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TO: Coleman Geary, NSTAR/Northeast Utilities
Jeremy Fennell, Epsilon Associates

FROM: Regan E. Harrold, RLA

DATE: October 15, 2014

REFERENCE: Sheriff's Meadow Restoration
Landscape Management Plan
West Tisbury, Massachusetts
B+T Project No. 2420.00

INTRODUCTION

This Landscape Management Plan (the Plan) was prepared by Beals and Thomas, Inc. for the use of Epsilon Associates and NSTAR, and for distribution to the Martha's Vineyard Commission (MVC). The Plan represents a supplemental document to the exhibit entitled "Sheriff's Meadow Vegetative Restoration Plan," (the Restoration Plan) prepared by Beals and Thomas, Inc, dated October 15, 2014. The goal of the Plan is to outline the minimum installation, maintenance and monitoring requirements necessary to facilitate a successful restoration plan. Accordingly, the Plan contains various procedures associated with the proposed installation, and identifies the relevant maintenance tasks to be undertaken, as well as a corresponding schedule for monitoring and maintenance activity. We understand based on email communication with Epsilon Associates on October 14, 2014, that the work is permitted under an Order of Conditions from the local Conservation Commission, File No. 74-717, and "Decision of the Martha's Vineyard Commission, DRI 641 – Comcast/NSTAR Undersea Cable." In the event of conflicts between this Landscape Management Plan and the referenced permits, the permits shall rule. We have not evaluated whether any additional permits or approvals are necessary for implementation of the Restoration Plan.

MATERIALS

1. Plants
    - Four (4) *Juniperus virginiana*, spaced as depicted on plan
    - Thirty (30) *Myrica pensylvanica*, spaced as depicted on plan
    - *Ammophila breviligulata 'Cape'* culms, spaced a maximum 18"x18" and minimum 12"x12", and planted 8" deep. Two to three culms per planting hole.
2. Fertilizers
    - For *Ammophila breviligulata*, provide an inorganic granular fertilizer high in nitrogen (N-P-K: 30-10-10, 16-8-8, or 10-10-10).
    - For *Juniperus virginiana* and *Myrica pensylvanica*, provide a phosphorous free fertilizer.
3. Mulches
    - Compost mulch for shrubs and trees only: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5

decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings.

INSTALLATION STANDARDS

1. All work shall be undertaken under the supervision of an Environmental Monitor, who shall be a Wetland Scientist or Registered Landscape Architect.
2. All plant material shall conform to the minimum guidelines established by the American Standard for Nursery Stock published by the American Nursery and Landscape Association.
3. Shrubs and trees shall be planted between September 1 and November 1 or between April 1 and June 1.
4. Beach grass shall be planted between October 1 and April 30.
5. Verify all existing utility lines prior to planting and report any conflicts to the Owner or his representative.
6. Provide continuous mulch bed around shrub and tree plantings.
7. All plant materials shall be guaranteed by the contractor for one year following date of final acceptance.
8. A nitrogen-rich, phosphorous-free, slow release fertilizer shall be added to each shrub and tree planting hole prior to closing. No additional fertilizer is necessary after establishment.
9. A nitrogen- rich fertilizer shall be applied to the beach grass once in the spring, once in the early summer and once in late summer during the first year of establishment. Apply no more than 1 lb. of N/1000 square feet in a single application. Following establishment, fertilizer quantities may be reduced by half for each application during the second and third years. No additional fertilizer shall be applied. (USDA, NRCS, Plant Guide)

EROSION CONTROL

1. Erosion control barriers shall be 12" biodegradable compost socks, located as depicted on the Restoration Plan. If placed on steep slopes, compost socks shall be staked every 5'; otherwise staking is not required. The compost socks shall be maintained throughout the construction period until the area becomes stabilized or until authorized by the local Conservation Commission or its representative, upon which, the biodegradable sock may be sliced open and the compost spread upland of the adjacent wetland.

MAINTENANCE & MONITORING

Annual maintenance and monitoring of all components of the restoration area, including plants, soil, and mulch, shall be performed to ensure their overall success. Restoration plantings shall meet a success criterion of 85% survivability in 3 years.

<u>Maintenance Activities:</u>

1. Fertilize according to specified schedule.
2. Replace plants that have failed due to death and unsatisfactory growth.

Monitoring Plan

Monitoring shall be undertaken for a period of three years following completion of plant installation and shall be performed by a registered Landscape Architect or Wetland Scientist. Monitoring shall be undertaken prior to planting to assess existing conditions, and once immediately upon completion of planting, with a follow-up monitoring performed later during that same growing season if plants are not installed in 2014. Monitoring shall then occur twice during the beginning and end of the growing season of years two and three following construction. Monitoring activities shall include the following:

1. A general reconnaissance of the restoration area will be undertaken during each monitoring event. This general reconnaissance is meant to identify the success of the restoration plantings as well as any issues, including but not limited to erosion or the presence of invasive species. A comparison of the area to approved plans shall be undertaken during this reconnaissance.
2. Invasive species not present prior to planting and encountered during site reconnaissance are to be reported and a plan made for removal and disposal in accordance with applicable local, state and federal regulations. No invasive species management activities shall commence without approval by the MVC and/or local Conservation Commission as applicable.
3. A minimum of three permanent vegetative and photographic transects shall be established and marked in the field. During each monitoring event, photographs will be taken of the same locations within the Project site to facilitate a comparison of conditions over time. Vegetation shall be evaluated via the same method during each monitoring event.
4. Monitoring results shall be summarized in a report, which shall include the following information, at a minimum:
    a. Name and Contact Information for Permittee and Agent
    b. Name of Party Responsible for Conducting the Monitoring
    c. Date(s) of Inspection(s)
    d. Project Summary
    e. Start and Completion Dates of Construction
    f. General Success and Relation to Approved Plans and the Sheriff's Meadow Vegetative Restoration Plan
    g. Dates and Types of Corrective or Maintenance Activities Conducted Since Last Report
    h. Recommendations for Additional Remedial Actions, if necessary

Monitoring Reports shall be made available to the MVC and the local Conservation Commission upon request. Members and agents of the MVC and local Conservation Commission shall be allowed to enter and inspect the premises to evaluate and ensure that the responsible party complies with the Plan requirements.