US Army Corps of Engineers®
New York District

NY-NJ HATS – HUDSON RIVER (CHRISTOPHER ST.) FLOODWALL CONCEPT

EXISTING CONDITION (ACTUAL PHOTO)

PROPOSED CONCEPT (DIGITAL RENDERING – SUNNY DAY)

PROPOSED CONCEPT (DIGITAL RENDERING - STORM CONDITION)

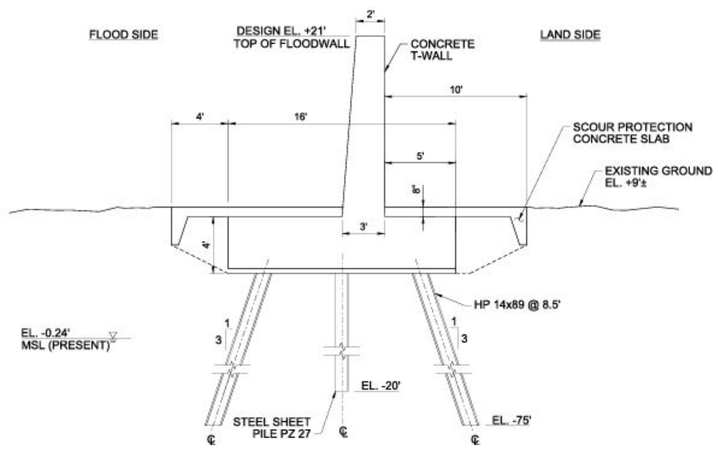
DISCLAIMER: *These renderings are artistic depictions of the features in NYNJHAT Study Tentatively Selected Plan (Alternative 3B) as of September 2022.* ***They are initial concepts used for illustrative purposes only and are subject to change****. The renderings are intended to promote a discussion of the study objectives and potential coastal storm risk management solutions. The selection of the final plan elements will be determined during the Pre-Construction, Engineering, and Design phase, and will incorporate stakeholder feedback that was obtained during the study's public comment period.*

FLOODWALL DESCRIPTION

Floodwall systems are independent, single purpose structures that aim to provide flood risk reduction. A floodwall is typically a reinforced concrete structure supported on steel H-piles, which can incorporate a steel sheet pile cut-off wall as a seepage control measure.

Based on the range of existing site elevations and required design elevations, a total of three types of prototypical floodwall were developed for NYNJHAT Study. Three of the floodwalls were developed as regular SBMs and were labeled as "medium", "large", and "extra-large". All three types of floodwall are composed of an inverted T-shape reinforced concrete structure with a base of 4-foot thick, battered H-piles and a vertical steel sheet pile cut-off wall. For the medium, large, and extra-large floodwalls, the existing ground elevations were assumed to be El. 12', El. 9', and El. 6'; the top of the wall elevations were set at El. 18.5', El. 21', and El. 22.5'. Detailed design would be completed during later stages of the study when site specific parameters are available.

TYPICAL LARGE FLOODWALL CROSS-SECTION



LOCATION MAP