



City of Burlington, VT
149 Church Street, 3rd Floor
Burlington, VT 05401
Phone: (802) 865-7144

www.burlingtonvt.gov/plan

Burlington Planning Commission

Ordinance Committee
Remote Meeting

Thursday, January 7, 2021 @ 5:15 PM

Zoom: <https://us02web.zoom.us/j/85982141565?pwd=Q3FGTDdQU1htbjE5a3ZGOFdpRkNwQT09>

Webinar ID: 859 8214 1565

Password: 668222

Telephone: +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099 or +1 253 215 8782 or
+1 346 248 7799 or +1 669 900 6833

AGENDA

1. Lakeshore amendment
 - Review proposed front yard setback change and introduction of no-mow provision.
2. Roof forms and building height measurement
 - Discussion about potential revision to the standards of Sec. 5.2.6 (a) *Height Measurement* to address dormers.
3. Adjournment



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TO: Planning Commission Ordinance Committee
FROM: Scott Gustin, Principal Planner & Zoning Division Manager
DATE: January 7, 2021
RE: Shoreline property setbacks & buffer zone

Overview & Background

This amendment seeks to establish a maximum front yard setback for shoreline properties in the waterfront residential districts and to provide a measure of shoreline naturalization upon development of shoreline properties.

The maximum front yard setback is proposed to remedy a recurring problem wherein the front yard setback, based on the average of neighboring properties, pushes development closer towards the shoreline and further into the riparian and littoral conservation zone. The shoreline is irregular. As a result, many shoreline properties vary in depth. In turn, placement of homes on these properties also varies. The residential front yard setback is based on the average of neighboring homes and works well in uniform neighborhoods. The average in these cases provides consistency along the street edge. Among shoreline properties, the variability of lot configurations and building locations renders the use of the average inappropriate. In some cases, strict use of the average actually pushes redevelopment closer towards the shoreline than existing development, counter to the intent of the riparian and littoral conservation zone. This amendment proposes a maximum front yard setback for waterfront residential properties to avoid recurrence of this problem.

The provision for shoreline naturalization is intended to establish a development threshold for improving shoreline conditions by allowing for some vegetative regeneration. Within the riparian and littoral conservation zone, development involving site work is reviewed by the Conservation Board with an eye towards tree retention and stormwater management capacity. Redevelopment of Burlington's widely developed shorelines has a fairly low bar for shoreline impacts. Existing conditions cannot be made worse, but there is currently no provision for improving vegetative conditions along the shoreline. . The proposed amendment, applied to development above a certain threshold, will allow for some degree of vegetative regeneration by establishing no-mow areas along the shoreline.

The Conservation Board reviewed this draft amendment December 7, 2020 and unanimously recommended approval.

Proposed Amendment

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact the City Planning department or 711 if you are hearing or speech impaired.

Amendment Type

Text Amendment	Map Amendment	Text & Map Amendment
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Purpose Statement

The intent of the proposed amendment is to enhance protection of the city's environmentally sensitive shorelines. The city has already identified the need to protect surface waters from encroaching development and from nonpoint source pollution associated with stormwater runoff. It has also identified the need to preserve natural vegetative cover along the shoreline to protect native plants, wildlife habitat and corridors, and water quality.

The proposed maximum setback for shoreline properties within the waterfront residential zones will substantially limit occurrences of the average front yard setback requirement pushing development closer towards the shoreline.

The no-mow provision is a simple and effective way to allow for vegetative regeneration along the shoreline. Such regeneration is consistent with the city's articulated goals of protecting shoreline integrity, water quality, and wildlife habitat.

Proposed Amendments

Deleted language is ~~crossed out~~ and new language is underlined in red.

[Begin text amendment]

Sec. 4.4.5 Residential Districts

(a) Purpose:

As written.

(b) Dimensional Standards and Density

The density and intensity of development, dimensions of building lots, the heights of buildings and their setbacks from property boundary lines, and the limits on lot coverage shall be governed by the following standards:

Table 4.4.5-1: Minimum Lot Size and Frontage: RL, RL-W, RM and RM-W²

Use	Lot Frontage ¹ (linear feet)		Lot Size (square feet)	
	RL,WRL	RM,WRM	RL, WRL ³	RM, WRM
Single detached dwelling	Min: 60'	Min: 30'	Min: 6,000	NA

Duplex and above			Min: 10,000	
1. The DRB may adjust the frontage requirements for lots fronting on cul-de-sacs, multiple streets, or corner lots reflecting the existing neighborhood pattern on each respective street. 2. There are no minimum lot size or frontage requirements in the RH District. 3. Exception: Larger minimum lot size in RL and WRL larger lot overlay district; refer to Section 4.5.5 & Table 5.5-1.				

Table 4.4.5-2: Base Residential Density

District	Maximum dwelling units per acre ¹
Low Density: RL, RL-W	7 units/acre
Medium Density: RM, RM-W	20 units/acre
High Density: RH	40 units/acre
Inclusive of new streets but exclusive of existing streets, and without bonuses or any Inclusionary Zoning allowances.	

Table 4.4.5-3: Residential District Dimensional Standards

Zoning District	Max. Lot Coverage ¹	Setbacks ^{1, 3, 4, 5, 6}				Max. Height ¹
		Front ^{2, Z}	Side ³	Rear	Waterfront	
RL; WRL	35%	Min/Max: Ave. of 2 adjacent lots on both sides +/- 5-feet	Min: 10% of lot width Or ave. of side yard setback of 2 adjacent lots on both sides Max required: 20-feet	Min: 25% of lot depth but in no event less than 20' Max required: 75-feet	Min: 75' feet from the ordinary high water mark of Lake Champlain and the Winooski River	35-feet
RM	40%	Min/Max: Ave of 2 adjacent lots on both sides +/- 5-feet	Min: 10% of lot width Or ave. of side yard setback of 2 adjacent lots on both sides Max required: 20-feet	Min: 25% of lot depth but in no event less than 20' Max required: 75-feet	NA	35-feet
WRM	60%	Min/Max: Ave of 2	Min: 10% of lot	Min: 25% of lot	Min: 75' feet	35-feet

Table 4.4.5-3: Residential District Dimensional Standards

Zoning District	Max. Lot Coverage ¹	Setbacks ^{1, 3, 4, 5, 6}				Max. Height ¹
		Front ^{2Z}	Side ³	Rear	Waterfront	
		adjacent lots on both sides +/- 5-feet	width Or ave. of side yard setback of 2 adjacent lots on both sides Max required: 20-feet	depth but in no event less than 20' Max required: 75-feet	from the ordinary high water mark of Lake Champlain and the Winooski River	<i>(60-feet under Sec. 4.4.5(d)2A)</i>
RH	80%	Min/Max: Ave of 2 adjacent lots on both sides +/- 5-feet	Min: 10% of lot width Or ave. of side yard setback of 2 adjacent lots on both sides Max required: 20-feet	Min: 25% of lot depth but in no event less than 20' Max required: 75-feet	NA	35-feet

1. An additional ten per cent (10%) lot coverage may be permitted for accessory residential features per (d)3A below. Measurement of and exceptions to coverage, setback, and height standards are found in Art 5.
2. Average front yard setback of the principal structures on the 2 adjacent lots on both sides within the same block having the same street frontage. See Sec. 5.2.4.
3. In no event shall the side yard setback be required to exceed 20-feet, or the rear-yard setback be required to exceed 75-feet.
4. Additional setbacks from the lakeshore and other water features may be applicable per the requirements of the Sec 4.5.4 Riparian and Littoral Conservation Overlay Zone.
5. The side yard setback shall be calculated based on the 4 adjacent properties (2 on each side of the subject property). The right side yard setback is the average of the right side yard setback of the principal structures on these 4 properties. The left yard setback is the average of the left side yard setback of the principal structures on these 4 properties. The adjacent properties shall be within the same block having the same street frontage as the subject property. See Sec. 5.2.5.
6. Where there are fewer than 2 adjacent lots on both sides within the same block having the same street frontage, the average side yard setback shall be calculated from the fewer number of lots. Where there are no adjacent lots, the setback shall be 10% of the lot width.
7. For properties in the WRL and WRM zones with frontage along Lake Champlain or the Winooski River the front yard setback shall not be required to exceed 50 feet in any event.

(c) Permitted and Conditional Uses:

As written.

(d) District Specific Regulations:

As written.

Sec. 4.5.4 Natural Resource Protection Overlay (NR) District

(a) Purpose and Authority:

The Natural Resource Protection Overlay District is intended to:

- Protect surface waters and wetlands from encroachment by development, and from sources of non-point pollution;
- Preserve natural lakeshore vegetative cover where reasonably possible consistent with the Vermont Shoreland Protection Act, and the protection of native plants and vegetative cover that provide lake shoreland wildlife habitat, to the greatest extent possible;
- Protect the functions and values of Burlington's wetlands;
- Protect and enhance water quality near public beaches and other water-based recreation areas from sources of non-point pollution;
- Preserve natural features and communities, geologic features and cultural sites for education and research.
- Provide opportunities for public access where feasible and appropriate;
- Facilitate connections and corridors for wildlife between areas of publicly protected sites.
- Ensure that development that occurs within a Flood Hazard Area conforms to the requirements of the National Flood Insurance Program.
- Minimize and prevent the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding and other flood related hazards; and
- Ensure that the design and construction of development in flood and other hazard areas are accomplished in a manner that minimizes or eliminates the potential for flood and loss or damage to life and property; and
- Manage all flood hazard areas designated pursuant to 10 V.S.A. § 753; and
- Make the City of Burlington and its residents eligible for federal flood insurance and other federal disaster recovery and hazard mitigation funds as may be available.

(b) Areas Affected

As written.

(c) District Specific Regulations: Riparian and Littoral Conservation Zone:

1. Permitted Uses:

Except where otherwise noted herein, only the following uses are permitted within the Riparian and Littoral Conservation Zone and its associated buffer subject to the requirements and limitations set forth below under subpart 4.

- 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;
- B. "Accepted agricultural and silvicultural practices" as defined under 24 VSA Ch 117;
- C. Normal maintenance of constructed wetlands and stormwater systems, provided that naturally occurring wetlands are not disturbed in conjunction with the maintenance;
- D. Normal maintenance of existing docks, roads, rail lines, bridges, and culverts provided that disturbance to any shoreland is minimized in conjunction with such maintenance;
- 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,
- F. Recreational and educational activities such as hiking, walking, fishing, nature study, and bird watching and associated boardwalks and unimproved trails.

2. Prohibited Uses:

Except where noted herein, the following uses shall be prohibited within the Riparian and Littoral Conservation Zone and its associated buffer.

- A. The deposition or introduction of organic and inorganic chemicals, including herbicides and 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,
- B. The off-road use of any motorized vehicles including ATVs or dirt bikes (the temporary use of motorized vehicles used to construct and maintain permitted or regulated activities are specifically exempted from this prohibition);

3. Regulated Uses:

Except where otherwise noted herein, all uses permitted or conditionally permitted in the respective underlying zoning district, including any construction of buildings or other structures, and roads, parking areas or any other impervious surface, may be approved only within the Riparian and Littoral Conservation Zone and its associated buffer after review and approval pursuant to the requirements and limitations below under Subpart 4.

4. Requirements:

- 1. 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.

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, prevent erosion, and control sedimentation. The city engineer is hereby authorized to develop performance standards to ensure conformance with these state stormwater management rules:

For properties with frontage along Lake Champlain or the Winooski River, development that includes 400 square feet or more of new or redeveloped lot coverage shall establish a no-mow zone along the shoreline. A no-mow zone is a new or existing vegetated area that is not mowed and allows vegetation to grow and mature. A no-mow zone shall be at least 15 ft. wide as measured inland from the 100 ft. elevation and shall be of a size equivalent to, or greater than, the new or redeveloped lot coverage, except that in no event shall a no-mow zone be required to extend along more than 80% of a property's shoreline frontage;

For properties with frontage along Lake Champlain or the Winooski River, development shall be located no closer to the shoreline than existing development wherever reasonably possible.

2. Agricultural and silvicultural activities shall follow Best Management Practices for the Protection of Water Quality;
3. Installation of any seawalls, rip-rap or other shoreland retention structures shall be submitted for review by the conservation board who shall consult with the city engineer prior to issuance of a recommendation to the DRB; and,
4. No new stormwater outfall shall directly discharge into any surface water without approval and implementation of a stormwater management plan approved by the city engineer.

[End text amendment]

Relationship to planBTV

This following discussion of conformance with the goals and policies of planBTV is prepared in accordance with the provisions of 24 V.S.A. §4441(c).

Theme	Dynamic	Distinctive	Inclusive	Connected
Land Use	Conserve	Sustain		Grow

Compatibility with Proposed Future Land Use & Density

The proposed amendment does not impact the types or density of potential land use and density. It provides enhanced protection of Burlington's environmentally sensitive shorelines and is consistent with express goals of the city to protect its shorelines, water quality, and wildlife habitat and contiguity. The amendment enables more appropriate development siting and establishes a threshold for improving shoreline conditions.

Impact on Safe & Affordable Housing

The proposed amendment has no impact on housing safety or affordability.

Planned Community Facilities

The proposed amendment has no impact on planned community facilities.

Process Overview

The following chart summarizes the current stage in the zoning amendment process, and identifies any recommended actions:

Planning Commission Process				
Draft Amendment prepared by: Staff, based on discussion with the Conservation Board	Presentation to & discussion by Commission	Approve for Public Hearing	Public Hearing	Approved & forwarded to Council
				Continue discussion
City Council Process				
First Read & Referral to Ordinance Cmte	Ordinance Cmte discussion	Ordinance Cmte recommend as modified	Second Read & Public Hearing	CCOC Recommends Approval & Adoption
				Rejected

Department of Permitting and Inspections

Zoning Division
149 Church Street
Burlington, VT 05401

<http://www.burlingtonvt.gov/PZ/>

Telephone: (802) 865-7188
(802) 865-7195 (FAX)

William Ward, Director
Charlene Orton, Code Compliance Officer
Theodore Miles, Interim Code Compliance Officer
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
Layne Darfler, Planning Technician
Alison Davis, Zoning Clerk



MEMORANDUM

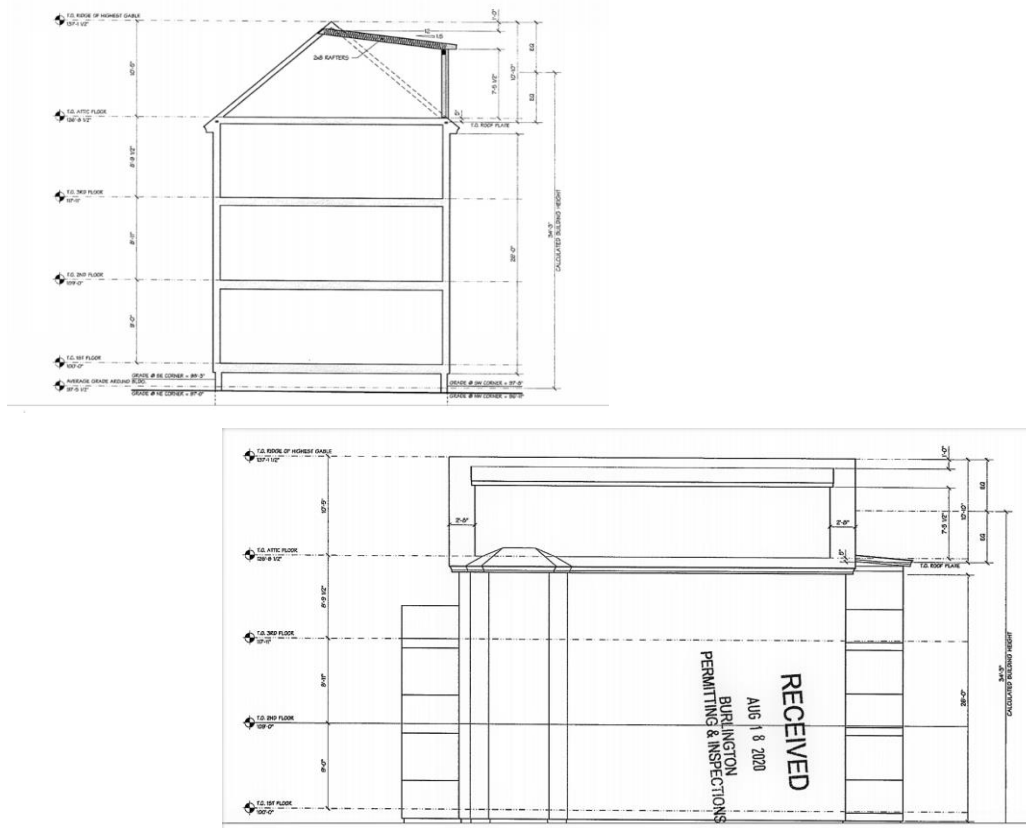
To: Planning Commission Ordinance Committee

From: Mary O'Neil, AICP, Principal Planner

Date: December 3, 2020

RE: Calculating building height with dormers

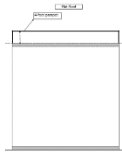
A recent decision by the Development Review Board considered the proposed increase in living space with the addition of a full shed dormer on an existing 3 ½ story residential building. Although the measurement to the mid-line of the rise of the gable roof met the 35' limitation, the Board identified an increase in perceivable building mass and actual height of the proposed dormer and determined that the addition of a full shed dormer **increased building height beyond allowable limits** for the zoning district. The zoning permit application had been administratively denied; the decision upheld on subsequent appeal to the DRB.



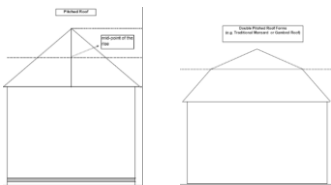
The Comprehensive Development Ordinance offers no guidance on measurement of building height when dormers are proposed.

Section 5.2.6, Article 5 directs building height calculation based on four scenarios:

- A. Flat roof;** *(the highest point of the decking of a flat or flat-topped mansard roof. A parapet no taller than four (4) feet shall not be considered part of a flat roof for the purposes of measuring building height)*



- B. Pitched or double pitched roof** *(gable, shed, Gambrel, traditional Mansard) (the midpoint of the rise between the roofplate and the ridge of the highest gable of a pitched or hipped roof. A double-pitched roof (e.g. gambrel or double-pitched mansard) shall be measured to the roofplate of the highest pitch)*



- C. Curved roof** *(a point two thirds (2/3) the vertical distance from the point at which an exterior wall varies from a 100% slope and to highest point of the roof)*



and

- D. Other roof forms.** *(Building height shall be measured as determined by the administrative officer in a manner that most closely reflects the intent of subsections (a) through (c).)*

Not previously considered is the addition of roof dormers, and how they may influence the real or perceived height of a structure. In the subject example, the zoning administrative officer determined that measuring to the mid-rise of the gable on the host roof was inappropriate as it did not reflect the increased building mass (and height) of the additional story created by the full shed dormer. The permit was therefore denied.

It may be helpful to first understand the different types of dormers.

A dormer, by definition is a roofed structure, often containing a window that projects vertically beyond the plane of a pitched roof. Dormers are commonly used to increase the usable space in a half story and to create window openings in a roof plane. Some common examples of dormers include:

A dog-house dormer;



A shed dormer (partial, half, full);



and

A Nantucket dormer (think two dog-house dormers connected by a shed)



Recognizing that the addition of a dormer will increase living area (sometimes to the point of establishing an entire new level of habitable space), combined with the potential and perceivable increase in building mass, some communities regulate building height by defined regulations around the size of dormers. Ordinances include prescriptive standards for dormer size and placement to limit building mass and height; others utilize roof pitch and percentage of new massing across the roof plane. Other communities simply measure roof height based on the mid-point of the rise of the dormer roof.

The **City of South Burlington** includes language that limits the size and number of roof dormers; linking them to roof height:

3.07 Height of Structures

A. General Provisions. Structures in all districts shall comply with the height standards presented below in this section. Maximum allowable building heights are illustrated in Figure 3-1, Height of Structures.

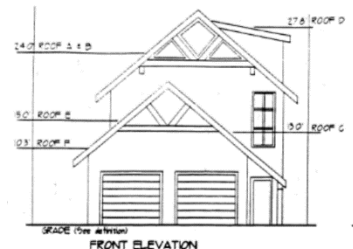
B. Stories. The requirements of Table C-2, Dimensional Standards, shall apply.

(1) Where a roofline story is placed on a building that contains or is planned to contain the maximum permitted number of stories below the roofline, the following conditions shall apply:

- (a) dormers on such story shall not exceed the height of the roof peak, and
- (b) the total width of the dormers on any single side does not exceed thirty-three percent (33%) of the horizontal distance of the roof line along that side. Vertical extensions that exceed thirty-three percent (33%) of the horizontal width (i.e., step dormers) are permitted, but are limited to a maximum height of five (5) feet above the average height of the principal roof structure and shall not exceed fifty percent (50%) of the horizontal width of any side.

Sommerville, Massachusetts tightly regulates dormer size, and limits them to no more than 50% of the horizontal eave length of the roof.
(see attachment.)

Whisler, California illustrates that the addition of a shed dormer with a low slope will spur a different calculation of overall roof height reflecting a higher roof.



Given the recent decision of the DRB, Burlington's ordinance must consider the visible impact of building dormers as they relate to building height.

Recommendation: Limiting dormers across a percentage of eave length (50% is a popular tipping point) before recalculating building height to the mid-point of the rise of the shed roof* when it occupies more than 50% of the eave length is a reasonable path. This would reflect the decision by the DRB that acknowledges roof dormers, by degree, increase visible and functional building height.

- Or intersection of a shed dormer with the host roof



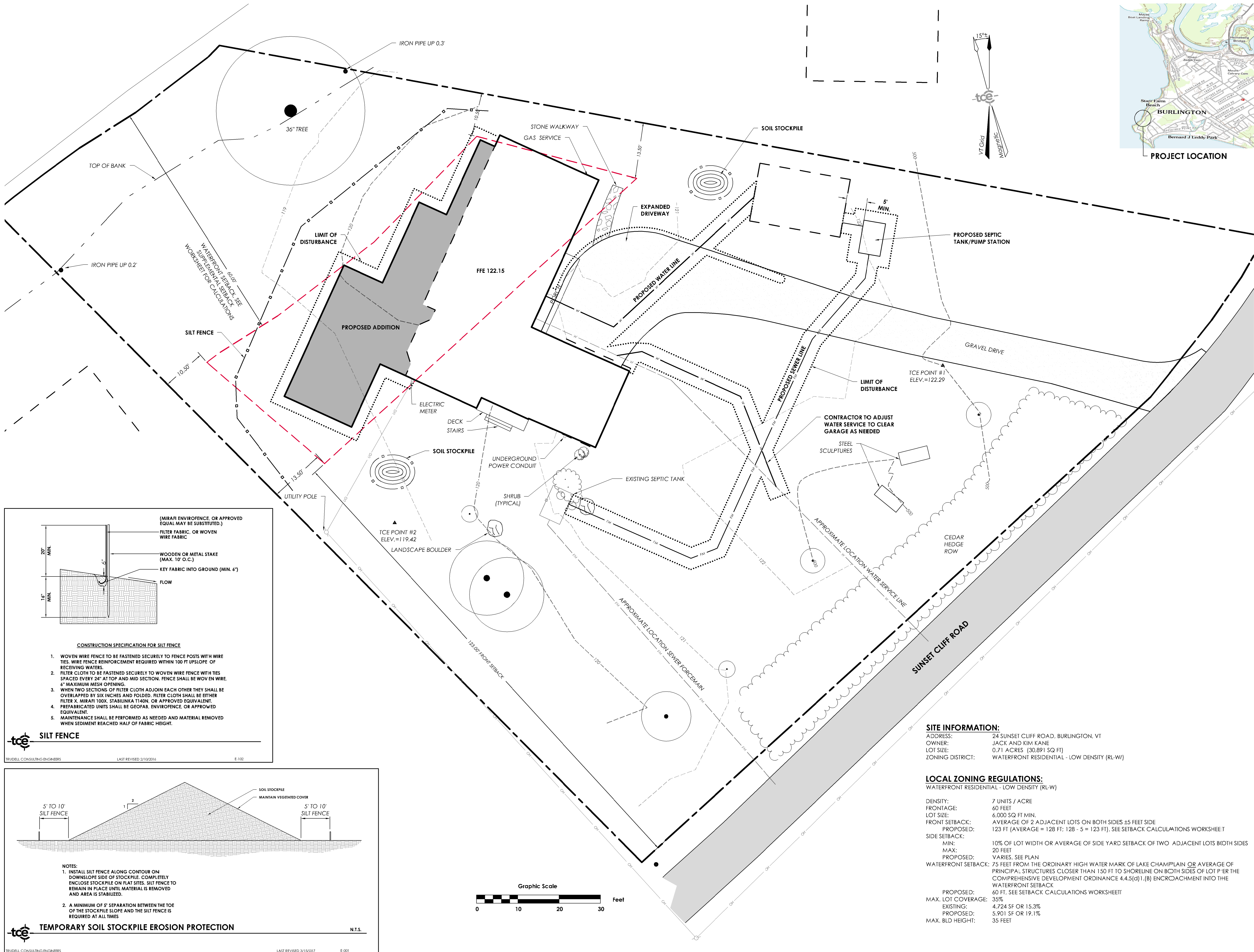
194' front setback

149' front setback

218' +/- 5' required front yard setback

271' front setback

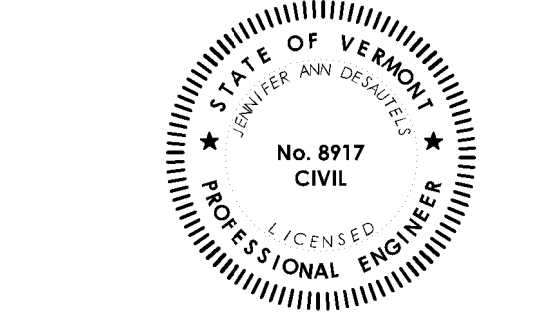
259' front setback



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Revisions	No.	Description	Date
Revised Building Addition	09/04/2020	JAD	

- Use of These Drawings
- Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines, and/or approval from the regulatory authority. They are not intended as construction drawings unless as such or marked approved by a regulatory authority.
 - By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines including but not limited to, the Engineer and the Architect to ensure these plans are properly coordinated including, but not limited to, contract documents, specific owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent plans for construction.
 - Owner and Architect are responsible for final design and location of buildings shown, including an area measurement minimum five (5) feet around any building and coordination of final utility connections shown on these plans.
 - Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the current revisions.
 - These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. Errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
 - It is the User's responsibility to ensure this copy contains the most current revisions.



Project Title

Kane Residence
24 Sunset Cliff Road
Burlington, Vermont

DRAFT FOR PERMIT ONLY

Sheet Title

Site & EPSC Plan

Date:	04/08/2020
Scale:	1" = 10'
Project Number:	19-285
Drawn By:	JAD
Project Engineer:	JAD
Approved By:	
Field Book:	

C2-01



Burlington Planning Commission

Ordinance Committee Meeting Minutes

Thursday, January 7, 2021 @ 5:15 PM
Remote Meeting

Attendance

- **Committee Members:** Bruce Baker (BB), Emily Lee (EL), Matt Bushy (MB), Yves Bradley (YB)
- **Absent:** Ravi Venkataraman (RV)
- **Public:** none
- **Staff:** Scott Gustin, Mary O'Neil (Permitting & Inspections), David White (Planning Office),

1. Meeting Schedule

Committee members said that continuing the regular meeting schedule of the first Thursday of each month at 5:15 PM works for them.

2. Lakeshore Amendment

A MOTION was made by EL and SECONDED by YB:

Refer the amendment as proposed to the Planning Commission.

Vote: 4-0-0

3. Roof forms and building height measurement

The Committee discussed roof dormers and their height implications. Committee members requested seeing draft ordinance language at an upcoming meeting. Additional discussion pertained to the requirement for height measurement intervals and how it relates to the requirement to measure building height on all sides from the average finished grade for buildings more than 10' from the sidewalk. Staff will follow up at a future meeting with several alternatives and what their implications on building height and volume would be.

4. Upcoming discussion items

Committee members requested historic preservation standards as a discussion topic – their interface with other ordinance standards, materials requirements, and the general standards of Sec. 5.4.8. Staff will prepare to start this discussion at the Committee’s March meeting.

5. Adjournment

The Committee adjourned at 6:35 PM.