

**ARTIS SENIOR LIVING
WETLAND MITIGATION NARRATIVE
April 6, 2016**

History

The applicant previously proposed mitigation on the adjoining property known as Section 90.15, Block 1, Lot 23 (84 Morningside Drive). Since that time, two things have occurred: (1) the owner of the adjoining property has informed the applicant and the Planning Board that they will not permit the measures previously proposed to be undertaken to the wetland on that property (the "Off-Site Wetland") to mitigate the impacts of the applicant's disturbance to on-site wetland/watercourse buffer area¹; and (2) the Town's Freshwater Wetlands, Watercourses and Water Body Protection Law (Town Code Chapter 105) was amended by Local Law 7-2015, and as a result, the formerly unregulated Off-Site Wetland is now regulated, thereby increasing the amount of corresponding on-site buffer area proposed to be disturbed². In response to these events, the applicant has modified the mitigation plan so that only on-site measures are now proposed.

Current Wetland Mitigation Plan

The current mitigation plan consists of four (4) components: (1) Invasive Species Removal and Monitoring; (2) Wetland/Watercourse Buffer Planting Plan; (3) Introduction of Permeable Pavement for all Walkways/Paths; and (4). Water Quality Treatment of Off-Site Stormwater Runoff.

1. Invasive Species Removal and Monitoring

A heavy stand of Japanese knotweed exists along a man-made berm at the northern border of the site. This invasive plant has completely taken over the area adjacent to the Town-regulated intermittent watercourse (the "Watercourse") and Off-Site Wetland located immediately north of the property line. The applicant is proposing a complete (manual) removal of the species and spot treatment with glyphosate, at the direction of the Town's Wetland Consultant. Once completely removed, clean soil will be introduced to the area to supplement the existing soil and the area will be planted with a dense palette of native trees, shrubs and groundcover.

¹ The original mitigation plan included an invasive species removal program and native shrub, tree and meadow-grass planting on the adjoining property.

² Under prior Town Code Chapter 105, approximately 6,860 square feet of buffer area was proposed to be disturbed. Under current Town Code Chapter 105, approximately 24,773 square feet of buffer area is proposed to be disturbed.

The dense planting is designed to outcompete any residual invasive plants/seed stock that might have survived the invasive plant removal. In addition, the planting will help stabilize the berm area so that the potential for soil erosion is minimized or eliminated, thereby providing further protection of the adjacent intermittent watercourse and Off-Site Wetland.

This component of the mitigation plan also includes a 5 year invasive species monitoring program. This program will include the regular visual inspection of the area and immediate treatment and/or eradication of any invasive plant growth observed for a period of 5 years. The monitoring and treatment will insure that the invasive plants in this area will be permanently eliminated. As required by Town Code Section 105-10(C)(2), the applicant will submit written reports to the Planning Board or the Town Wetland Consultant) at a frequency to be determined by the Planning Board addressing the progress of the invasive species removal under the mitigation plan.

2. Wetland/Watercourse Buffer Area Mitigation Planting Plan (6,690 square feet)

The applicant is proposing to plant within the on-site buffer area 187 native trees, shrubs and groundcover plants, in the immediate area surrounding the northern and north-east/north-west property lines. An additional 59 trees and shrubs are proposed within the building courtyard area, which is within the buffer area. Sheets 5/9 and 6/9 illustrate the mitigation planting plan.

3. Permeable Pavement for Walkways and Paths (4,160 square feet)

Although the project's stormwater collection and treatment system will provide the required attenuation of (up to and including) the 100 year storm event, as well as the required water quality treatment, the current wetland mitigation plan includes the introduction of permeable pavement for the 1,040 linear feet of walkways and paths on the site. As a result, approximately 4,160 square feet originally proposed as impervious surface will now be pervious. The substitution of pervious surface will provide an additional water quality benefit to the underlying aquifer and receiving downstream waters. A detail of the permeable pavement is included on Sheet 8/9.

4. Water Quality Treatment of Off-Site Stormwater Runoff

Although it is not required, the applicant has included in the current wetland mitigation plan the installation of a water quality treatment structure (a "Downstream Defender") for the treatment of off-site stormwater runoff that currently drains through the site. As Sheet 6A/9 illustrates, a ±16.1 acre area, including properties both north and south of

Morningside Drive, drains to the applicant's property, ultimately being piped through an existing culvert to the Town's drainage system within North State Road.

Presently, this off-site stormwater is piped to North State Road without the benefit of any water quality treatment. Under the applicant's current wetland mitigation plan this off-site stormwater run-off will be directed to the "Downstream Defender" water quality structure where it will be treated for pollutants including total suspended solids, phosphorus, nitrogen, floatable trash and petroleum products. The proposed "Downstream Defender" (4' diameter model) will treat off-site stormwater flows of up to the 1 year storm event. This will provide a significant water quality benefit compared to the current, untreated condition of the stormwater runoff from this ±16.1 acre off-site drainage area.

Conclusion

The Town's Wetland Consultant has previously concluded that disturbance to on-site buffer area is a "necessary and unavoidable" impact of the project. Town Code Section 105-10(B)(2) provides that on-site mitigation "shall be the preferred approach." Under Town Code Section 105-10(B)(3), "mitigation for intrusion into buffer areas shall be such as to preserve the ecological characteristics and functions of the associated wetland."

The applicant has previously discussed with the Planning Board the fact that that site does not drain to the Off-Site Wetland or the Watercourse along the north property boundary. The applicant no longer proposes any disturbance or alteration to either the Off-Site Wetland or the Watercourse. The Town Wetland Consultant has confirmed that the already degraded buffer area on the site does not perform any ecological function for the corresponding Off-Site Wetland or Watercourse. The proposed disturbance to this buffer area will therefore have no impact on "the ecological characteristics and functions" of the Off-Site Wetland or Watercourse. Given that the project will not impact the Off-Site Wetland or Watercourse, and that the water quality of both on-site and off-site runoff will be improved, it is the professional opinion of Kellard Sessions Consulting, P.C. that the modified plan now proposed is an appropriate and reasonable on-site mitigation plan for the disturbance to the buffer area.