

Photo 1: Overview of the north concrete pen; note partial failure and large crack in remaining wall (a portion of this structure (wall & slab) previously failed into the ship berth and required removal). The project would demolish the failed north wall of this structure, construct a stone revetment/rip across the pen floor area to the south wall (generally matching the profile of the existing revetment), and installing sheeting from the bulkhead at the south side of the pen across the opening to the steel sheets at the timber pier (generally aligned to match the aluminum bridge across the area. This work would stabilize the area and remove any future hazards to persons or navigation.



Photo 2: Large crack and displacement in back wall of north pen



Photo 3: Overview of the north concrete pen; note partial failure and large crack in remaining wall (a portion of this structure (wall & slab) previously failed into the ship berth and required removal). The intent would be to demolish the north wall of this structure, return the proposed sheeting to a point about at the west end of the pen, and extend the existing stone revetment across the pen. This would stabilize the area and remove any future hazards to persons or navigation.

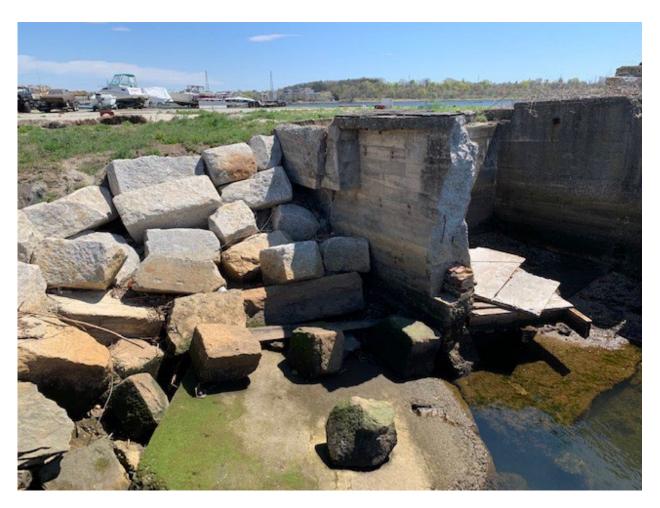


Photo 4: Stone revetment just north of the north concrete pen.



Photo 5: Failure/crack in the south wall of the south concrete pen; displacement indicates differential settlement across the pen. The intent would be to demolish the top few feet of this structure, extend the stormwater outfall through the steel sheetpile bulkhead, and backfill the area level with the adjacent ground. This would stabilize the area and remove any future hazards to persons or navigation.



Photo 6: Failure/crack in the north wall of the south concrete pen; displacement indicates differential settlement. Note concrete placed in an attempt to address soil loss into the pen.

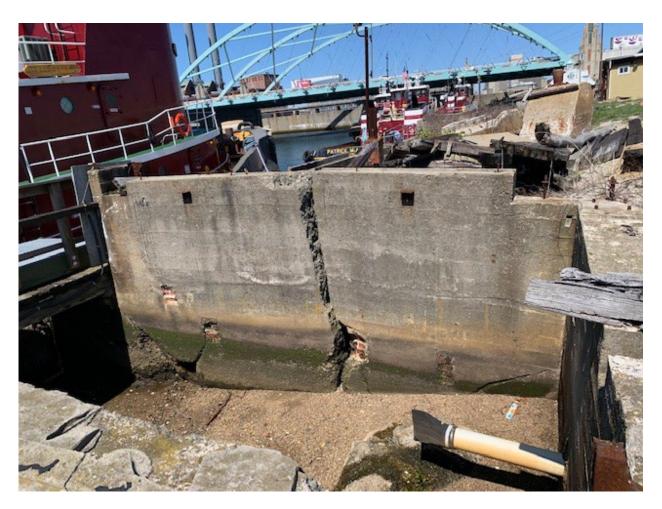


Photo 7: Failed north wall of the south concrete pen and 8" dia. stormwater outfall with duckbill valve. The intent would be to extend this outfall pipe through the steel sheetpile bulkhead. The mean high tide line was determined at this site from the black staining on the concrete walls. The soil above the concrete floor at the western end of the pen is believed to be the result of erosion of the upland soil through the large cracks in the pen walls.



Photo 8: Close view of failure in south wall of the south concrete pen

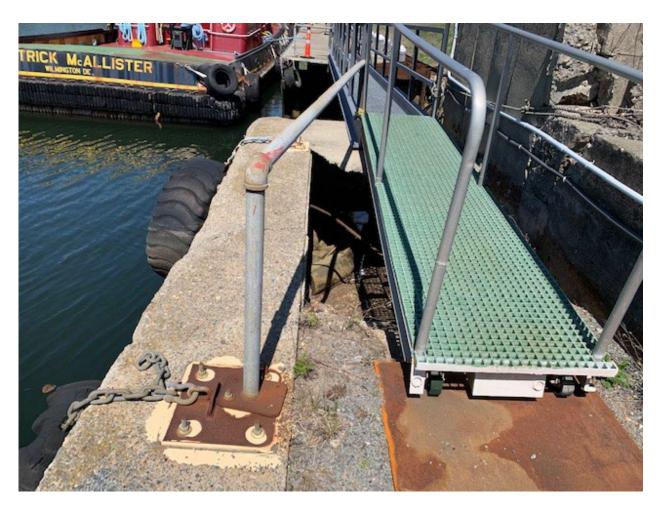


Photo 9: Severe settlement and soil loss adjacent to failing north concrete pen. This condition creates a dangerous condition at the support/landing at the pedestrian bridge used to access the south tug berth.



Photo 10: Aerial photograph from 1955 showing port area conditions when the building along the waterfront was still in place. Note the concrete pen areas at the face of the building.