

# KENTUCKY LOCK ADDITION PROJECT UPDATE

## INLAND WATERWAYS USERS BOARD MEETING #96

Stephanie Hall  
Deputy District Engineer  
U.S. Army Corps of Engineers  
Nashville District  
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# KY LOCK ADDITION – COMPLETED CONTRACTS



Bridges Superstructures - \$104M  
Completed Jul 2014

Bridge Substructure - \$44M  
Completed Mar 2008

D/S Cofferdam - \$67.1M  
Completed Jul 2021

Site, Demo, & Utilities - \$4.6M  
Completed Mar 2019

Upstream Lock - \$110M  
Completed Feb 2017

U/S Miter Gate Fab. - \$5.6M  
Completed Dec 2016

Upstream Cofferdam - \$17M  
Completed Nov 2006



# KY LOCK ADDITION – CURRENT CONTRACTS



**Downstream Excavation - \$54.8**  
**Estimated Completion: JUL 2022**

**Downstream Monoliths- \$167M (\$380M)**  
**67-month duration (access Pit JUL '22)**





# KY LOCK ADDITION – FUTURE CONTRACTS



Approach Walls (AWC)

Electrical/Mechanical, Buildings, and utilities Bridge (EMBC)

East Bank Site Development (EBSB)

aerial  
innovations  
SOUTHEAST



# KENTUCKY LOCK OVERVIEW OF SCOPE



## **Authorization:**

The Water Resources Development Act (WRDA) of 1996 (P.L 104-303) & Project reauthorized in WRDA 2020 (P.L. 116-260)

## **Purpose/Description:**

Construction of a new 110' x 1200' lock addition at Kentucky Lock. The existing navigation lock is too small to meet current and future traffic demands without significant delays. Kentucky Lock's delays are among the highest in the country. In the last three years, the average delay for vessels transiting the lock has been over 10 hours. The addition of a new larger lock will essentially eliminate these delays well into the future.

## **Ongoing/Remaining Work:**

### **– Current Contracts:**

- DS Excavation (\$54.8M) Awarded 26 Sep 2018 to Heeter Construction
  - Contract Completion is 07 JUN 2022
- DS Monoliths (\$167M(\$380M)) Awarded 30 Sep 2021 to Thalle Construction
  - Contract Completion is 19 MAY 2027

### **– Remaining Contracts' Scope:**

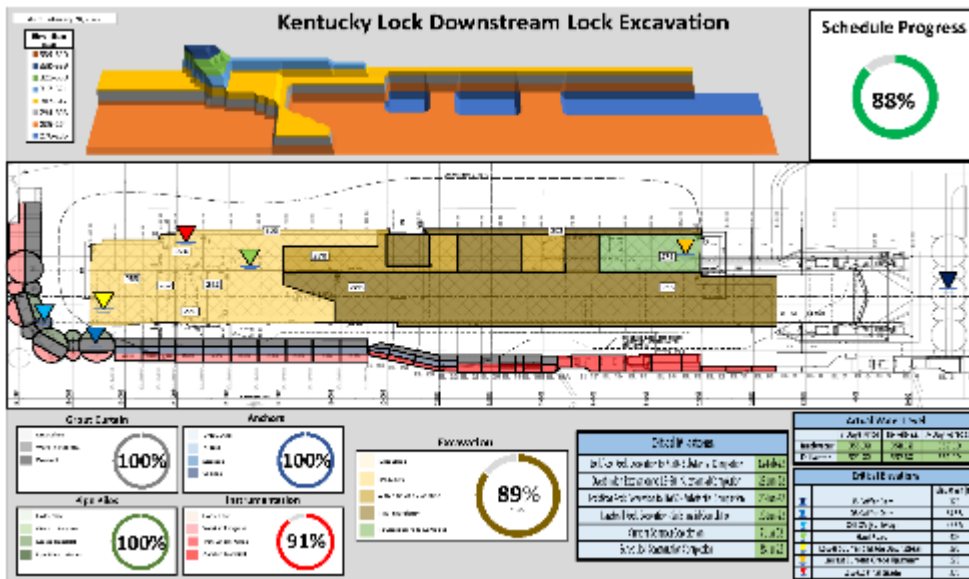
- Approach Walls (AWC)
- E/M, Buildings, Bridges, Utilities (EMBC)
- East Bank Site Development (EBSD)



# FY22 – DOWNSTREAM EXCAVATION PROGRESS



February 2022

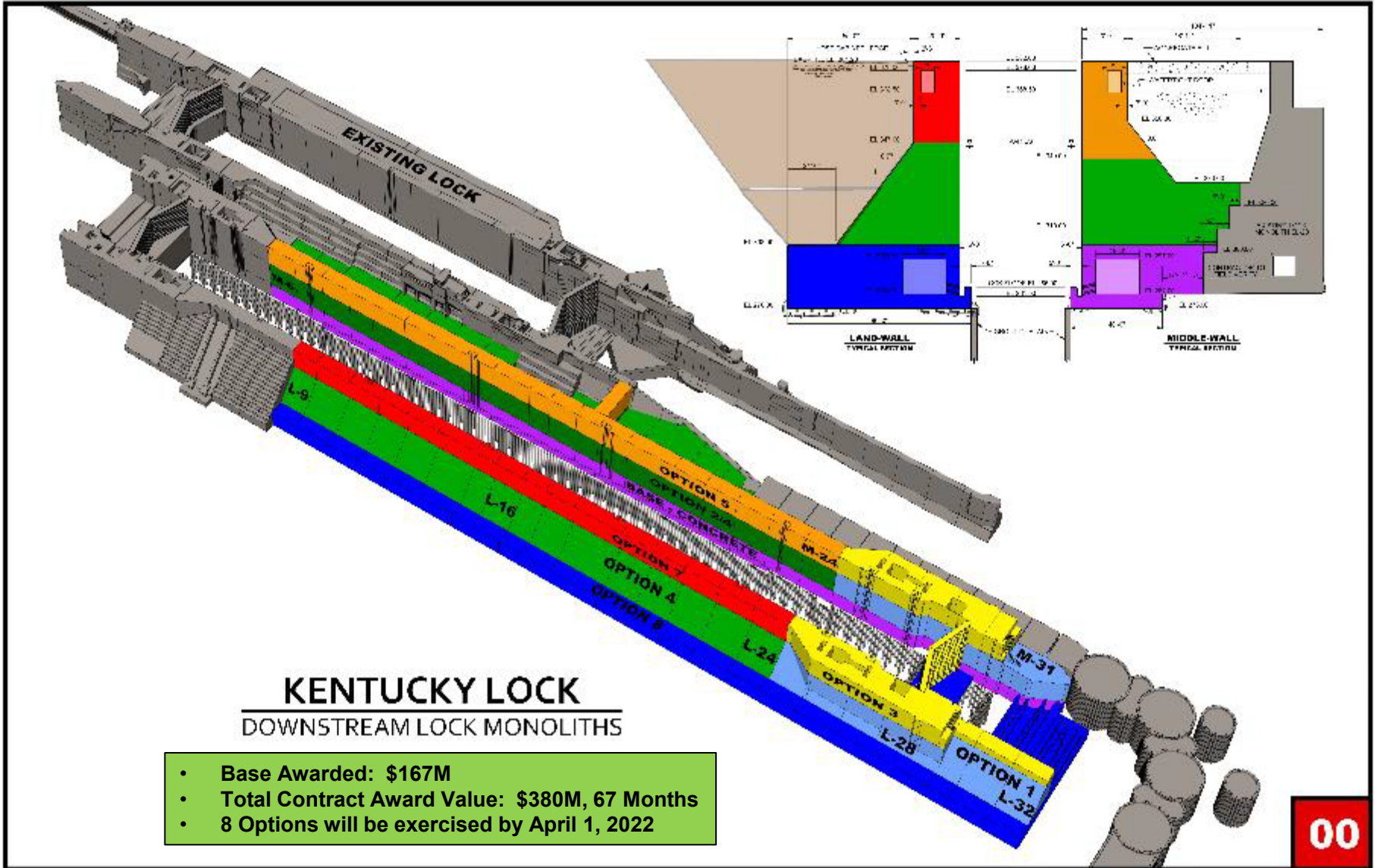


## FY22 Progress Included:

- \$20M in FY21 placement
- 225 Grout Holes installed
- 20 Verification Holes
- 44 Anchors Installed
- 40 Pipe Piles Installed
- 130K cy Rock Excavated
- 109K cy Overburden Excavated



# DOWNSTREAM LOCK MONOLITH- PLAN









# COST/FUNDING OVERVIEW

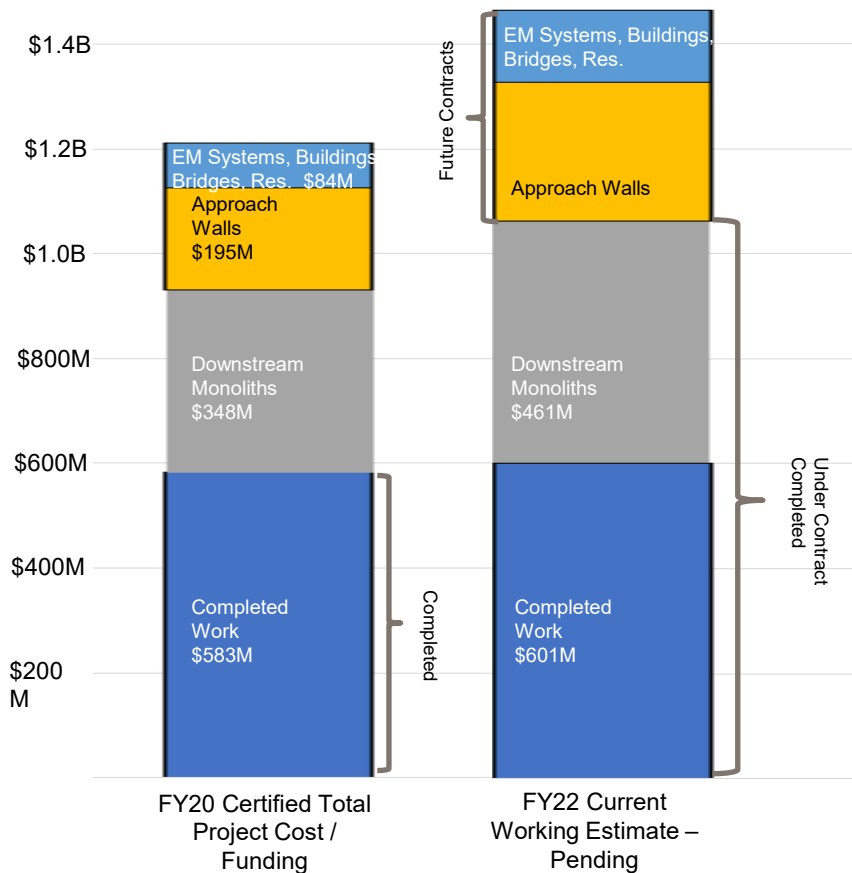


## KENTUCKY LOCKS & DAM, TENNESSEE RIVER, KY

	ARRA	CG	IWTF	IIJA	Total
Allocations through FY 2016:	\$88,833,626	\$211,381,288	\$171,660,987	NA	\$471,875,901
FY17 Allocation:	NA	\$18,000,000	\$18,000,000	NA	\$36,000,000
FY18 Allocation:	NA	\$20,600,000	\$20,600,000	NA	\$41,200,000
FY19 Allocation:	NA	\$21,800,000	\$21,800,000	NA	\$43,600,000
FY20 Allocation:	NA	\$30,530,000	\$30,530,000	NA	\$61,060,000
FY21 Allocation:	NA	\$71,565,000	\$38,535,000	NA	\$110,100,000
FY22 Allocation (IIJA):	NA	\$0	\$0	\$465,492,000	\$465,492,000
<b>Total Allocations to Date:</b>	\$88,833,626	\$373,876,288	\$301,125,987	\$465,492,000	\$1,229,327,901
<b>Remaining TPC Balance:</b>					TBD



# KENTUCKY LOCK ADDITION COST UPDATE



## Kentucky Lock funds to date

- The Downstream Lock Monoliths (DSLMM) contract base (\$167M) + 8 options (\$213M) for a total contract \$380M was awarded 30 Sept. 2021. Market Conditions extended the Period of Performance (54 to 67 months). Contract award was \$158M above the FY20 estimate.
- IIJA funding (\$465M) enables award of all 8 options on the Downstream monolith contract and award of the Approach Wall base contract.

## Funding Required

- Additional funding will be required for the options on the approach wall contract and Electrical and Mechanical Features, Lock Operations Buildings and Bridges, and Site Restoration.
- Cost estimates for remaining work are being revised to account for the changed market conditions since the FY20 estimate update
- The FY22 Cost Estimate will be Certified and provided in May 2022



# KENTUCKY LOCK ISSUES AND CHALLENGES



**Top Issue:** The Downstream Lock Monoliths contract (major remaining work on lock chamber) grew from 54 months to 67 months, moving the operational date. Due to market conditions the procurement came in at \$158M above the FY20 estimate.

**Issue:** Schedule - Earliest completion of the Lock Monolith contract is mid-2027. The Corps is working to optimize schedule and scope, mitigating additional funding requirements and determining most aggressive on-line date.

**Issue:** Funding - The Corps expects to complete the certified Total Project Cost Estimate update in May 2022.

## **Path Forward:**

- The Corps team is working to integrate remaining scope and schedule optimization to support the earliest online date and efficient funding.



# THANK YOU



Bob Winters, PMP

Project Manager – Programs and Project Delivery Branch

Email: [Robert.I.winters@usace.army.mil](mailto:Robert.I.winters@usace.army.mil)

Office: 615-736-2346

