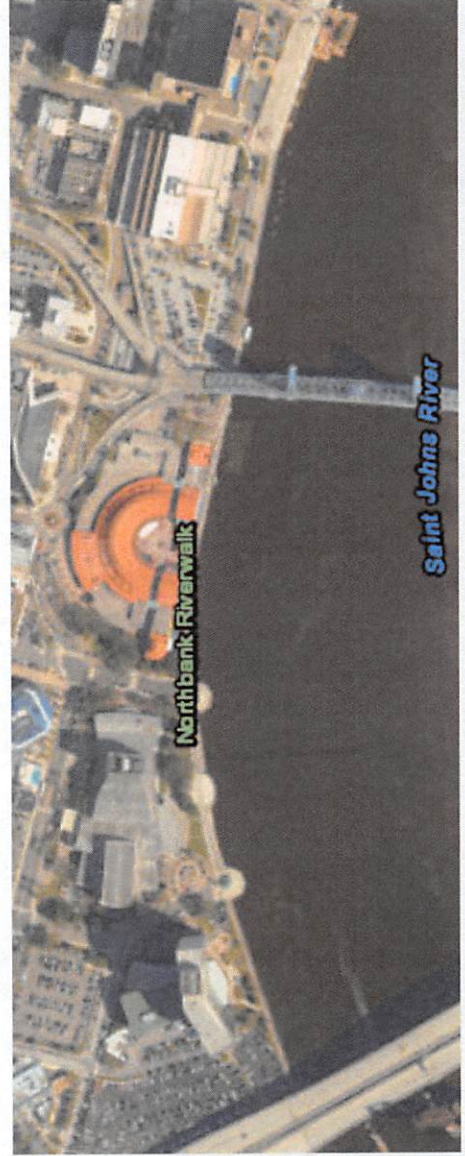


NORTHBANK RIVERWALK BULKHEADS



Background



- The bulkheads along the Northbank Riverwalk from CSX to Catherine Street are City maintained. These bulkheads are anchored steel sheet pile walls. They were all constructed back in the 1950's and are reaching the end of their service life. The most recent bulkhead inspection report recommends beginning replacement of the bulkheads 2019 thru 2026.

Inspection Reports



Bulkhead Inspection Reports:

- Public Works had the bulkheads inspected back in 2006 by CH2MHill. A second inspection was done in 2011 by RS&H and the latest Inspection report was completed in May of 2018, also by RS&H.
- The bulkheads were inspected above and below the water line, with ultrasonic thickness measurements of the steel made periodically along the bulkhead.

Segments



The bulkheads are broken into segments for reporting purposes and are named according to features found upland from the facility. The bulkhead segments along with approximate lengths are listed below as follows:

- » CSX Building – 681 LF.
- » Times Union Center – 642 LF.
- » Jacksonville Landing – 857 LF.
- » Main Street – 80 LF
- » Jacksonville Landing Parking Lot – 286 LF
- » Coastline Drive – 465 LF.
- » Coastline Drive (under construction) – 475 LF
- » Market & Courthouse Dr – 850 LF
- » Catherine Street (completed)– 400 LF.



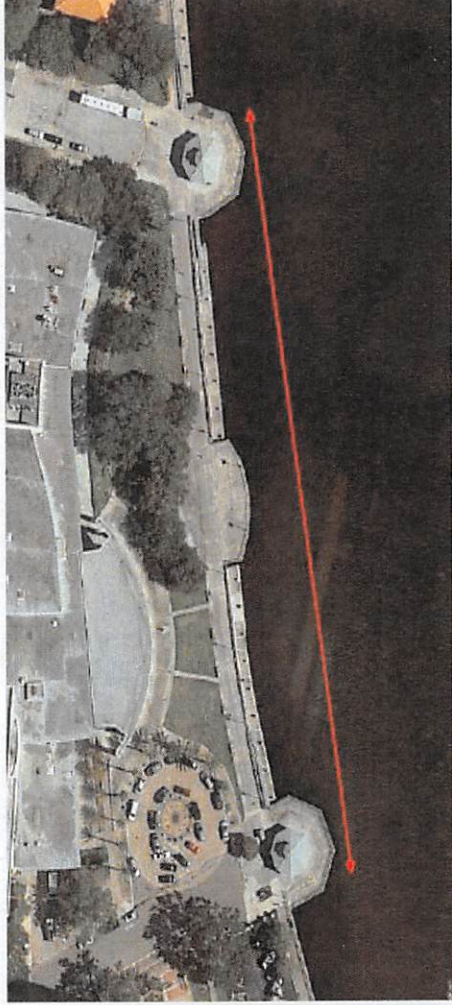
- The CSX bulkhead segment is the westernmost bulkhead on the project that extends from the Acosta Bridge to Pearl Street.
- Length – 681 feet



Times Union Center



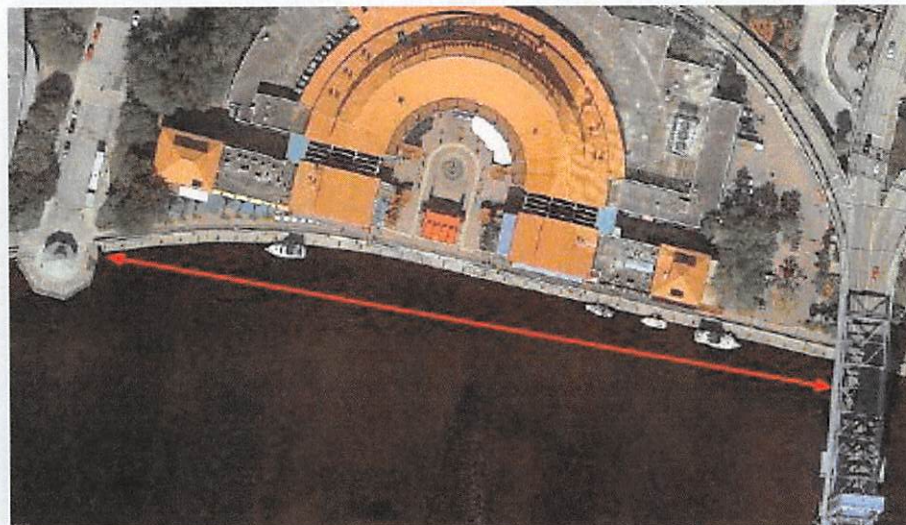
- The Times Union Center bulkhead segment is immediately east of the CSX bulkhead segment and extends from the western right of way at Pearl Street to the eastern right of way of Hogan Street.
- Length - 642 feet



Jacksonville Landing



- The Jacksonville Landing segment begins at the eastern right of way of Hogan Street and extends to the western right of way of the Main Street Bridge.
- Length – 857 feet



Main Street



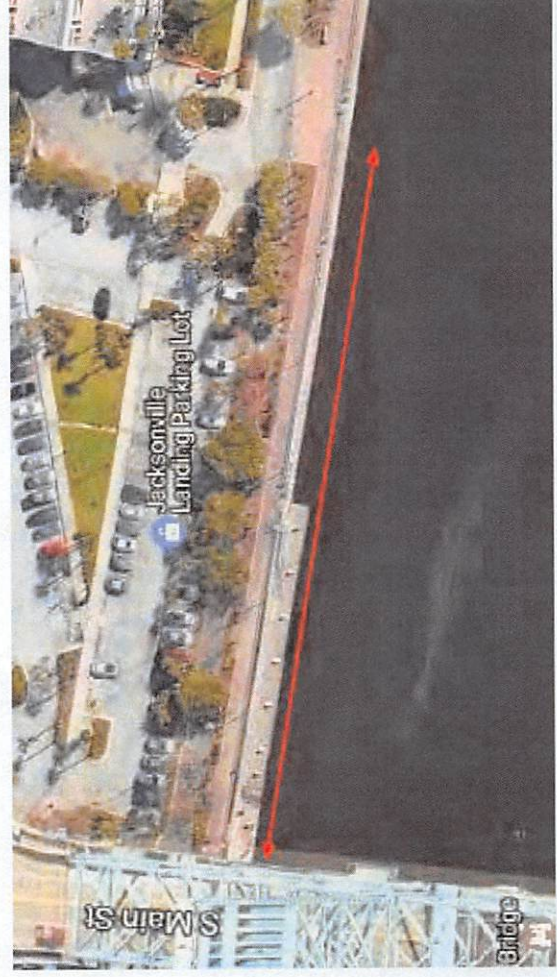
- The Main Street Bridge bulkhead segment is directly east of the Jacksonville Landing bulkhead segment. It extends to the eastern right of way line of Main Street.
- Length – 80 feet



Landing Parking Lot



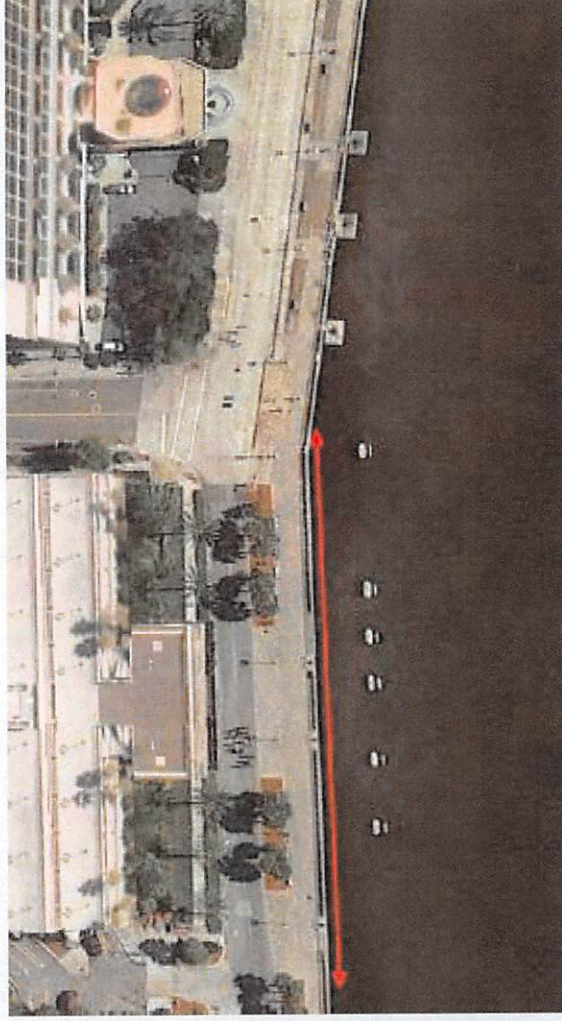
- The Landing Parking Lot bulkhead segment is directly east of the Main Street Bridge bulkhead segment and extends to the eastern edge of the surface parking associated with the Landing.
- Length – 286 feet



Coastline Drive



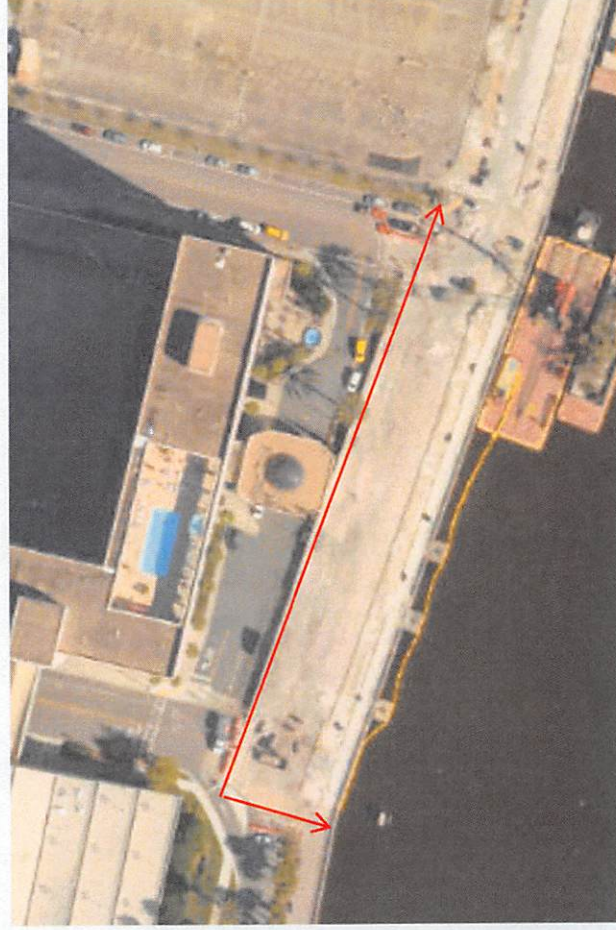
- This bulkhead segment represents the portion along Coastline Drive and is directly east of the Landing Parking Lot bulkhead segment and extends to the western edge of the Newnan street right of way.
- Length – 465 feet



Coastline/Liberty Project – Hyatt Hotel



- This bulkhead is in the process of being replaced as part of the Coastline/Liberty project.
- Length – 475 feet



Coastline/Liberty Project – S. Market St & Courthouse Dr

- These two bulkheads will be exposed as part of the Coastline/Liberty project once the parking decks have been removed.
- Once they are exposed, they will be evaluated.
- Length – 850 feet
- The segment under Liberty Street will be replaced with the Coastline/Liberty Street project.



Catherine Street Bulkhead Project



- This project was constructed in 2017.
- Length – 400 feet

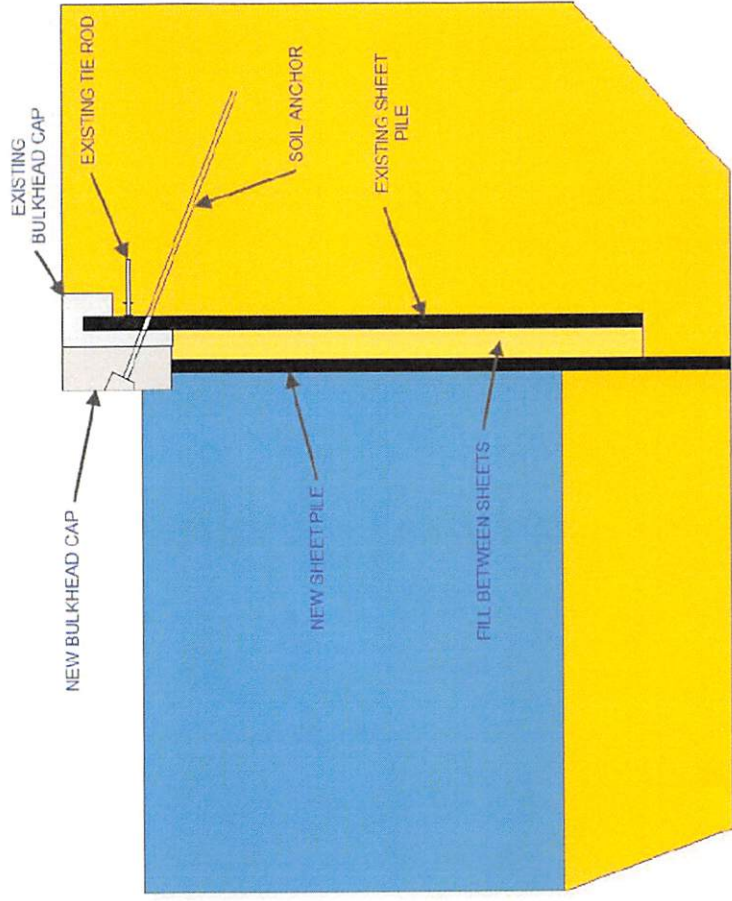


Replacement Methodology



- For the Northbank bulkheads, it is recommended that the replacement of these bulkheads be performed by installing a new steel sheet pile wall water ward of the existing bulkhead cap. Once the new wall is in place, the anchor system can be installed behind the wall with pre-stressed soil anchors. The new concrete cap will be used as the wale system to transfer the loads from the sheet pile into the anchor system. The anchors will need to be installed on a down angle to avoid utilities and existing structures near the surface.

Typical Section Through Bulkhead



Moving Forward



- Currently, there is \$700,000 available in the NBRW bulkhead account.
- Public Works will advertise a new RFP for the design and permitting of all segments of bulkheads along the Northbank Riverwalk.
- Winter 2019, design and permitting will be underway on the Times Union Center segment.
- \$3 million is proposed in the FY18/19 budget. The Times Union Center bulkhead should be advertised for construction by the end of 2019.
- Subsequent bulkhead segments will be designed/advertised as funding becomes available.

Moving Forward



➤ **PROPOSED CAPITAL IMPROVEMENT PROGRAM (CIP) FOR THE NORTHBANK RIVERWALK BULKHEAD REPLACEMENT :**

- Previously Allocation \$700,000
- Proposed for FY 18/19 = \$3,000,000
- Proposed for FY 19/20 = \$4,000,000
- Proposed for FY 20/21 = \$1,000,000
- Proposed for FY 21/22 = \$4,000,000
- Proposed for FY 22/23 = \$4,000,000
- Proposed for Beyond 5th = \$19,900,000

Moving Forward



THANK YOU