

NEW LOCK AT THE SOO PROJECT UPDATE

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Senior Project Manager

New Lock at the Soo

11 SEP 2025



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US Army Corps
of Engineers®





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HISTORY OF THE SOO LOCKS



1855
State Lock Opens



1896
First Poe Lock Opens



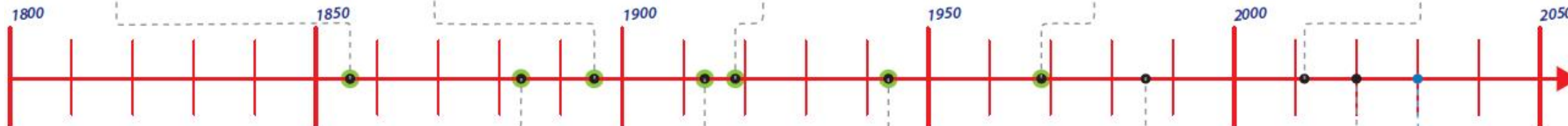
1919
Sabin Lock Opens



1969
Second Poe Lock
Opens



2011
Preparatory Work for
New Soo Lock Completed



US Army Corps
of Engineers®
Detroit District



1883
Wietzel Lock Opens



1914
Davis Lock Opens



1943
MacArthur Lock Opens

1986
New Soo Lock
Authorized

2020
New Lock at the Soo
Construction Started



2030 New Lock at the Soo Scheduled Completion

● A new lock was constructed on average every 19 years from 1855 to 1969



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NEW LOCK AT THE SOO RENDERING



Pre-Construction Facility



Future Facility

New lock will have **same dimensions** as existing Poe Lock
(1,200 ft length by 110 ft width and a depth of 32 ft)



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NEW LOCK AT THE SOO CONSTRUCTION STATUS

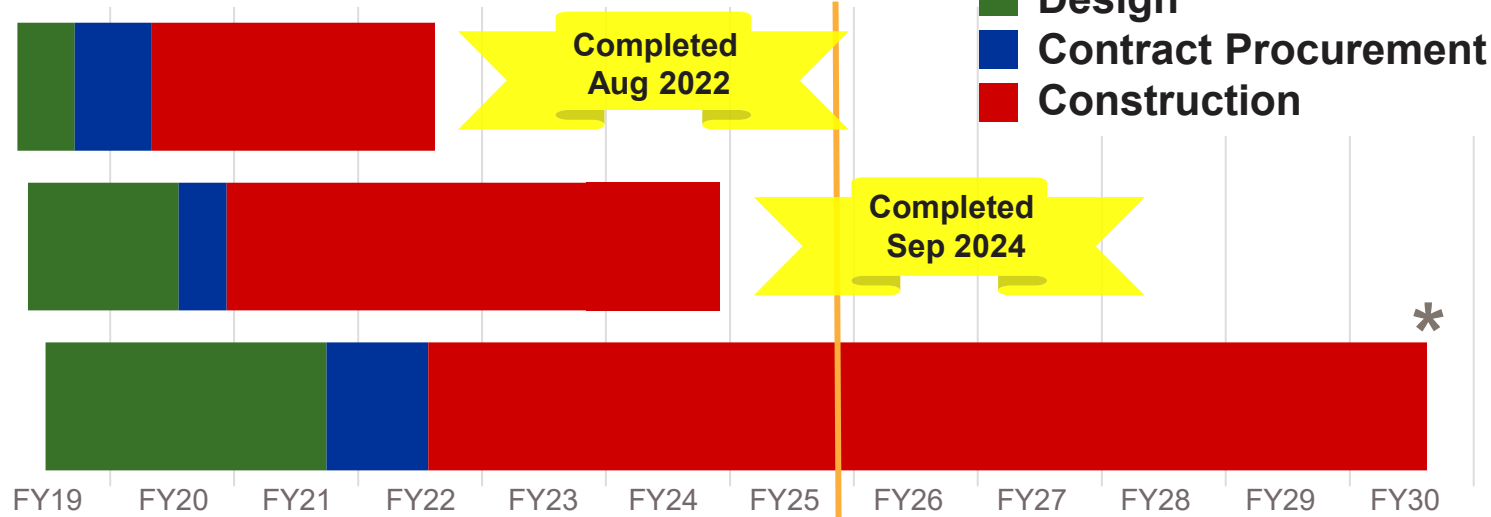


- Design
- Contract Procurement
- Construction

Upstream Channel Deepening

Upstream Approach Walls

New Lock



WE ARE HERE

* Assumes continued efficient funding

Upstream Channel Deepening
(Completed AUG 2022)

Upstream Approach Walls
(Completed SEP 2024)

New Lock
(Base and Options)

Remaining Upper Approach Wall Work
(Tentative FY26 Award)

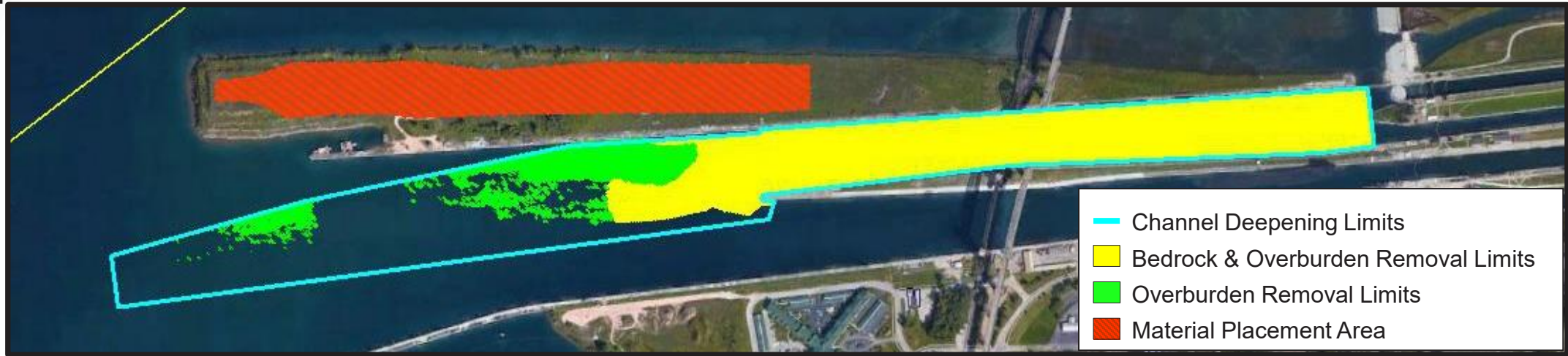
Ice Mitigation Feature Construction
(Tentative FY27 Award)





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UPSTREAM CHANNEL DEEPENING – PHASE 1 (COMPLETE)



Scope: Remove 300,000 CY of bedrock and overburden to deepen the Approach Channel to depth of 30 feet

Construction Status:

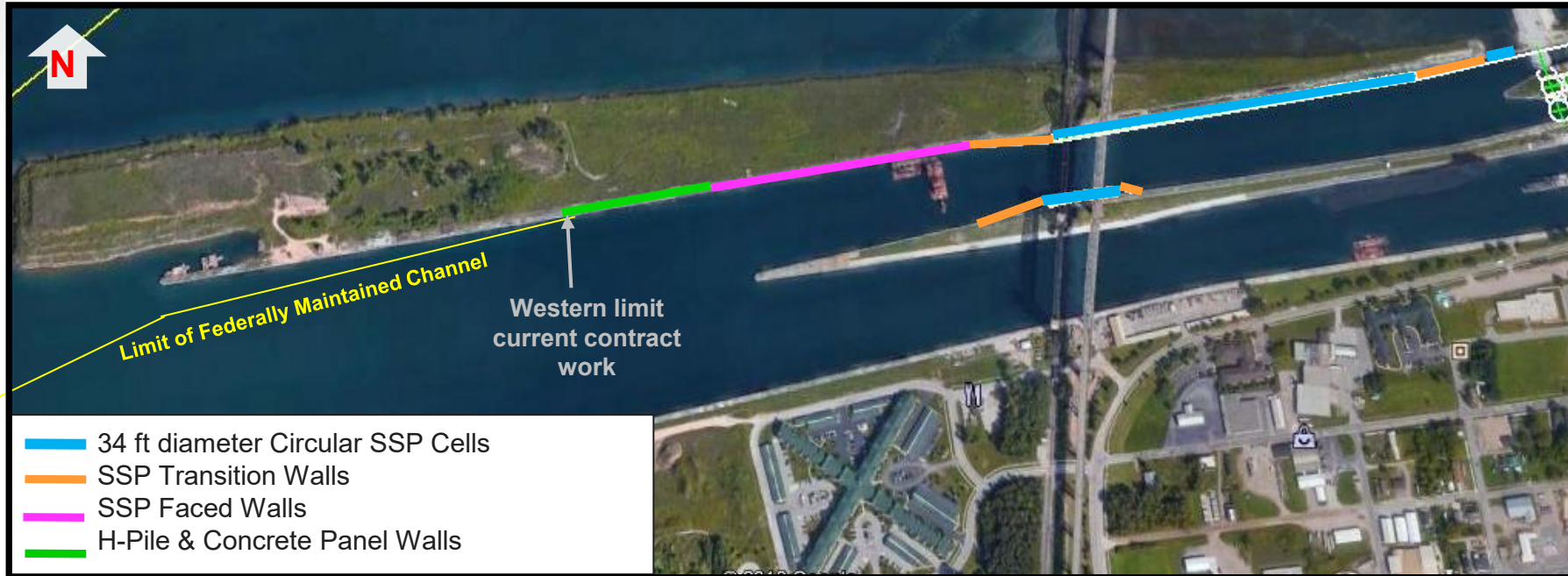
- Construction completed in Aug 2022
- Contractor: Trade West Construction Co.
- \$53.5M of work performed





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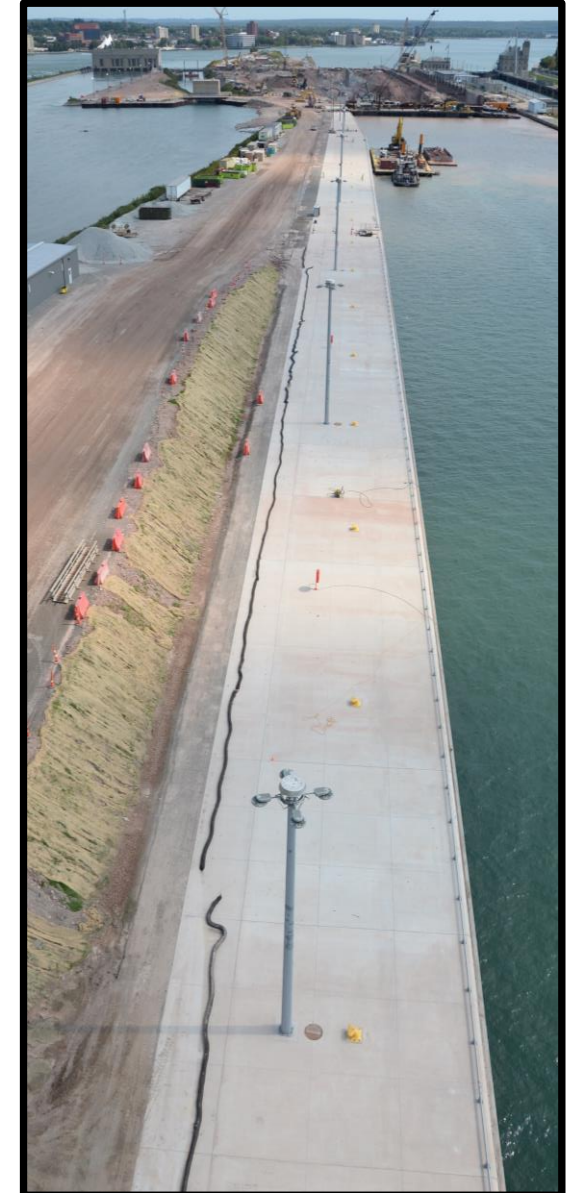
UPSTREAM APPROACH WALLS - PHASE 2 (COMPLETE)



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:

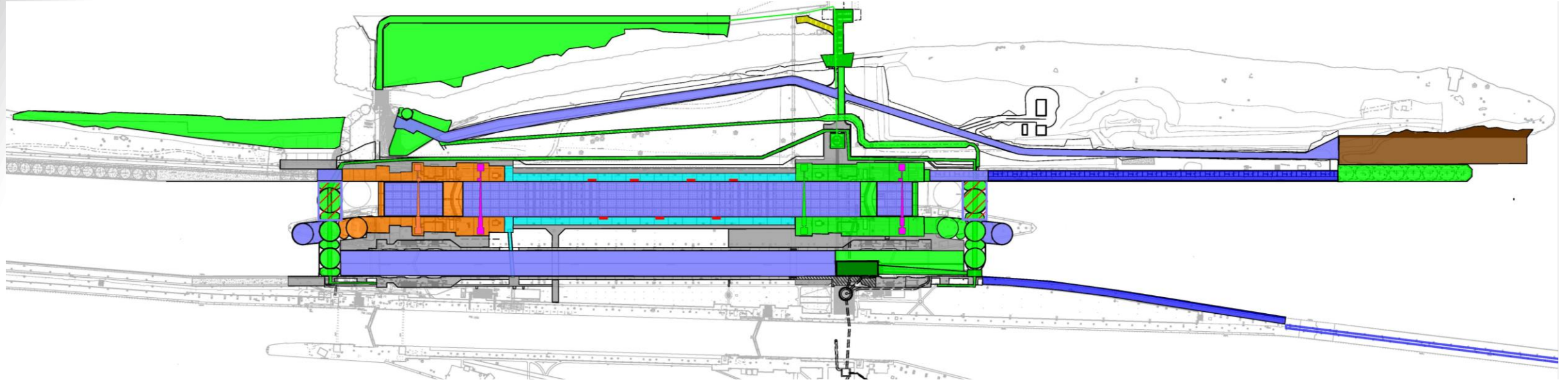
- Construction completed in Sep 2024
- Contractor: Kokosing-Alberici
- \$135M of work performed





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NEW LOCK – PHASE 3 (CONSTRUCTION IN PROGRESS)



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
- Total contract is valued at \$1.87B
- Over \$620M of work completed to date

Estimated Completion: Summer 2030

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

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



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NEW LOCK CONSTRUCTION MILESTONES



9/2020



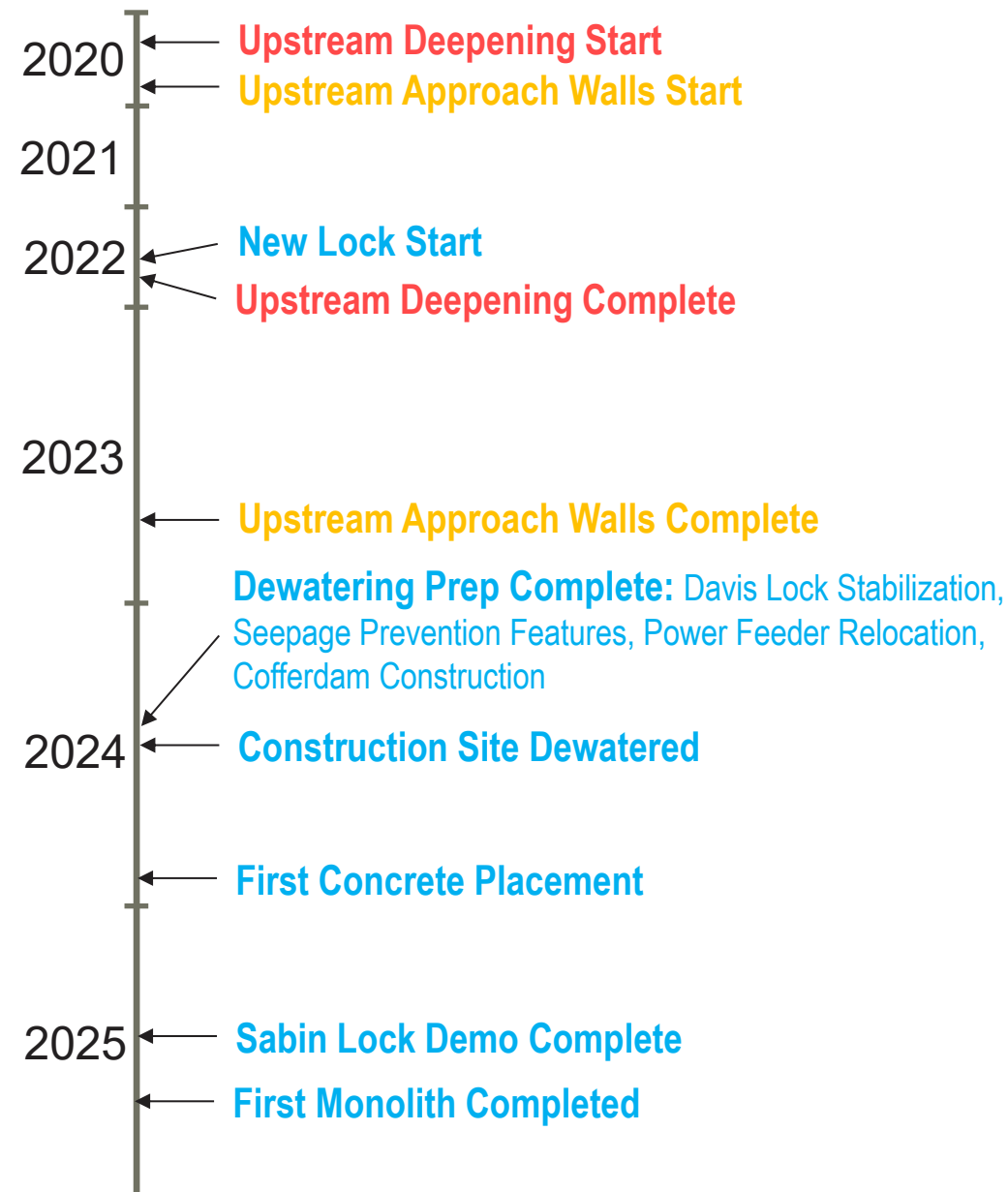
5/2023



5/2024



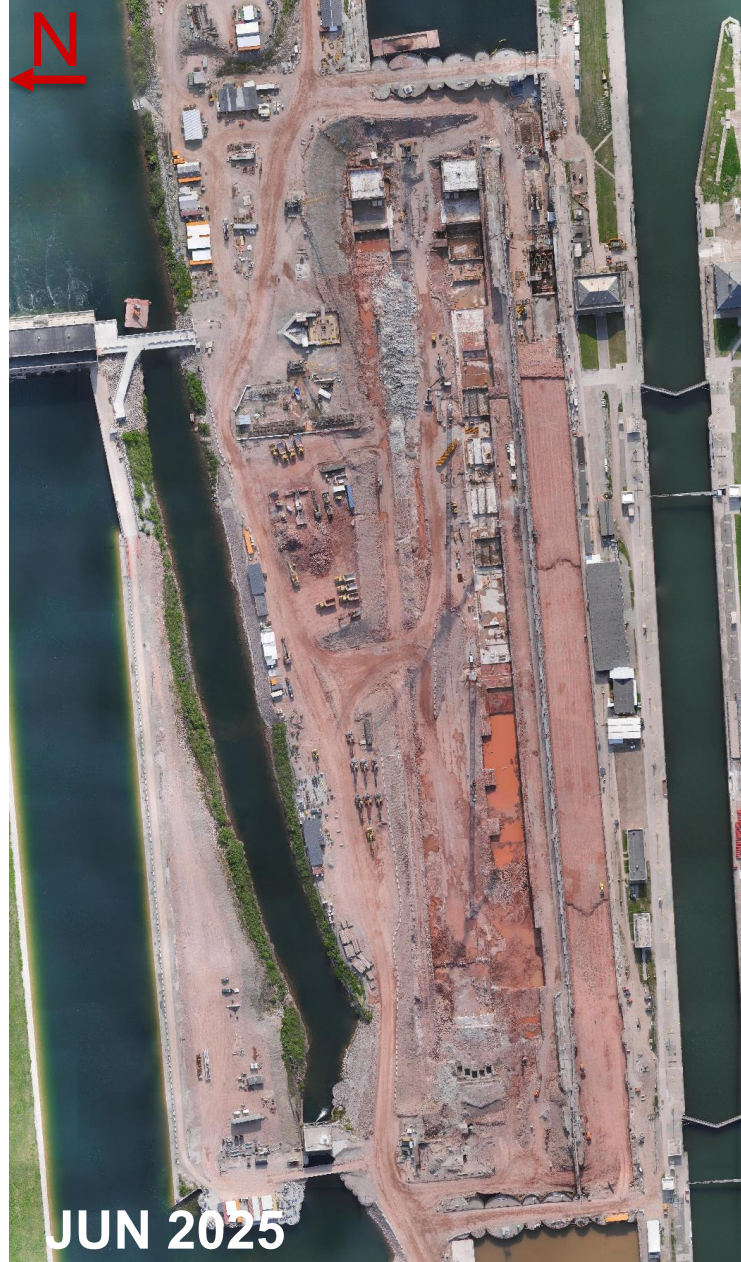
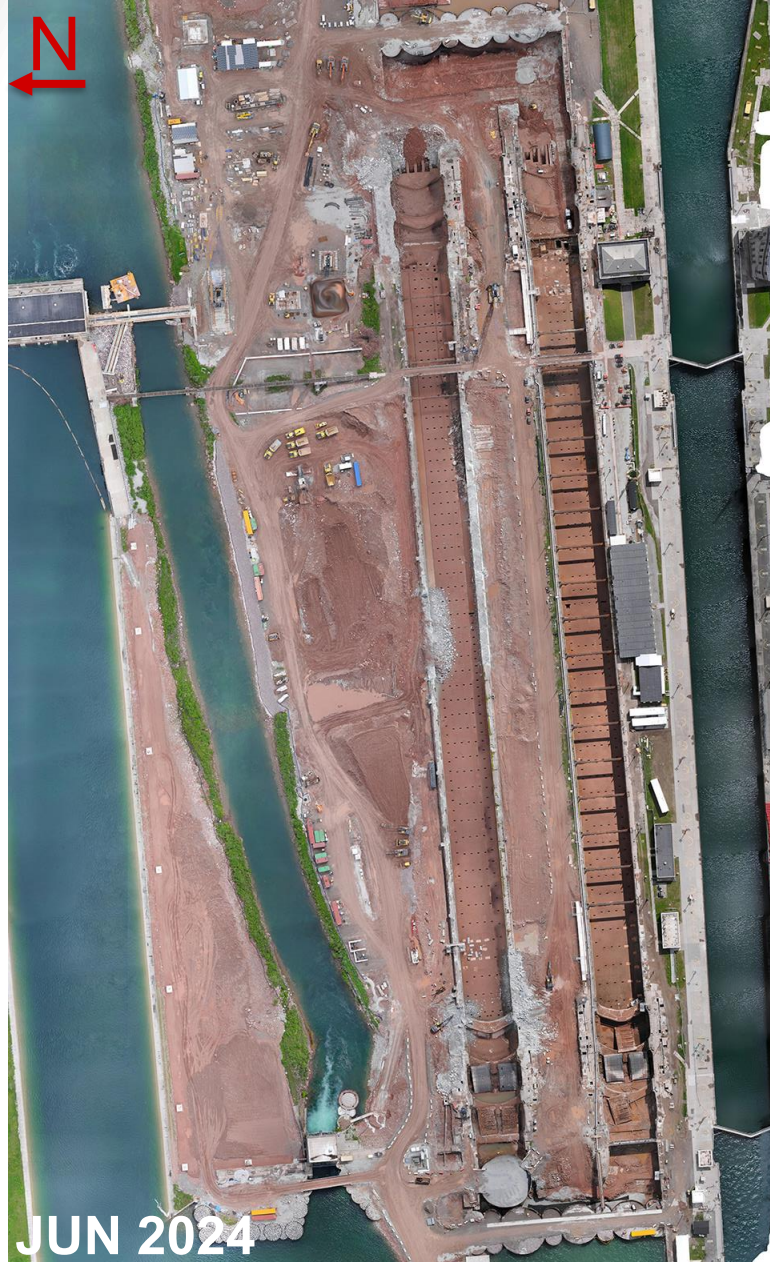
7/2025





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PHASE 3: PROGRESS JUNE 2024-JUNE 2025



Recently Completed Features

- ✓ Dewatering
- ✓ Bridge to NPP
- ✓ Sabin Lock Demo
- ✓ Davis Lock Fill
- ✓ Tower Crane Construction

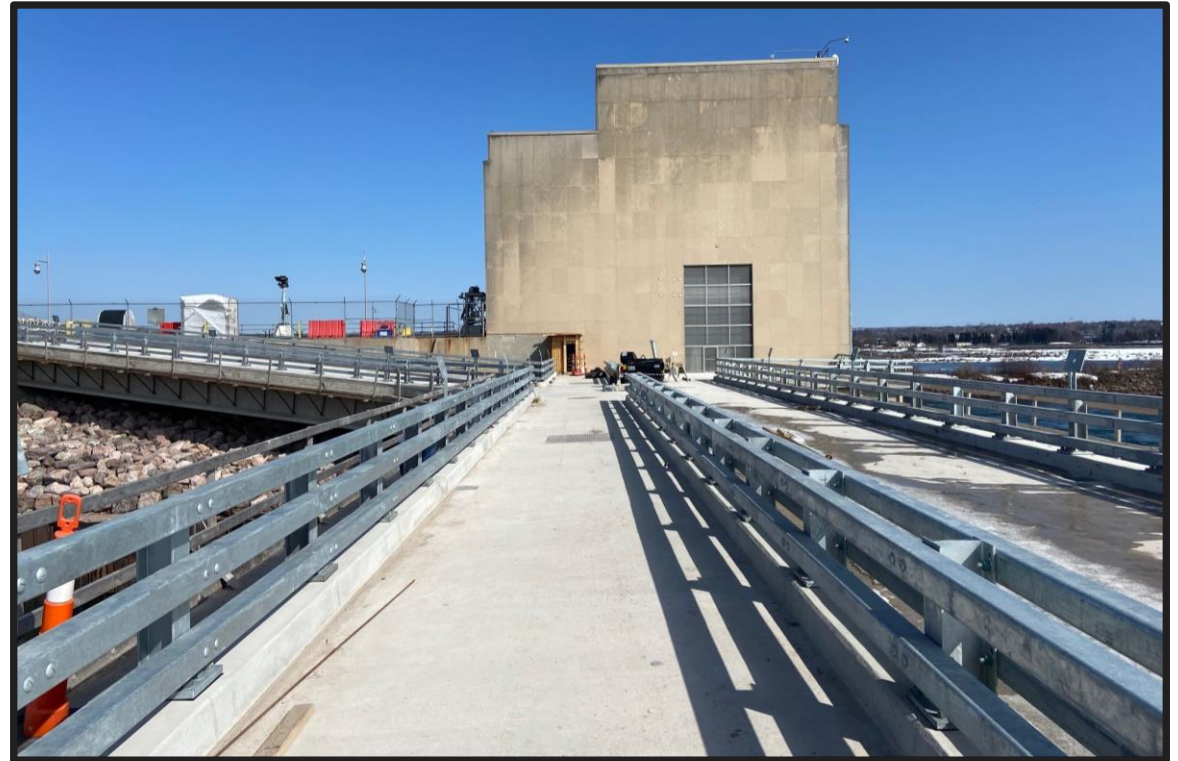
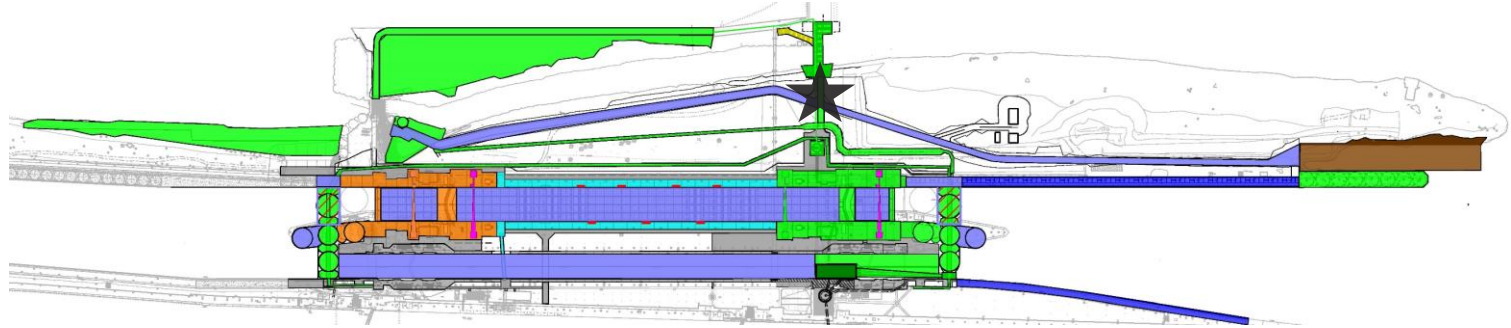
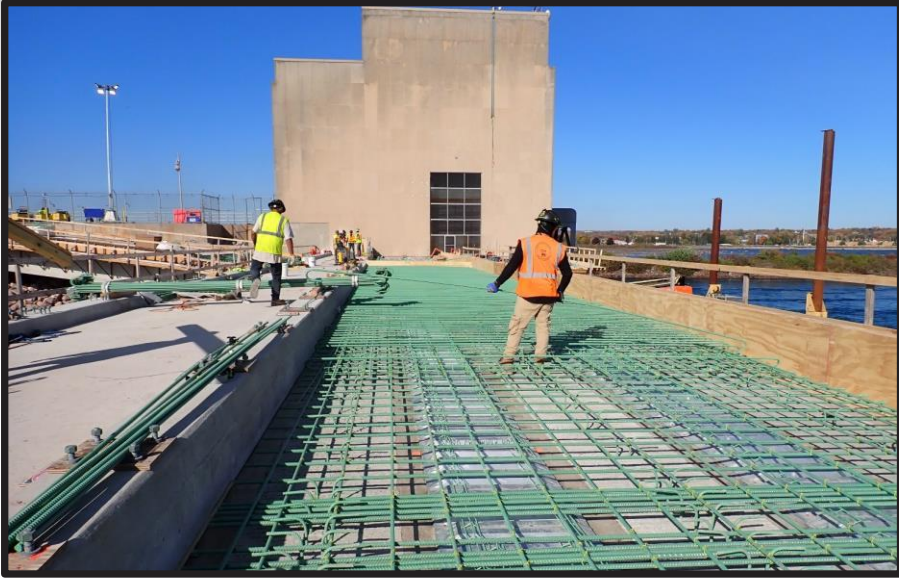
In Progress Features

- Bedrock Excavation
- Foundation Preparation
- New Lock Wall Construction
- New Pump Well Construction
- Offsite Fabrication of Lock Components



BRIDGE TO NEW POWER PLANT

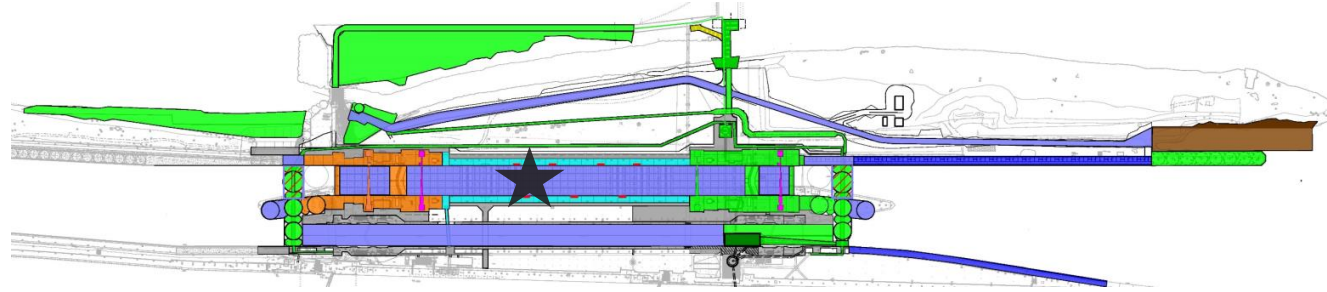
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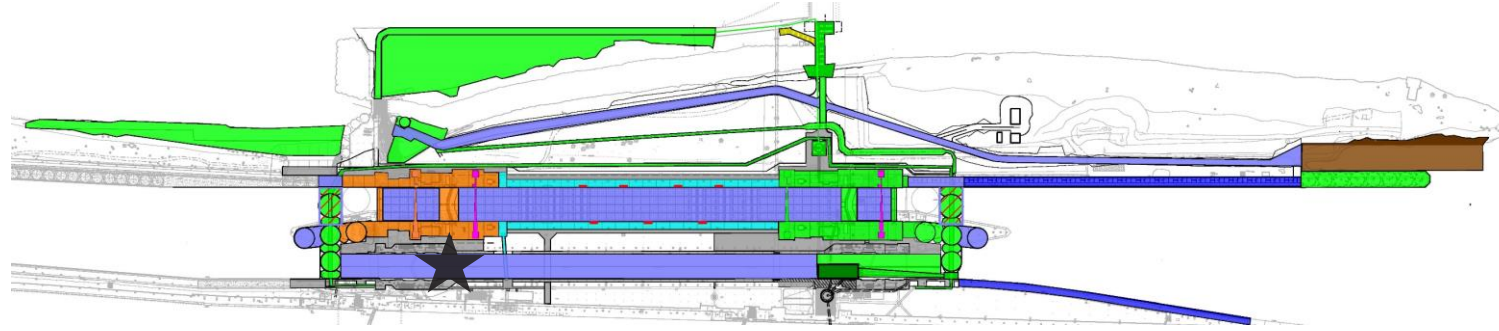
✓ SABIN LOCK DEMO





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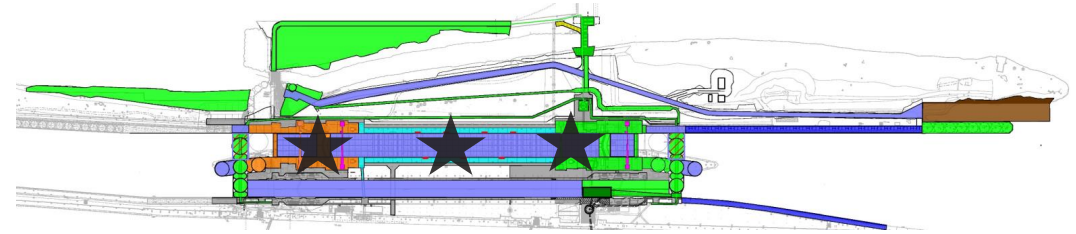
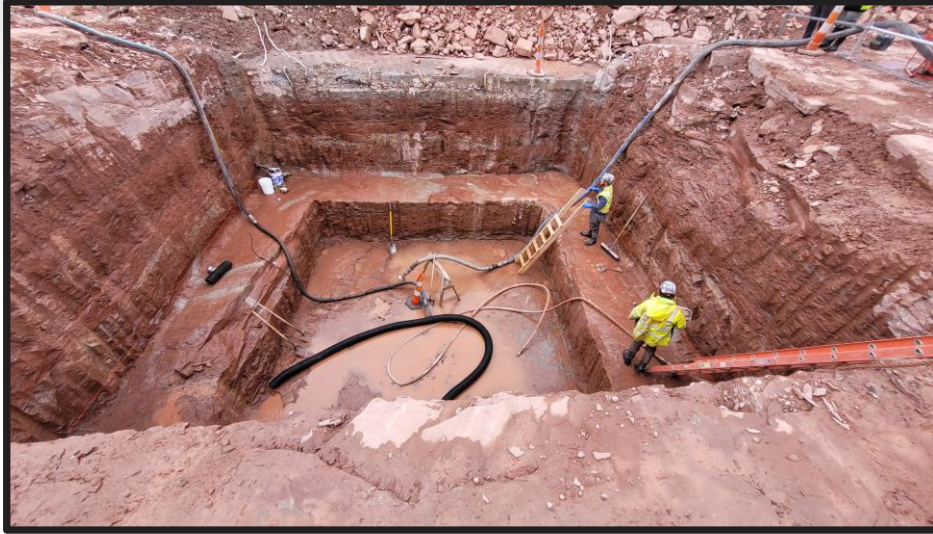
✓ DAVIS LOCK FILL





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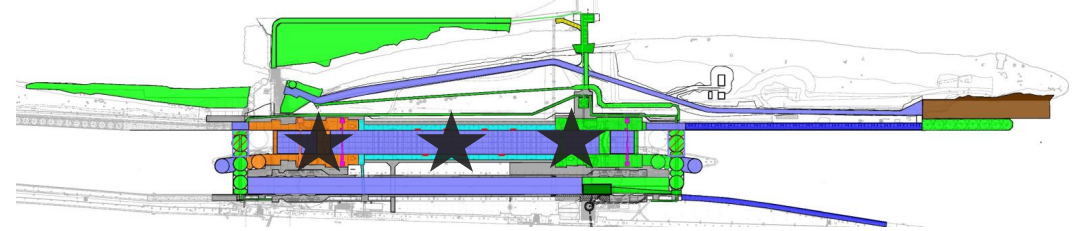
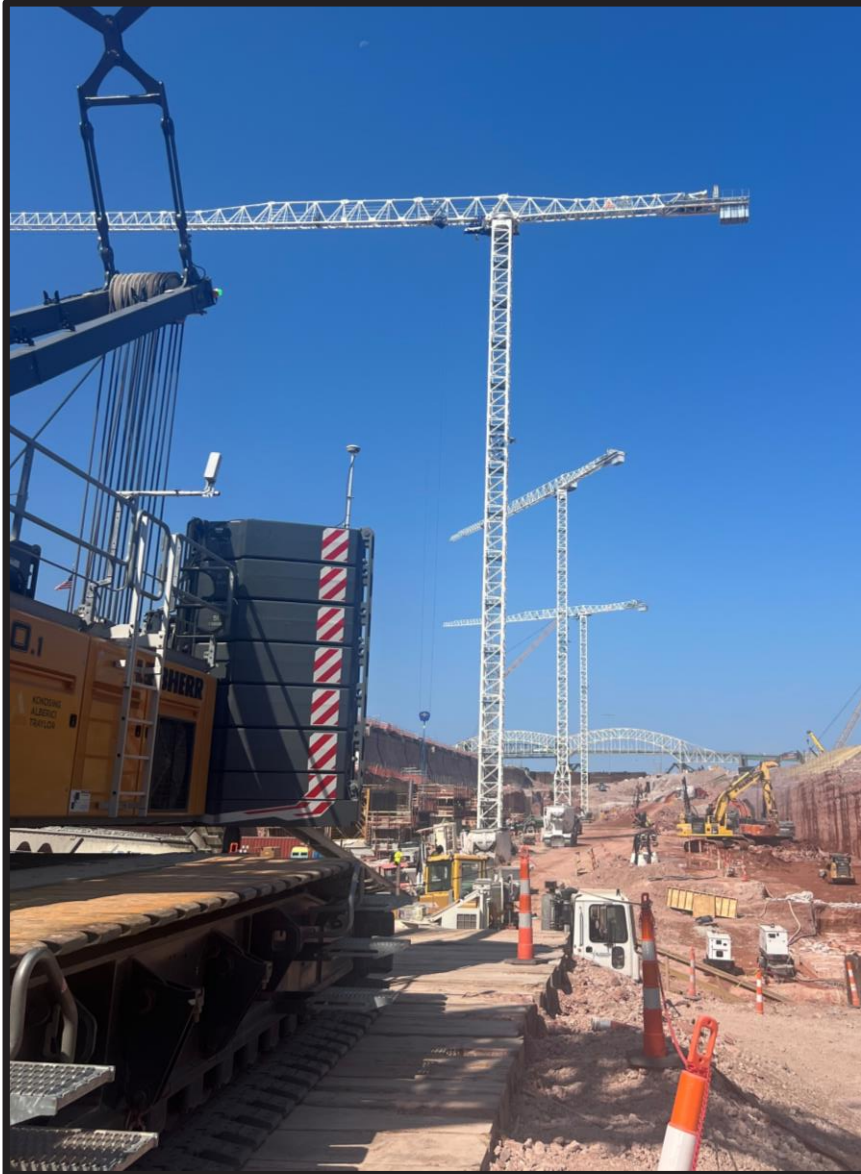
✓ TOWER CRANE CONSTRUCTION





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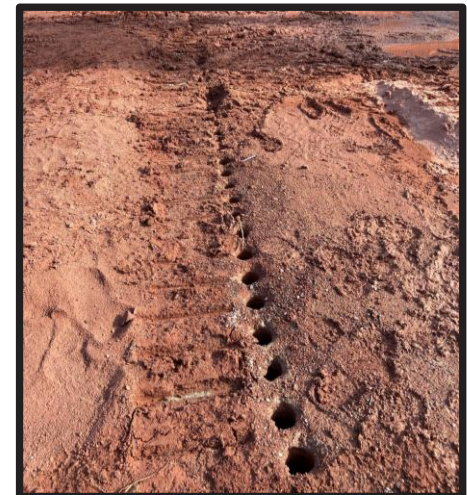
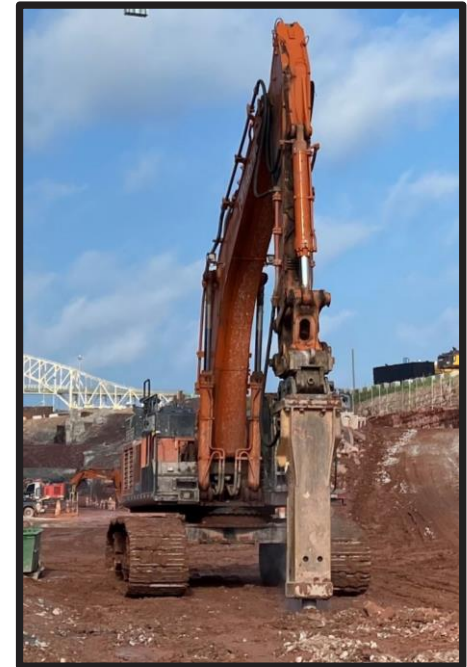
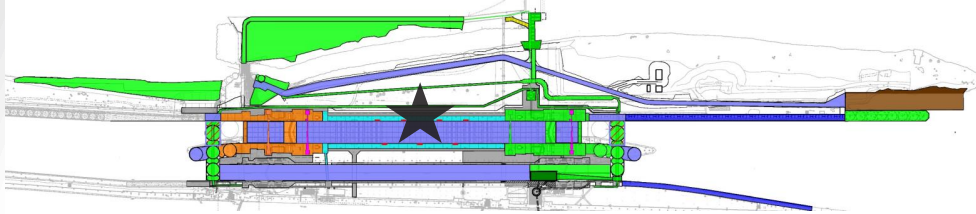
✓ TOWER CRANE CONSTRUCTION





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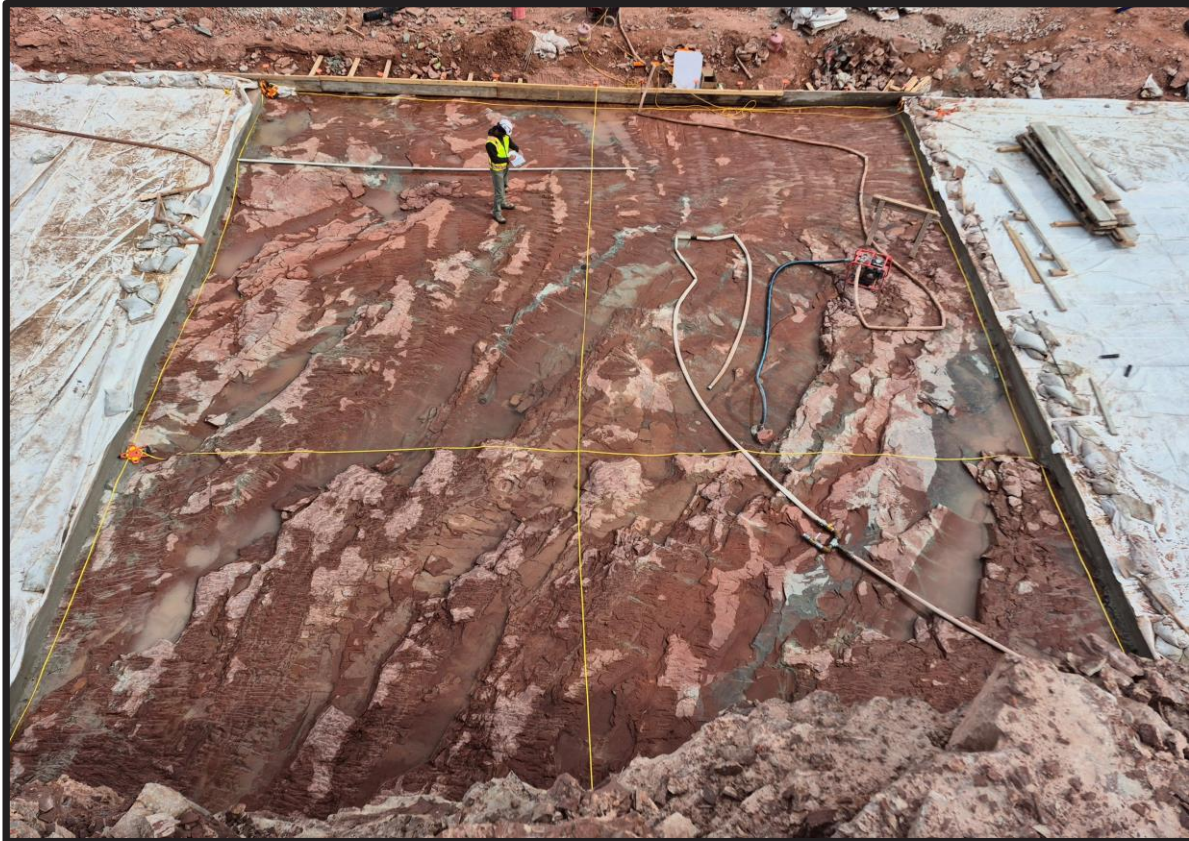
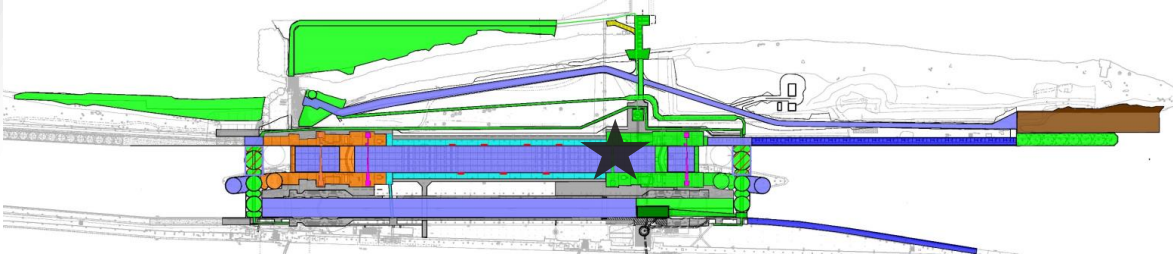
BEDROCK EXCAVATION





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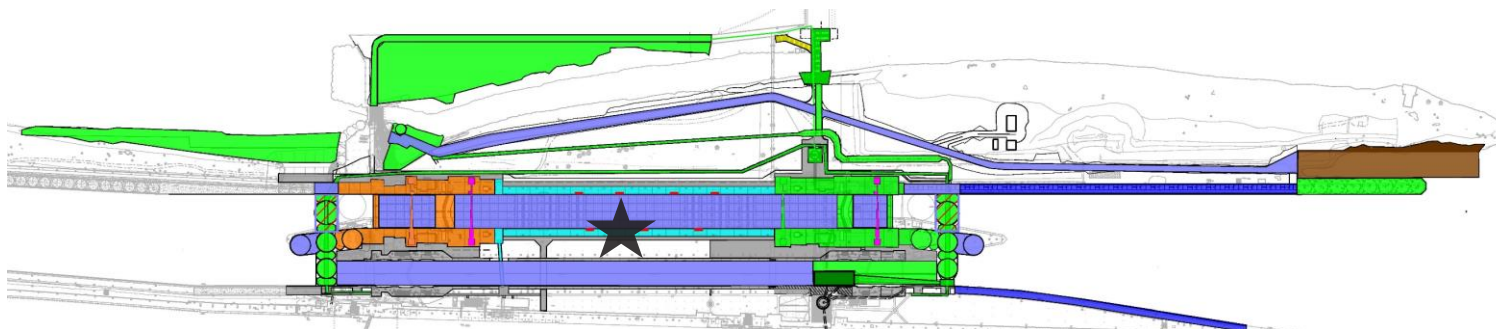
FOUNDATION PREPARATION





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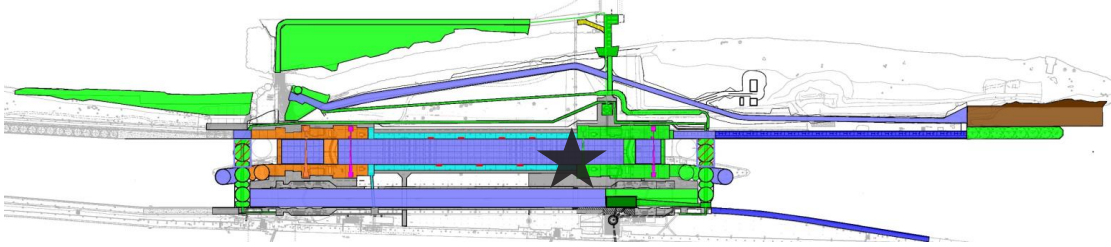
NEW LOCK WALL CONSTRUCTION





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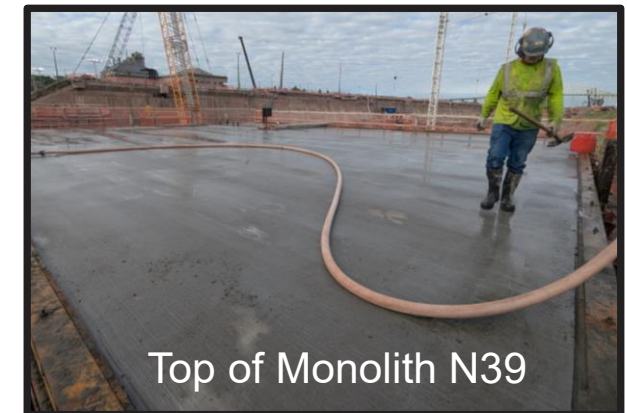
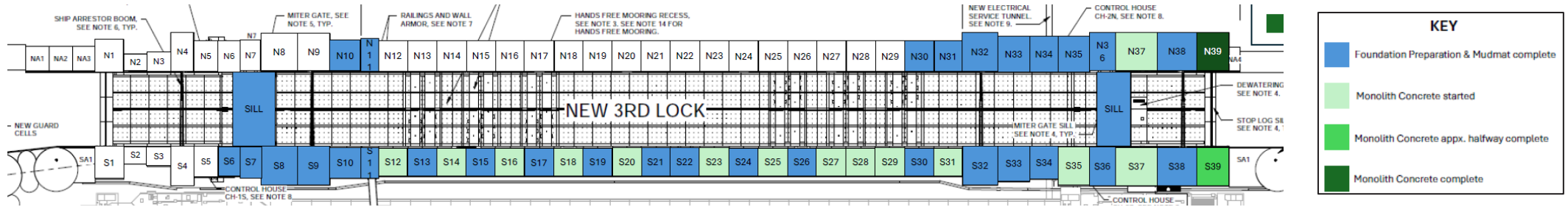
NEW LOCK WALL CONSTRUCTION





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FIRST NEW LOCK WALL MONOLITH COMPLETE!!!

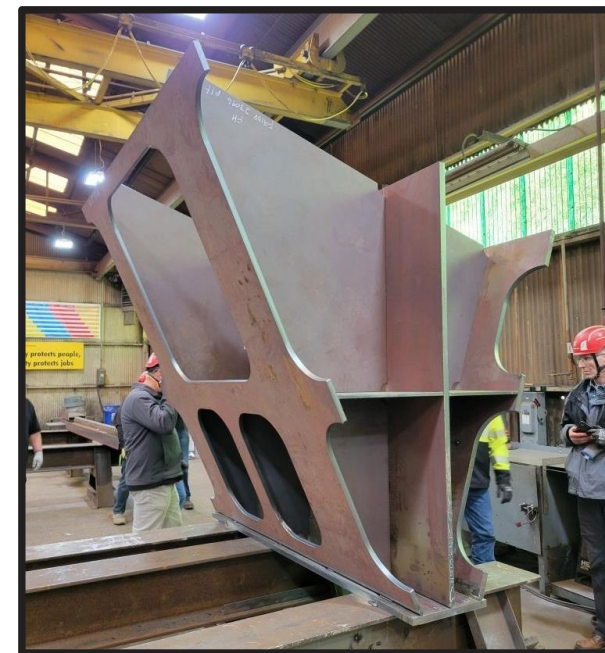




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NEW LOCK

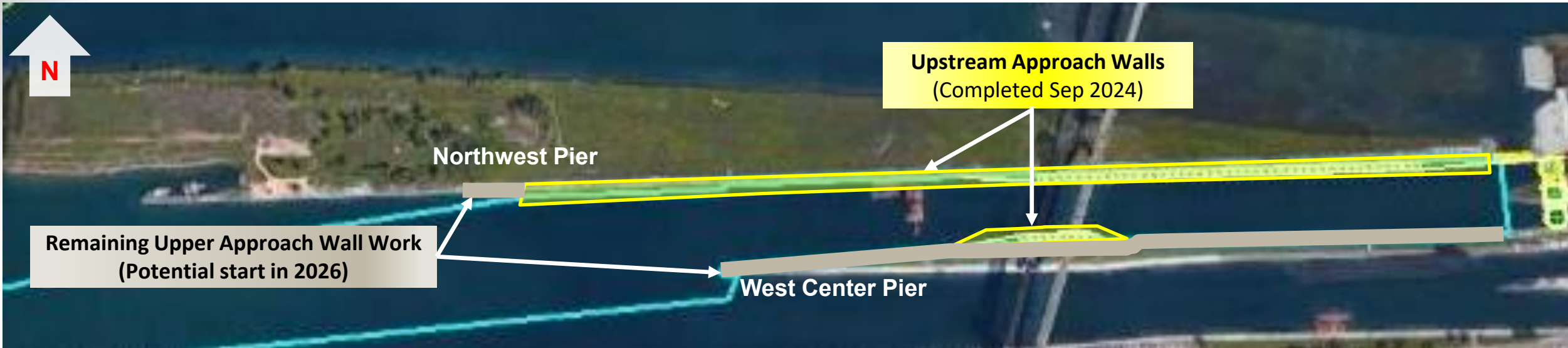
OFFSITE FABRICATION MITER GATES, CULVERT VALVES, SHIP ARRESTORS



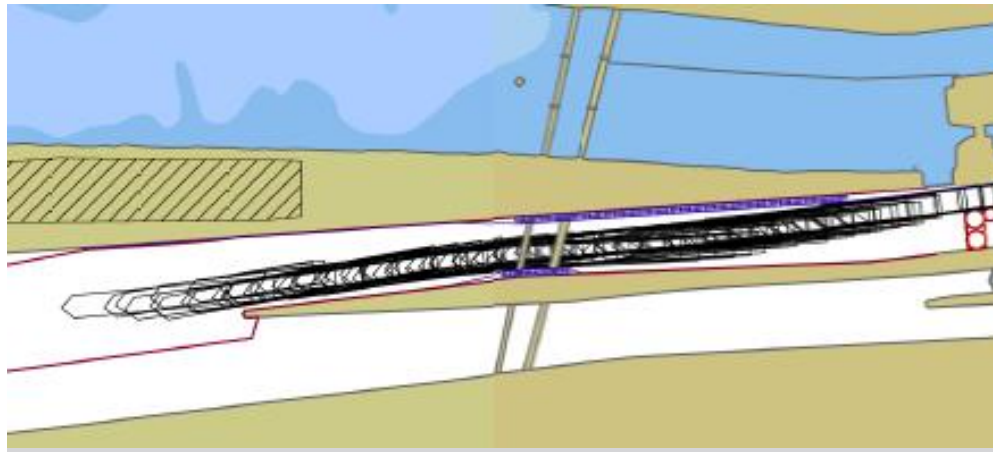


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REMAINING UPPER APPROACH WALL WORK



Virtual navigation through the New Lock at the Soo, ERDC Ship Simulation Study (May 2019)



Upbound vessel track plots, ERDC Ship Simulation Study (May 2019)



Western Limit of completed North Upstream Approach Wall Work (30 APR 2025)



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SOO LOCKS ICE MITIGATION STUDY



Study Area: 9,000' x 1,100'



Geographic limits of area included in ice study physical model



Ice Study physical model construction

Ice Mitigation Features Under Consideration:

1.  Upstream Ice Booms
2.  Upstream Bubbler Curtain
3.  Mac Lock Ice Passage Bulkhead
4.  Lock Wall Coatings
5.  Lock Wall Radiant Heating
6.  Longitudinal Bubbler Curtain in Chamber
7.  Additional Point Source Bubblers around miter gates





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RECENT & UPCOMING SIGNIFICANT ACTIVITIES



Recent Engagements and Dates of Importance:

- Senator Slotkin Site Visit: May 2025
- LTG Graham, USACE Chief of Engineers, Site Visit: Jul 2025
- LRD Change of Command, Outgoing MG Quander to COL Herlihy: Aug 2025
- Representative Bergman Site Visit: Aug 2025
- Representative Kaptur Site Visit: Aug 2025



COL Herlihy
LRD Commander



Senator Slotkin & LTC Bandeff, 30 May 25



Representative Bergman, Alec Zender,
LTC Bandeff, & Mick Awbrey, 05 Aug 25



Representative Kaptur &
Mick Awbrey, 18 Aug 25



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QUESTIONS

