

**Wetland Restoration Plan
For
Map 135 Lot 298 and 350
David Rosonina
3806 Acushnet Avenue, New Bedford, MA**

(Revised 10/29/18)

On behalf of the applicant, the following sequence of work is proposed:

1. The following locations will be staked out by Romanelli Associates, Inc. in accordance with the specifications provided on the attached plan titled: *Wetland Restoration Plan prepared for 3806 Acushnet Avenue, New Bedford, MA* by Romanelli Associates, Inc., dated September 19, 2018.
 - a. Wetland Boundary
 - b. Limit of Fill Area
 - c. Erosion Control Measures Limit
 - d. 25-Foot No Activity Zone
2. The Conservation Agent will be contacted and given an opportunity to inspect the staked wetland boundary and limit of fill area, and confirm proper installation of the erosion controls before any earth disturbance activities take place. The erosion control measures will be installed between the existing unaffected wetland and the limit of fill. This boundary will also serve as the limit of work. **Restoration work will not proceed until authorization is provided by the Conservation Agent.**
3. The operator of the backhoe will then begin removing the fill material from the area of impact, starting at the furthest point from the upland boundary (eastern end of fill area), working back towards the upland boundary (northern end of fill area), such that travel is minimized and limited to the fill areas or existing uplands during restoration work, and no travel occurs outside the restoration area. All earth work in the restoration area will be conducted under the supervision of a Wetland Professional.
4. The Wetland Professional will be onsite to confirm fill material is removed down to the native topsoil horizon (approximately 12"-16" of fill is present). Following the complete removal of fill from a designated area, the operator will use the teeth on the bucket of the backhoe to de-compacted and scarify the restored surface. Any native logs, rocks, or woody debris encountered within the undisturbed topsoil horizon during the removal of fill will be left within the restoration area.
5. Fill material excavated from the impacted area will be live-loaded into a dump truck and removed from the site or temporarily staged in upland locations outside the 25-foot no disturbance area for later offsite removal.
6. As the excavation work occurs, the onsite Wetland Professional will also confirm the transition zone between the wetland restoration area and the unaffected wetland community is natural in appearance, such that restoration efforts do not lead to the draining of the unaffected wetland or create unnatural areas of ponding.
7. The Conservation Agent will be contacted and given an opportunity to inspect the site following the removal of fill soils and preparation of the existing topsoil for seed distribution and planting. **No seeding or planting of the wetland restoration area will occur until site conditions are deemed acceptable by the Conservation Agent.** Once restored locations are deemed acceptable, a second set of erosion controls will be installed between the restoration area and the existing uplands.

8. Following authorization to begin seeding and planting, the wetland restoration area will be seeded with a mix containing wetland herbaceous plants (e.g. New England Wet Mix from New England Wetland Plants, Inc.) Species include: Fox Sedge (*Carex vulpinoidea*), Hop Sedge (*Carex lupulina*), Lurid Sedge (*Carex lurida*), Blunt Broom Sedge (*Carex scoparia*) Green Bulrush (*Scirpus atrovirens*), Fowl Bluegrass (*Poa palustris*), Beggar Ticks (*Bidens frondosa*) Spotted Joe-Pye Weed (*Eupatorium maculatum*), Swamp Milkweed (*Asclepias incarnate*) Fringed Sedge (*Carex crinita*), New York Ironweed, (*Vernonia noveboracensis*), Calico Aster (*Aster lateriflorus*), Blue Flag, (*Iris versicolor*), American Mannagrass (*Glyceria grandis*), and Square Stemmed Monkey Flower (*Mimulus ringens*). **Application rate:** 1 lb/2500 sf as a wet meadow mix (see Attachment C for additional information). The wetland restoration area will also be planted with 16 shrub-sized trees, spaced 20 feet on center, which will include a combination of the following wetland species: red maple (*Acer rubrum*), yellow birch (*Betula alleghensis*), black gum (*Nyssa sylvatica*) and swamp white oak (*Quercus bicolor*).
9. Impacts to surface locations within the 25-foot no disturbance areas will be restored with hand tools or equipment prior to the contractor demobilizing from the site. As similar to the seedbed preparations performed in the wetland areas, surface locations in the 25-foot no disturbance areas will be de-compacted and scarified with the teeth on the bucket of the backhoe and the area will be sown with an erosion control seed mix (e.g. New England Erosion Control/Restoration Mix from New England Wetland Plants, Inc.) Species include: Canada Wild Rye (*Elymus Canadensis*), Red Fescue (*Festuca rubra*), Annual Ryegrass (*Lolium multiflorum*), Perennial Ryegrass (*Lolium perenne*), Little Bluestem (*Schizachyrium scoparium*), Switch Grass (*Panicum virgatum*) and Indian Grass (*Sorghastrum nutans*). **Application rate:** 1lb/1,250fs (see Attachment C for additional information).
10. Following the restoration of workspace locations a post and rail fence will be installed along the 25-foot no disturbance area in accordance with the specifications provided on the attached plan titled: *Wetland Restoration Plan* prepared for 3806 Acushnet Avenue, New Bedford, MA by Romanelli Associates, Inc., dated September 19, 2018. Signage will be installed on the fence with the following language: "A protected conservation area exists beyond this fence and is to remain undisturbed per Order of the New Bedford Conservation Commission."
11. The wetland restoration area will be monitored during the first and second growing season by a Wetland Professional for the presence of invasive species such as common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*), Russian and autumn olive (*Elaeagnus* spp.), buckthorn (*Rhamnus* spp.), Japanese knotweed (*Polygonum cuspidatum*), and/or multiflora rose (*Rosa multiflora*). These species, if found, will be removed by hand annually.
12. At the end of the 2019, 2020 and 2021 growing season a written report will be submitted by a Wetland Professional to the New Bedford Conservation Commission detailing the relative success or failure of the wetland restoration efforts. The written report shall summarize the field conditions at the end of each growing season and assess the success rate of the wetland restoration. A wetland plant community established with 75% aerial coverage meets the compliance standards set forth in 310 CMR 10.55 (4)(b)(6). If this density is not achieved, an additional wetland seed mix shall be distributed.
13. Upon completion of the monitoring program and acceptance of the wetland restoration efforts by the New Bedford Conservation Commission, all remnants of the plastic erosion control fencing will be removed from the wetland and properly disposed of. A Certificate of Compliance (WPA Form 8a) will then be submitted to the New Bedford Conservation Commission by the applicant to document that all work on the property has been completed in accordance with the associated NOI application.