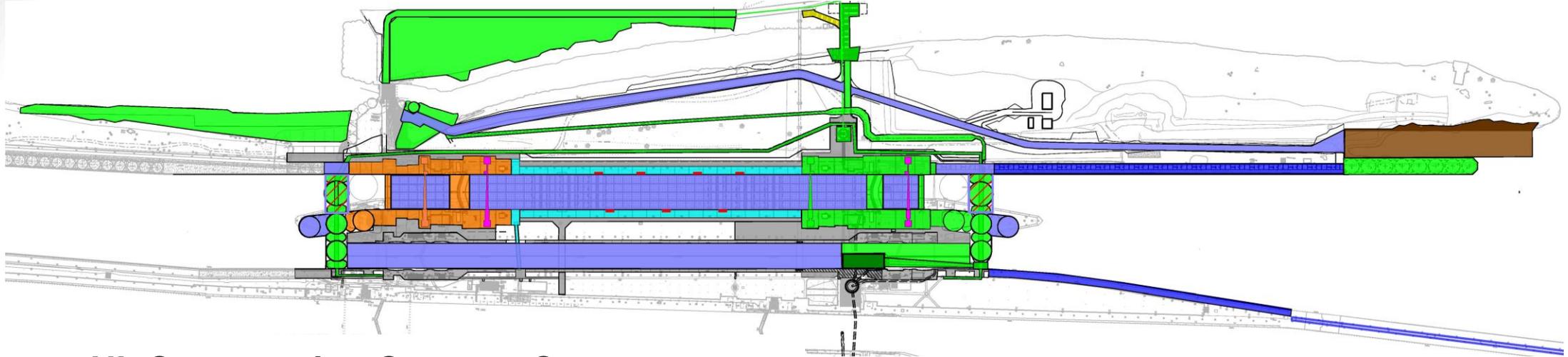
- 2024 focus:
 - Dewatering of Construction Site
 - Electrical Work
 - Demolition of Sabin Lock
 - Filling of Davis Lock Chamber
 - Bridge construction
 - Bedrock Excavation
 - Mass Concrete Placement

Estimated Completion: Summer 2030



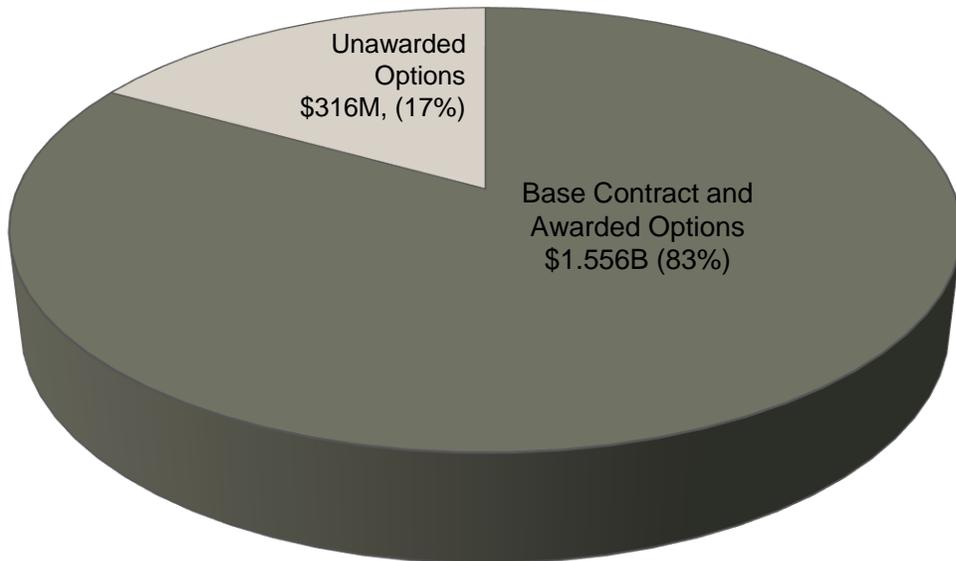
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PHASE 3: NEW LOCK CONTRACT BASE & OPTIONS



NL Construction Contract Cost

Total contract valued at \$1.872B



New Lock (Ph. 3) Base and Options Detail Legend

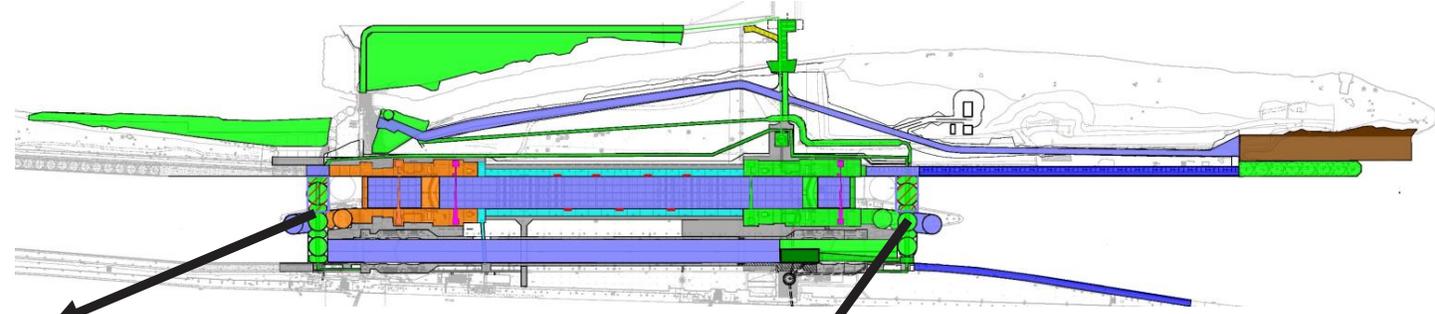
- BASE BID - AWARDED
- OPTION 1A UPSTREAM WIDE WALL MONOLITHS - AWARDED
- OPTION 1C NPP BRIDGE RAMP - AWARDED
- OPTION 2 NEW PUMP WELL COMPLETION - AWARDED
- OPTION 7 ALLIGATOR'S MOUTH MOORING AREA - AWARDED
- OPTION 1B CHAMBER WALL MONOLITHS - AWARDED
- OPTION 3 LOCK OPERATIONAL } Pricing Expires Sep 2024
- OPTION 4 DOWNSTREAM WORK } Pricing Expires Sep 2025
- OPTION 5 HANDS FREE MOORING
- OPTION 6 DOWNSTREAM SHIP ARRESTORS



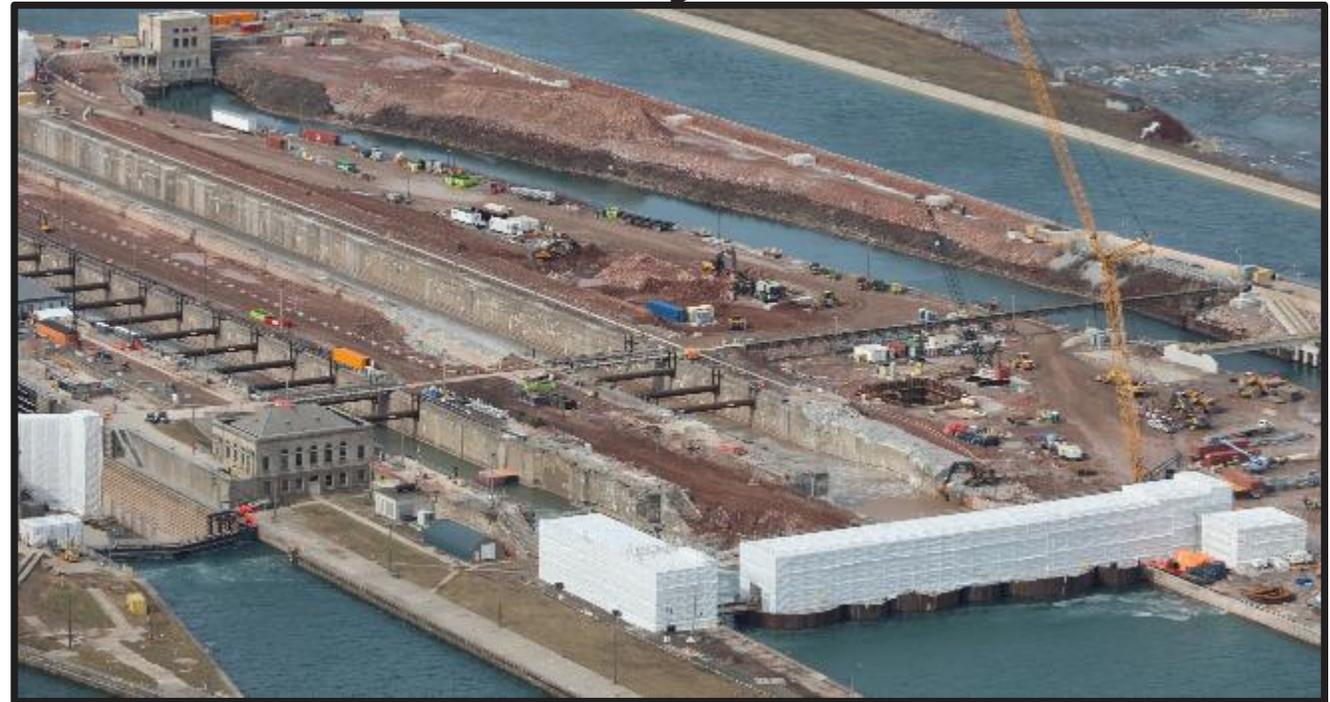
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PHASE 3: NEW LOCK PROGRESS

2024 WINTER WORK OPERATIONS



Upstream Cofferdam with Scaffolding Enclosure

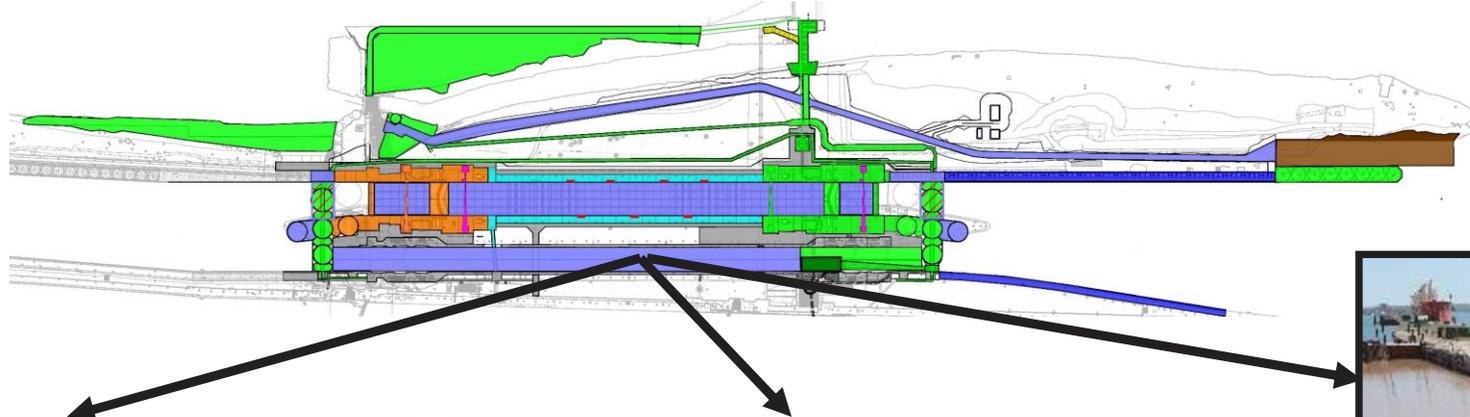


Downstream Cofferdam with Scaffolding Enclosure



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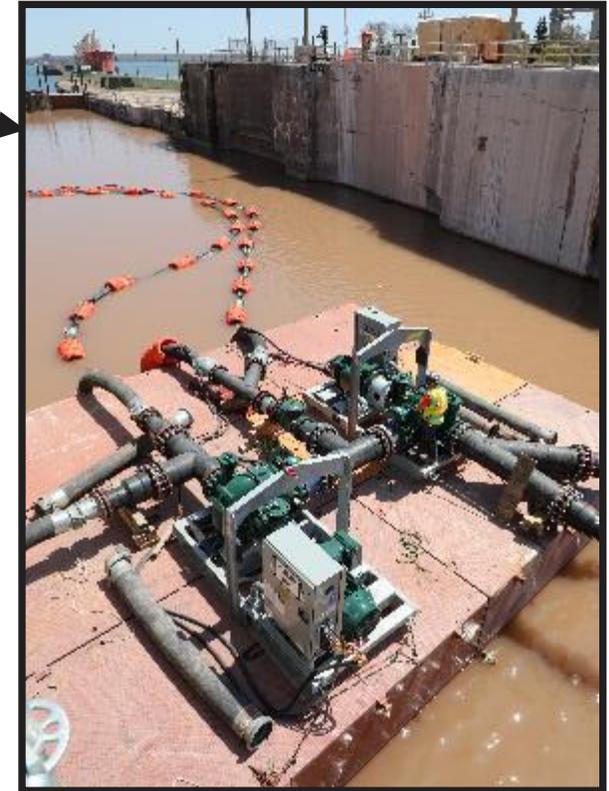
PHASE 3: NEW LOCK DEWATERING OF CONSTRUCTION SITE



New Lock construction site dewatering pump initiation ceremony (15 May 2024)



Davis Lock chamber five days into dewatering process



Hydraulic pump used to dewater construction site on barge in Davis Lock



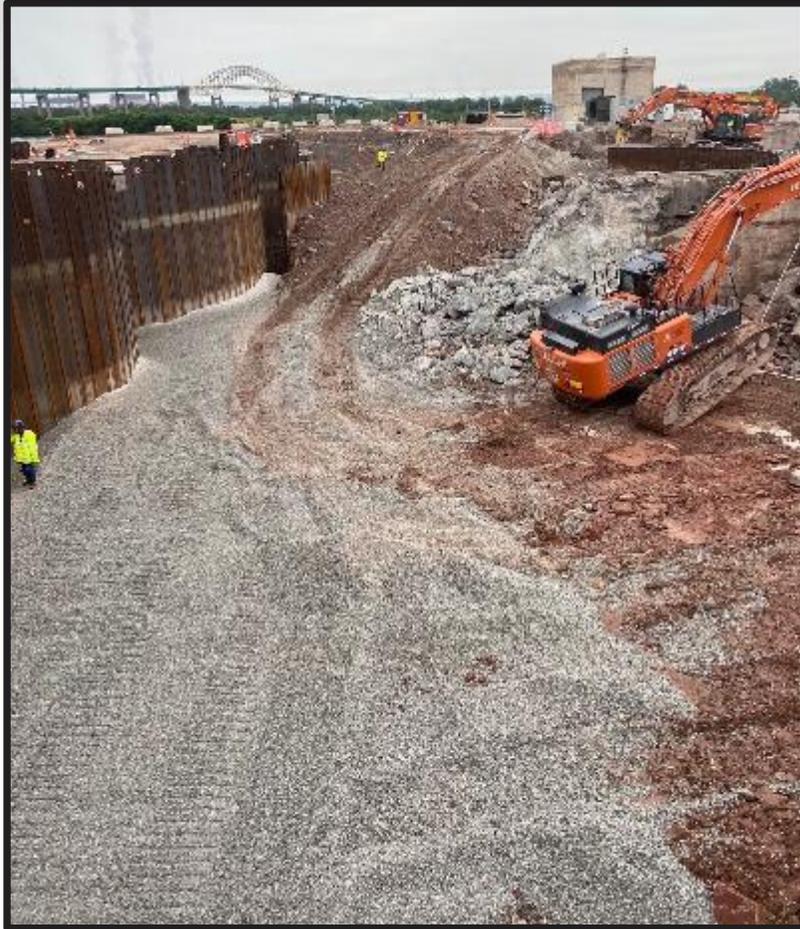
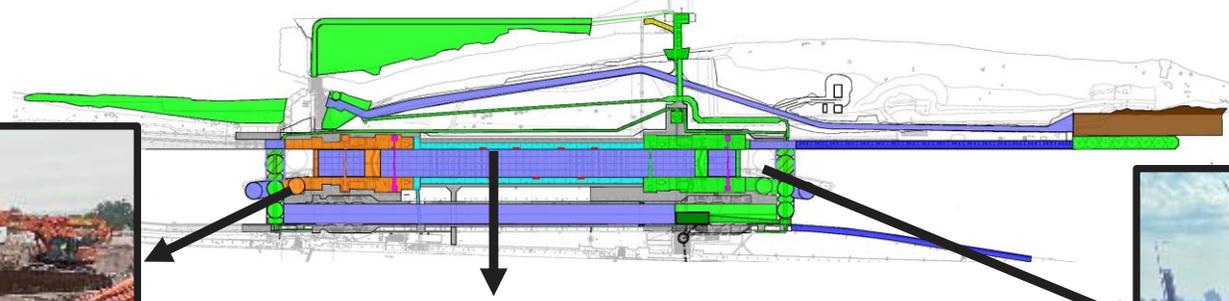
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PHASE 3: NEW LOCK

ESTABLISHING ACCESS TO SABIN AND DAVIS FLOORS



Ramp on East side of upstream cofferdam from the top of the lock wall to the lock floor



Ramps through North and South Sabin Lock wall to Sabin Lock floor



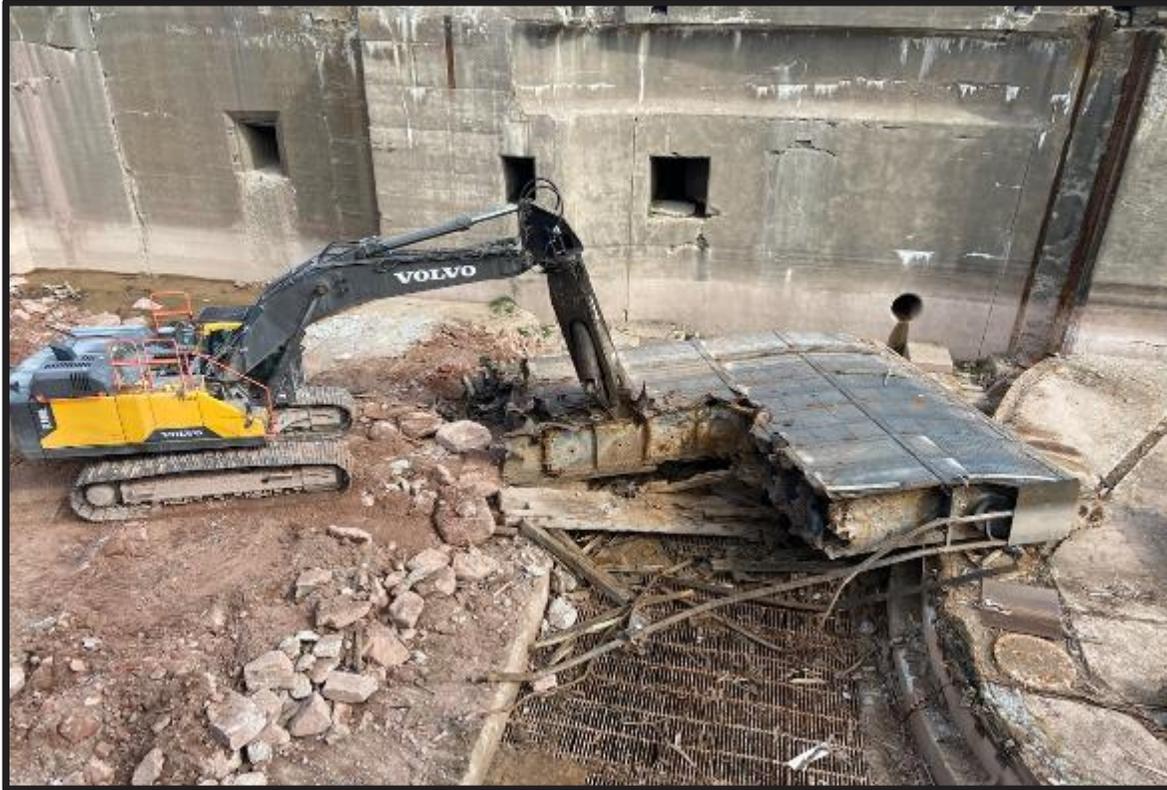
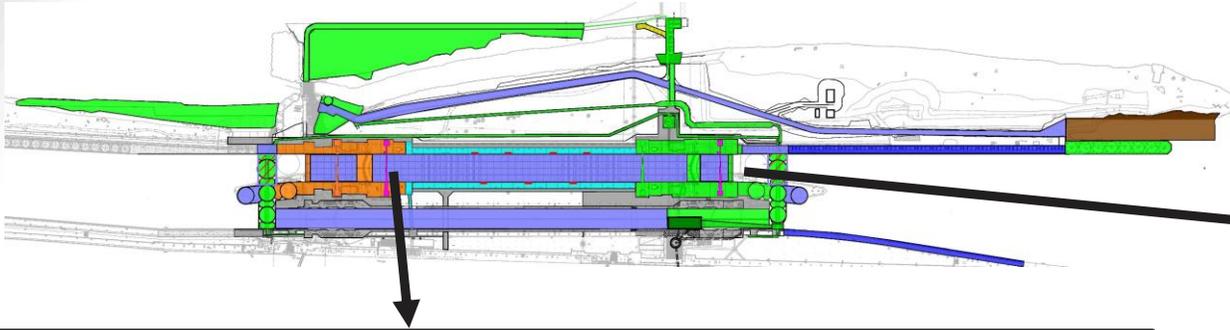
USACE inspection of the Downstream Cofferdam



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PHASE 3: NEW LOCK

DEMOLITION OF SABIN LOCK CHAMBER



Demo of Sabin Lock Gate Leaf

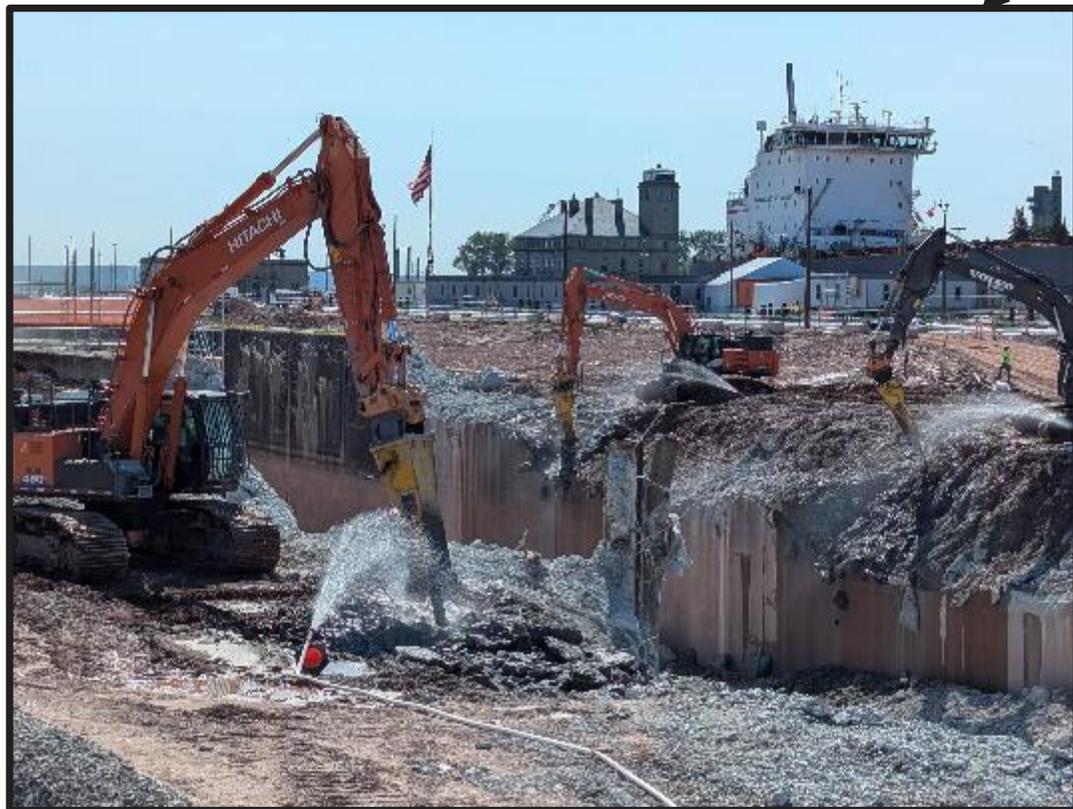
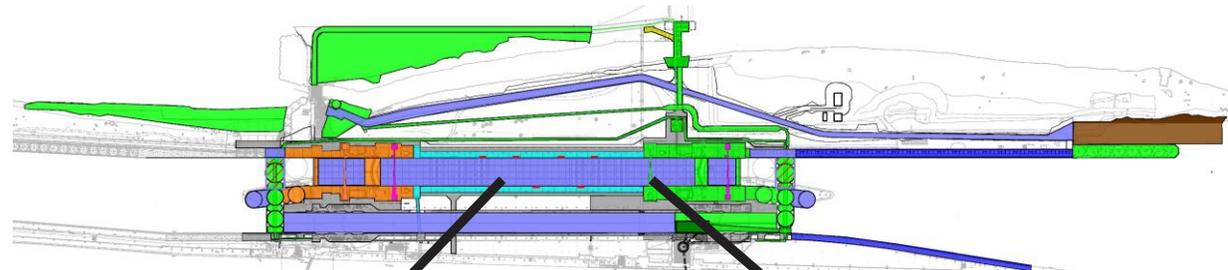


Exposure of century old Sabin Lock timber cribbing



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PHASE 3: NEW LOCK DEMOLITION OF SABIN LOCK CHAMBER



Middle of the Sabin Lock Chamber



Downstream end the Sabin Lock Chamber

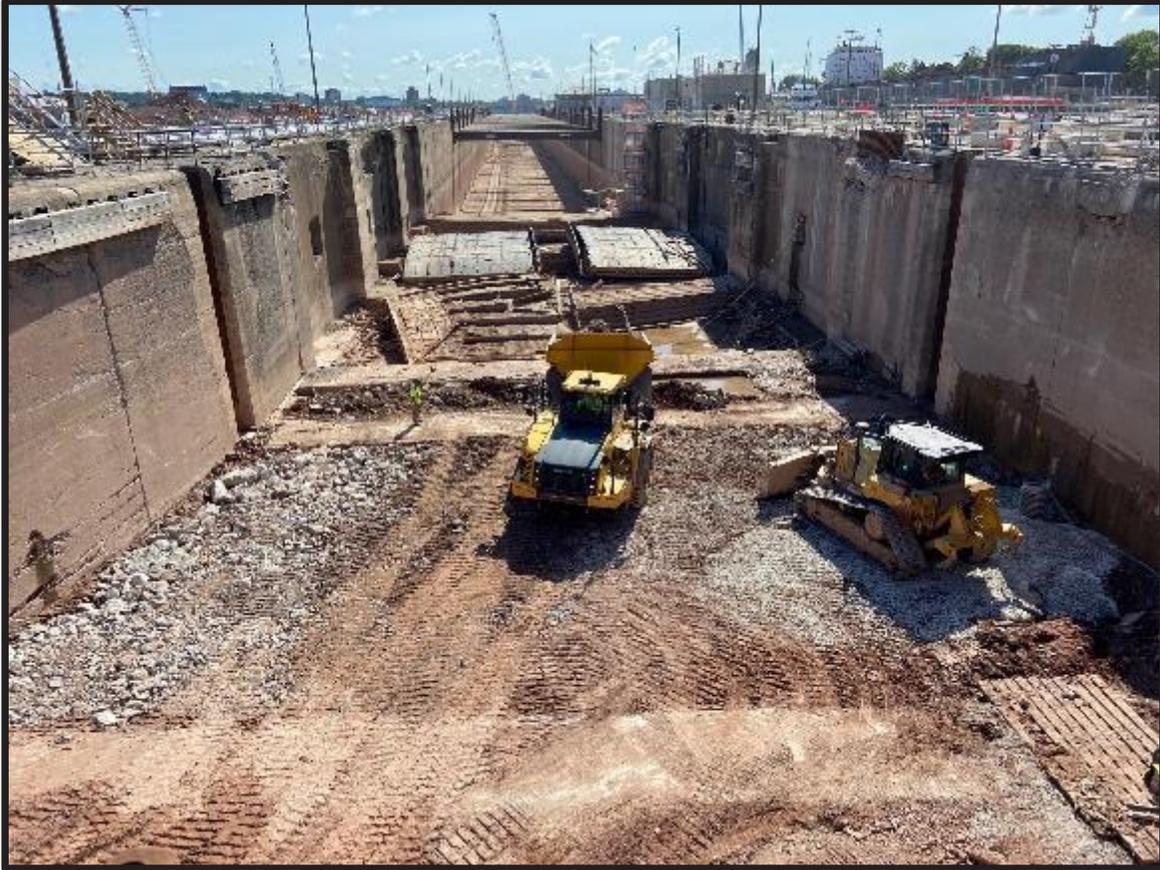
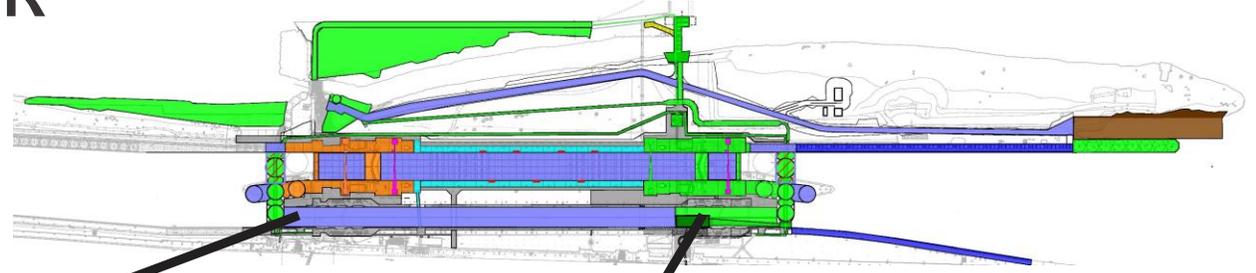




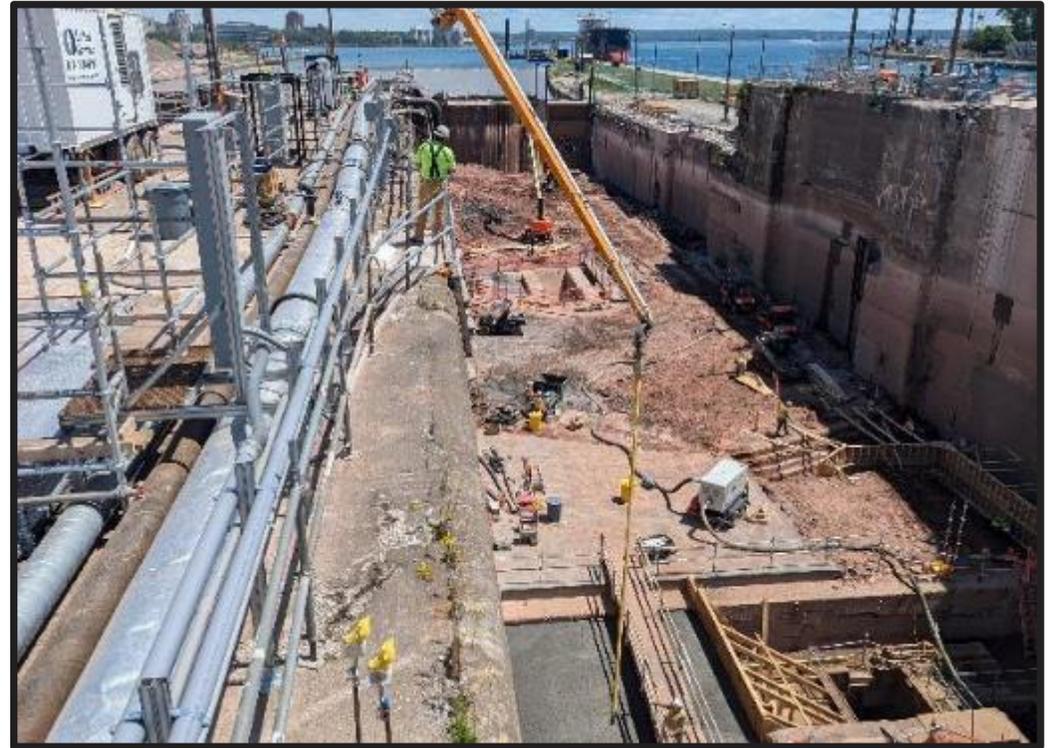
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PHASE 3: NEW LOCK

FILLING OF DAVIS LOCK CHAMBER



Placement of fill material in Davis Lock



Concrete placement to fill voids in floor of Davis Lock in support of the New Pump Well construction in the Davis Lock

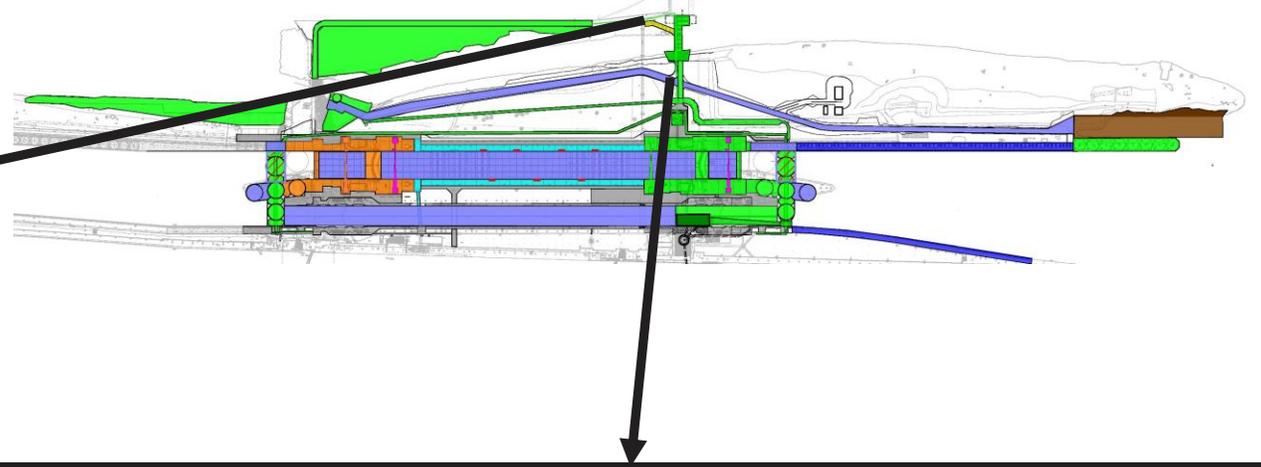


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PHASE 3: NEW LOCK BRIDGE CONSTRUCTION



Connection of new bridge to landing at hydropower plant



New bridge to the hydropower plant



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PHASE 3: NEW LOCK BEDROCK EXCAVATION



Trencor rock trencher to be used for bedrock excavation



Wirtgen milling machine to be used for bedrock excavation



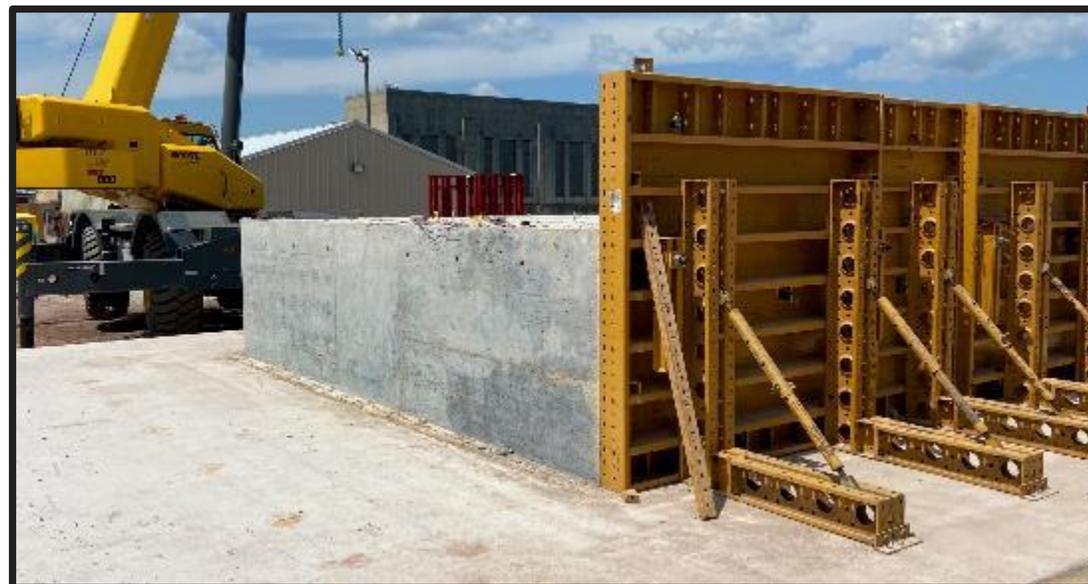
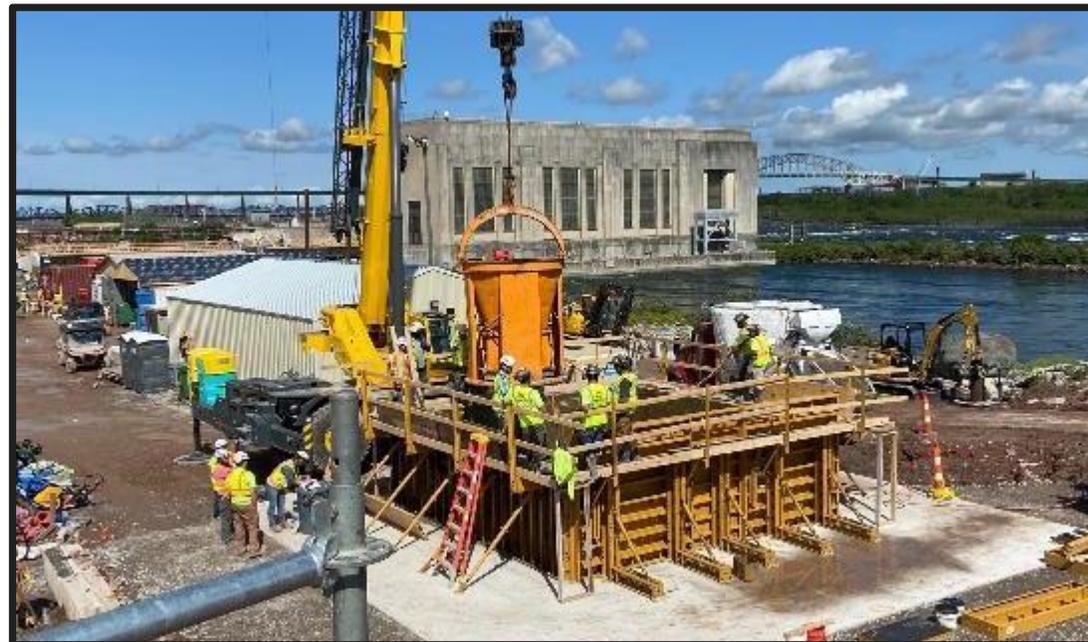
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PHASE 3: NEW LOCK

MASS CONCRETE PLACEMENT



Expanded concrete batch plant



Mass concrete test section



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RECENT ENGAGEMENTS AND UPCOMING DATES

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Recent Engagements and Dates of Importance:

- St. Lawrence Seaway visit, APR 2024
- Detroit SAME New Lock tour, MAY 2024
- First Lady Dr. Jill Biden and Second Gentleman Mr. Douglas Emhoff Soo Locks site visit, MAY 2024
- International Joint Commission Commissioners site visit, JUL 2024
- Senator Peters site visit, AUG 2024



First Lady Dr. Jill Biden and Second Gentleman Mr. Douglas Emhoff
Soo Locks site visit, MAY 2024

Upcoming Engagements and Dates of Importance:

- Phase 2 Contract Completion, Summer 2024
- Consul general of Canada, Oct 2024

Michigan-based Science YouTuber Alexis Dahl Soo Locks and New Lock interviews (New Lock starts at about 14 minutes), video at: https://www.youtube.com/watch?v=t2XprPx63_A



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QUESTIONS

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