



## PROJECT SUMMARY

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**Reference:** Coastal Marshlands Protection Act Permit Application  
Improving Resilience in West Brunswick Project

### PURPOSE

The City of Brunswick is applying for a Coastal Marshlands Protection Act (CMPA) permit to implement drainage improvements at two (2) ditches and one (1) outfall located within Coastal Marshlands under Coastal Resources Division (CRD) jurisdiction. This document provides a narrative description of the proposed activities per CMPA requirements. Supplemental CMPA application materials are included with this document.

### PROJECT SUMMARY

The City's Stormwater Masterplan identifies priority areas on the City's western border where bank stabilization and tide control improvements are expected to reduce the likelihood of flooding and increase the City's overall resilience to the effects of sea level rise, large tide events, and storm events increasing magnitude.

Bank stabilization improvements are proposed at the Palmetto Cemetery outfall ditch as well as the T Street outfall ditch. These improvements include the addition of Flexamat bank stabilization material, installing riprap at toe of ditch slopes for bank stabilization, and planting vegetation native to coastal GA (see sheet C-4 in plans). Replacement of an exterior tide gate check valve is proposed at the Howe Street outfall.

For bank stabilization projects, equipment such as excavators and front-end loaders will be operated from the tops of the banks to complete the installation and regrade ditch banks. If during construction equipment cannot reach certain areas of the project, temporary matting will be used in jurisdictional areas while accessing the project. Any matting material will be removed. Access for replacement of the Howe Street check valve will likely require temporary matting.

Project locations include three (3) discrete locations and do not represent a contiguous footprint. Projects include activity within jurisdictional marshlands. The project will conform to all required building, land disturbing, and stormwater management permits as required by Glynn County. BMPs (i.e., rock check dams (Rd)) will be implemented for erosion control during construction and will be removed once construction is complete. See plan sheets for additional details. Descriptions of proposed improvements at each location are below.

#### ***Palmetto Cemetery Outfall Ditch***

Approximately 782 LF of ditch and bank stabilization along the outfall ditch at Palmetto Cemetery. CMPA jurisdiction was delineated confirmed by CRD at the ordinary high water mark in the ditch. Impacts within CMPA jurisdiction will be approximately 792 SY or 0.16 acres.

Approximately 116 CY of material will be dredged from the toe of the ditch slope and replaced with roughly 116 CY of riprap. Approximately 380 CY of fill dirt and topsoil will be used to restore the ditch slope and provide a substrate for plantings. Flexamat and geotextile fabric will then be placed on top of the fill dirt, accounting for approximately 104 CY of fill.

Using fill dirt and stabilizing material will mitigate erosion, encourage native plant growth, and allow for more efficient flow through the ditch. In total, the amount of dredge will be approximately 116 CY and the amount of fill will be approximately 600 CY (Drawing C-2 in Plans).

Proposed improvements include installation of approximately 1,380 SY of Flexamat bank stabilization material and vegetation native to coastal GA.

### ***T Street Outfall Ditch***

Approximately 415 LF of ditch and bank stabilization along the outfall ditch of T Street. CMPA jurisdiction was delineated and confirmed by CRD at the ordinary high water mark in the ditch. Impacts within CMPA jurisdictional delineation will be approximately 1,028 SY or 0.22 acres. Currently, there is approximately 362 SY within the T Street ditch from a previous bank stabilization effort.

Approximately 103 CY of material will be dredged from the toe of the ditch slope and replaced with roughly 103 CY of riprap. Approximately 480 CY of fill dirt and topsoil will be used to restore the ditch slope and provide a substrate for plantings. Flexamat and geotextile fabric will then be placed on top of the fill dirt, accounting for approximately 94 CY of fill.

Using fill dirt and stabilizing material will mitigate erosion, encourage native plant growth, and allow for more efficient flow through the ditch. In total, the amount of dredge will be approximately 103 CY and the amount of fill will be approximately 677 CY (Drawing C-3 in Plans).

Proposed improvements include installation of approximately 980 SY of Flexamat bank stabilization material and vegetation native to coastal GA.

### ***Howe Street Outfall***

Proposed improvements include the replacement of one 60 inch Tideflex Series TF-1 Exterior Check Valve on the existing 48 inch outfall pipe west of Howe Street. CMPA jurisdiction was delineated and confirmed by CRD at the edge of CMPA jurisdictional vegetation. CMPA impacts will be limited to temporary disturbance for access and will be approximately 81 SY or 0.02 acres.

## **ALTERNATIVE ANALYSES**

Alternative project locations are limited, without relocating existing outfalls and therefore generating additional marsh impacts. Aside from relocations, outfall ditch channelization with rip rap was considered; however, traditional, hard armoring stabilization techniques are not preferred over those which are amenable to the establishment of native plant and ecological communities, such as the specified design. Improvements were designed at the existing project locations using best available information and engineering judgment. These improvements are designed for unreasonable impact avoidance and overall minimization of jurisdictional impacts.

**PUBLIC INTEREST**

The proposed improvements are designed to improve drainage and reduce the likelihood of flooding in project locations for the protection of private property, real property, and for improved safety within the City. Proposed improvements will not unreasonably obstruct or alter navigational waters, increase erosion, alter channel structure, generate stagnant water, or interfere with marine or estuarine wildlife or habitat conservation.