SANDWICH HARBOR STORMWATER
TOWN NECK & BOARDWALK ROAD
SANDWICH, MASSACHUSETTS
AUGUST 22, 2018
16. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA WITHIN THE BIORETENTION AREAS, REMOVE AND PROPERLY DISPOSE
OF LEGEND:

HAS REACHED A MINIMUM OF 80% STABILIZATION AND IS NO LONGER REQUIRED AS A CONSTRUCTION SEDIMENTATION BASIN.

EXISTING

SYMBOLS

EXISTING

NO. 13:

TREE

NO. 13:

EXISTING SHRUB

NO. 5:

EXISTING SPOT GRADE

NO. 5:

WALL - RETAINING

NO. 5:

STONE

NO. 5:

VEGETATED SWALE

NO. 5:

CROSSWALK/PAVEMENT

NO. 5:

GAS LINE

NO. 5:

WETLAND BOUNDARY

NO. 5:

BRIDGES

NO. 5:

BORING

NO. 5:

UTILITY POLE W/GUY

NO. 5:

UTILITY POLE

NO. 5:

PICNIC TABLE

NO. 5:

BIKE RACK

NO. 5:

SANDBOX

NO. 5:

POND

NO. 5:

POND

NO. 5:

WATER PI Lot

NO. 5:

Sewn INLET

NO. 5:

INLET

NO. 5:

EPIFILM INLET

NO. 5:

CROSSWALK

NO. 5:

WATERMETER

NO. 5:

PUMP

NO. 5:

VALVE

NO. 5:

POLE TRENCH

NO. 5:

PUMP

NO. 5:

PILOT TANK

NO. 5:

PILOT TANK

NO. 5:

Sewer Manhole

NO. 5:

SEWER MANHOLE

NO. 5:

PV TABLE

NO. 5:

TRESTLE

NO. 5:

THrust Block

NO. 5:

HYDRANT

NO. 5:

MANHOLE

NO. 5:

THRU HOLE

NO. 5:

WATER INTERFACE

NO. 5:

WATER INTERFACE

NO. 5:

CROSSWALK

NO. 5:

WATER INTERFACE

NO. 5:

CROSSWALK

NO. 5:

WATER INTERFACE

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CROSSWALK

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WATER INTERFACE

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CROSSWALK

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CROSSWALK

NO. 5:

WATER INTERFACE

NO. 5:

CROSSWALK

NO. 5:

WATER INTERFACE

NO. 5:

CROSSWALK

NO. 5:

WATER INTERFACE

NO. 5:

CROSSWAL
SURVEY NOTES:
1. THE TOPOGRAPHY AND EXISTING SITE DATA DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY TIGHE & BOND IN FEBRUARY 2011 WITH A SUPPLEMENTAL SURVEY BY THE HORSLEY WITTEN GROUP, INC. ON FEBRUARY 13, 2018.
2. THIS PLAN DOES NOT SHOW ANY RECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
4. ALL PROPERTY AND BOUNDARY LINES DEPICTED ARE APPROXIMATE ONLY.
5. EXISTING CONTOUR INTERVALS ARE EQUAL TO TWO FEET.
6. THE ACCURACY OF MEASURED PIPE INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER CONDITIONS.
### Site Plan: Boardwalk Road

**Project Title:** Sandwich Harbor Stormwater Management System Update

**Prepared For:**

**Sheet Number:** 10C

**Registration:**

**Survey Provided By:**

**Plan Set:**

**Plan Title:** Sandwich Harbor Stormwater Management System Update

**Graphic Scale:**

1 INCH = 30 FEET

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### Table: Site Plan Details

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Drawn By:</th>
<th>Designed By:</th>
<th>Checked By:</th>
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**Sustainable Environmental Solutions**

90 Route 6A
Sandwich, MA 02563
508-833-6600 voice
508-833-3150 fax

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**Graphical Details:**

1. All materials to meet manufacturer's specifications.
2. Slab in place to be filled with liquid composite concrete.
3. Designers' specifications to be followed.
4. Stormwater treatment area for contaminated material shall be designed per Stormwater Mitigation Plan, as approved by the Permitting Authority.
1. HANDICAPPED ACCESS

BITUMINOUS BERM
VAN (CAR) ACCESSIBLE
SPACES SHOULD BE 5 FEET-SEE PLANS.

2. ALL PARKING LOT

BERM TO BE CONSTRUCTED OF BITUMINOUS WEARING SURFACE COURSE AS SHOWN.

3. WHEN BERM IS TO BE CONSTRUCTED ON A FRESH LAID BITUMINOUS SURFACE, THAT SURFACE

MUST FIRST BE CLEANED.

4. BERM TO BE FOUNDED ENTIRELY ON THE BASE COURSE.

5. ALL PAINT SHALL BE

NEW TYPE I-1 BIT. PAVEMENT WEARING SURFACE & BINDER

SURFACE, ON 2" BINDER COURSE

(SEE PAVEMENT DETAIL)

6. EXISTING BITUMINOUS PAVEMENT SHALL BE REMOVED TO A CLEAN STRAIGHT EDGE VIA SAW

PRIOR TO SUB-BASE INSTALLATION.

7. PRIOR TO INSTALLING THE WEARING COURSE THE EXISTING VERTICAL PAVEMENT SURFACE SHALL

BE SWEPT COMPLETELY CLEAN.

8. SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH AND LOCATION

9. ALL JOINTS SHALL BE WELDED SOLID.

10. CONTRACTOR SHALL PROVIDE SHOP DRAWING OF THE GATE ASSEMBLY.

11. ANY HOLLOW POST TO BE FILLED WITH 4000 PSI CONCRETE.

12. ALL METAL SHALL BE PRIMED AND PAINTED (TWO COATS).

13. CONTRACTOR SHALL INSTALL TWO 3/16" WELDED STEEL PIPE GREASE FITTINGS

ATTACHED TO BOTH SIDES OF THE GATE, ON ALL POSTS AND IN CENTER OF GATE ARM.

14. COMPACTED GRAVEL BELOW POST AND EXTEND POST TO THE BASE OF THE GRAVEL FOR DRAINAGE PRIOR

TO INSTALLING THE WEARING COURSE.

15. WOOD POSTS SHALL BE NOTCHED AS NECESSARY TO FACILITATE CURVES AND CHANGES IN DIRECTION.

16. SETTING POSTS: (1) EXCAVATE BY AUGER, SET POST IN GROUND AND BACKFILL WITH CONCRETE OR (2)

SET BY HYDRAULIC DRIVE MACHINERY (SEE SPECIFICATIONS).

17. SEDIMENT SILT SOCK TO BE FILLED WITH LEAF COMPOST AND/OR WOOD MULCH PER

NOT TO SCALE

18. THE CONTRACTOR SHALL INSTALL TWO 3 X 10 RAIL

45" MIN.

19. FASTENERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL MATCHING ASTM A153 AND ASTM

A653.


21. THERE IS TO BE NO LIP/EDGE FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA INVERT OF THE APRON IS AT THE SAME LEVEL AS THE RECEIVING CHANNEL.

22. THE WIDTH OF THE END OF THE APRON TO BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1.

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SEEDING FOR DISTURBED AREAS

SEED MIX - TYPE 1
TOTAL AREA = 3,000 SF ±
COLONIAL SEED - UNAMENDED MIX
APPLICATION: 18 & GEORGIA 30 GB (SP & B)

- Coastal/Wyoming hair Grass, (Datemispermum complanum), Sheep Fescue, (Festuca ovina), Blue & Field Fescue, (Festuca pratensis), Blue Fescue, (Festuca pratensis), Little Bluestem, (Schizachyrium scoparium), Autumn Bentgrass, (Agrostis perennans), Purple Lovegrass, (Eragrostis spectabilis)

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1. The following notes are provided as general planting guidelines only. The Contractor shall follow the project specifications for all landscape requirements. The Contractor shall prepare and submit a landscape plan for review by the Landscape Architect prior to installation.

2. Submit to the Landscape Architect for review and approval all recommendations for plant species, sizes, and quantities as described in the specifications. It is the Contractor’s responsibility to ensure that plants are properly maintained, watered, and fertilized as directed by the Landscape Architect.

3. Submit a representative sample of the topsoil to a testing laboratory for standard soil analysis as described in the specifications. Submit landscape requirements prior to the commencement of any landscape work. Submit in writing to the Landscape Architect any questions or recommended soil treatments to promote plant and grass growth. Correct deficiencies in the loam and stockpiled topsoil as directed by the Landscape Materials or begin any landscape construction.

4. All areas that are disturbed and/or graded during construction are required landscape submittals as described in the specifications to be brought to finished grade with at least 4" minimum depth of good quality loam and seeded with a quick germinating grass seed such as New England Erosion Control Restoration Mix or as specified on the W-32 Form.


6. Plants to be grown under climatic conditions similar to those in the vicinity of the project for at least two (2) years, and then be held in stockpiled topsoil for a minimum of six (6) months prior to planting, and then be held in stockpiled topsoil for a minimum of six (6) months prior to planting.

7. Install plants during the month of purchase if plants are to be stored in stockpiled topsoil or stockpiled planting material and legally disposed to an off-site location.

8. Provide proper preparation of all proposed planted and seeded areas prior to planting. Provide proper preparation of all proposed planted and seeded areas prior to planting. Provide proper preparation of all proposed planted and seeded areas prior to planting. Provide proper preparation of all proposed planted and seeded areas prior to planting. Provide proper preparation of all proposed planted and seeded areas prior to planting.

9. All plants are to be handled with care and properly tagged and identified prior to planting. Notify the Landscape Architect if any plant damage is observed prior to scheduling any work.

10. Please provide proper preparation of all proposed planted and seeded areas prior to the installation of sod or turf. Please provide proper preparation of all proposed planted and seeded areas prior to the installation of sod or turf. Please provide proper preparation of all proposed planted and seeded areas prior to the installation of sod or turf. Please provide proper preparation of all proposed planted and seeded areas prior to the installation of sod or turf. Please provide proper preparation of all proposed planted and seeded areas prior to the installation of sod or turf.

11. Watering Notes:

   1. DECIDUOUS: APRIL 1 TO JUNE 15
   2. EVERGREEN: APRIL 1 TO JUNE 15
   3. PERENNIALS: APRIL 15 TO JUNE 1
   4. GROUNDCOVERS: APRIL 15 TO JUNE 1
   5. FALL: DECIDUOUS: SEPTEMBER 15 TO NOVEMBER 15
   6. EVERGREEN: SEPTEMBER 15 TO NOVEMBER 15
   7. PERENNIALS: SEPTEMBER 15 TO NOVEMBER 15
   8. SPRING: DECIDUOUS: APRIL 1 TO JUNE 15
   9. EVERGREEN: APRIL 1 TO JUNE 15
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12. Plants or plants that have been damaged or exposed to the elements must be discarded. Plants that have been damaged or exposed to the elements must be discarded. Plants that have been damaged or exposed to the elements must be discarded. Plants that have been damaged or exposed to the elements must be discarded. Plants that have been damaged or exposed to the elements must be discarded.

13. All plants to be planted within one (1) week of purchase. If plants are to be stored in stockpiled topsoil, they must be ready to be planted within one (1) week of purchase. If plants are to be stored in stockpiled topsoil, they must be ready to be planted within one (1) week of purchase. If plants are to be stored in stockpiled topsoil, they must be ready to be planted within one (1) week of purchase. If plants are to be stored in stockpiled topsoil, they must be ready to be planted within one (1) week of purchase.


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