TO: Development Review Board
FROM: Scott Gustin
DATE: September 6, 2022
RE: ZP-22-443; 505 Lake Street

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: DW-PT Ward: 3C

Owner/Applicant: City of Burlington / Lake Champlain Community Sailing Center

Request: Proposed waterfront improvements for the existing Community Sailing Center. Install/build a boat ramp, a structural wall wave attenuators, a pier with walkways, and a launch well and hoists.

Applicable Regulations:
Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines)

Background Information:
The applicant is seeking approval to construct a number of improvements related to lake access for the existing sailing center. These improvements include a concrete ramp into the water, a new pier and boat hoists, and a protected “well” for hoisting boats into, and out of, the lake. Essentially all of the work will take place within the lake. VT ANR and the US Army Corps of Engineers have permitting jurisdiction over the lake encroachment. The sailing center is a permitted use in the Downtown Waterfront – Public Trust (DW-PT) zone. Zoning review of this application is limited to the structural improvements and their location within the Special Flood Hazard Area (SFHA).

Given the location within the SFHA, project plans have been provided to the state floodplain coordinator. No comments have been received. The 30-day comment period ends September 1, 2022.

The Conservation Board performed a courtesy review of this project August 1, 2022 and expressed no concerns. The review was “courtesy” because the project is within the city’s downtown waterfront and is not affected by the lakeshore buffer.

Previous zoning actions for this property:
- 5/23/20, Approval to construct a concrete pad
- 9/25/17, Approval to install signs
- 7/14/17, Approval to construct 9 onsite parking spaces
- 4/29/11, Approval reconfigure and fence boat yard
• 5/26/10, Approval redevelop the Moran Plant, including construction of the Community Sailing Center

Recommendation: Certificate of Appropriateness approval as per, and subject to, the following findings and conditions.

I. Findings
Article 4: Maps & Districts
Sec. 4.4.1, Downtown Mixed Use Districts:
(a) Purpose
(4) Downtown Waterfront – Public Trust District (DW-PT)
The subject property is located in the Downtown Waterfront – Public Trust (DW-PT) District. This district is intended to enhance and diversify commercial and residential development in the downtown waterfront area, and to increase access, utilization, and enjoyment of the lakeshore by the community. Strong emphasis is placed on enhancing public access to the lakeshore.

The proposed improvements to the sailing center are consistent with this intent. The sailing center is open to the public, including access to the water. The proposed improvements will enhance access to the lake. (Affirmative finding)

(b) Dimensional Standards & Density
A FAR of 2 is allowed in the DW-PT zone. No new onshore buildings are included in this proposal. Existing FAR will remain unchanged.

There is no lot coverage limit in the DW-PT zone.

No minimum setbacks apply to the project as proposed.

No new onshore buildings are proposed. Existing building height remains unchanged. (Affirmative finding)

(c) Permitted & Conditional Uses
See (d) 2 below.

(d) District Specific Regulations
1. Use Restrictions
   A. Ground Floor Residential Uses Restricted
      (Not applicable)

2. Public Trust Restrictions
The subject property is located within that area of the DW-PT north of Main Street. The sailing center – open to the public on a non-discriminatory basis – is a permitted use (i.e. marina). (Affirmative finding)

3. Facades and Setbacks on Side and Rear Property Lines
   (Not applicable)

4. Building Height Setbacks
A. Principal View Corridors  
(Not applicable)

B. Church Street Buildings  
(Not applicable)

C. Side Street Building Height  
(Not applicable)

5. Lake Champlain Waterfront Setbacks  
No new onshore buildings are included in this proposal. Proposed work continues to allow public access to the lakeshore.  
(Affirmative finding)

6. Residential District Setback  
(Not applicable)

7. Development Bonuses/Additional Allowances  
None are sought.

Sec. 4.5.4, Natural Resource Protection Overlay District:  
All of the proposed work encroaches into the special flood hazard area.

(a) District Specific Regulations: Special Flood Hazard Area  
(7) Special Review Criteria  
A. The danger to life and property…  
The proposed improvements will have no impact on flood heights or velocities.  
(Affirmative finding)

B. The danger that material may be swept onto other lands…  
The boat ramp and pier will be fixed structures built into the ground and lake bottom. The floating docks will be anchored to the sheet piling and/or pier. Flood velocities are typically not problematic along the lakeshore. Flood waters rise and then fall. Wave attenuators are in place to limit wave action. Water velocity is a danger within the floodway that follows the river corridor. There is little danger that the proposed facilities will be swept away.  
(Affirmative finding)

C. The proposed water supply and sanitation systems…  
Municipal water and sewer serve the sailing center. No changes are proposed.  
(Affirmative finding)

D. The susceptibility of the proposed facility and its contents to flood damage…  
The pier will be constructed to an elevation of 104’ above sea level – 2’ above the 102’ base flood elevation. Construction to this elevation significantly reduces the changes of inundation and flood damage. The ramp, of course, descends into the water and is protected by the pier and sheet piling to reduce potential for damage.  
(Affirmative finding)

E. The importance of the services provided…  
The sailing center serves as a significant public amenity affording access to the lakeshore. The proposed work will improve access to the water.  
(Affirmative finding)
F. The availability of alternative locations…
Given the purpose of the sailing center and the intent of the proposed work to improve access to the water, alternative locations are not warranted. It is a functionally dependent use necessarily located within the SFHA. (Affirmative finding)

G. The compatibility of the proposed use with existing development…
As noted elsewhere in these findings, the sailing center is consistent with the intent of the DW-PT zone. (Affirmative finding)

H. The relationship of the proposed use to the Municipal Development Plan…
PlanBTV: Downtown and Waterfront specifically calls for additional marina capacity to better serve the intense demand for water uses along Burlington’s downtown water front. The plan notes the present conditions as inadequate and cites the exiting 8-year wait list for a boat slip (Water Use Expansion)

The sailing center is accessible by boat, vehicle, bus, bike, and foot. It is consistent with PlanBTV: Downtown and Waterfront’s call for transportation options and connectivity (Yield to Pedestrians, Biking, Bikeways, and Transit). (Affirmative finding)

I. The safety of access to the property…
Access to the property will be unaffected by the base flood event. The sailing center building and boat storage are located outside of the SHFA. (Affirmative finding)

J. The expected heights, velocity, duration, rate of rise…
The maximum regulatory flood elevation along the lakeshore is 102’ above sea level. The velocity of flood waters along the lakeshore is not problematic. Water is more or less stationary as it rises and falls. The duration of flooding and the rate of its rise depend entirely on spring snowmelt and precipitation events. The lake has risen above 102’ just once on record (spring 2011). Sediment transport is insubstantial. Sediment transport is associated with moving waterways such as rivers. The proposed improvements to the sailing center will have no impact on flood height, velocity, duration, rate of rise, or sediment transport. (Affirmative finding)

K. Conformance with all other applicable requirements…
See Articles 4, 5, and 6 of these findings.

Article 5: Citywide General Regulations
Sec. 5.2.3, Lot Coverage Requirements
See Article 4 above.

Sec. 5.2.4, Buildable Area Calculation
Not applicable in the DW-PT zone.

Sec. 5.2.5, Setbacks
See Article 4 above.

Sec. 5.2.6, Building Height Limits
See Article 4 above.
Sec. 5.2.7, *Density and Intensity of Development Calculations*
See Article 4 above.

Sec. 5.5.1, *Nuisance Regulations*
Nothing in the proposal appears to constitute a nuisance under this criterion. *(Affirmative finding)*

Sec. 5.5.3, *Stormwater and Erosion Control*
Earthwork immediately along the lakeshore associated construction of the proposed improvements will require review and approval of an erosion prevention and sediment control plan by the city’s stormwater program. *(Affirmative finding)*

Article 6: Development Review Standards:
Part 1, Land Division Design Standards
Sec. 6.1.2, Review Standards
Not applicable.

Part 2, Site Plan Design Standards
Sec. 6.2.2, Review Standards
(a) *Protection of important natural features*
The property does not contain any important natural features as identified in the Open Space Protection Plan or as outlined in Sec. 4.5.4, *Natural Resource Protection Overlay Districts*. The downtown waterfront is specifically excluded from the Riparian & Littoral Conservation zone. *(Affirmative finding)*

(b) *Topographical alterations*
The existing property is essentially flat and will remain so. Topographic alteration is modest and is largely related to construction of the new boat ramp. *(Affirmative finding)*

(c) *Protection of important public views*
There are significant public views from the subject property, particularly westward across the lake. These views will be preserved. The proposed construction will not adversely impact any identified public view corridor. *(Affirmative finding)*

(d) *Protection of important cultural resources*
The property is a lakeshore fill site of industrial origin. It has no known archaeological significance. It contains no archaeological site points, nor is it located within an archaeologically sensitive area. *(Affirmative finding)*

(e) *Supporting the use of alternative energy*
No alternative energies are incorporated into the project design. Construction of the project will have no adverse impact on potential use of alternative energies onsite. *(Affirmative finding)*

(f) *Brownfield sites*
This property is included on the Vermont DEC Hazardous Site List. A corrective action plan (CAP) has been established and amounts to capping contaminated soils in place. This was done as part of the original site redevelopment. It is the applicant’s responsibility to coordinate with VT
DEC as to the corrective action plan and any earthwork associated with this new project.  
(Affirmative finding as conditioned)

(g) Provide for nature’s events
Post construction stormwater management measures are not required for the proposed work.  As noted above, an erosion control plan must be in place prior to construction, subject to review and approval by the city’s stormwater program.  (Affirmative finding)

(h) Building location and orientation
No new onshore buildings are included in this proposal.  (Not applicable)

(i) Vehicular access
Vehicular access remains unchanged.  (Not applicable)

(j) Pedestrian access
Pedestrian access to the property remains unchanged.  The proposed improvements will enable greater access by pedestrians to the lakeshore with construction of the proposed pier.  (Affirmative finding)

(k) Accessibility for the handicapped
The application narrative notes that the proposed improvements will include ADA accessibility.  Associated handicap parking will remain unchanged.  (Affirmative finding)

(l) Parking and circulation
Onsite parking and circulation will remain unchanged.  Access to the boat ramp and hoists will stem from the existing interior circulation.  (Affirmative finding)

(m) Landscaping and fences
No new landscaping is proposed.  All of the work is lake-side of the shoreline piling.  (Not applicable)

(n) Public plazas and open space
Significant public open space exists adjacent to the sailing center.  Even within the sailing center facility, public access to the lakeshore is available.  The proposed work will not adversely impact available public open space or access to the water.  (Affirmative finding)

(o) Outdoor lighting
No new outdoor lighting is proposed.  (Not applicable)

(p) Integrate infrastructure into the design
This project includes no new utilities or trash and recycling facilities.  (Not applicable)

Part 3, Architectural Design Standards
Sec. 6.3.2, Review Standards
Not applicable.

II. Conditions of Approval
1. **Prior to release of the zoning permit,** the required erosion prevention and sediment control plan shall be reviewed and approved by the city’s stormwater program.

2. It is the applicant’s responsibility to coordinate with VT DEC as to the corrective action plan and any earthwork associated with this new project.

3. Per Sec. 4.5.4, (f) 8, construction within the Special Flood Hazard Area is subject to the following conditions:

   C. All development:
      (i) New construction and/or substantial improvements to structures shall be reasonably safe from flooding and be:
         1. Designed and adequately anchored to prevent flotation, collapse, or lateral movement during the occurrence of the base flood;
         2. Constructed of materials resistant to flood damage;
         3. Constructed by methods and practices that minimize flood damage; and
         4. Constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
      (ii) All development shall be designed to minimize flood damage to the proposed development and to public facilities and utilities;
      (iii) All development shall be designed to provide adequate surface drainage to reduce exposure to flood hazards;
      (iv) All new construction and substantial improvements that have fully enclosed areas below the lowest floor shall:
         1. Be solely used for parking of vehicles, storage, or building access, and such a condition shall clearly be stated on any permits; and,
         2. Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Such designs must be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria: A minimum of two openings of two walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters;
      (v) All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law.

   D. Residential Development:
      (i) Not applicable.

   E. Non-Residential Development:
      (i) All new construction and substantial improvements for nonresidential purposes shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation. Existing non-residential structures may be flood proofed where designed to be watertight to one foot or more above the base flood elevation, with walls substantially impermeable and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A permit for a proposed building to be flood proofed shall not be issued until a registered architect or
engineer has reviewed the structural design, specifications and plans and has
certified that the design and methods of construction are in accordance with
meeting the provisions of this subsection.

F. Water Supply Systems:
   Not applicable;
G. On-Site Waste Disposal Systems:
   Not applicable;
H. Recreational Vehicles:
   (i) Not applicable.

4. It is the applicant’s responsibility to comply with all applicable ADA requirements.
5. All new construction is required to meet the Guidelines for Energy Efficient Construction
   pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of