

11/30/22



**453 Pine St – Burlington, VT**

**Natural Resource Protection Overlay (NR) District - Summary**

The Project falls within the Natural Resource Protection Overlay (NR) District and the following address the criteria under the Wetlands Conservation and Natural Area Zones.

**(d) Wetlands Conservation Zone**

1. Additional Application Requirements:
  - A. Boundary Determination:
    - Arrowwood Environmental (AE) has completed an updated wetland delineation for 0 Pine and 453 Pine St as depicted in the attached resource maps. Ms. Tina Heath from the Vermont Wetlands Office visited the site on 11/29/2022 to review and approve the delineation boundaries. The boundaries have been flagged and surveyed via submeter GPS.
  - B. Report addressing wetland functions and values:
    - AE will be preparing a report documenting their work and assessing any project impacts on the functions and values of the wetlands and overall natural area at the site following this initial sketch plan review with the DRB and the Conservation Board.
  - C. Project Site Plan:
    - Submitted site plan is currently conceptual in nature as the project has been working with Vermont Department of Environmental Conservation, Civil, Environmental and Geotech Engineers on the Evaluation of Corrective Action Alternatives (ECAA) through the State's Brownfields Economic Revitalization Alliance (BERA) program. Once the existing site conditions have been evaluated a more formal Site Plan developed by a Civil Engineer will be developed.
  - D. Stormwater Management, Erosion Prevention and Sediment Control Plan:
    - As the project is in the initial design phase, the actual stormwater treatment practices have not been designed. The designs will be submitted at the time of the Zoning Application.
2. Permitted Uses:
  - A. Normal maintenance of existing lawns and maintained grounds including mowing, trimming of vegetation and the removal of dead or diseased vegetation around a residence, decorative landscaping and planting, vegetable and flower gardens, and the repair of existing private landscaping structures such as walkways and walls;
    - Normal maintenance is proposed.
  - B. "Accepted agricultural and silvicultural practices" as defined under 24 VSA Ch 117.
    - No agricultural and silvicultural practices proposed.
  - C. Normal maintenance of constructed wetlands and stormwater systems, provided that naturally occurring wetlands are not disturbed in conjunction with the maintenance;

- The proposed stormwater system is not located within naturally occurring wetlands.
- D. Normal maintenance of existing roads, rail lines, bridges, and culverts provided that disturbance to naturally occurring wetlands and shorelands is minimized in conjunction with such maintenance;
- There is an existing access road to 0 Pine St which is required to be maintained in place by the EPA ROD Institutional Controls.
- E. Selective cutting of less than 25 percent of the trees six inches or more in diameter at breast height over any 10 year cycle; and,
- A calculation has not yet been completed to determine the proposed cutting within the wetland buffer. This will also be addressed under section 5.4.9 Brownfield Remediation and 5.5.4 Tree Removal (a)1.D. as part of an approval from DRB for more tree cutting as being a “regulated” activity per 4.F. below.
- F. Recreational and educational activities such as fishing, walking, hiking, nature study, and bird watching
- There are no proposed recreational activities within the 50’-0” wetland buffer. However, there are limited recreational activities proposed within the 50’-0” to 100’-0” wetland conservation zone including a mowed walking path and hammock area that supports the Silt Botanica Bathhouse outdoor programming.
3. Prohibited Uses:
- A. The deposition or introduction of organic and inorganic chemicals, including pesticides, except when the application of pesticides is reviewed and approved by the BCB and DRB, and performed by an applicator certified by the Vermont Department of Agriculture for the sole purpose of controlling invasive species and subject to the requirements of the City’s pesticide application ordinance (Burlington Code of Ordinances, Chapter 17, Section 9); and,
- There are currently invasive species on the property that will need to be eradicated or controlled to support the development. The means and methods for control are under development in light of City and State restrictions on the use of herbicides.
- B. The off-road use of any motorized vehicles including ATVs or dirt bikes (the temporary use of motorized construction vehicles used to construct permitted or regulated activities in the wetland are specifically exempted from this prohibition);
- None are proposed.
4. Regulated Uses:
- A. The construction of buildings or other structures, and roads, parking areas or other impervious surface;
- Within the 50’-0” to 100’-0” wetlands conservation zone there are a few of these uses proposed. At the northwestern portion of the site the parking lot encroaches into the 100’-0” zone. At the Silt or southern portion of the site, the following items are within the 100’-0” zone; two-story building for private event

space with a 400 sf footprint, a portion of an earthen berm that transitions the landscape to the southwest building corner of Silt, (3) small sauna buildings, and a portion of the southeast Silt service court & staff parking. The project team is exploring whether it's feasible to shift a portion of the development 15'-0" north to move these items, further minimizing the impact on the 50'-0" to 100'-0" zone. These uses are crucial to the success of the project and are difficult to locate in other locations outside of the 100'-0" zone due to poor soil conditions as well as clearances from the NAPL on adjacent O Pine St site.

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- B. Any form of drainage, dredging, excavation, or removal of material either directly or indirectly
  - There are stormwater treatment areas within the 100' wetland's conservation zone which will require these actions to occur for construction of these items in addition to maintaining grades while providing adequate protection from contaminated soils.
- C. Alteration or modification of natural drainage patterns, natural features and contours;
  - While site grading and certain modifications will occur to create the stormwater management systems, the intent is for post construction stormwater management systems to mimic natural drainage patterns.
- D. Installation of docks, rip-rap or other shoreline stabilization features
  - None proposed.
- E. Installation of utility poles or utility service lines, underground pipes or cable conduits, and wells;
  - Aside for some already in place and yet to be installed ground monitoring wells, no other utility features except for stormwater management system components are envisioned to be located within the buffer.
- F. Cutting of greater than 25 percent of the trees six inches or more in diameter at breast height over any 10 year cycle;
  - This will be addressed under section 5.4.9 Brownfield Remediation and 5.5.4 Tree Removal (a)1.D. as part of an approval from DRB for more tree cutting.
- G. Construction, expansion or placement of any structure;
  - Refer to (d)4.A. above.
- H. Construction or expansion of roads, rail lines parking areas, trails, and sidewalks;
  - Minimal walking paths are proposed at Silt but will be pervious surfaces.
- I. Introduction of any form of pollution, including but not limited to the installation of a septic tank, the running of a sewer outfall, or the discharge of sewage treatment effluent or other liquid wastes into or so as to drain into a wetland;
  - None are proposed.
- J. The construction of a stormwater outfall as part of a stormwater management plan approved by the city engineer. In making determinations and decisions required herein, the city engineer shall consider the requirements of the most recent State of Vermont Stormwater Management Rules and Guidance document. The city engineer shall

require the best practicable means be used to manage stormwater and prevent erosion and control sediment and the city engineer is hereby authorized to develop performance standards to ensure conformance with these state stormwater management rules; and,

- There will be stormwater treatment areas within the 100' wetland's conservation zone of which will be designed to meet the requirements of the state stormwater management rules and in consultation with the City Engineer as needed.
- K. Application of pesticides performed by an applicator certified by the Vermont Department of Agriculture for the sole purpose of controlling invasive species and subject to the requirements of the City's pesticide application ordinance (Burlington Code of Ordinances, Chapter 17, Section 9). In no other cases shall pesticides be applied.
- There are currently invasive species on the property that will need to be eradicated or controlled to support the development. The means and methods for control are under development in light of City and State restrictions on the use of herbicides.
5. Prohibited activities in a vernal pool and buffer zone:
- A. Any activities which disturb the area within 100 feet of a vernal pool, including, but not limited to timber harvesting, disturbance of the understory vegetation, pesticide or herbicide application, the erection of fences or other barriers to amphibian dispersal, barriers and any other type of human activities that disturb the vegetation or water quality in the pool and buffer.
- There are no vernal pools on or adjacent to the subject property.
6. Criteria for Review:
- The project has been designed to avoid direct impacts to wetland resources and adjoining 50' buffer area. The project as proposed will have no adverse impact on wetland resources. Project components occur within the 50'-100' buffer area which is characterized as a disturbed landscape dominated by non-native invasive plant species. A summary analysis of the functions and values of this 50' area is provided.
- A. Water storage for floodwater and stormwater;
- The project area, including the wetland buffer have the potential to provide water storage for floodwater although contiguity with Lake Champlain significantly diminishes this function. The control of stormwater will be addressed by design of a site specific Erosion Prevention and Sediment Control (EPSC) and Post-Construction Stormwater Management System to comply with City Ordinance Chapter 26, the State of Vermont Stormwater Management Rules and Guidance documents as well as the EPA ROD Institutional Controls.
- B. Erosion and sedimentation control through binding and stabilizing the soil or shoreline;
- The project area, including wetland buffer, are not in close proximity to high velocity currents with the closest shoreline approximately 350' to the west.
- C. Surface water and groundwater protection, including sediment and toxicant retention, nutrient retention and transformation, and groundwater discharge and recharge;

- The wetland buffer provides water quality protection which the applicant intends to address by designing its Erosion Prevention and Sediment Control (EPSC) and Post-Construction Stormwater Management Systems to comply with City Ordinance Chapter 26, the State of Vermont Stormwater Management Rules and Guidance documents as well as the EPA ROD Institutional Controls. By doing so the project will result in no reduction in water quality to the wetland and will possibly provide an improvement to current runoff conditions.
- D. Fisheries habitat;
- There are no streams or open water within the project area. The closest open water with the potential to support fish is approximately 350' to the west. The wetland buffer in the project area does not provide, support, or protect fisheries habitat.
- E. Wildlife habitat;
- The project area, including wetland buffer from 50'-100', does not contain significant wildlife features due to the dominance of non-native invasive species and existing vegetation management.
- F. Examples of natural community types that are exemplary, rare, or make an important contribution to the natural heritage of Burlington and Vermont;
- The project area is highly disturbed, dominated by non-native invasive species. The site, including the wetland buffer, is not an example of an exemplary or rare natural community type and does not contribute toward the overall natural heritage of Burlington.
- G. Habitat for rare, threatened and endangered species;
- The project area, including the wetland buffer, may provide summer habitat for RTE bat species. The project team will work with Vermont Fish and Wildlife to develop appropriate conservation measures to ensure the protection of these species.
- H. Education and research in natural sciences;
- The project area is highly disturbed, including the wetland buffer, and does not contain elements that contribute toward the study of natural sciences. The overall wetland provides an outdoor classroom for the study of impacts from the super fund site.
- I. Recreational and economic benefits; and,
- The project site, including the wetland buffer, does not provide opportunity for wetland dependent recreation and economic benefits. The development of 453 Pine St does open up the opportunity to create a conservation area at 0 Pine St with the donation of adjacent property 501 Pine St which will allow more public accessibility to the future conservation area.
- J. Open space and aesthetics.
- The project site, including the wetland buffer, does not possess special or unique aesthetic qualities due to the past disturbance and dominance by non-native invasive species. The site does provide open space in an urban landscape,

however, this is not a wetland or wetland buffer function in this context. The development of 453 Pine St does open up the opportunity to create a conservation area at 0 Pine St with the donation of adjacent property 501 Pine St which will allow more public accessibility to the future conservation area.

- K. Any land disturbing activities (i.e., vegetation has been removed, or the landscape has been graded or filled resulting in bare soil surfaces) shall include a stormwater management, erosion prevention and sediment control plan pursuant to the requirements of Sec 5.5.3 to be reviewed by the conservation board and approved by the city engineer;
- L. No new stormwater outfall shall directly discharge into surface water without approval and implementation of a stormwater management plan approved by the city engineer;
  - The new stormwater outfall will not directly discharge into the wetland.
- M. No installation of docks, rip-rap or other shoreline stabilization features shall be installed without review approval by the city engineer;
  - None proposed.
- N. Agricultural and silvicultural activities shall follow Best Management Practices for the Protection of Water Quality; and,
  - Not applicable.
- O. Stormwater management, erosion, and sedimentation control plans shall be submitted for review by the conservation board who shall consult with the development review board and city engineer prior to issuance of a recommendation to the city engineer who shall render a final decision on such plans.
  - As the project is in the initial design phase, the actual stormwater treatment practices have not been designed. The designs will be submitted at the time of the Zoning Application. See A. B. and C. for more information.

**(e) Natural Areas Zone**

1. Additional Application Requirements:
  - Refer to Items A, B & C under (d)1. Above
2. Permitted Uses:
  - A. Normal maintenance of constructed wetlands and stormwater systems, provided that naturally occurring wetlands are not disturbed in conjunction with the maintenance;
    - Refer to (d)2.C. above.
  - B. Normal maintenance of existing roads, bridges, and culverts provided that disturbance to naturally occurring wetlands and shorelands is minimized in conjunction with such maintenance;
    - Refer to (d)2.D. above.
  - C. Selective cutting of less than 25 percent of the trees six inches or more in diameter at breast height over any 10 year cycle; and,
    - Refer to (d)2.E. above.

- D. Recreational and educational activities such as fishing, walking, hiking, nature study, and bird watching.
- Refer to (d)2.F. above.

3. Prohibited Uses

- A. The deposition or introduction of organic and inorganic chemicals, including pesticides, except when the application of pesticides is reviewed and approved by the BCB and DRB, and performed by an applicator certified by the Vermont Department of Agriculture for the sole purpose of controlling invasive species and subject to the requirements of the City's pesticide application ordinance (Burlington Code of Ordinances, Chapter 17, Section 9); and,
- Refer to (d)3.A. above.
- B. The off-road use of any motorized vehicles including ATVs or dirt bikes (the temporary use of motorized construction vehicles used to construct permitted or regulated activities in the wetland are specifically exempted from this prohibition) ;
- Refer to (d)3.B. above.

4. Regulated Uses:

- A. The construction of buildings or other structures, and roads, parking areas and any other impervious surfaces;
- Refer to (d)4.A. above.
- B. Land disturbing activities (i.e., vegetation has been removed, or the landscape has been graded or filled resulting in bare soil surfaces) not associated with a permitted or conditionally permitted use. Land disturbing activities which expose 5,000 or more square feet of soil (i.e., vegetation has been removed, or the landscape has been graded or filled resulting in bare soil surfaces) are prohibited except where a stormwater management, erosion prevention and sediment control plan has been reviewed by the Burlington Conservation Board and approved by the city engineer;
- C. Any form of drainage, dredging, excavation, or removal of material either directly or indirectly;
- Refer to (d)4.B. above.
- D. Alteration or modification of natural drainage patterns, natural features and contours;
- Refer to (d)4.C. above.
- E. Installation of docks, rip-rap or other shoreline stabilization features;
- Refer to (d)4.D. above.
- F. Installation of utility poles or utility service lines, underground pipes or cable conduits, and wells;
- Refer to (d)4.E. above.
- G. Cutting of greater than 25 percent of the trees six inches or more in diameter at breast height over any 10 year cycle;
- Refer to (d)4.F. above.
- H. Construction, expansion or placement of any structure;
- Refer to (d)4.G. above.

- I. Construction or expansion of existing roads, parking areas, trails, and sidewalks;
    - Refer to (d)4.H. above.
  - J. Introduction of any form of pollution, including but not limited to the installation of a septic tank, the running of a sewer outfall, or the discharge of sewage treatment effluent or other liquid wastes into or so as to drain into a wetland;
    - Refer to (d)4.I. above
  - K. The construction of a stormwater outfall as part of a stormwater management plan approved by the city engineer. In making determinations and decisions required herein, the city engineer shall consider the requirements of the most recent State of Vermont Stormwater Management Rules and Guidance document. The city engineer shall require the best practicable means be used to manage stormwater and prevent erosion and control sediment and the city engineer is hereby authorized to develop performance standards to ensure conformance with these state stormwater management rules;
    - Refer to (d)4.J. above.
  - L. Application of pesticides performed by an applicator certified by the Vermont Department of Agriculture for the sole purpose of controlling invasive species and subject to the requirements of the City's pesticide application ordinance (Burlington Code of Ordinances, Chapter 17, Section 9). In no other cases shall pesticides be applied; and,
    - Refer to (d)4.K. above.
  - M. Agricultural and silvicultural activities following Best Management Practices for the Protection of Water Quality including but not limited to housing of livestock, manure storage, pasturing livestock, growing crops, and compost storage, but excluding residential backyard compost storage.
    - None proposed.
5. Criteria for Review:
- The wetlands to the west of the project have been identified as a significant natural area. The project has been designed to avoid direct impacts to wetland resources and adjoining 50' buffer area. The project as proposed will have no adverse impact on wetland resources. Project components occur within the 50'-100' buffer area which is characterized as a disturbed landscape dominated by non-native invasive plant species. A summary analysis of the functions and values of this 50' area is provided.
- See list above under (d)6.A through J.