TOWN OF FALMOUTH

CONTRACT DRAWINGS FOR
UNDERWOOD ROAD
DRAINAGE IMPROVEMENTS
FALMOUTH, MAINE
SEPTEMBER 2020

DRAWING INDEX

GENERAL

COVER SHEET

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SUGGESTED CONSTRUCTION PHASING PLAN

LOCATION PLAN

PROJECT LOCATION

FALMOUTH, MAINE

MAINE

PORTLAND

BANGOR

PRESQUE ISLE

AUGUSTA
NOTES:
1. MEAN HIGH WATER (MHW) OBTAINED FROM NOAA STATION ID. 841850 LOCATED IN PORTLAND MAINE.
2. HIGHEST ANNUAL TIDE (HAT) OBTAINED FROM MAINE DEP PUBLISHED IN 2018.
3. CEDARS AT THE TOP OF THE EMBANKMENT SHALL BE PROTECTED AT ALL TIMES.
4. CONTRACTOR SHALL EXCAVATE EMBANKMENTS A MINIMUM OF 1' PRIOR TO COMMENCING WORK. EXCAVATED MATERIAL SHALL BE DISPOSED OF AT THE TOWN OF FALMOUTH PUBLIC WORKS LOWER YARD LOCATED AT 101 WOODS ROAD.

CEDARS TO BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE. REMOVED CEDARS SHALL BE REPLACED IN-KIND AND COORDINATED WITH THE OWNER.

PLACE D50=6" RIPRAP AT OUTLET OF EXISTING PIPE, 5'WX5'LX1'T RIPRAP, TYP

GRADE TO DRAIN TOWARDS CB-2

PROTECT EXISTING OAK TREE. NO TRIMMING OF BRANCHES WILL BE ALLOWED
EMBANKMENT PROTECTION TYPICAL SECTION

STONE REVETMENT MATERIAL: ROCK WITH MAXIMUM SIZE OF 12" AND MINIMUM SIZE OF 8". PLACE ROCK WITH IN REVERSE DISTANCE AND PACK TIGHTLY. PLACE ROCK WITH IN THE ABOVE ORDER AND IN THE BAYS OF THE REVETMENT MATTRESS.

WOVEN GEOTEXTILE (MIRAFI 600X OR APPROVED EQUAL) TO BE PLACED UNDER THE EMBANKMENT PROTECTION.

EMBANKMENT TO BE FILLED WITH STRUCTURAL FILL. 1' LAYER OF 2" LEVELING STONE MULTIPLE PLANTINGS. PLACED 6' APART.
1. THE WRAPS ALONG THE SEAM SHALL BE SUFFICIENTLY TIGHT TO CLOSE THE GAP BETWEEN THE ADJACENT PIECES OF GEOGRID, CHANNELED ALONG BEDDING/INITIAL BACKFILL.

2. NUMBER OF STITCHES PER FOOT ALONG THE SEAM SHALL BE SIX (6). THE SPACING OF STITCHES ALONG EACH SEAM SHALL BE TYPICAL THICKNESS (FILLED): 12 INCHES; OPTIONAL THICKNESS: 18 INCHES OR 24 INCHES.

3. THE DRAINAGES IMPROVEMENTS SHALL BE SET TO GRADE AS SHOWN ON PLANS.

NOTES:

- FLAT SLAB TOP DRAIN MANHOLE
- SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.

pipe trench

scale: NTS

Typical drive section

scale: NTS

ditch grate

scale: NTS

pipe trench

scale: NTS

frame and cover

for type "a" catch basin

scale: NTS

catch basin

scale: NTS

drain manhole

standard cover and frame

flat slab top drain manhole

revetment mattress detail

revetment mattress connection detail
SECTION A-A

EROSION CONTROL Mulch BERM

1. Mulch Berm Creation: The Mulch Berm shall be created using approved mulch material in accordance with the requirements and specifications outlined in the Erosion Control Plan. The Berm shall be contoured and graded to match the natural slope and be stabilized with mulch. Mulch shall be placed to a minimum depth of 3'-0" (Min) above local ground level.

2. Mulch Berm Maintenance: The Mulch Berm shall be maintained to ensure its effectiveness in controlling erosion and sediment. Mulch shall be kept free of debris, trash, and other materials that may contribute to erosion. The Berm shall be inspected and maintained on a regular basis to ensure its stability and effectiveness.

3. Mulch Berm Removal: Once the construction work is complete, the Mulch Berm shall be removed as per the Erosion Control Plan. The removal of the Berm shall be done in a manner that minimizes soil disturbance and erosion.

SECTION A-A

EROSION CONTROL - WINTER CONSTRUCTION

1. Winter Construction Precautions: Snowfall and icy conditions shall be considered as part of the winter construction. Proper precautions shall be taken to ensure the safety of workers and the protection of the site.

2. Snow and Ice Removal: Snow and ice shall be removed from the site on a regular basis to prevent accumulation and potential hazards. Snowplows and ice removal equipment shall be used to maintain clear pathways and access areas.

3. Mulch Berm Creation: The Mulch Berm shall be created as per the requirements outlined in the Erosion Control Plan. Mulch shall be placed to a minimum depth of 3'-0" (Min) above local ground level.

4. Mulch Berm Maintenance: The Mulch Berm shall be maintained to ensure its effectiveness in controlling erosion and sediment. Mulch shall be kept free of debris, trash, and other materials that may contribute to erosion.

5. Mulch Berm Removal: Once the construction work is complete, the Mulch Berm shall be removed as per the Erosion Control Plan. The removal of the Berm shall be done in a manner that minimizes soil disturbance and erosion.

SECTION A-A

EROSION CONTROL - WETLAND NOTES

1. Wetland Erosion Control Measures: Special care shall be taken to protect wetlands and their associated values. Erosion control measures shall be designed and implemented to minimize the impact on the wetlands.

2. Wetland Protection: Erosion control measures shall be designed to prevent erosion and sedimentation in wetland areas. Special attention shall be given to Keeping wetland areas in place.

3. Wetland Remediation: If wetland areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the wetlands.

SECTION A-A

EROSION CONTROL - WETLAND CROSSING

1. Wetland Crossings: Wetland crossings shall be designed and implemented to minimize the impact on the wetlands. Special attention shall be given to the protection of the wetlands.

2. Wetland Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation in wetland areas. Special attention shall be given to the protection of the wetlands.

3. Wetland Remediation: If wetland areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the wetlands.

SECTION A-A

EROSION CONTROL - SLOPES

1. Slope Protection: Slope protection measures shall be designed to prevent erosion and sedimentation on sloped areas. Special attention shall be given to the protection of the slopes.

2. Slope Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation on sloped areas. Special attention shall be given to the protection of the slopes.

3. Slope Remediation: If slope areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the slopes.

SECTION A-A

EROSION CONTROL - WATERFALLS

1. Waterfall Protection: Waterfall protection measures shall be designed to prevent erosion and sedimentation at waterfall areas. Special attention shall be given to the protection of the waterfalls.

2. Waterfall Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation at waterfall areas. Special attention shall be given to the protection of the waterfalls.

3. Waterfall Remediation: If waterfall areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the waterfalls.

SECTION A-A

EROSION CONTROL - Ditches

1. Ditch Protection: Ditch protection measures shall be designed to prevent erosion and sedimentation in ditch areas. Special attention shall be given to the protection of the ditches.

2. Ditch Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation in ditch areas. Special attention shall be given to the protection of the ditches.

3. Ditch Remediation: If ditch areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the ditches.

SECTION A-A

EROSION CONTROL - WINDFALLS

1. Windfall Protection: Windfall protection measures shall be designed to prevent erosion and sedimentation at windfall areas. Special attention shall be given to the protection of the windfalls.

2. Windfall Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation at windfall areas. Special attention shall be given to the protection of the windfalls.

3. Windfall Remediation: If windfall areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the windfalls.

SECTION A-A

EROSION CONTROL - STOCKPILE

1. Stockpile Protection: Stockpile protection measures shall be designed to prevent erosion and sedimentation at stockpile areas. Special attention shall be given to the protection of the stockpiles.

2. Stockpile Erosion Control Measures: Erosion control measures shall be designed to prevent erosion and sedimentation at stockpile areas. Special attention shall be given to the protection of the stockpiles.

3. Stockpile Remediation: If stockpile areas are disturbed, they shall be remediated to their original condition. Special care shall be taken to ensure the integrity of the stockpiles.
DEMOBILIZE ALL EQUIPMENT.

- PHASE 3
  - RESTORE AREA WITH LOAM AND SEED.
  - INSTALL INSTALLATION OF THE STORM DRAIN AND STRUCTURES.
  - INSTALL STORM DRAIN AND STRUCTURES FROM DMH-1 TO CB-1. REMOVE TRANSITE PIPE DURING INSTALLATION OF THE STORM DRAIN AND STRUCTURES.
  - INSTALL STORM DRAIN AND STRUCTURES FROM DMH-2 TO DMH-1.
  - INSTALL EMBANKMENT PROTECTION ALONG EMBANKMENT AS SHOWN ON THE PLANS.
  - INSTALL REMAINING EMBANKMENT PROTECTION ALONG EMBANKMENT AS SHOWN ON THE PLANS.
  - EXCAVATE FOR REVETMENT MATTRESS, 24" RIPRAP, LEVELING STONE, AND 24" RIPRAP.
  - INSTALL RIP RAP APRON AT THE OUTLET OF THE EXISTING CULVERTS AS SHOWN ON THE PLANS.
  - INSTALL PROPOSED 48" STORM DRAIN FROM THE OUTLET OF THE PROPOSED STORM DRAIN TO DMH-2.
  - INSTALL TEMPORARY ROADWAY USING 8' TIMBER MATS.
  - INSTALL TEMPORARY ROADWAY AS WORK PROGRESSES UP THE DRAINAGE DITCH.
  - REMOVE TEMPORARY ROADWAY AS WORK PROGRESSES UP THE DRAINAGE DITCH.
  - REMOVE THE EXISTING CONCRETE HEADWALL.
  - INSTALL REMAINING STORM DRAINAGE IMPROVEMENTS.
  - REMOVE AND DISPOSE OF EXISTING 30" TRANSITE PIPE.
  - INSTALL STORM DRAIN AND STRUCTURES FROM DMH-2 TO DMH-1.
  - INSTALL REMAING STORM DRAINAGE IMPROVEMENTS.
  - CONTINUE INSTALLATION OF REVETMENT MATTRESS, 24" RIPRAP, LEVELING STONE, AND 24" RIPRAP.
  - INSTALL TEMPORARY ROADWAY USING 8' TIMBER MATS.
  - INSTALL BYPASS PUMP IN CB-2 AND ROUTE TO HAY BALE SEDIMENT BASIN ON DOWNSTREAM END OF PROPOSED REVETMENT MATTRESS.
  - INSTALL BYPASS PUMP IN CB-2 AND ROUTE TO HAY BALE SEDIMENT BASIN ON DOWNSTREAM END OF PROPOSED REVETMENT MATTRESS.
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