

Burlington Development Review Board

Department of Permitting & Inspections
645 Pine Street

Burlington, VT 05401

www.burlingtonvt.gov/DPI/DRB

Telephone: (802) 865-7188

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AJ LaRosa
Caitlin Halpert
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Sean McKenzie
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Chase Taylor
Evan Gould, (Alternate)
Vacant, (Alternate)



Development Review Board

Tuesday, December 19, 2023, 5:00 PM

645 Pine Street, Front Conference Room or Remote on Zoom:

Please click the link below to join the webinar:

Zoom: <https://us02web.zoom.us/j/83225696227?pwd=SGQ0bTdnS000Wkc3c2J4WWw1dzMxUT09>

Webinar ID: 832 2569 6227

Passcode: 969186

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

1. Agenda

2. Communications

3. Minutes

4. Public Hearing

4.1.

ZAP-23-12; 123 King Street (RH, Ward 5) Rebecca Keinath / Charles Keinath

Appeal of zoning administrative denial (ZP-23-496) to enlarge second story balcony. (Project Manager, Scott Gustin)

5. Certificate of Appropriateness

5.1.

ZP-23-530; 0 University Road (I, Ward 1) University of Vermont / State Agricultural College / Claire Forbes

Proposed improvement and expansion of existing Physical Plant Centennial Compound parking lot. (Project Manager, Scott Gustin)

5.2.

ZP-23-536; 52 Institute Road (I, Ward 4) City School Department / Administrative Offices/EED / Joe Weith
Amendment to ZP-23-276 for additional tree clearing and soil cap as required by the Corrective Action Plan. (Project Manager, Mary O’Neil)

6. Other Business

6.1. Standard permit conditions

7. Adjournment

8. Informational and Non-Discrimination Statements

8.1.
Plans may be viewed upon request by contacting the Department of Permitting & Inspections between the hours of 8:00 a.m. and 4:30 p.m. Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Zoning office is considered public and cannot be kept confidential. This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/dpi/drb/agendas or the office notice board, one week before the hearing for the order in which items will be heard.

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 Human Resources Department at (802) 540-2505

Proposed appeal of administrative denial under ZP-23-496.

Appealing decision on permit number ZP 23 496. The reasons given for denial are not factual, this section was altered to make it smaller many decades ago, the current size is not original. The materials I removed due to safety and excessive rot and fishmouthing into the house are modern and also NOT original. The old rotted floor joists that were covered with tar and sheet metal are original and unsafe to replicate but they were also obviously cut off (in effect shortening this porch section long ago). I have a history degree from UVM, I took historical architecture (and specifically Burlington) courses. I have done home and barn renovations for decades and can tell from experience what is original and what is not. This structure was indeed originally larger, extending at least past the window on that side of the house based on the obviously shortened floor joists and attachment marks and fastener holes in the rotted sheathing and modern plywood that is covering what would have been original siding.

From the 'Historical' side of the argument this house was (unfortunately) stripped of all 'historic' features, materials and aesthetics LONG ago. I am going to painstaking (and very costly) lengths to actually bring as much of the historic features back as I possibly can. I have recovered, sourced and reclaimed old porch posts and ornate cornice trim pieces that were original to the house. While some are still missing I am trying to find same or similar replacements or find a place to mill replicates. This house was covered with ugly, fading, stained, damaged and non-uniform colored vinyl siding. I chose the MUCH more expensive route of removing that and repairing the extensive damage underneath of it to repaint the original wooden clapboard siding, replacing modern rusty metal clad doors with wood look doors in keeping with the original (likely) wooden door original style. Since my permit has been open, the City changed the rules mid stream and I am no longer allowed to do paint repair on my own home even though I was lead paint certified as required. I have no idea how that will now play out as due to City restrictions no one will work in Burlington on structures and the very few that do are gouging customers (the most recent bid I received to paint the house was over \$100,000!!!!). I am by no means taking any short cuts and am doing my best to bring as much of the historic look and feel back as I can, though the financial punishment from the City I continue to endure makes me wish i left this building ugly and decrepit and run down like the vast majority of house owners in the City are forced to do. But I digress...

The enlarged upper small porch section I proposed may have been larger than original, but the original was most certainly larger than what is there now. If I cannot extend it to wrap around slightly towards the front that would be fine, one of the reasons I did that was to also address a safety concern from the Fire Marshall years ago to have something on the front of the house to reach the large 3rd floor window in case of emergency. We constructed a small porch extension as directed many years ago and even though that was PT it also failed, rotted and became a safety issue. Another obvious reason is to be able to actually use the space, decorate it for the Holidays, and for general aesthetics. Maintenance is also huge issue with the tiny space being impractical to be able to get out to in the winter to shovel or in other seasons to remove leaves, maintain and keep in goor repair.

The materials requirements here are also convoluted and confusing and I have received several different answers and directions from several different people to this whole project, which has

now taken months to even get to this point because of inaccurate instructions, impossible to decipher codes, ambiguous wording and a web site that is literally impossible to navigate if you weren't the person who designed it. I also contend that given the nature of the already altered single bay porch that using 'regular' wood just because it is 'historic' leads to significant safety concerns as well as undue ownership on me to have to constantly repair and replace railings and floor boards as well as the rest of the structure that is constantly exposed to the elements. There is a reason technology, building standards and building codes change over time. If I am going to be mandated to build at sub-standard and inferior levels using inferior and unsafe materials then the City should take on the liability of these demands that create unsafe situations in the case someone is injured.

I have no idea what I would attach here. I will use this opportunity to point out, again, how convoluted and confusing this and all the other projects have been. I have gone in to the Pine Street location literally dozens of times, and while staff is friendly and helpful NOBODY knows how to answer any questions. Everyone points me to the online system where no dialogue can be had and the confusion just deepened. The ambiguous and vague and inconsistent terminology is ubiquitous.

Intentional or not, the City is making it almost impossible for home owners to do any work on their homes. Be it through this highly confusing, expensive and unjust process with the new online system, or the myriad non-sensical ways the City makes it virtually impossible to do work that is up to code (real code, not arbitrary City of Burlington, unsafe code) so that every trades person I call asks if this is in Burlington and when they find out it is they say they don't do work in Burlington... it's a real issue. Its no wonder the average home owner just stays quiet, leaves their homes alone for fear of the City's reprisals and you have increasing blight everywhere. You are creating unsafe situations through this egregiously unfriendly process that only prevents people from maintaining their homes...

I would LOVE to actually have a chance to speak to people in person (gasp!) and appeal this decision in person (double gasp!!)

9/25/2023

City of Burlington Trades division,

I have an open permit for a project (Project_401670 Building Permit: CBP-21-736) That I am requesting to amend a part of. I went to the Pine Street Office and spoke with a few people there who instructed me to write a description of the change, and attach a couple drawings to explain it in hopes of acquiring an 'as built' (if I remember the terminology correctly) permission.

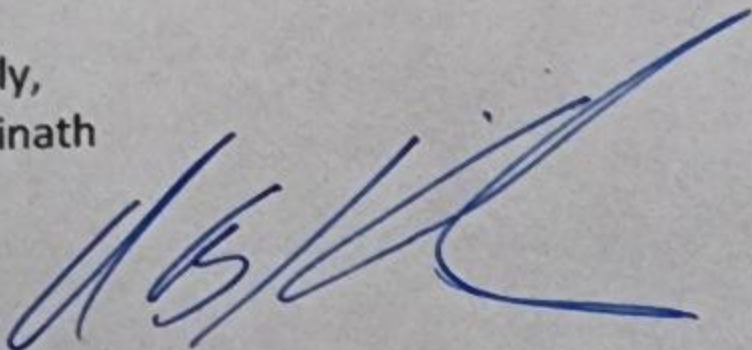
This permit is for a covered wrap around porch. I am over 60% done with the project but would like to extend a small portion of the current small balcony/covered porch area on the second floor. The footprint will not change at all. The section of roof would just be replaced by more open deck space than what already exists.

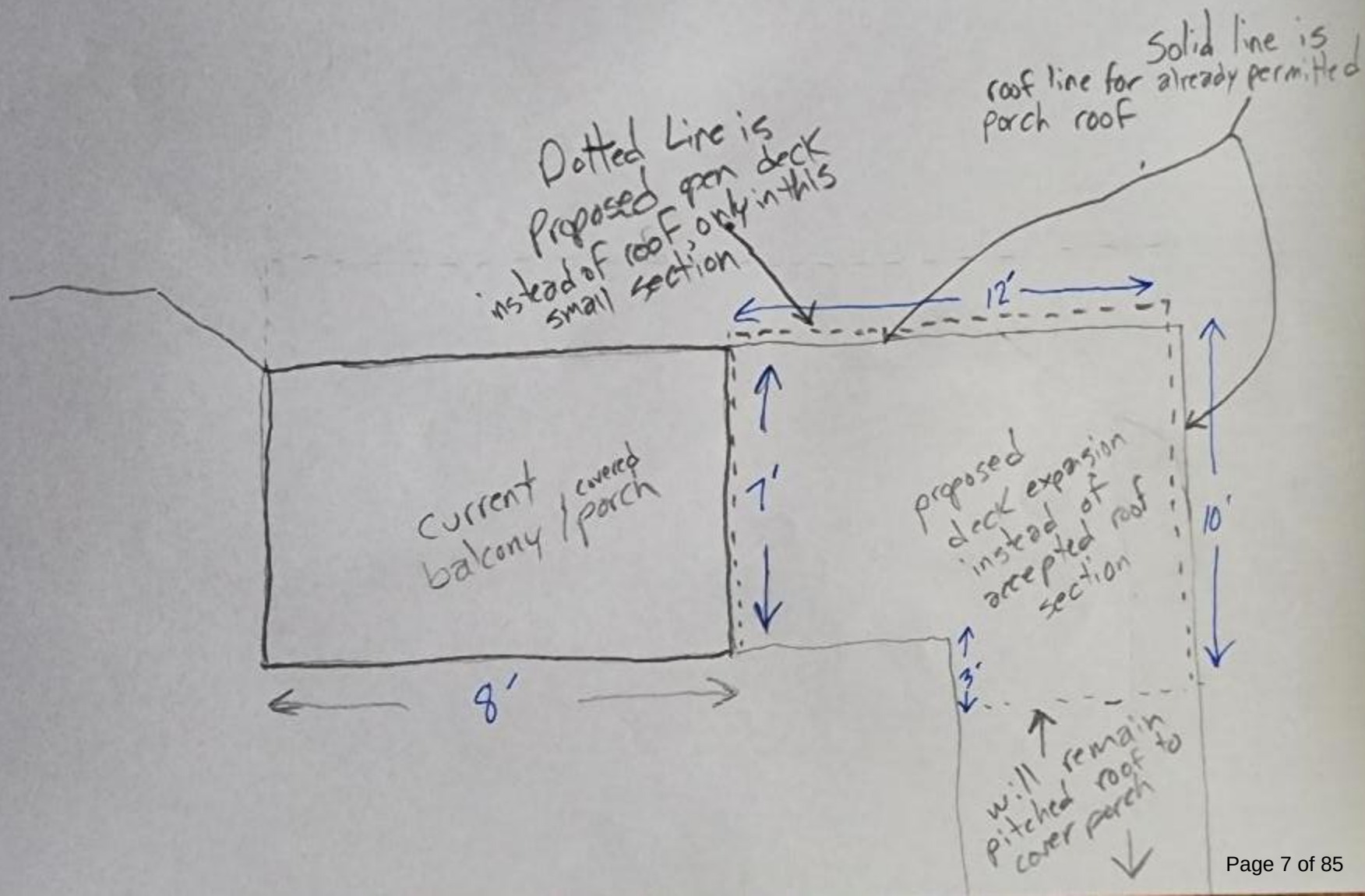
I would obviously build railings according to code. I am also very aware and concerned about aesthetics and will be in keeping with the style of the home as much as I can. I have an attention to detail, (I am actually am delayed now while trying to source 2 additional period style decorative porch posts) and am most concerned about historical appearance, second only to code and safety.

I am placing this letter as an attachment as well as 2 other sketches to show visually my proposed change and the dimensions. Again, this will not change the footprint at all, just composite decking instead of a slanted roofline with asphalt shingles only in this small proposed area outlined in the sketch.

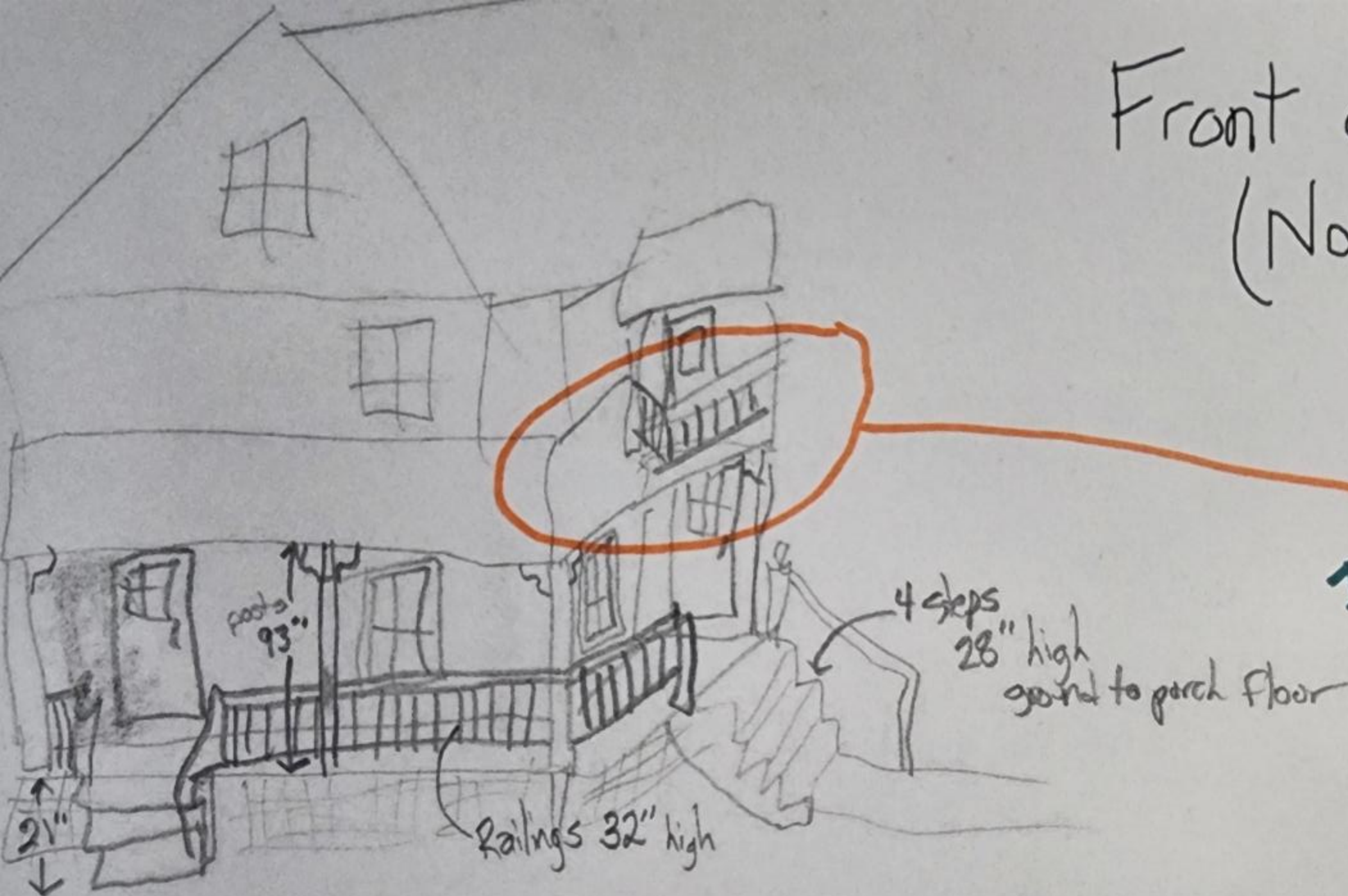
Thank you for your consideration. Please let me know how to proceed. I am eager to get this project wrapped up and close the permit by winter if possible.

Sincerely,
Bart Keinath





Front of House (North)



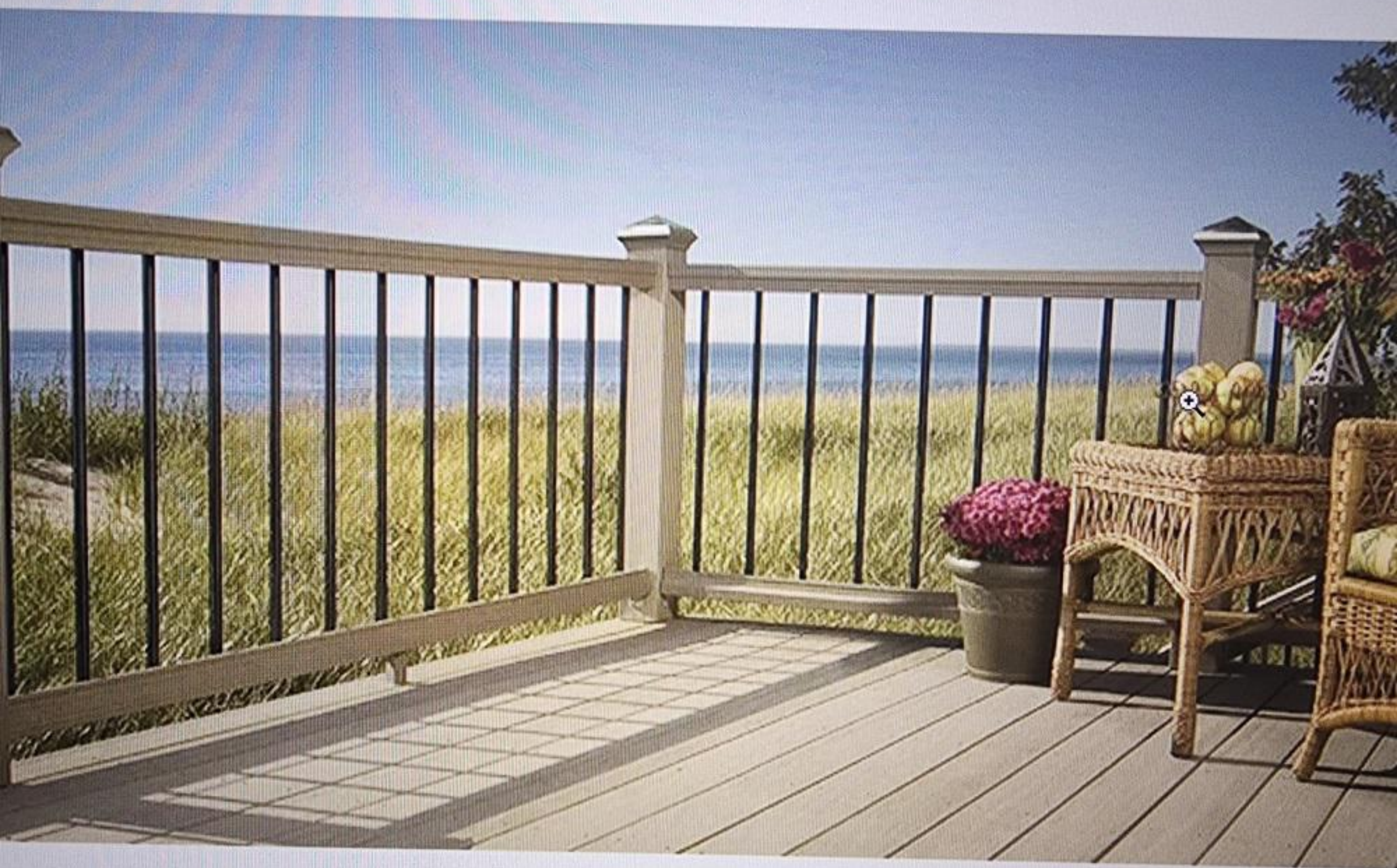
This is the section
I am requesting to
change.

Front of House (North)











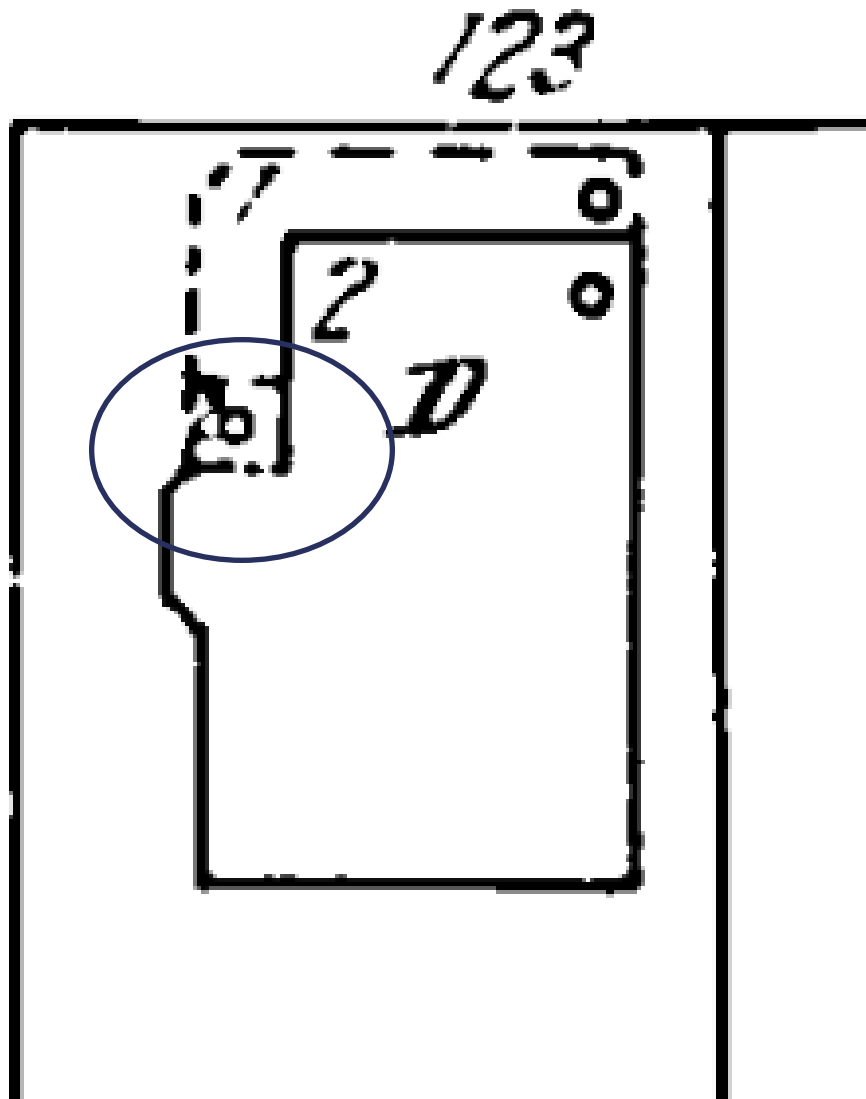
Assessor's photo



1977 Survey photo



#207





City of
Burlington, Vermont
645 Pine Street

Zoning Permit – Reasons for Denial

ZP #: 23-496

Tax ID: 049-3-038-000

Issue Date: November 16, 2023

Decision: Deny

Property Address: 123 King Street

Description: Proposed amendment to ZP-21-210 to enlarge existing balcony area on second floor above wrap around porch.

Reasons for Denial:

The property is included on the Vermont Historic Sites & Structures Survey. As a result, the historic preservation standards of Sec. 5.4.8, *Historic Buildings & Sites*, of the Comprehensive Development Ordinance pertain to this application.

The historic survey form specifically calls out the 1-bay, 2nd floor porch under the eaves. The application is to extend this small 2nd floor porch to the front of the building and partially wrap around onto the front façade of the building. The proposed work substantially enlarges this feature and alters the characteristic proportions of the building's street face. This proposed alteration is inconsistent with subsections 2 and 9 of Sec. 5.4.8.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or *alteration of features, spaces, and spatial relationships* that characterize a property will be avoided. [emphasis added]
9. New additions, exterior alterations, or related new construction will not destroy historic materials, *features, and spatial relationships that characterize the property*. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment. [emphasis added]

The application is also unclear as to proposed materials, specifically the use of traditional wood versus pressure treated wood. The former is acceptable; however, the latter is not.

As the application is inconsistent with the noted standards of Sec. 5.4.8, it cannot be approved. The application is, therefore, denied.

An interested person may appeal a decision of the Zoning Administrator to the Development Review Board within 15 days after the decision date per Sec. 12.2.2, *Appeals of Administrative Officer Decisions*. Appeals may be filed online at [burlingtonvt.viewpointcloud.com/categories/1098](https://www.burlingtonvt.viewpointcloud.com/categories/1098) or in-person at 645 Pine Street, Burlington, Vermont. <https://www.burlingtonvt.gov/DPI/Appealing-a-Zoning-Decision>

Department of Permitting & Inspections

Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone: (802) 865-7188

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Garret King, Associate Planner
Joseph Cava, Permit Technician
Ted Miles, Code Compliance Officer
Ted Boylan, Permitting & Inspections Administrator



TO: Development Review Board
FROM: Scott Gustin
DATE: December 19, 2023
RE: ZAP-23-12; 123 King Street

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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: RH Ward: 5

Owner/Appellant: Charles Keinath

Request: Appeal of zoning administrative denial (ZPW-23-496) to enlarge existing balcony area on second floor above wrap around porch.

Overview:

The applicant is appealing an administrative denial of an application to extend a small 2nd story porch from the side of the building under the eaves to the front of an historic building. The subject 2-family residence dates to 1899 and is included in the Vermont state register of historic places. It is also within the Battery Street / King Street Historic District. The historic listing for this property specifically notes the 1-bay porch on the 2nd floor under the eaves. Given the historic significance of the building, the historic preservation standards of Sec. 5.4.8, *Historic Buildings and Sites*, apply.



#207

Recommendation: Uphold administrative denial as per the following findings.

I. Findings

The subject application was filed October 17, 2023. The application was made complete on October 24, 2023. On October 27, 2023 review of the application took place, and the applicant was contacted by staff and advised of the problem with significant alterations to the front and side of this historic building. Following subsequent correspondence, the applicant chose to move forward with the application as proposed on November 15, 2023.

The application was administratively denied November 16, 2023 per the following:

The property is included on the Vermont Historic Sites & Structures Survey. As a result, the historic preservation standards of Sec. 5.4.8, *Historic Buildings & Sites*, of the Comprehensive Development Ordinance pertain to this application.

The historic survey form specifically calls out the 1-bay, 2nd floor porch under the eaves. The application is to extend this small 2nd floor porch to the front of the building and partially wrap around onto the front façade of the building. The proposed work substantially enlarges this feature and alters the characteristic proportions of the building's street face. This proposed alteration is inconsistent with subsections 2 and 9 of Sec. 5.4.8.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or *alteration of features, spaces, and spatial relationships* that characterize a property will be avoided. [emphasis added]
9. New additions, exterior alterations, or related new construction will not destroy historic materials, *features, and spatial relationships that characterize the property*. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment. [emphasis added]

The application is also unclear as to proposed materials, specifically the use of traditional wood versus pressure treated wood. The former is acceptable; however, the latter is not.

As the application is inconsistent with the noted standards of Sec. 5.4.8, it cannot be approved. The application is, therefore, denied.

Appeal of the denial was filed on November 16, 2023 – within the 15-day appeal period.

The appeal asserts that the present configuration of the 1-bay, 2nd story porch under the eaves is not original and that it extended further along the 2nd story. The appellant states that structure underneath the exterior suggests this was the case. However, both the 1977 photo of the building when it was surveyed for historic significance and the recent city assessor's photo of the building show it in its present configuration. (Note that the assessor's photo does not show the recently permitted 1st story full-width front porch. That feature was removed some time ago and has been permitted for replacement based on documentary evidence.) The 1942-1950 Sanborn map also shows the 2nd story porch in its present configuration. Documentary evidence clearly points to a 1-bay porch tucked under the eaves on the side. Similarly, documentary evidence supported the historic existence of a full-width open front porch on the 1st story. Subsection (b) 3 of Sec. 5.4.8 notes that addition of conjectural features will not be undertaken.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

The appeal also touches on pressure treated versus traditional wood but is not especially clear. The appellant seems to prefer pressure treated wood, but extent of its utilization is unclear in the proposed work. Within the context of historic building renovations, pressure treated wood may be used in some cases for structural framing, such as the framing underneath an open porch. It may not be used for exterior features such as the posts, railings, and spindles of an open porch.

Extending the small 1-bay, 2nd story porch to the front of the residence significantly alters this distinctive feature and disrupts the present massing and spatial relationships among the various components of this building. The proposed work does not comply with the standards of Sec. 5.4.8 and would deteriorate the integrity of this historic building.

II. Recommended Motion

Uphold the administrative denial.



STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

SURVEY NUMBER:

123 King St.

NEGATIVE FILE NUMBER:

77-4-64

UTM REFERENCES:

Zone/Easting/Northing

U.S.G.S. QUAD. MAP:

PRESENT FORMAL NAME:

ORIGINAL FORMAL NAME:

Tuttle house

PRESENT USE: apartments

ORIGINAL USE: residence

ARCHITECT/ENGINEER:

BUILDER/CONTRACTOR:

PHYSICAL CONDITION OF STRUCTURE:

Excellent ☐ Good ☒

Fair ☐ Poor ☐

THEME:

STYLE: Queen Anne

DATE BUILT:

1899

COUNTY: Chittenden

TOWN: Burlington

LOCATION:

123 King St., corner Brown's
St.

COMMON NAME:

FUNCTIONAL TYPE: dwelling

OWNER: Pampas, John

ADDRESS: 123 King St., Burlington

ACCESSIBILITY TO PUBLIC:

Yes ☐ No ☒ Restricted ☐

LEVEL OF SIGNIFICANCE:

Local ☒ State ☐ National ☐

GENERAL DESCRIPTION:

Structural System

1. Foundation: Stone ☒ Brick ☐ Concrete ☐ Concrete Block ☐

2. Wall Structure

a. Wood Frame: Post & Beam ☐ Balloon ☐

b. Load Bearing Masonry: Brick ☐ Stone ☐ Concrete ☐
Concrete Block ☐

c. Iron ☐ d. Steel ☐ e. Other:

3. Wall Covering: Clapboard ☒ Board & Batten ☐ Wood Shingle ☐

Shiplap ☐ Novelty ☐ Stucco ☐ Sheet Metal ☐ Aluminum ☐

Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐

Bonding Pattern: Other:

4. Roof Structure

a. Truss: Wood ☐ Iron ☐ Steel ☐ Concrete ☐

b. Other: rafter

5. Roof Covering: Slate ☒ Wood Shingle ☐ Asphalt Shingle ☐

Sheet Metal ☐ Built Up ☐ Rolled ☐ Tile ☐ Other:

6. Engineering Structure:

7. Other:

Appendages: Porches ☒ Towers ☐ Cupolas ☐ Dormers ☐ Chimneys ☒

Sheds ☐ Ells ☐ Wings ☐ Other:

Roof Style: Gable ☒ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐

Jerkinhead ☐ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐

With Parapet ☐ With False Front ☐ Other:

Number of Stories: 2 1/2

Number of Bays: 3 x 3

Entrance Location: side hall

Approximate Dimensions:

THREAT TO STRUCTURE:

No Threat ☐ Zoning ☐ Roads ☐

Development ☐ Deterioration ☐

Alteration ☐ Other:

LOCAL ATTITUDES:

Positive ☐ Negative ☐

Mixed Other:

ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

Massing - rectangular block with front gable orientation. Extended on west elevation by a polygonal bay which terminates in a pedimented gable. Polygonal 1-story, porch which wraps around the corner (NW). Front elevation double gables, are not as wide as the other. 1 bay porch 2nd floor under eaves.
Fenestration - double hung sashes - smaller window in gable.
Door - plain surround
Enrichments - 3 types of shingles in gable porch posts embellished with cut-out brackets.

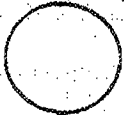
RELATED STRUCTURES: (Describe)**STATEMENT OF SIGNIFICANCE:**

Transitional in style from Queen Anne to Colonial Revival this house employs features of each. The double, front-gable and pedimented gable of the side bay are characteristic of Colonial Revival while the polygonal bay and polygonal, "wrap-around" porch were commonly employed in the Queen Anne style.

Probably built for John Tuttle, who had a carriage manufactory on the corner of Maple and Church. James McIntyre, a janitor at the Custom's House, lived here from 1907 through 1948.

REFERENCES:

Directories, Sanborns,

MAP: (Indicate North in Circle)**SURROUNDING ENVIRONMENT:**

Open Land ☐ Woodland ☐
Scattered Buildings ☐
Moderately Built Up ☐
Densely Built Up ☒
Residential ☒ Commercial ☒
Agricultural ☐ Industrial ☒
Roadside Strip Development ☐
Other:

RECORDED BY:

Adele Gummer

ORGANIZATION:

VT Division for Historic Preservation

DATE RECORDED:

7/13/77

Department of Permitting & Inspections
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Joseph Cava, Permit Technician
Ted Miles, Code Compliance Officer
Ted Boylan, DPI Administrator*



TO: Development Review Board
FROM: Garret King
DATE: December 19, 2023
RE: ZP-23-530; 0 University Road

=====

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Zone: I Ward: 1

Owner/Applicant: Claire Forbes for the University of Vermont

Request: Proposed improvement and expansion of existing Physical Plant Centennial Compound parking lots.

Applicable Regulations:

Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards), Article 8 (Parking).

Background Information:

The University of Vermont (UVM) is proposing to improve and expand the existing Physical Plant Centennial Compound Lot and create an additional 10 space row of parking at the Centennial Complex portion of campus. The Centennial Compound Parking Lot is located on the eastern side of Main Campus on the north side of University Road and west of the Centennial Baseball Field. The site of the 10-space parking row is south of University Road near the end of a gravel drive that is primarily used by the UVM Physical Plant Department and the two electric companies that access the nearby power sub-station. The project scope will include formalizing and converting the gravel parking area to a paved lot through grading, installation of an infiltration chamber treatment system, and full subbase replacement. The improved parking area will be designed with infrastructure for electric vehicle charging. Also, within the project's scope is a small expansion of University Road aimed at improving pedestrian safety. This parking lot improvement is included in the city approved 2023-2028 Joint Institutional Parking Management Plan (JIPMP).

The University of Vermont is an educational institution and, therefore, is subject to only limited zoning review per 24 VSA, Sec. 4413, Limitations on municipal bylaws. This application may be reviewed only with respect to location, size, height, building bulk, yards, courts, setbacks, density of buildings, off-street parking, loading facilities, traffic, noise, lighting, landscaping, and screening requirements.

Prior zoning permit actions for this property.

- Zoning Permit ZP-19-680; Install two salt sheds. Relocate two brine tanks and addition of another larger tank. Relocate fence. Remove existing waste blocks. Installation of gate. Replacement of two sheds with a 10 ft x35 ft wood shed on concrete pad. Installation of two storage containers. All work on existing gravel surface.
- Zoning Permit 14-0704CA; add roof over storage area for winter sand storage. January 2014.
- Zoning Permit 13-0854CA; pave existing gravel portion of University Road. No change to existing dimensions. April 5, 2013.
- Zoning Permit 14-0085CA; construct new grounds materials storage building on new asphalt pad, within existing outdoor storage area. August 2013.
- Zoning Permit 10-0681CA; demolish five small outbuildings around Centennial Field property. Buildings are: Two story building #951, two ticket buildings #983 and #984, and two trailer buildings #988 and #989. March 2010.
- Zoning Permit 07-497CA; pave an existing gravel parking lot a Centennial Field to address drainage issues. Parking lot will drain into the stormwater pond, which will be improved to absorb the increased volume. March 2007.
- Zoning Permit 04-267; redesign east campus stormwater treatment and collection facility. Basin size increased. November 2003.
- Zoning Permit 87-040 / COA 87-016; raise existing detention pond dam 2', raise existing outlet structure 1'9". February 1987.
- Zoning Permit n.a...; install a 4000-gallon gas tank and pump on University road at Centennial Field. November 1973.

Recommendation: **Certificate of Appropriateness Approval** as per, and subject to, the following findings and conditions:

I. Findings

Article 4: Maps & Districts

Sec. 4.4.4, Institutional Districts:

(a) Purpose

The Institutional District (I) is designed to support continued growth and flexibility of the city's major public and higher education and health care institutions within their respective institutional missions. The reconstruction and expansion of the parking areas is primarily used by the UVM Physical Plant Department and the two electric companies that access the nearby power sub-station and the redeveloped lot will support mainly EV parking spaces. The parking expansion will increase access and help promote the cities renewable energy goals. **(Affirmative finding)**

(b) Dimensional Standards & Density

Lot coverage for the I-Centennial Sports parcel will change lot coverage from 34.82% to 34.39%. Height and setbacks will not be changing. See Sec. 5.2.3 **(Affirmative Finding)**

(c) Permitted & Conditional Uses

The addition of parking spaces and reconfiguring of the parking area is allowed in the Institutional district. **Affirmative finding)**

Sec. 4.4.5 Residential Districts:

(a) Purpose

This district is intended primarily for low-density residential development in the form of single detached dwellings and duplexes. The proposed work in the RL district is limited to the widening of the private road that provides vehicle access to the Centennial Fields complex. **(Affirmative Finding)**

(b) Dimensional Standards & Density

The proposal shows the RL-Centennial Sports parcel increasing from 82.93% to 89.38% the increase in coverage for the RL zone will be increasing nonconformity. See Sec. 5.2.3. Increasing the already non-conforming lot coverage is prohibited. **(Affirmative Finding as Conditioned)**

(c) Permitted & Conditional Uses

No structures are currently in or are planned for this section of the property. Currently only the private drive exists, and will be expanded. **(Affirmative Finding)**

Sec. 4.4.6 Recreation, Conservation and Open Space Districts

(a) Purpose

The Recreation/Greenspace District is intended to provide a diversity of passive and active recreational opportunities and other urban green spaces that provide for public use and enjoyment but also includes private property. While the property is in the RCO-RG district no work is proposed in that section of the property. **(Affirmative Finding)**

(b) Dimensional Standards & Density

No work is proposed in this area. **(Affirmative Finding)**

(d) Permitted & Conditional Uses

No work is proposed in this area. **(Affirmative Finding)**

Sec. 4.5.4 Natural Resource Protection Overlay (NR) District

(a) Purpose

The Natural Resource protection Overlay District is intended to protect and preserve The City of Burlington's natural resources and waterways from development and point and non-point pollution. The lot is in the Centennial Woods buffer, the Riparian & Littoral Buffer / Centennial Brook, and Wetland Buffer – Centennial Brook Wetland. No changes are proposed in these areas. **(Affirmative Finding)**

Sec. 4.5.7 Centennial Woods Overlay District

(a) Purpose

The Centennial Woods Overlay District is intended to provide for educational, institutional and accessory uses, as well as a diversity of passive and active recreational opportunities and other urban green spaces that provide for public use and enjoyment. The lot is in the Centennial Woods Overlay CWO-A and CWO-B but no work is proposed in these areas. **(Affirmative Finding)**

Article 5: Citywide General Regulations

Sec. 5.1.1 Uses

(c). Permitted Uses:

The existing parking areas are permitted in Institutional districts. **(Affirmative Finding)**

Sec. 5.2.3, Lot Coverage Requirements

(a) Calculating lot coverage:

1. Compute the square footage of all parts of the lot, or portion of the lot where split by a zoning district boundary, covered by all buildings including accessory structures, decks, patios, paved or unpaved walkways and parking areas, and any other paved surface. As this lot is in multiple districts lot coverage is calculated for each area separately. **(Affirmative Finding)**

Sec. 5.2.4, Buildable Area Calculation & Steep Slopes Overlay

The lot is in the Steep Slopes Overlay but no work is proposed in this part of the property. Lot coverage is calculated by Sec. 5.4.3. **(Affirmative Finding)**

Sec. 5.2.5, Setbacks

See Sec. 4.4.4(b) above

Sec. 5.2.6, Building Height Limits

(Not Applicable)

Sec. 5.3.6 Non-Conforming Lots

No change shall be permitted to any nonconforming lot which would have the effect of increasing the density at which the property is being used, or increasing the structure located upon such lot, if the dimensional requirements and standards of the underlying zoning district are not met as a result thereof. The RL section of the lot is currently non-conforming with respect to lot coverage, a proposed increase to lot coverage is proposed See Sec. 4.4.5. **(Affirmative Finding as Conditioned)**

Sec. 5.5.1, Nuisance Regulations

The proposed project will not create any additional nuisance, as the land use will not change. **(Affirmative finding)**

Sec. 5.5.2 Outdoor Lighting

(f) Specific Outdoor Lighting Standards

1. Parking Lot Lighting

Outdoor lighting of parking and related circulation areas shall comply with the following standards:

- A. The maximum mounting height for any fixture shall be 25 ft.
The proposed pole lighting will be mounted at 25ft. and equal to the maximum height permitted. **(Affirmative finding)**
- B. The maximum illumination level shall not exceed 4 footcandles (fc) at any point.
The maximum fc at the highest point for the project is 3fc and below the maximum limit. **(Affirmative finding)**
- C. The maximum illumination level shall only be computed for the functional area of the parking lot.
The provided photo metric plan covers only the area related to the proposed areas of work. **(Affirmative finding)**

- D. The maximum to minimum uniformity ratio shall not exceed 20:1.
The maximum to minimum uniformity ratio peaks at 10.7 for the project area and is under the ratio limit. **(Affirmative finding)**
- E. Illumination levels are encouraged to be reduced by at least 50% within one hour after the end of public business hours.
The proposal does not include any mention of reducing light levels but is recommended.
(Affirmative finding)

Sec. 5.5.3, Stormwater and Erosion Control

Greater than 400sf of land disturbance is proposed, an EPSC permit will be required for this project. **(Affirmative finding as Conditioned)**

Article 6: Development Review Standards

Part 1, Land Division Design Standards

(Not Applicable)

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

There are no significant natural features within or associated with the project area. **(Affirmative finding)**

(b) Topographical alterations

Minimal grading is proposed with this application to facilitate stormwater management.
(Affirmative Finding)

(c) Protection of important public views

The property is not associated with any important public views. The parking lot changes will not affect views from adjacent properties. **(Affirmative finding)**

(d) Protection of important cultural resources

The property has is not listed on a state or national register of historic places or known to be an important archeological site. **(Affirmative finding)**

(e) Supporting the use of alternative energy

(Not applicable)

(f) Brownfield sites

The subject property is not an identified brownfield. **(Affirmative finding)**

(g) Provide for nature's events

The new parking plan includes stormwater management systems. **(Affirmative finding)**

(h) Building Location and Orientation

The new parking changes will not alter the locations and orientations of the site. **(Affirmative finding)**

(i) Vehicular access

University Road is an unaccepted city street and is in private ownership by the University of Vermont. Access to the parking is provided by University Road connections to Colchester Ave and East Ave, the connection to East Ave is proposed to have alterations to widen University Road. The widening takes place in the RL portion of the lot and will be increasing lot coverage beyond the existing non-conformity See Sec. 5.3.6 and Sec. 4.4.5. The widening of the private road is to increase pedestrian safety. The 10 new parking spaces will be added to an existing lot with to access points. The new spaces will not interfere with vehicle access. The reconfiguring and new paving of the lot will retain the singular vehicle lot entrance that previously existed. **(Affirmative finding as Conditioned)**

(j) Pedestrian access

(Not applicable)

(k) Accessibility for the handicapped

With the paving of the north lot 5 new ADA parking spaces are proposed with new sidewalk access to the street. **(Affirmative Finding)**

(l) Parking and circulation

The proposed parking layout will remain in the same location as current lots with the new spaces following the same pattern as the other existing lots. Proposed landscaping will break up the parking area into smaller sections while retaining ease in maneuvering for vehicles. Both parking areas will have curbing and stormwater control measures to protect adjacent green spaces. The planting of 15 new Honeylocust trees and preserving 18 existing trees will provide more than the required 30% shading needed for the parking areas. **(Affirmative finding)**

(m) Landscaping, fences, and retaining walls

The proposed plan shows the retention of the existing trees around the lot that will be paved to preserve the separation between the parking area and the neighboring property. The proposed new Honeylocusts will be placed along the road and the parking islands to provide shade for the parking lot. **(Affirmative finding)**

(n) Public plazas and open space

No new sidewalks besides the short paths to the ADA parking spaces are proposed. No proposed sidewalks will connect to the public sidewalk. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2

(p) Integrate infrastructure into the design

A proposed utility shed will be constructed to house much of the electrical equipment. Some of the utility equipment is mounted to the exterior of the shed and some is free standing attached to a stand. The shed structure and other electrical will be positioned towards the center of the project and will not produce any adverse impacts on the neighbors. **(Affirmative finding)**

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(a) Relate development to its environment

1. Massing, Height, and Scale

The proposed work will have similar scale to the existing parking areas and infrastructure. Slight expansion to the parking area will only make up a small percentage of the total work area. The project takes place at grade with the exception of a small utility shed. **(Affirmative finding)**

2. Roofs and Rooflines

The utility shed roof is a simple gabled roof with asphalt shingles or metal roof. **(Affirmative finding)**

3. Building Openings

The utility shed will have one door and will not be open to the public. **(Affirmative finding)**

(b) Protection of important architectural resources

(Not Applicable)

(c) Protection of Important Public Views

The property is not associated with any important public views. The proposed work will not obstruct views from adjacent properties. **(Affirmative Finding)**

(d) Provide an active and inviting street edge

From the road, the new landscaping will provide a more attractive street edge than the current conditions. **(Affirmative Finding)**

(e) Quality of materials

The proposed project will consist of paving the parking lots and the use of cement curbing along with the instillation of stormwater retention systems. Utility features for the electrical vehicle charging system will consist of the typical metal, cement, wood, and composite materials commonly seen for this type of system. **(Affirmative Finding)**

(f) Reduce energy utilization

(Not Applicable)

(g) Make advertising features complimentary to the site

(Not Applicable)

(h) Integrate infrastructure into the building design

The proposed utility shed will hold most of the utility equipment, some will be attached externally. Electrical connections to all EV charging locations will be through underground connections. **(Affirmative Finding)**

(i) Make spaces safe and secure

(Not Applicable)

Article 8: Parking

Part 3: Institutional Parking Plans

Sec. 8.3.2. Institutional Parking Management Plans

The increase in parking creates 38 parking spaces out of 40 spaces that are allotted in the Joint Institutional Parking Management Plan for 2023-2018 in Table 11 UVM Campus Building Program Data for the Centennial Compound scheduled for 2023. The gravel lot will be changing from 80 informal spaces to a new paved 108 spaces along with an additional new 10 space row on the south side parking expansion. The total new number of parking proposed in this project is under allotted amount. **(Affirmative Finding)**

II. Conditions of Approval

1. Prior to Release of the Zoning Permit:

- a. EPSC and Stormwater plans shall be submitted for review to Water Resources.
- b. Submission of a revised site plan showing no increase of lot coverage in the RL shall be submitted to zoning staff for review.
2. Any expansion in lot coverage in the RL zone that was undertaken without proper approval that has created additional lot coverage shall be removed within one year.
3. The applicant shall work with the Department of Public Works to coordinate any changes to University Road to align with upcoming improvements to the right-of-way and East Avenue.
4. The Applicant/Property Owner is responsible for obtaining all necessary Zoning Permits and Building Permits through the Department of Public Works as well as other permit(s) as may be required, and shall meet all energy efficiency codes of the city and state.
5. Standard permit conditions 1-15.

DPW comments for DRB meeting 12/19/23 on University Rd.

- University Rd is a private road within the City of Burlington. DPW does not prioritize access to private roads that are not up to current DPW standards.
- DPW is planning to install traffic calming measures along East Avenue in the near future. One of these features is a raised crosswalk at the intersection of East/University. Any change to city ROW at this location would have impacts to the future crosswalk alignment and would require further review from DPW Technical Services.
- Widening to the roadway shoulder within the limits University Road would not impact current drive access to the roadway from East Ave. It would create a future curb line misalignment at the intersection of the two streets. Currently no curbing on University Rd.
- Does this level of development trigger a traffic impact study?
- DPW will requires a professional consultant to give letter of opinion if additional 75 daily trips during peak hour are anticipated.

I will plan to attend the meeting tomorrow for DPW.

Thanks,

Caleb Manna

Excavation Inspector

Burlington Department of Public Works

645 Pine Street

Burlington, VT 05401

802.865.7562

cmanna@burlingtonvt.gov

<https://burlingtonvt.viewpointcloud.com/categories/1088>



The University of Vermont
DEPARTMENT of PLANNING, DESIGN
and CONSTRUCTION

December 19, 2023

To:

Zoning Division, City of Burlington Department of Permitting & Inspections
645A Pine Street
PO Box 849
Burlington VT 05402-0849

Re: UVM Zoning Permit Application for Centennial Compound Parking Lot on University Road - Expansion of Roadway in the RL Zone

Dear Zoning Division and Development Review Board,

The University of Vermont (UVM) is requesting that the Conditions of Approval #1b and 2, in the Staff Report, not be included in the final decision. University Road has two-way vehicle traffic with heavy pedestrian use at times. The proposed widening of the roadway creates an opportunity for a dedicated pedestrian lane and dedicated vehicle lanes. Currently hospital workers, UVM employees, game patrons, and members of the public walk along both sides of the road. UVM is intending on painting a 4' stripe along the north side of the roadway to help dedicate a space for pedestrians. Signs may be added as needed. The slight widening of University Road has been accounted for in the site balancing and is included in the state stormwater permit.

University Road was recently repaved and during the repaving, an issue with the subbase was discovered that necessitated rebuilding the subbase. As the future plans were to widen the road for pedestrian safety within the next year, the construction team made a decision to widen the road concurrently with the subbase work to prevent rebuilding the subbase and ripping up everything to widen in the future.

Additionally, in 2022, a new residential building was added at 5 University Road, and this added additional lot coverage to UVM's RL Zone to facilitate access to their residence.

In response to DPW's comments, the alignment issue referenced in relation to vehicle and pedestrian movements would be no more exacerbated by this proposal than it exists today. It is our opinion that it would allow for an earlier merge out of conflict of the eastbound turn with oncoming westbound vehicles that shifted to accommodate pedestrians. This would improve the

situation on the ground and sets the stage for more complete pedestrian safety improvements with further coordination with the City.

Also, a traffic impact study would not be triggered by this project. Please see the attached email from VTrans. The paved lot will be designed for 108 spaces (previously 80 spaces). The 10-space parking row on the south side of University Road will be formalized for continued Physical Plant Department use as the location is in close proximity to the grounds department operations. Some of the 38 additional parking spaces will be used by existing traffic/staff in the UVM/UVMMC immediate area.

UVM can work with the Department of Public Works to coordinate any changes to University Road to align with upcoming improvements to the right-of-way and East Avenue.

Thank you for reviewing this project. Please let us know if there is any further information needed.

Sincerely,

Claire Forbes, AICP

Claire Forbes, AICP
Associate Planner
University of Vermont
Department of Planning, Design & Construction

cc:

Lisa Kingsbury, Associate Director of Planning, Planning, Design & Construction
Adam Frazier, Project Coordinator, Planning, Design & Construction

From: [Clow, Christopher](#)
To: [Claire Forbes \(she/her\)](#)
Subject: RE: Email
Date: Tuesday, April 25, 2023 3:41:25 PM

Hi Claire,

Thanks for sending this. I have reviewed what you sent and I have a few comments. We will get to the Act 145 fee in a second but I wanted to talk about requirements for transportation related state permitting and or impact studies. My thoughts are that you don't need a study. Let me focus on the second lot or the lot used by the UVM medical staff first. Let me know if I am incorrect but I get the impression that lot is to handle the demands of the existing staff/traffic in the area that need to utilize it. The lot is not necessarily creating new traffic. If it is for existing traffic/staff then it is not creating additional traffic and would not need a study or have an Act 145 transportation impact fee.

For the first lot on Spear Street, it is not my thought that a traffic study would be needed for that either. There are a few reasons I say this. A traffic study is usually required by VTrans when there are over 75 peak hour vehicles meeting a state road or intersection. Based on your bulleted list below, there are only 21 primary peak hour trips. A majority of the fleet vehicles are missing the AM and especially the PM peak hour times so they are not adding to the congestion at the critical points in the day. Based on this, 21 peak hour trips is less than 75 trips. There are also not any state roads close by here except for the interstate. US-2 or Williston Road from downtown all the way almost to Williston is Class 1 town highway. That means Burlington and South Burlington maintain this portion of Williston Road though an agreement with the state, so it is essentially a town road and not a state road. The same is the case for US-7 or Shelburne Road coming from downtown. The Class 1 portion of that road ends where Swift Street intersects and then VTrans takes over Shelburne Road as a state road from there. Based on that, this traffic is primarily travelling on local roads so there would not be many trips travelling along the state portion of the road anyway – let alone 75 trips. It is for those reasons that I do not believe a study is necessary.

Act 145 Fee

There are two Act 145 projects in the area and the PM peak hour traffic from the Spear Street location may come into contact with those projects. It would be assessed against the possible 21 primary peak hour trips that were mentioned before. For me to assess the fee based on peak hour trips contacting the project, I need to know two estimates from you. What percentage of vehicles would be coming/going south along Spear Street from this location (so to/from the Swift Street region) and what percentage of vehicle would coming/going north towards Williston Road? Would it be 70% coming/going north and 30% coming/going south or 80/20 – I would need to know that. The other percentage/estimate I would need to know is of the location's vehicles coming/going up Spear Street towards Williston Road – what percentage would you say are going east on Williston Road towards the interstate and South Burlington and what percentage are going west towards downtown Burlington? If I have that information, I should be able to calculate a fee for you.

I hope this helps. Thanks!

Sincerely,

Chris

Christopher Clow, PE | Transportation Engineer
Policy, Planning, and Intermodal Development
Development Review and Permitting Services
Vermont Agency of Transportation
219 North Main Street | Barre, VT 05641
802-522-4901 phone | christopher.clow@vermont.gov
<http://www.vtrans.vermont.gov>

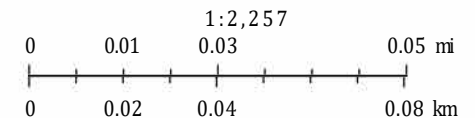


University Road, UVM Centennial Compound Parking Lot Site Map



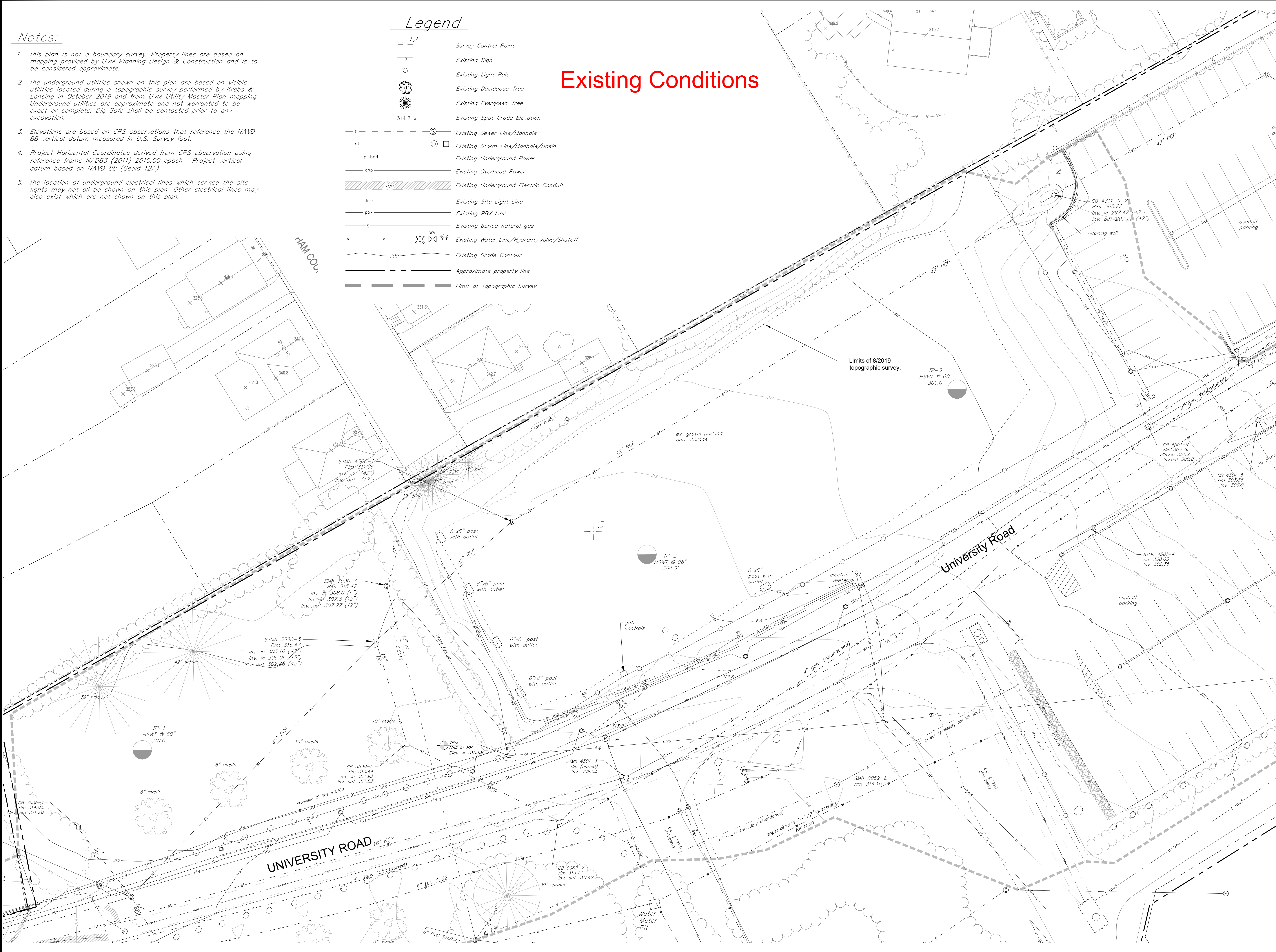
I-CENTENNIAL SPORTS PARCEL WILL DECREASE LOT COVERAGE FROM 34.82% TO 34.39%

RL-CENTENNIAL SPORTS PARCEL WILL INCREASE LOT COVERAGE FROM 82.93% TO 89.38%



VCGI, Esri Community Maps Contributors, Chittenden County RPC, VCGI, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph,

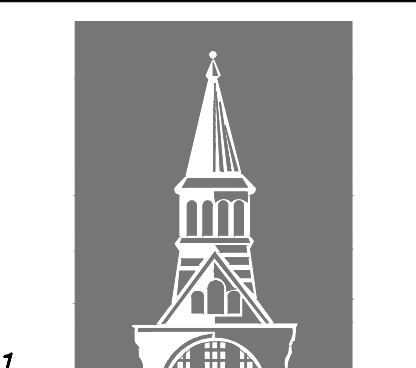
Web AppBuilder for ArcGIS



- Notes:**
1. This plan is not a boundary survey. Property lines are based on mapping provided by UVM Planning Design & Construction and is to be considered approximate.
 2. The underground utilities shown on this plan are based on visible utilities located during a topographic survey performed by Krebs & Lansing in October 2019 and from UVM Utility Master Plan mapping. Underground utilities are approximate and not warranted to be exact or complete. Dig Safe shall be contacted prior to any excavation.
 3. Elevations are based on GPS observations that reference the NAVD 88 vertical datum measured in U.S. Survey foot.
 4. Project Horizontal Coordinates derived from GPS observation using reference frame NAD83 (2011) 2010.00 epoch. Project vertical datum based on NAVD 88 (Geoid 12A).
 5. The location of underground electrical lines which service the site lights may not all be shown on this plan. Other electrical lines may also exist which are not shown on this plan.

Legend	
	Survey Control Point
	Existing Sign
	Existing Light Pole
	Existing Deciduous Tree
	Existing Evergreen Tree
	Existing Spot Grade Elevation
	Existing Sewer Line/Manhole
	Existing Storm Line/Manhole/Basin
	Existing Underground Power
	Existing Overhead Power
	Existing Underground Electric Conduit
	Existing Site Light Line
	Existing PBX Line
	Existing buried natural gas
	Existing Water Line/Hydrant/Valve/Shutoff
	Existing Grade Contour
	Approximate property line
	Limit of Topographic Survey

Existing Conditions



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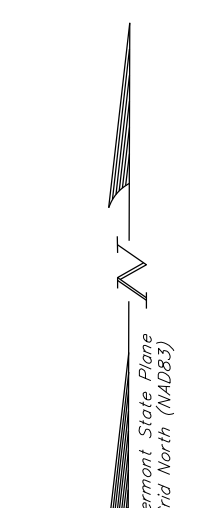
Physical Plant Department
284 EAST AVENUE
BURLINGTON, VERMONT 05405
Project Manager: Adam Frazier

CIVIL ENGINEER



KREBS & LANSING
CONSULTING ENGINEERS

164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com



Bar Scale 1" = 20'

Project:

**Physical Plant
Compound Parking**

Project No. 22309
Scale 1"=20'
Drawn by SLM
Checked by
Date 11/08/2023

Revisions

No.	Date

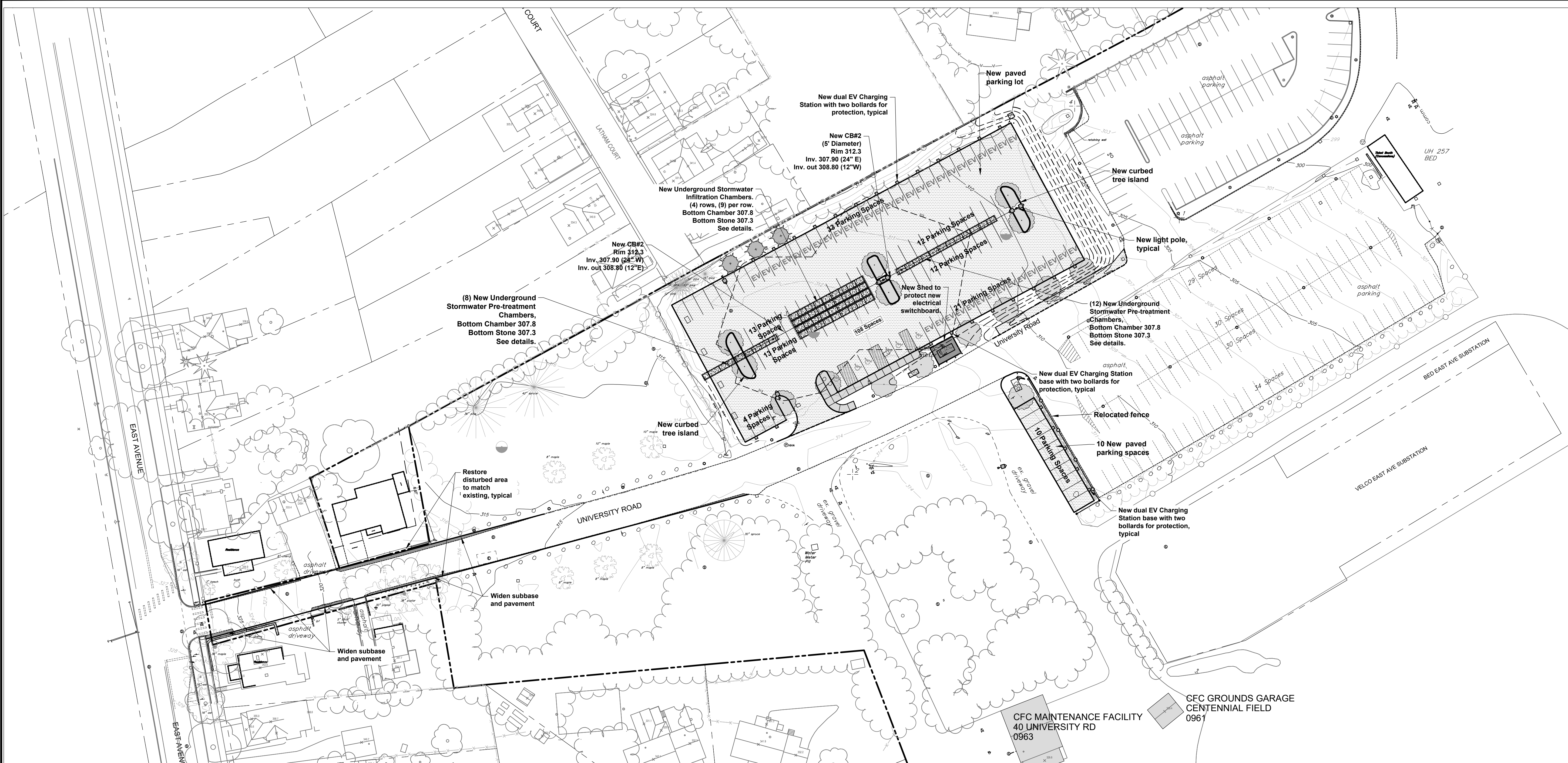
Drawing Title

Existing Conditions

Drawing No.

C 2.0

22309\DWGS\UVM PPD Compound Parking.dwg

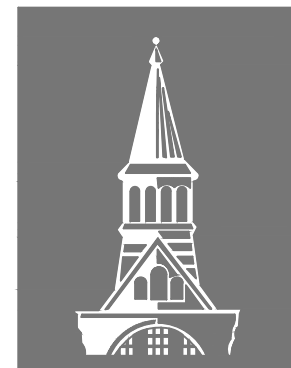


Legend (See Sheet EX1.0 for existing conditions Legend)

- New EV Charging Station and Bollards
- New light pole and base
- Preconstruction Excavation
- Finish Grade Spot Grade Elevation
- Finish Grade Direction of Flow
- New Stormwater Treatment Chambers
- New Finish Grade Contour
- New Storm Line/Manhole/Basin
- New Site Lighting Conduit
- New Electrical Conduit
- New Concrete/Granite Curb
- New pavement and subbase
-

NOTES

- The Contractor shall be responsible for repairing all disturbed areas back to original or better condition, including but not limited to curbing, sidewalks, road, parking areas, landscaping, site lighting, electrical, and etc. All asphalt shall be sawcut prior to paving.
- All stumps, rock, and other non-approved trench backfill material discovered during construction is the exclusive property of the Contractor and shall be removed from UVM property and disposed of in a State approved disposal location. All existing soils reused for fill or trench backfill shall conform to all applicable sections of VTRANS specifications Section 203-Excavation & Embankments. Fill soils that do not pass a subgrade proof roll shall be removed and replaced at the Contractor's expense.
- All passing concrete and soil (sieve, proctor, and compaction) testing expenses shall be paid by Owner. Testing coordination, all other required testing, and expenses for failed tests shall be the Contractor's responsibility.
- The Contractor shall contact the Burlington Electric Department prior to any work in the vicinity of the existing electric conduits.
- This project requires coverage under the City of Burlington Standard Erosion Prevention & Sediment Control Permit. The Contractor shall be the On-site Coordinator for the project and shall be responsible for all required inspections, maintenance, and reporting. The Contractor shall be responsible for installing, maintaining and removing all erosion and sediment control devices shown on the plans or details and, to the maximum extent practical, to minimize potential contamination of stormwater runoff from the construction activities.
- Contractor shall be responsible for all "As-built" measurement and drafting requirements as outlined on the Detail Sheets. All trench excavations shall remain open until all as-built survey shots have been taken. Progress Record Drawings shall be submitted to the Engineer as indicated in the Record Drawing specifications.
- See Erosion Control Plans for locations of staging / storage areas.
- The Contractor shall be responsible for all signage and fencing necessary to providing safe vehicular and pedestrian access through or around the site during construction. Signs shall meet sign requirements on detail sheets.
- Contractor shall be responsible for importing topsoil as required to complete the project. Refer to Post Construction Soil Depth and Quality Notes on Sheet C 3.3.
- Temporary groundwater and stormwater by-pass pumping and/or diversion is the responsibility of the Contractor. The Contractor is responsible for providing all necessary pumps and equipment to perform the work. Overnight pumping is not allowed.
- All sidewalks shall have 2% maximum cross slope.
- Where plans indicate "RESTORE" to vegetation, Contractor shall remove and dispose of impervious surface and subbase (assume 12"). For lawn areas rototill subgrade soil and fill to within 4" of finish grade, place 4" topsoil, and hydroseed. For planting areas, rototill subgrade soil and install 18" of topsoil and 2" of bark mulch (as approved by UVM Grounds). Refer to Post Construction Soil Depth and Quality Notes on Sheet C 3.3.
- Removal of all erosion control matting and inlet protection is the responsibility of the Contractor.
- Electrical and lighting lines are shown for coordination purposes. Refer to Electrical plans and specifications for design.
- Contractor is responsible for all costs and any effort necessary for obtaining an Excavation Permit from the City of Burlington for work within the City Right of Way.
- Contractor shall be responsible for all effort related to obtaining and closing out an Electrical Permit from the City of Burlington for the new light pole.



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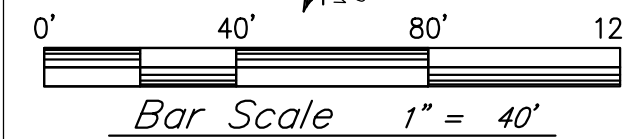
University of Vermont

Physical Plant Department
284 EAST AVENUE
BURLINGTON, VERMONT 05405
Project Manager: Adam Frazier

CIVIL ENGINEER



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Project:

**Physical Plant
Compound Parking**

Project No. 22309
Scale 1"=40'
Drawn by SLM
Checked by
Date 11/08/2023

Revisions	No.	Date

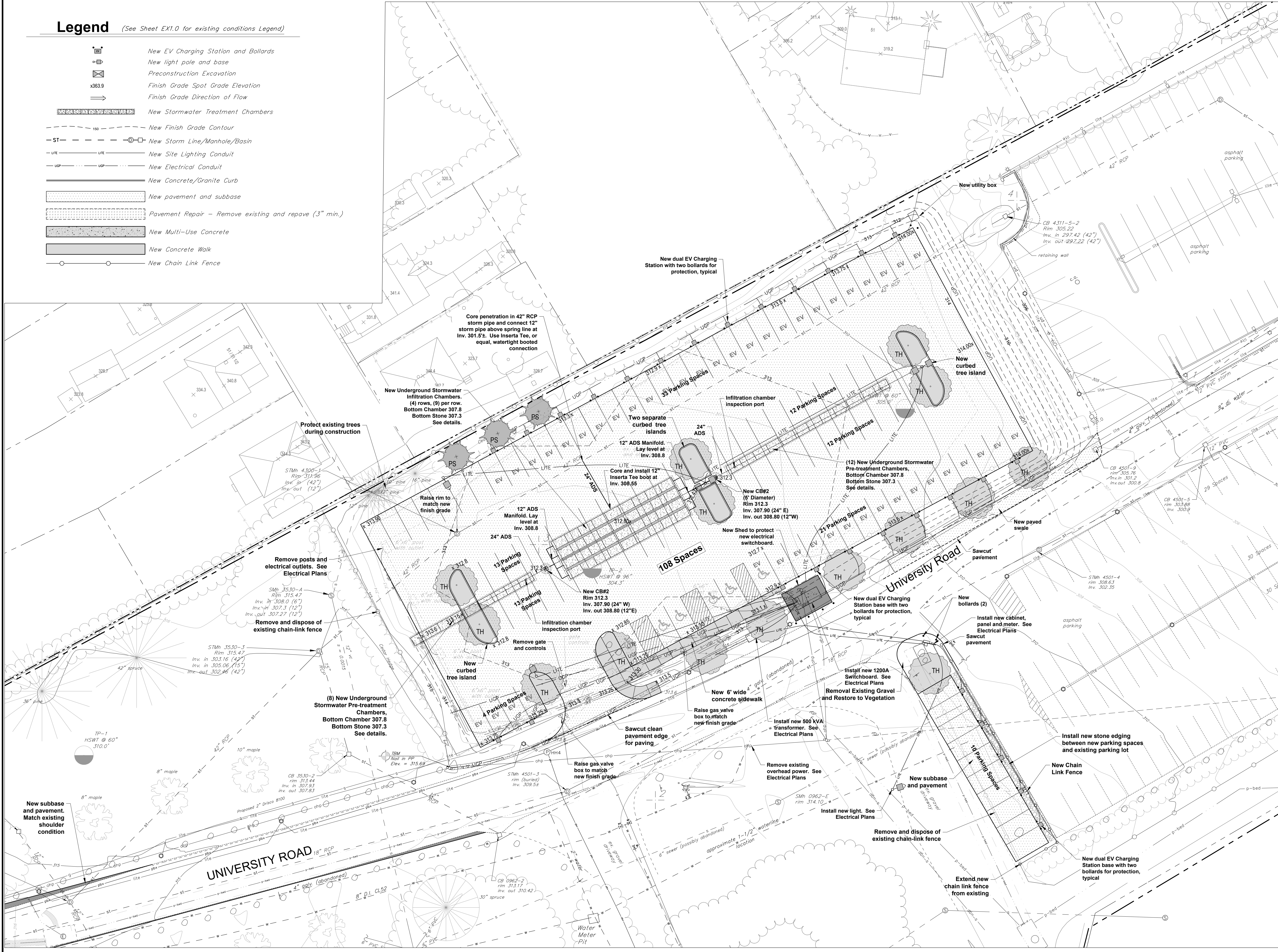
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Overall Site Plan

Drawing No.
C 1.0

Legend

(See Sheet EX1.0 for existing conditions Legend)

- New EV Charging Station and Bollards
- New light pole and base
- Preconstruction Excavation
- Finish Grade Spot Grade Elevation
- Finish Grade Direction of Flow
- New Stormwater Treatment Chambers
- New Finish Grade Contour
- New Storm Line/Manhole/Basin
- New Site Lighting Conduit
- New Electrical Conduit
- New Concrete/Granite Curb
- New pavement and subbase
- Pavement Repair - Remove existing and repave (3" min.)
- New Multi-Use Concrete
- New Concrete Walk
- New Chain Link Fence



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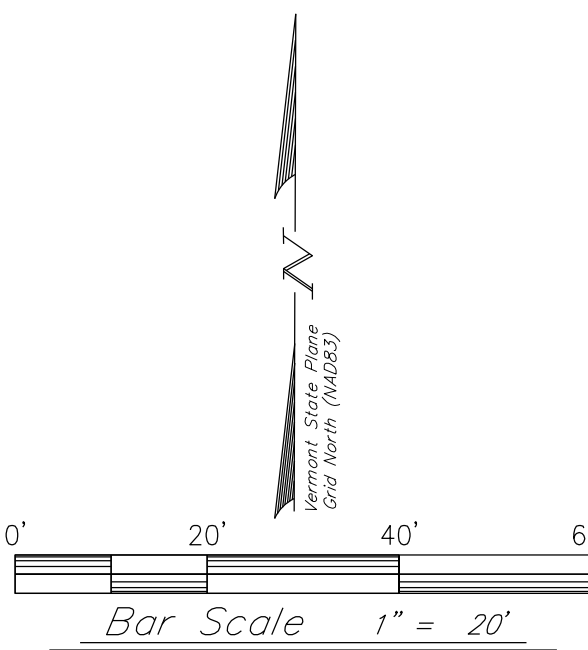
University of Vermont

Physical Plant Department
284 EAST AVENUE
BURLINGTON, VERMONT 05405
Project Manager: Adam Frazier

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Project:

Physical Plant
Compound Parking

Project No. 22309

Scale 1"=20'

Drawn by SLMDMR

Checked by

Date 11/08/2023

Revisions

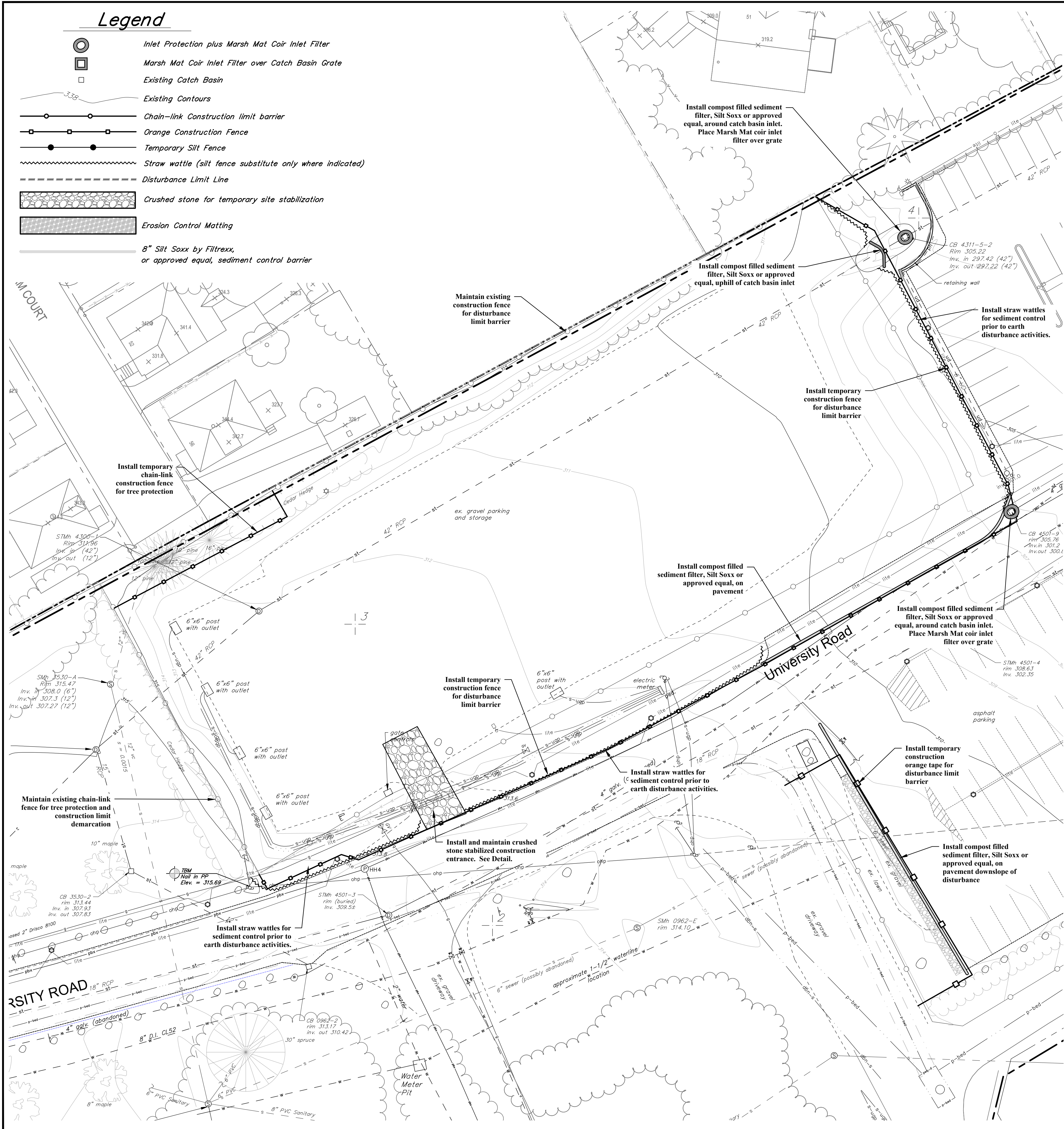
No. Date

Drawing Title

Site Plan

Drawing No.

C 1.1



- Erosion Prevention and Sediment Control Notes**
- Contractor shall be responsible for complying with all State and Local erosion prevention and sediment control standards and permit requirements during construction. Both the City and State Erosion Prevention & Sediment Control Permits shall be posted near the construction entrance, or in a location visible to the public.
 - This project is subject to the permit conditions for an Individual Construction Stormwater Permit. The Contractor shall be the On-site Coordinator for the project and shall be responsible for all required inspections (minimum weekly and after any storm event that produces a discharge), turbidity readings, maintenance, and reporting. The On-Site Plan Coordinator shall be required to provide a turbidity meter for the project. Refer to the permit for inspection and maintenance requirements.
 - The limit of disturbance shall be clearly defined by Contractor's surveyor prior to clearing. Clearing and grubbing shall not begin until disturbance limits and sediment controls are in place. All roots, stumps and deleterious materials shall be removed from the site. The Contractor shall minimize the amount of disturbed land at any given time.
 - The erosion prevention and sediment control practices shown on these plans are the minimum required for the project. The Contractor shall employ and maintain as many best management practices as necessary to prevent soil from leaving the construction site. If evidence is found of sediment tracking or eroded soil leaving the construction site, the Engineer may direct Site Contractor to implement additional best management practices at no additional cost to Owner.
 - All areas of disturbance shall be permanently or temporarily stabilized as soon as possible and within 48 hours of final grading. All areas of disturbance shall be at least temporarily stabilized daily during winter construction unless the following exceptions apply:
 - Stabilization is not required if earthwork is to continue in the area in the next 24 hours and there is no precipitation forecast in the next 24 hours.
 - Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 ft. or greater (e.g. house foundation excavation, utility trenches). Stabilization measures shall include mulch and netting, erosion control matting, crushed stone, gravel, or pavement.
 - Unless specifically indicated on the plans acceptable methods of stabilization shall include:
 - STRAW Mulching - 2 tons per acre. Only STRAW mulch is allowed. Approximately 2" uniform thickness. Only allowed on relatively flat areas with minimum upslope watershed. Mulch must be properly secured with netting to prevent material from being blown away by wind (windthrow).
 - Hydroseeding* - Applied at the manufacturer's recommended application rate. Contractor shall provide evidence of proper application rate. Hydroseeding must be accompanied by erosion control matting in areas of concentrated flow.
 - Erosion control matting - S150BN matting must be applied to all slopes 3:1 (H:V) or greater (unless otherwise indicated).
 - Crushed stone or crushed gravel - Typically used for temporary access roads and construction staging areas.
 - The Contractor shall use water for dust control.
 - The Contractor shall provide inlet protection around all catch basins (existing or new) that collect construction site stormwater runoff. At a minimum, MarshMat, or approved equal, coir inlet filters shall be installed over all catch basin grates. Additional inlet control shall be installed as identified on the plans or as warranted during construction. Inlet protection must be maintained until final stabilization has been reached.
 - A stabilized construction entrance (See Detail) shall be installed and maintained at all construction access locations if construction vehicles travel off the existing hardscape. Contractor shall be responsible for installing crushed stone to provide stable areas for construction vehicle traffic, staging, and storage. The Contractor is responsible for providing and maintaining sufficient stone to prevent rutting and sediment tracking.
 - Any paved roads used by construction vehicles shall be swept daily, or at a greater frequency, if dirt or gravel is tracked from the site. The swept debris shall be immediately removed from face of curb if applicable.
 - All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the measures are no longer needed, unless otherwise authorized.
 - All sediment removed from sediment control practices shall be placed in an approved soil disposal area.
 - All areas that do not have established vegetation by October 15th must be stabilized in accordance with the Winter Stabilization requirements outlined in the Low Risk Site Handbook. See Details.
 - After permanent seeding the Contractor shall be responsible for watering to ensure adequate vegetative growth. Weed growth is not considered acceptable vegetative growth.
 - The location of temporary construction fencing and the temporary access shown on the plan are for schematic purposes only. The Contractor shall be responsible for providing all necessary temporary construction fencing, temporary roads, staging areas, etc., necessary to complete the work.
 - Water from dewatering activities that flows off site must be clear. Turbid, or visibly discolored water must not be pumped into storm sewers.
 - Contractor shall call James Sherrard at (802) 503-7027 or email (jsherrard@burlingtonvt.gov) at least 24 hours prior to initiating earth disturbance and submit name, cell phone number, and email contact information of the erosion control coordinator for the project.
 - The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has traveled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each workday.

Schedule of Construction Activities
PRECONSTRUCTION - Summer 2023

The sequence of activities indicated below has been provided based on approximate starting dates. The schedule of construction activities is approximate and may be subject to change due to unpredictable factors that may shift the construction schedule.

- Mobilize and install temporary construction fence
- Install stabilized construction entrance, perimeter sediment control practices, and other BMPs indicated on this plan.



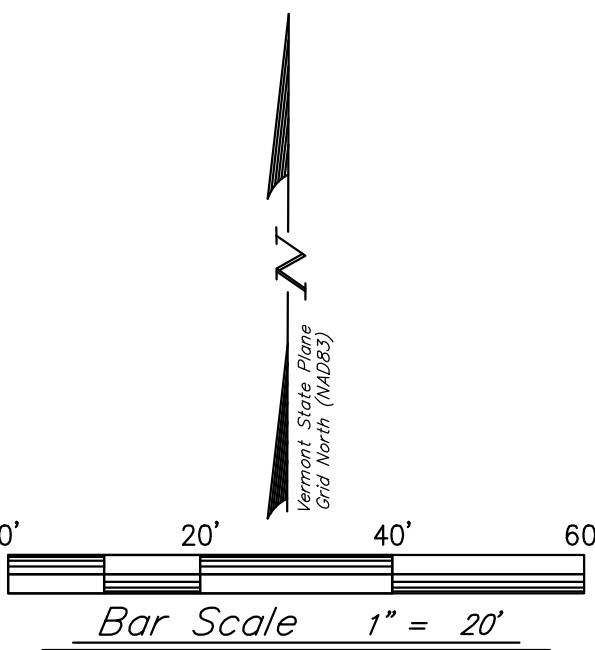
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Physical Plant Department
284 EAST AVENUE
BURLINGTON, VERMONT 05405
Project Manager: Adam Frazier

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Project:

Physical Plant
Compound Parking

Project No. 22309
Scale 1"=20'
Drawn by SLM
Checked by
Date 11/08/2023

Revisions	No.	Date

Drawing Title

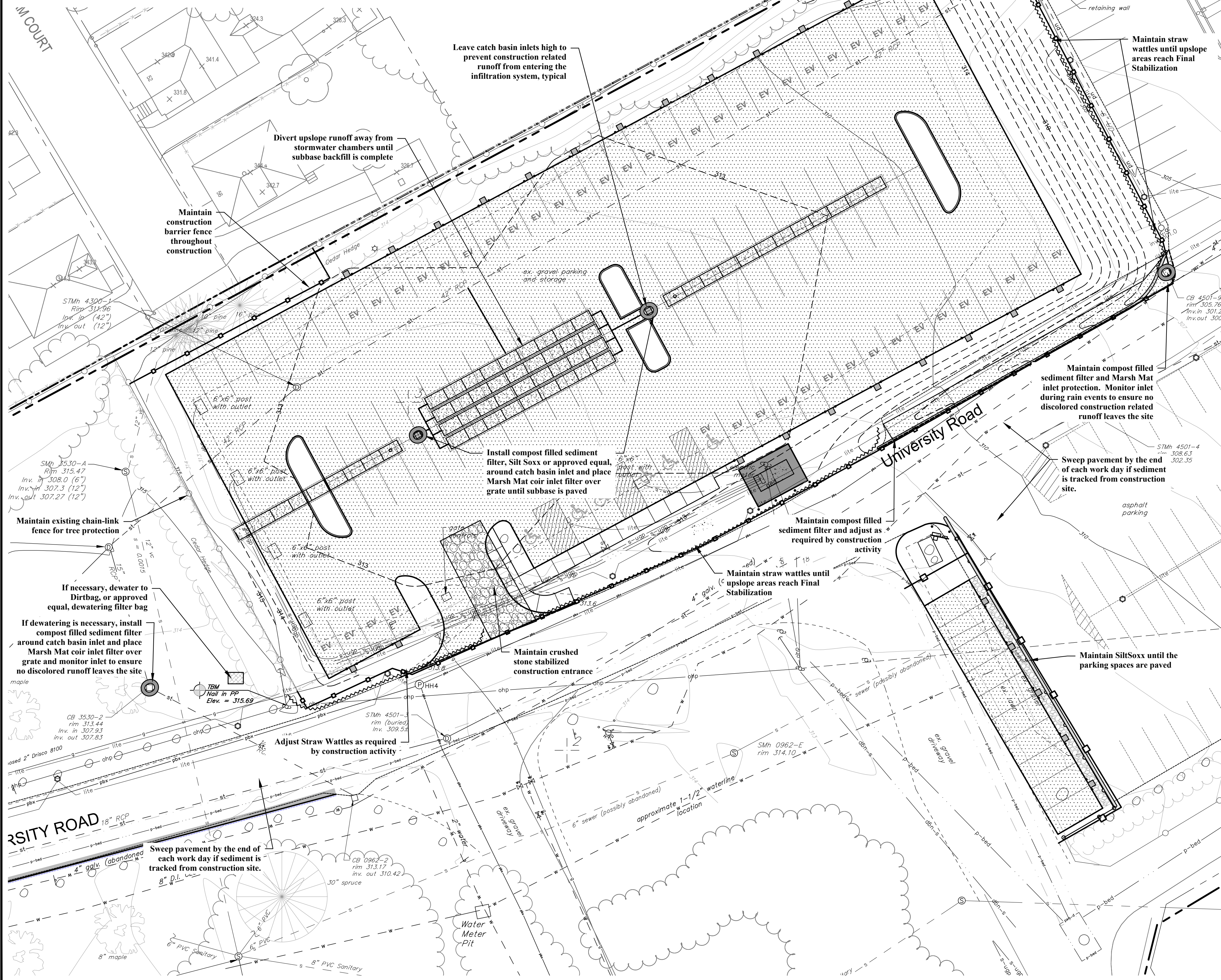
Erosion Prevention and
Sediment Control Plan
Preconstruction

Drawing No.

C 3.1

The diagram illustrates various erosion control measures and their corresponding symbols. The symbols are arranged vertically on the left, and their descriptions are listed to the right.

- Marsh Mat Coir Inlet Filter**: Represented by a circle with a dot inside, a square with a dot inside, and a small square.
- Marsh Mat Coir Inlet Filter over Catch Basin Grate**: Represented by a circle with a dot inside, a square with a dot inside, and a small square.
- Existing Catch Basin**: Represented by a small square.
- Existing Contours**: Represented by a wavy line.
- Chain-link Construction limit barrier**: Represented by a line with circles.
- Orange Construction Fence**: Represented by a line with squares.
- Temporary Silt Fence**: Represented by a line with black dots.
- Straw wattle (silt fence substitute only where indicated)**: Represented by a wavy line.
- Disturbance Limit Line**: Represented by a dashed line.
- Crushed stone for temporary site stabilization**: Represented by a rectangular area filled with circles.
- Erosion Control Matting**: Represented by a rectangular area filled with a cross-hatch pattern.
- 8" Silt Sox**: Represented by a thick horizontal line.
- 8" Silt Sox by Filtraxx, or approved equal, sediment control barrier**: Represented by a thick horizontal line.



1. Contractor shall be responsible for complying with all State and Local erosion prevention and sediment control standards and permit requirements during construction. Both the City and State Erosion Prevention & Sediment Control Permits shall be posted near the construction entrance, or in a location visible to the public.

2. This project is subject to the permit conditions for an Individual Construction Stormwater Permit. The Contractor shall be the On-site Coordinator for the project and shall be responsible for all required inspections (minimum weekly and after any storm event that produces a discharge), turbidity readings, maintenance, and reporting. The On-Site Plan Coordinator shall be required to provide a turbidity meter for the project. Refer to the permit for inspection and maintenance requirements.

3. The limit of disturbance shall be clearly defined by Contractor's surveyor prior to clearing. Clearing and grubbing shall not begin until disturbance limits and sediment controls are in place. All roots, stumps and deleterious materials shall be removed from the site. The Contractor shall minimize the amount of disturbed land at any given time.

4. The erosion prevention and sediment control practices shown on these plans are the minimum required for the project. The Contractor shall employ and maintain as many best management practices as necessary to prevent soil from leaving the construction site. If evidence is found of sediment tracking or eroded soil leaving the construction site, the Engineer may direct Site Contractor to implement additional best management practices at no additional cost to Owner.

5. All areas of disturbance shall be permanently or temporarily stabilized as soon as possible and within 48 hours of final grading. All areas of disturbance shall be at least temporarily stabilized daily during winter construction unless the following exceptions apply:

- a. Stabilization is not required if earthwork is to continue in the area in the next 24 hours and there is no precipitation forecast in the next 24 hours.
- b. Stabilization of the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 ft. or greater (e.g. house foundation excavation, utility trenches). Stabilization measures shall include mulch and netting, erosion control matting, crushed stone, gravel, or pavement.

6. Unless specifically indicated on the plans acceptable methods of stabilization shall include:

- STRAW Mulching - 2 tons per acre. Only STRAW mulch is allowed. Approximately 2" uniform thickness. Only allowed on relatively flat areas with minimum upslope watershed. Mulch must be properly secured with netting to prevent material from being blown away by wind (windthrow).
- Hydroseeding* - Applied at the manufacturer's recommended application rate. Contractor shall provide evidence of proper application rate. Hydroseeding must be accompanied by erosion control matting in areas of concentrated flow.
- Erosion control matting - 5.00BN matting must be applied to all slopes 3:1 (H:V) or greater (unless otherwise indicated).
- Crushed stone or crushed gravel - Typically used for temporary access roads and construction staging areas.

7. The Contractor shall use water for dust control.

8. The Contractor shall provide inlet protection around all catch basins (existing or new) that collect construction site stormwater runoff. At a minimum, MarshMat, or approved equal, coir inlet filters shall be installed over all catch basin grates. Additional inlet control shall be installed as identified on the plans or as warranted during construction. Inlet protection must be maintained until final stabilization has been reached.

9. A stabilized construction entrance (See Detail) shall be installed and maintained at all construction access locations if construction vehicles travel off the existing hardscape. Contractor shall be responsible for installing crushed stone to provide stable areas for construction vehicle traffic, staging, and storage. The Contractor is responsible for providing and maintaining sufficient stone to prevent rutting and sediment tracking.

10. Any paved roads used by construction vehicles shall be swept daily, or at a greater frequency, if dirt or gravel is tracked from the site. The swept debris shall be immediately removed from face of curb if applicable.

11. All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the measures are no longer needed, unless otherwise authorized.

12. All sediment removed from sediment control practices shall be placed in an approved soil disposal area.

13. All areas that do not have established vegetation by October 15th must be stabilized in accordance with the Winter Stabilization requirements outlined in the Low Risk Site Handbook. See Details.

14. After permanent seeding the Contractor shall be responsible for watering to ensure adequate vegetative growth. Weed growth is not considered acceptable vegetative growth.

15. The location of temporary construction fencing and the temporary access shown on the plan are for schematic purposes only. The Contractor shall be responsible for providing all necessary temporary construction fencing, temporary roads, staging areas, etc., necessary to complete the work.

16. Water from dewatering activities that flows off site must be clear. Turbid, or visibly discolored water must not be pumped into storm sewers.

17. Contractor shall call James Sherrard at (802) 503-7027 or email (jsherrard@burlingtonvt.gov) at least 24 hours prior to initiating earth disturbance and submit name, cell phone number, and email contact information of the erosion control coordinator for the project.

18. The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has traveled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each workday.

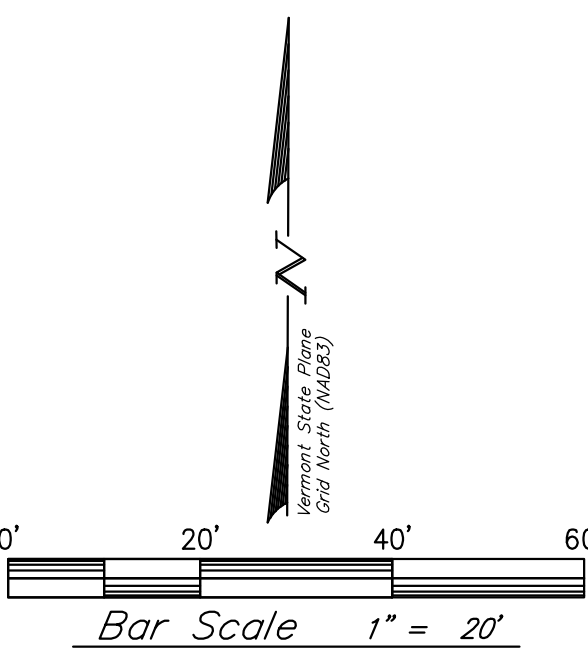


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Project Manager: Adam Frazier



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Physical Plant Compound Parking

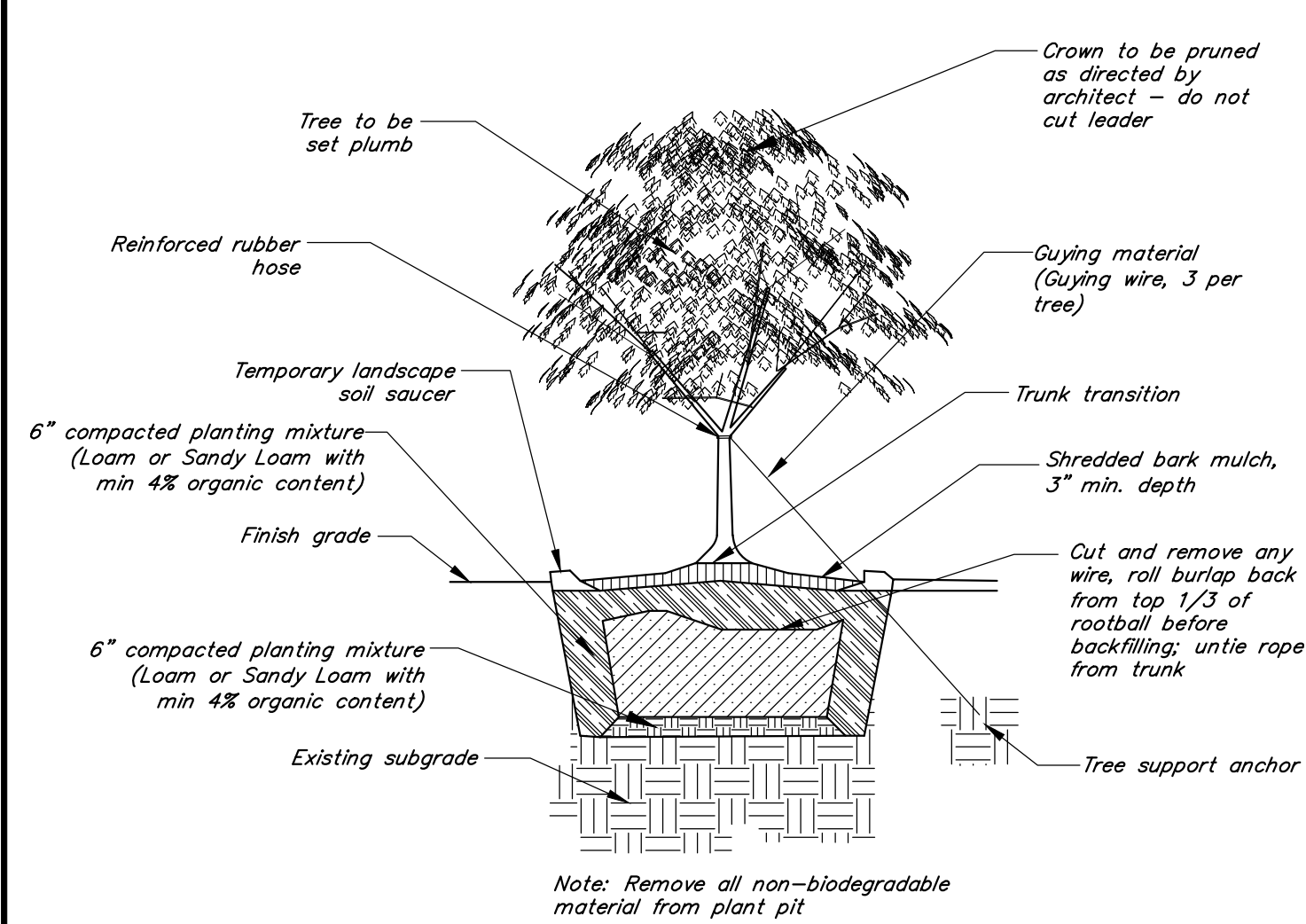
Project No. 22309
Scale 1"=20'
Drawn by SLM
Checked by _____
Date 11/08/2023

Revisions	
No.	Date

Drawing Title
Erosion Prevention and
Sediment Control Plan
Summer 2024

Drawing No.

C 3.2



Tree Planting Requirements

Total new parking spaces = 118
Required 1 tree for every 5 parking spaces ($118/5 = 23.6 = 24$ trees)
New tree plantings provided = 18 new trees
Credit for preserving existing 5 evergreen trees and cedar hedge (~10 mature cedars) on western edge of proposed parking
Landscape requirements met (18 New + 15 Existing = 33 trees)

Shade Calculations

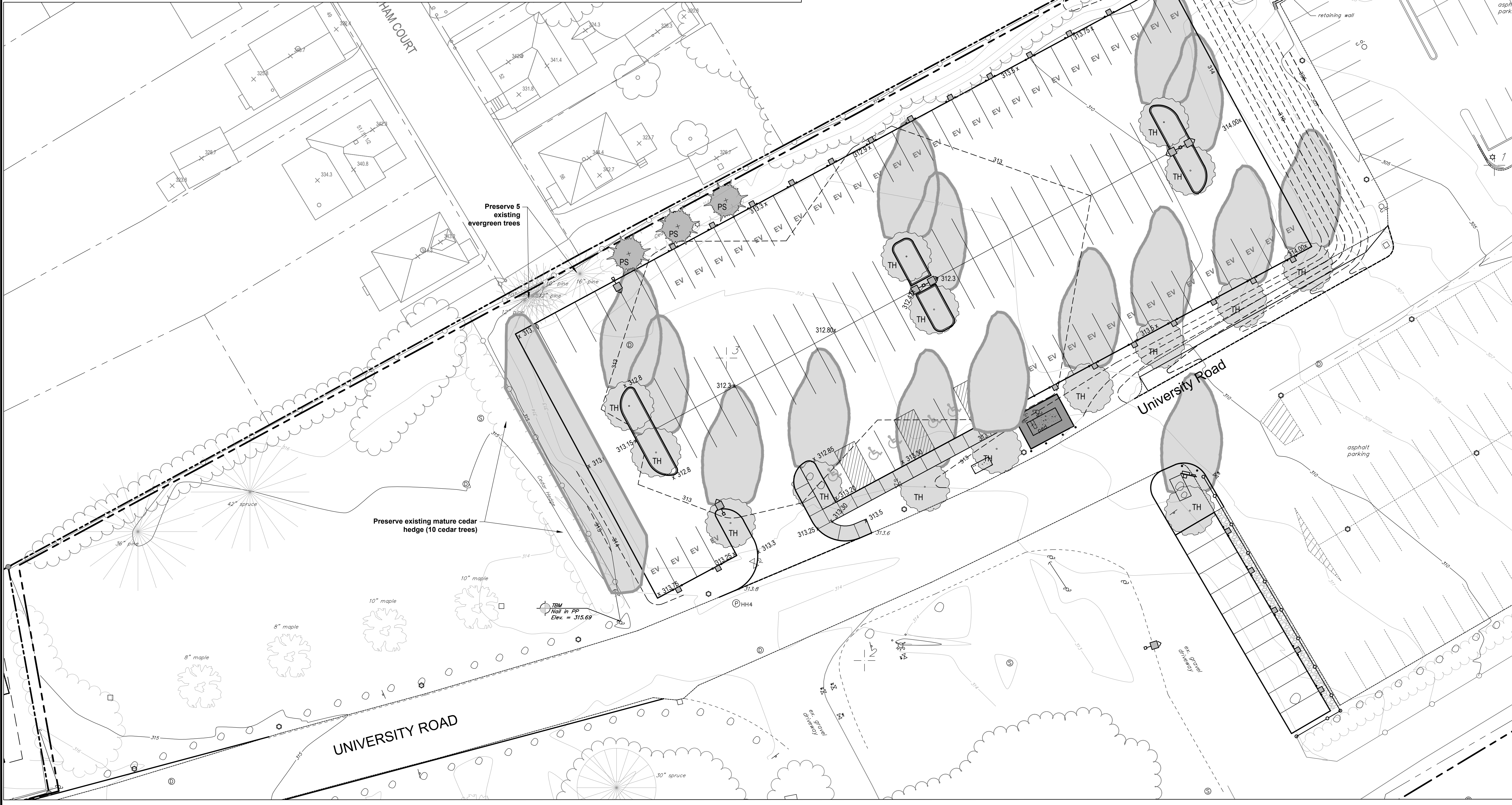
Total new parking area = 36,400 SF
30% of new parking area ($36,400 \times .3$) = 10,920 SF
Total area shaded by new tree planting* = 11,007 SF
Shaded area provided > 30% total new parking area

*Shade analysis and calculations based on SketchUpPro shade analysis modeling assuming 12/21 at 12:00 noon.

PLANT SCHEDULE					
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
DECIDUOUS TREES					
TH	14	Gleditsia Triacanthos Inermis	THORNTLESS HONEYLOCUST	3" CAL	AS SHOWN
PS	3	Pinus Strobus	EASTERN WHITE PINE	3'-4'	AS SHOWN

Tree Planting in Landscape Detail

N.T.S.



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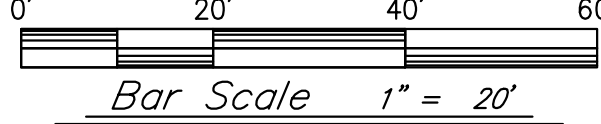
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Project:

**Physical Plant
Compound Parking**

Project No. 22309
Scale 1"=20'
Drawn by CPG
Checked by
Date 11/08/2023

Revisions	No.	Date

Drawing Title
**Landscape &
Shade Plan**

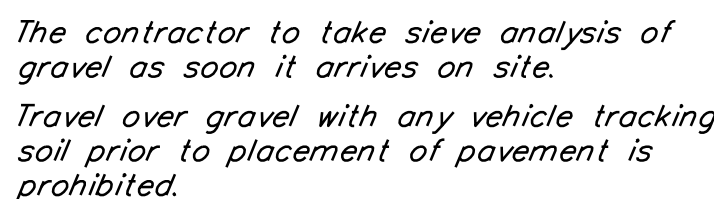
Drawing No.

L-1.0



Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.

The Engineer shall be contacted at least 24 hours prior to forming concrete curb to review layout.



If gravel is contaminated after placement, the Site Contractor shall be responsible removal of all contaminated gravel and paying for all recommended sieve analysis as determined by the Engineer.

1. New road shall be constructed to the line and grade shown on the drawings. The road and utility locations shall be as typically detailed unless otherwise shown.
2. All road and parking construction shall be completed in accordance with the Vermont Agency of Transportation "Standard Specifications for Construction" 2011, hereafter called Vermont Highway Specifications, specifications found on these plans, and project specifications. In case of conflict, the more stringent specification shall apply as determined by the Engineer.
3. The Contractor shall follow Vermont Highway Specifications (2011) Section 203.11 for placing and spreading embankments.
4. Fill material for road embankment shall meet Note #13 below and be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 95% of maximum density (Standard Proctor).
5. Road in fill sections shall be placed and compacted a minimum of 3 feet above top of any utility to be installed before trench is excavated for pipe placement. In trenches and cut sections, the Contractor shall provide all necessary sheeting, shoring and bracing to maintain compliance with all OSHA/VOSH regulations.
6. Methods for construction of subgrade shall conform to Vermont Highway Specifications (2011) 203.12 or as determined by the Engineer.
7. Any subgrade or subbase disturbed by Contractor, or rendered unsuitable by construction machinery, shall be removed and replaced with approved granular backfill at the Contractor's expense. The subgrade shall be compacted to attain at least 95% of the maximum density (Standard Proctor) before placing road or embankment materials.
8. The Owner will pay for on site soils testing (compaction, sieve, and proctor). The Contractor shall pay for failing tests. The Contractor is fully responsible for coordinating all testing/inspections. Contractor shall provide minimum 24 hour notice to testing agency prior to placement of any item to be tested.
9. Sand borrow and cushion shall conform to Vermont Highway Specifications (2011) 703.03. Granular borrow shall conform to the Vermont Highway Specifications 703.04.
10. Gravel subbase for pavement shall conform to Vermont Highway Specifications (2011) 704.05, coarse. Substitute materials identified in VAOT Specifications Section 301 - Subbase are not allowed.
11. Leveling course shall conform to Vermont Highway Specifications (2011) 704.05, fine grading. Shoulders shall conform to Section 704.12, Aggregate for Shoulders.
12. Bituminous concrete pavement shall conform to Vermont Highway Specifications (2011) Section 404 and 406. Binder course shall be Type I + II, and finish wearing course shall be Type III, IV, or as detailed.
13. Embankment fill for all impervious areas, EXCLUDING BUILDINGS, shall be a sieve specification as follows:

Sieve	% Finer
4"	100
2"	85-100
#4	60-100
#200	30 maximum
14. Dense graded crushed stone, crushed gravel and sand borrow shall not be contaminated by work. Construction traffic shall not travel over exposed areas of this material.
15. Contractor is responsible for all pavement markings (ie. parking striping, handicap markings, stop bars, etc.) shown or implied on the Plans. Refer to pavement marking requirements below.

1. Typical parking space is marked with 4" wide Yellow Paint. Parking spaces shall be evenly spaced and match the number of existing spaces
2. ADA spaces shall have painted blue box with white stencil and trim per ADA requirements.
3. Paint for pavement markings shall be Hydrophast Waterborne Traffic Paint by Franklin Paint Company. It shall be reflective, VOC compliant fast drying, 100% acrylic waterborne traffic paint. Confirm paint color with Owner prior to application.
4. Traffic paint shall be applied with a uniform thickness and at a rate such that no pavement is visible after drying. Additional paint application will be required if underlying pavement is visible.

N. T. S.

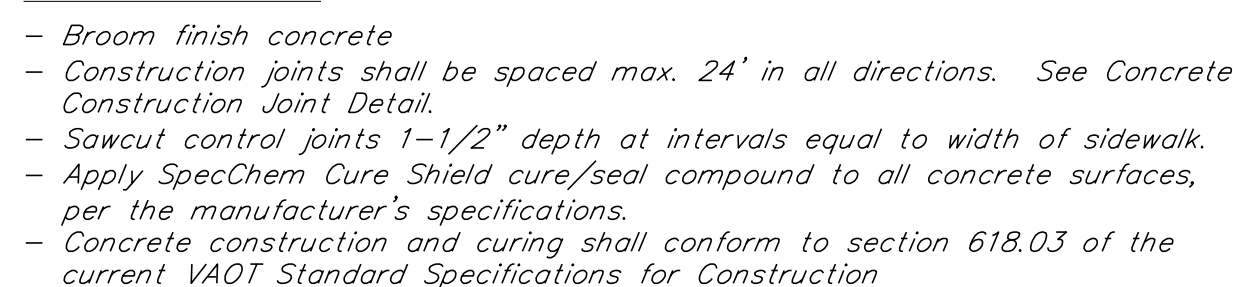
1. *Unless otherwise indicated, all civil site materials shall comply with the Vermont Agency of Transportation "Standard Specifications for Construction" 2018.*
2. *The Contractor shall follow Vermont Highway Specifications (2018) Section 203.11 for placing and spreading embankments.*
3. *Fill material for Embankment shall be clean, shall contain no stones greater than 3" in diameter, no frozen lumps, clay, organics, roots or contaminated material, shall meet the sieve indicated below, and shall be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 90% of maximum density (Standard Proctor).*

<u>Sieve</u>	<u>% Finer</u>
4"	100
2"	85-100
#4	60-100
#200	30 maximum
4. *Crushed Gravel for Subbase shall conform to Vermont Highway Specifications (2018) 704.05 and shall meet the following gradation requirements:*

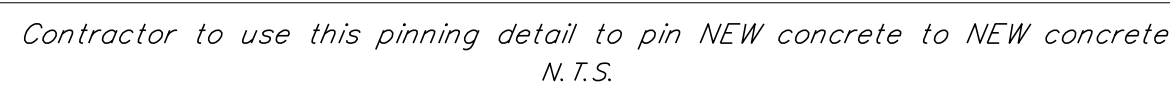
COARSE GRADED		FINE GRADED	
<u>Sieve</u>	<u>% Finer</u>	<u>Sieve</u>	<u>% Finer</u>
4"	95-100	2"	100
#4	30-60	1 1/2"	90-100
No. 100	0-12	#4	30-60
No. 200	0-6	No. 100	0-12
		No. 200	0-6
5. *Dense Graded Crushed Stone for Subbase shall conform to Vermont Highway Specifications (2018) 704.06 and shall meet the following gradation requirements:.*

<u>Sieve</u>	<u>% Finer</u>
3-1/2"	100
3"	90-100
2"	75-100
1"	50-80
1/2"	30-60
No. 4	15-40
No. 200	0-6
5. *Drainage Aggregate, Drainage Rock, and Clean Crushed Stone for Drainage shall conform to Vermont Highway Specifications (2018) 704.16 and shall meet the following gradation requirements:.*

Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.



N.T.S.



1. If the details specify a specific product, and the Contractor is not proposing a substitute, the Contractor shall not submit shop drawings for that product (ex. Mirafi 140N).
2. If the details for this project specify Mirafi 140N, then the following are approved equals and the Contractor shall not submit shop drawings for that product.
SKAPS GT 142
WinFab 450
Carthage Mills FX-45HS
ADS 045IT
3. If the details for this project specify Mirafi 500X, then the following are approved equal and the Contractor shall not submit shop drawings for that product
SKAPS W200
Geotex 200ST
WinFab 200W
ADS 200W



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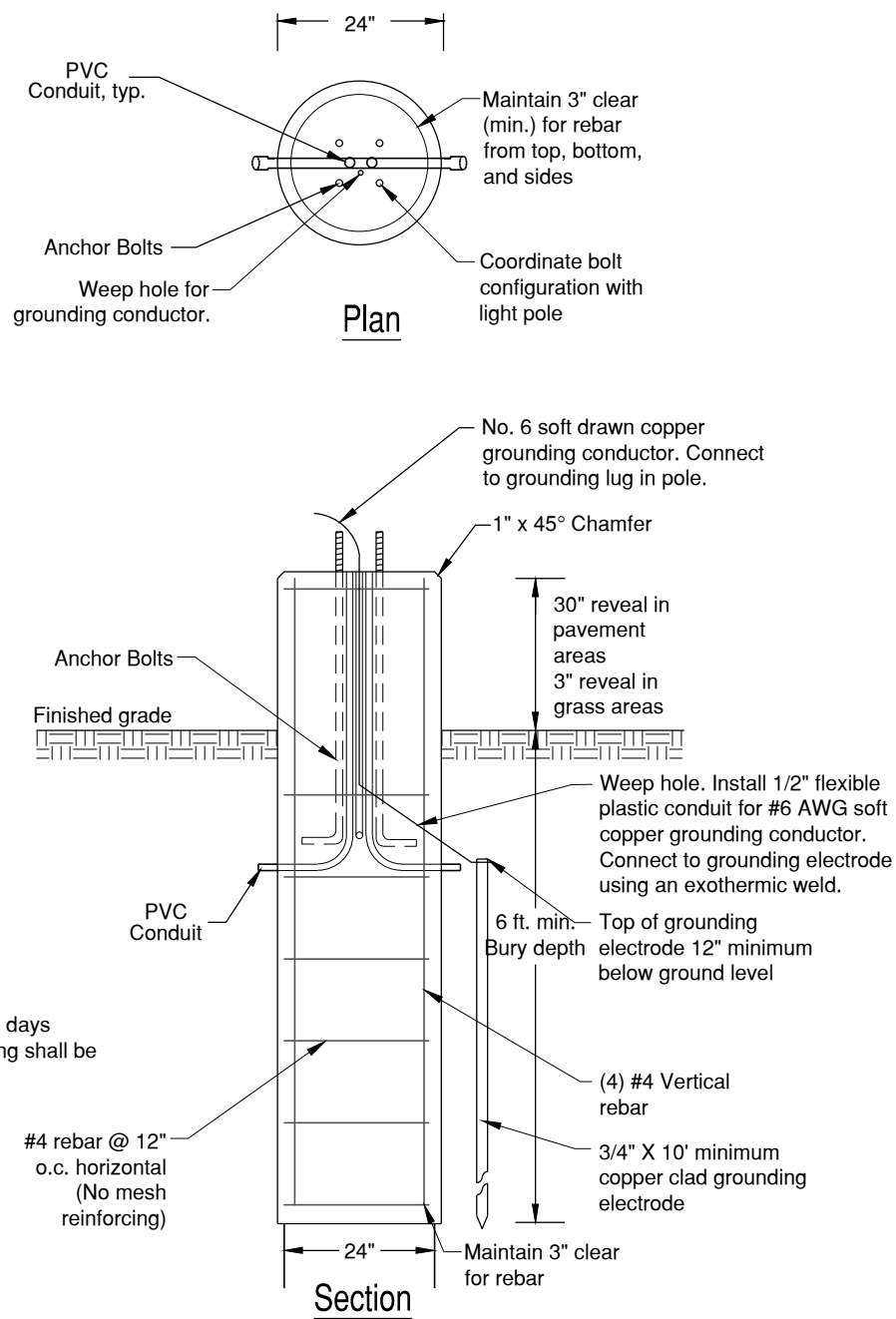


Physical Plant Compound Parking

Revisions

Civil Details

C 4.1



NOTE:
See Electrical Plans for electrical, conduit, light pole bolt pattern, and grounding design.

SPECIFICATIONS:
- Concrete Minimum Strength 5000psi @ 28 days
- Reinforcement per Specification. Reinforcing shall be ASTM A615 Grade 60
- PVC Conduit Supplied by Others
- Anchor Bolts Supplied by Others
- Weights Subject to Variation

Typical Light Pole Base

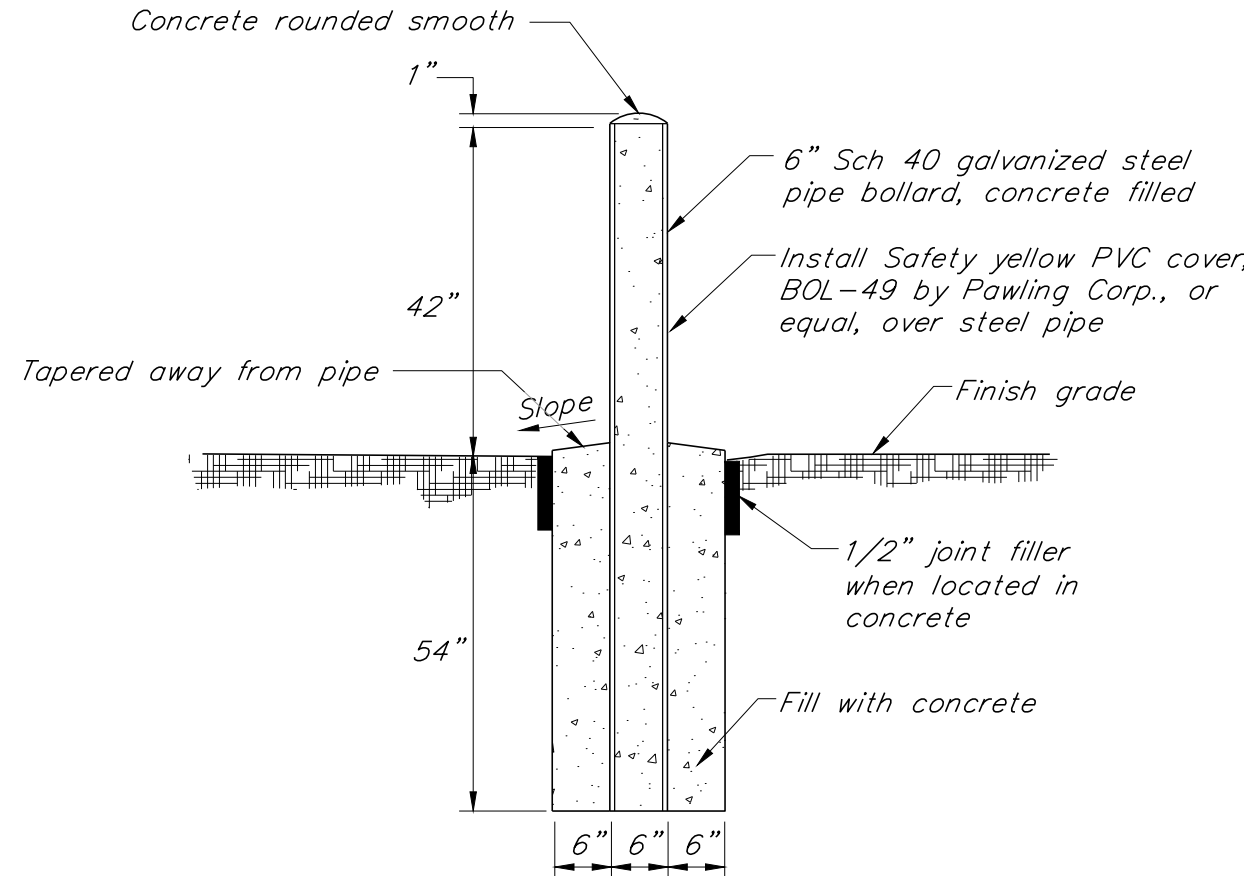
N.T.S.

SIGN POST NOTES

- All sign posts shall be 2" square galvanized steel posts with anchors. Bottom of all signs to be 7 feet above nearest adjacent curb or pavement elevation.
- All square tube steel posts and anchors shall be formed into a size and shape in such a manner that neither flash nor weld shall interfere with the telescoping properties, nor damage the galvanizing.
- Anchors may be driven or set into a dug hole and backfilled. If driven, a driving cap shall be used. The dug hole installation method shall be utilized in areas with poor soil conditions or as directed by the engineer. Backfill shall be compacted as directed by the engineer.
- The tops of sign posts shall be at or near the top of sign. The post shall not extend above the top of sign.
- Sign posts shall be installed a minimum of one foot below ground, inside the anchor. The length of anchor exposed above ground shall not exceed four inches.

Construction Notes

- The methods and materials of construction shall conform to the latest standards of the Municipality and the State of Vermont. All work shall be in conformance with all permits and approvals issued for the project. In case of conflict, the more stringent specification shall apply as directed by Engineer. All work shall be done in a workmanlike manner and completed in the time specified by Owner.
- The Contractor shall be responsible for all work and materials shown and required to make the job complete. These drawings do not show every fitting or appurtenance. Materials shall be as specified on the drawings. Manufacturer's product specifications shall be submitted for all materials to the Engineer for approval prior to installation.
- The location and size of existing underground utilities is not warranted to be exact or complete. The Contractor shall field locate all utilities and shall contact the affected utility company, the Engineer and the Municipality prior to making any hook ups. The Contractor shall be solely responsible for all existing utilities and their uninterrupted services. The Contractor shall contact Dig Safe and other non-member utilities prior to any excavation.
- All off-site backfill, sheeting and shoring, dewatering, clearing and grubbing, erosion control, dust control, traffic control, grading, and all incidentals shall be included as part of the required work.
- Repair of all disturbed areas, grading, seeding, mulching, repair of roads and curbs, paving, and other incidentals are included as part of the required work. All disturbed areas shall be loamed and mulched until permanent ground cover is established.
- The Contractor shall be responsible for all construction layout and shall verify all horizontal control and temporary bench marks before use.
- The workers and public shall be protected by the Contractor from any and all hazards connected with the construction work. Open trenches, materials, or equipment within the working limits are to be guarded by the use of adequate barricades or flaggers. All barricades left in position overnight are to be properly lighted. Kerosene pots are not acceptable. When work narrows the usable pavement, flaggers shall be employed to aid the flow of traffic so that there will be no undue delays. The Contractor shall be held responsible for the safety of all workers and the general public and all damages to property occurring from or upon the work occasioned by negligence or shall be held responsible for the safety of all workers and the general public and all damages to property occurring from or upon the work occasioned by negligence or day or night within the working area. All work shall be in conformance to OSHA regulations, Title 19, Parts 1926.651 and 1926.652, and applicable to VOSHA regulations.
- The Contractor shall sawcut all existing pavement to be removed. The Contractor shall minimize the pavement area disturbance. Contractor shall be responsible for all pavement repair and restoration necessary to complete the work.
- Existing plantings are located in general areas as shown on the plans. Contractor shall protect plantings scheduled to remain so as not to damage these or their root systems.
- Contractor shall comply with all permits and approvals issued for this project.
- Contractor shall sign on as the Co-Permittee for the State of Vermont Erosion Prevention and Sediment Control permit for the project.
- Slope stability upon unsaturated soil conditions. If during construction saturated soils are encountered, contact the Engineer immediately.



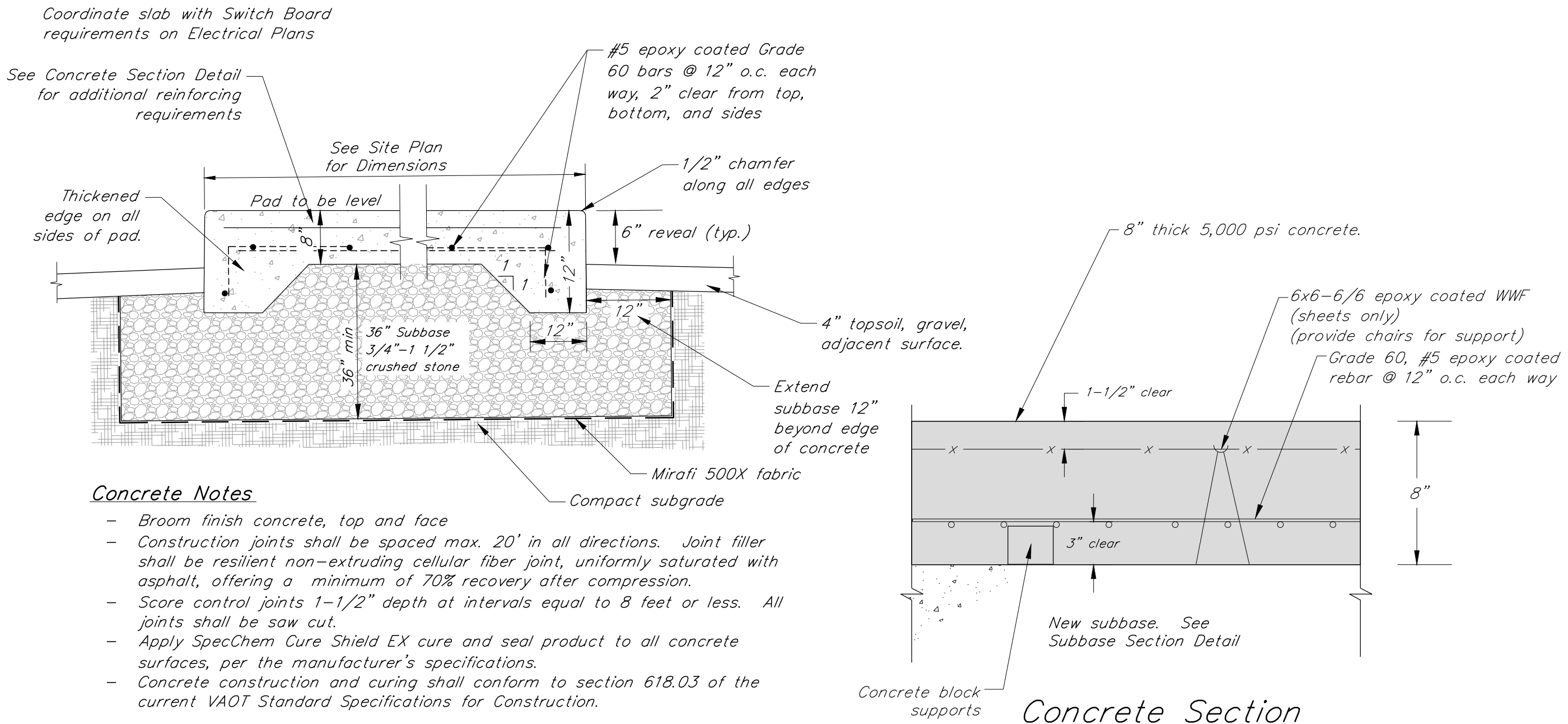
Bollard Detail

N.T.S.

All concrete used in the construction of the pad shall be made with Portland cement. The concrete shall meet section 541 of the State of Vermont Standard Specifications for Construction, have 28 day compressive strength of 5,000 psi, and meet the following mix design.

Max. water-cement ratio (lb./lb.)	0.44
Min. cement factor (lbs/C.Y.)	705
Entrained air content (%)	5 - 7
Slump (inches, before adding HRWR)	2 - 4

Use air entrained agent conforming to ASTM C260 with 5-7% total air. Use High Range Water Reducing agent conforming to ASTM C494 in all concrete.



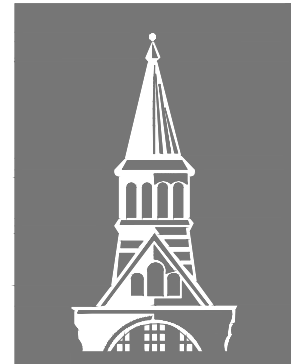
Concrete Notes

- Broom finish concrete, top and face
- Construction joints shall be spaced max. 20' in all directions. Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.
- Score control joints 1-1/2" depth at intervals equal to 8 feet or less. All joints shall be saw cut.
- Apply SpecChem Cure Shield EX cure and seal product to all concrete surfaces, per the manufacturer's specifications.
- Concrete construction and curing shall conform to section 618.03 of the current VAOT Standard Specifications for Construction.

Concrete Section

New Shed Foundation Pad for Electrical Switchboard

N.T.S.



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Project:

Physical Plant
Compound Parking

Project No. 22309
Scale N.T.S.
Drawn by DMR
Checked by
Date 11/08/2023

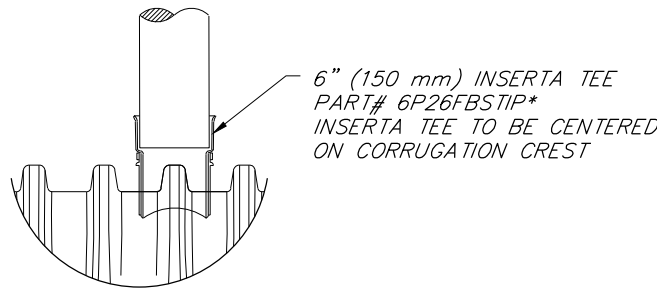
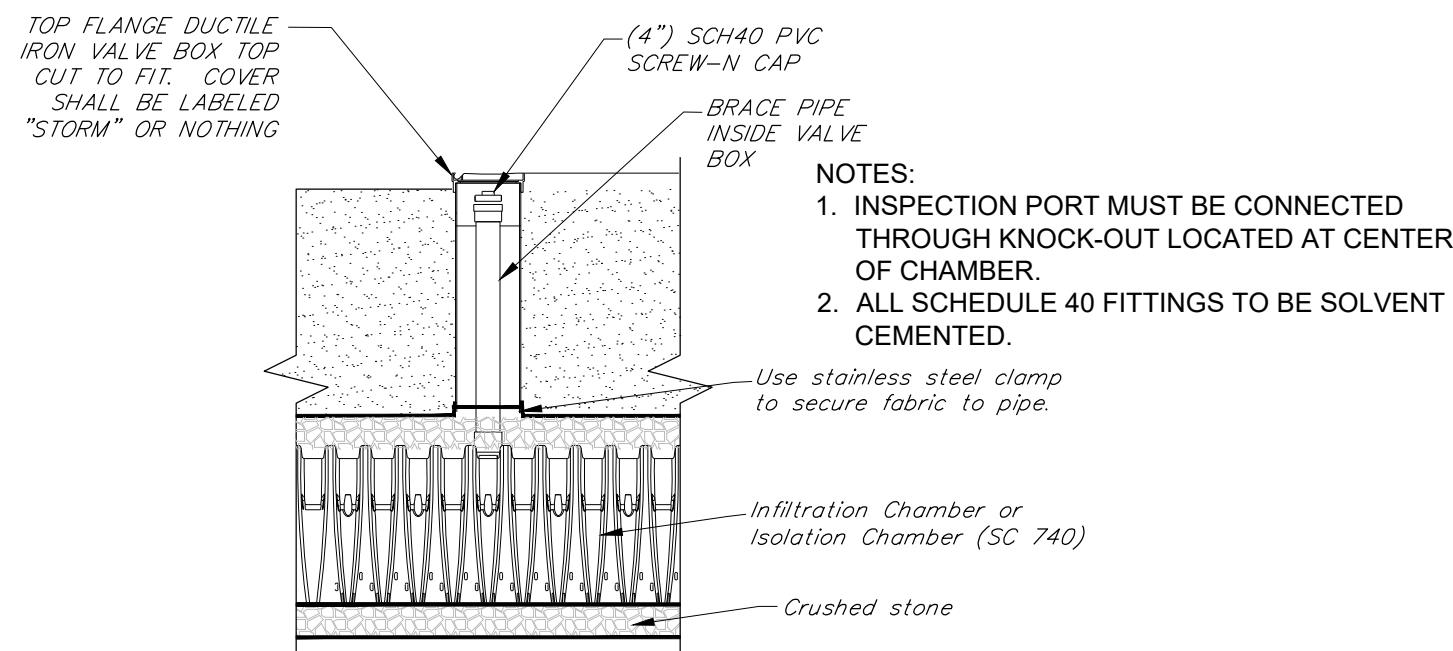
Revisions	No.	Date

Drawing Title
Civil Details

Drawing No.

C 4.2

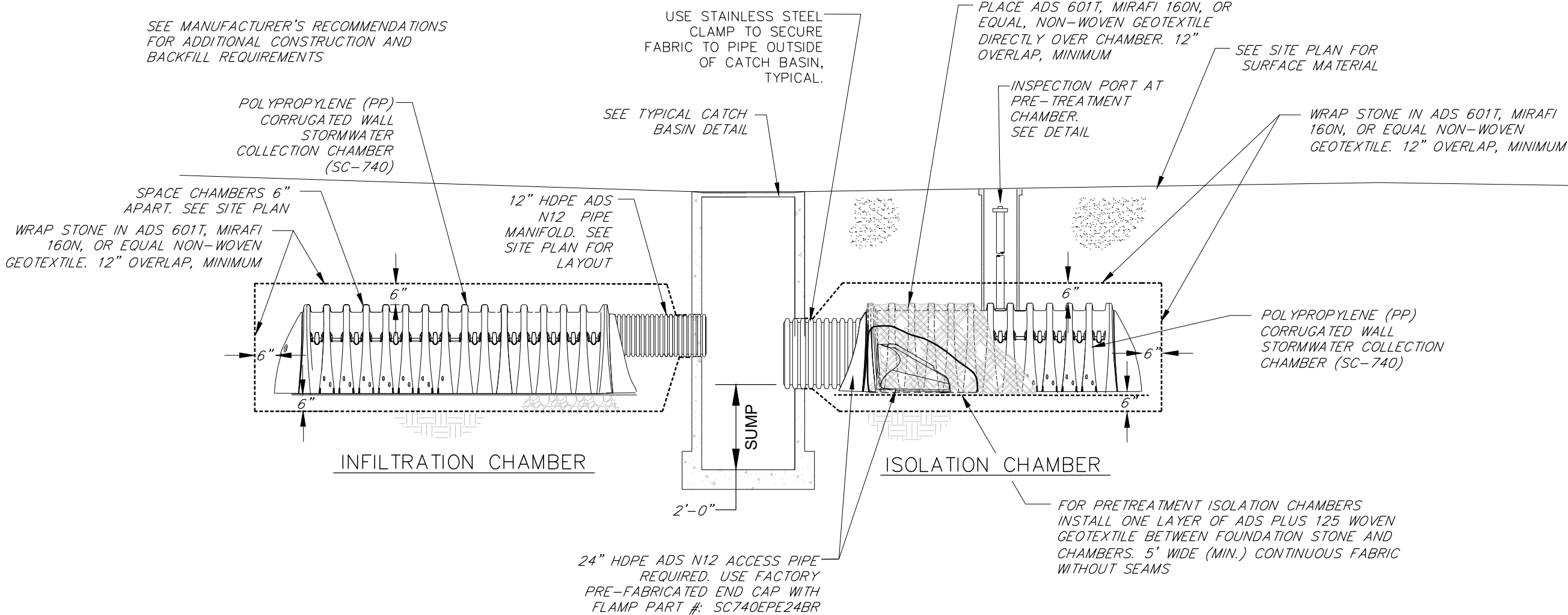
One Inspection port shall be installed on the first pre-treatment isolation chamber after the catch basin



Infiltration System Construction Notes:
All upstream/upslope construction shall be complete and stabilized prior to allowing runoff to enter any infiltration systems. "Stabilized" shall mean paved surfaces, washed crushed stone, or vegetated areas that have established a dense and vigorous vegetative cover.

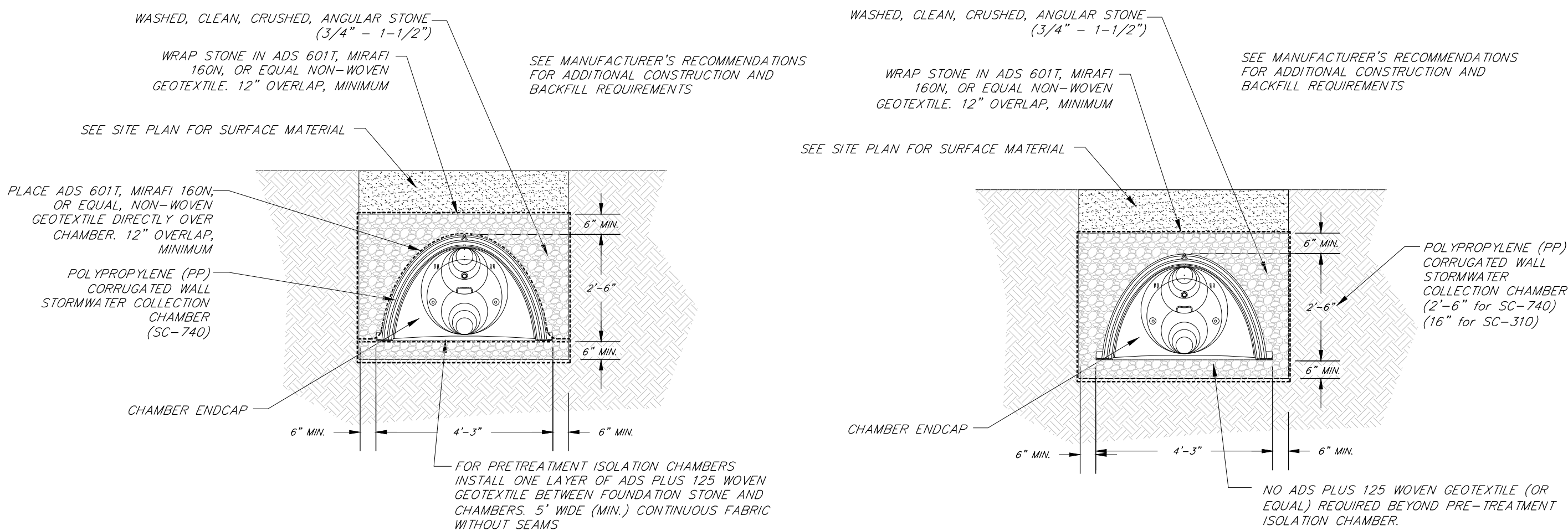
Typical Inspection Port Cross Section

N.T.S.



Stormtech Chamber System

N.T.S.



Typical Pretreatment Isolation Chamber Cross Section

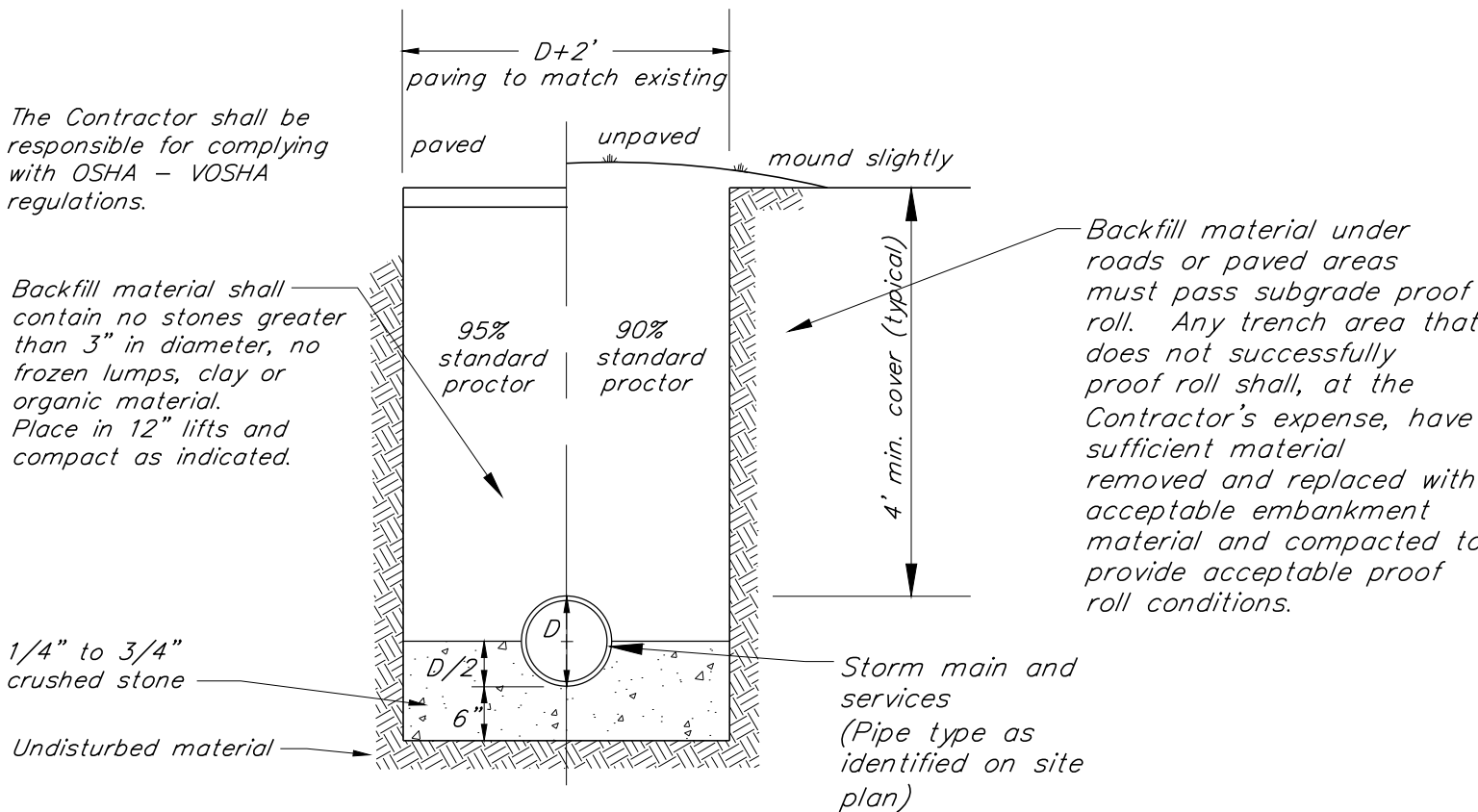
N.T.S.

Typical Infiltration Chamber Cross Section

N.T.S.

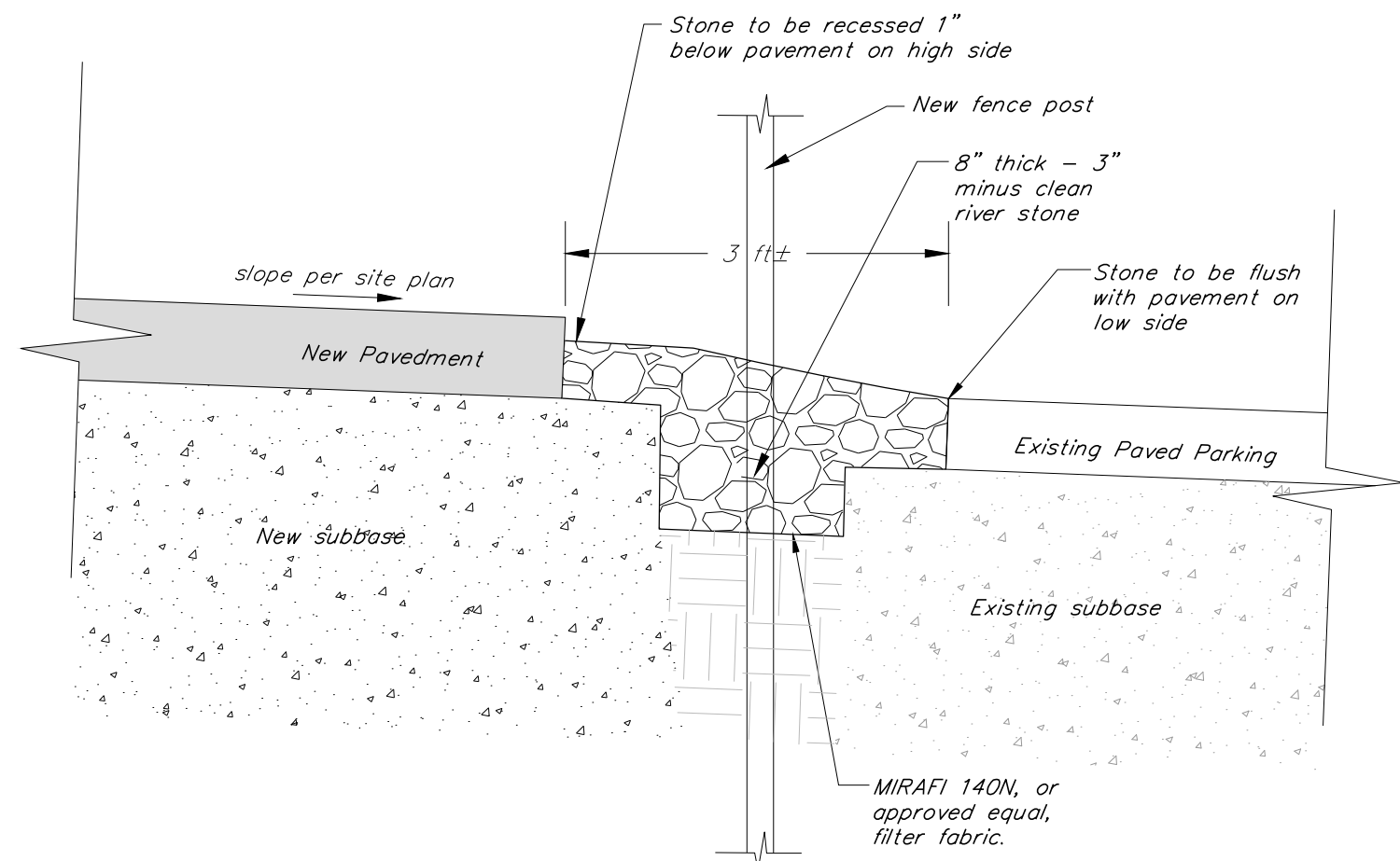
PVC SDR 35 pipe shall not be installed when the temperature drops below 32° F or goes above 100° F unless prior approval is obtained from the Engineer. Extra care is required when handling PVC pipe during cold weather. PVC pipe shall not be stored outside and exposed to prolonged periods of sunlight as pipe discoloration and reduction in pipe impact strength will occur. If PVC pipe is to be stored on site for 1 month or longer it shall be covered with canvas or other opaque material.

All new storm and sanitary extending from structures shall be laid with a pipe laser to elevation and slope as shown on the plans.

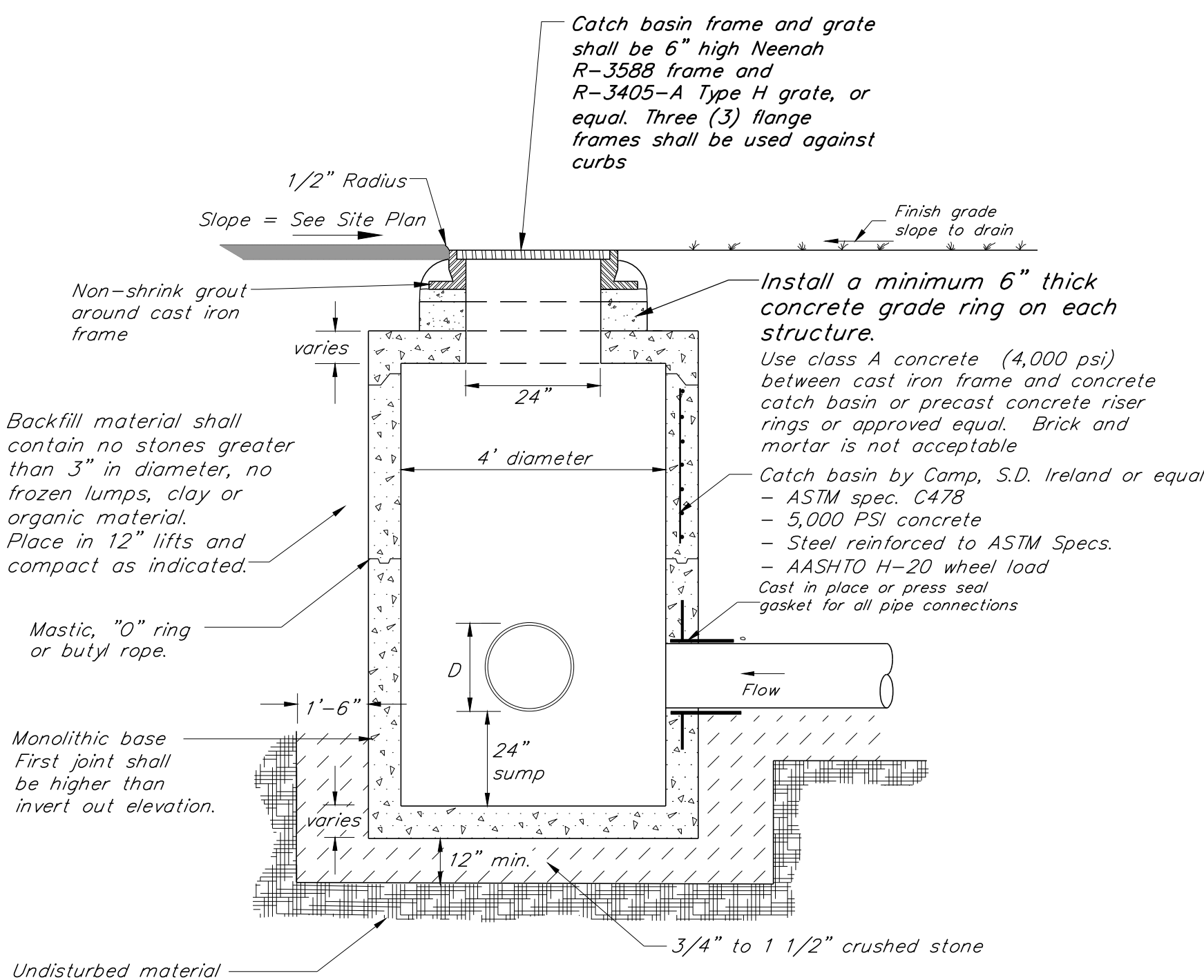


Typical Storm Trench Detail

N.T.S.



Stone Drip Edge Detail



Typical Catch Basin Detail

N.T.S.



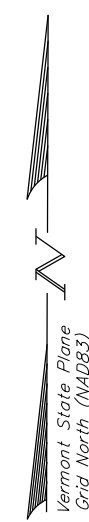
The
UNIVERSITY
of VERMONT
UVM

University of Vermont

Physical Plant Department
284 EAST AVENUE
BURLINGTON, VERMONT 05405
Project Manager: Adam Frazier

CIVIL ENGINEER

KREBS & LANSING
CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com



Project:

Physical Plant
Compound Parking

Project No. 22309
Scale N.T.S.
Drawn by DMR
Checked by
Date 11/08/2023

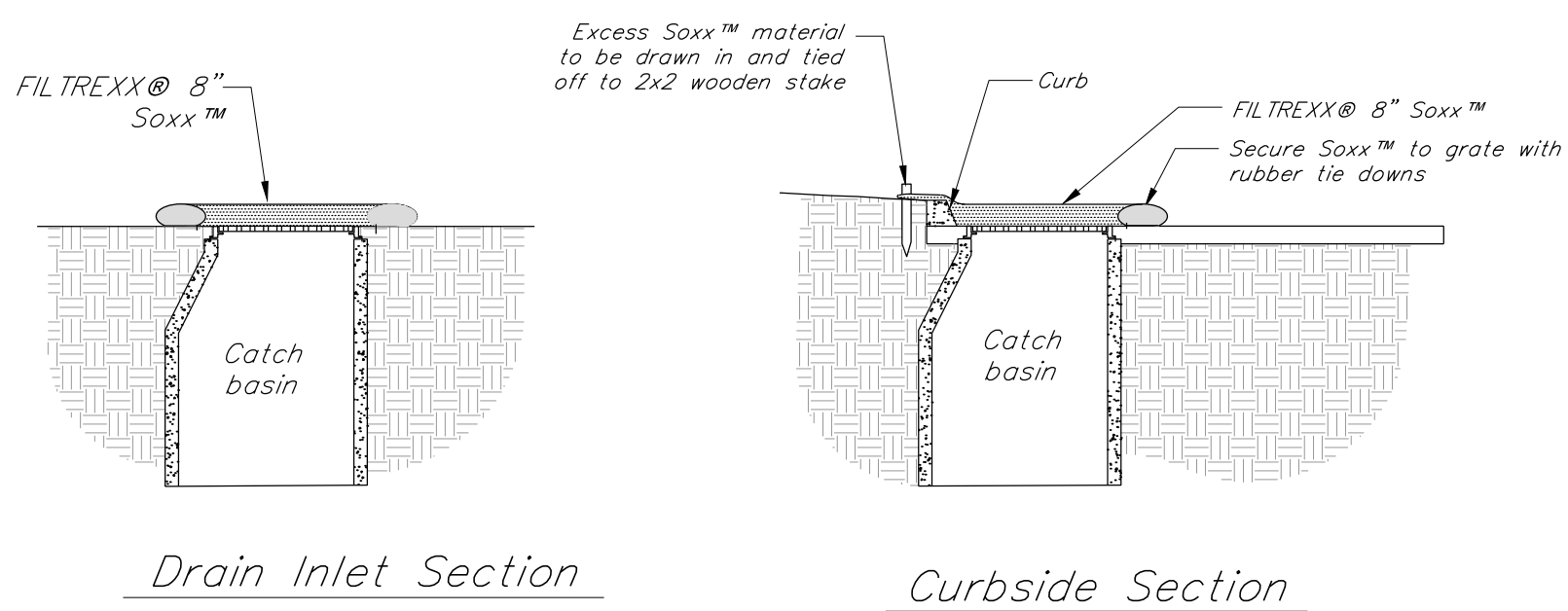
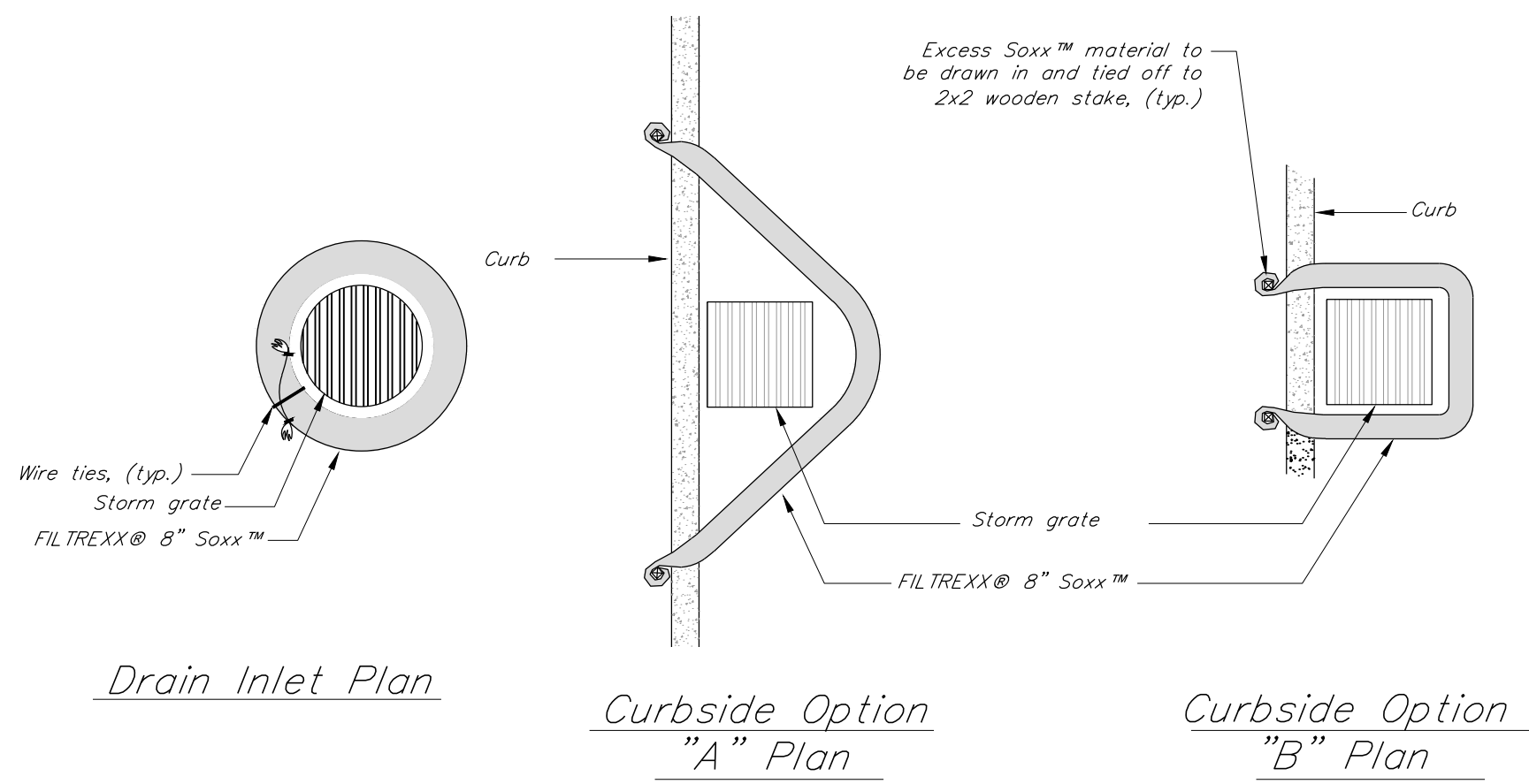
Revisions
No. Date

Drawing Title
Civil Details

Drawing No.

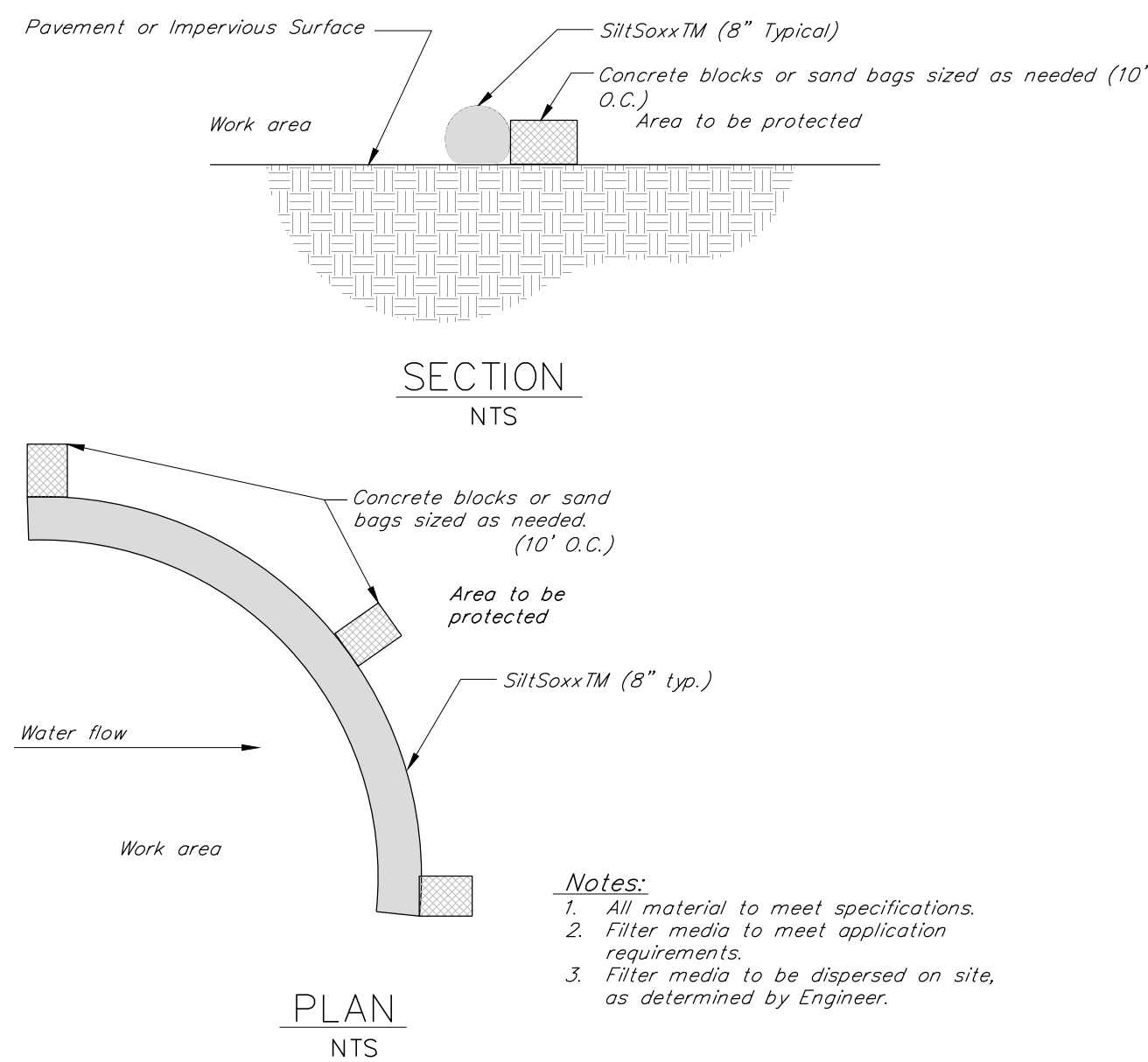
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22309\DWG\UVM Compound Parking Details.dwg



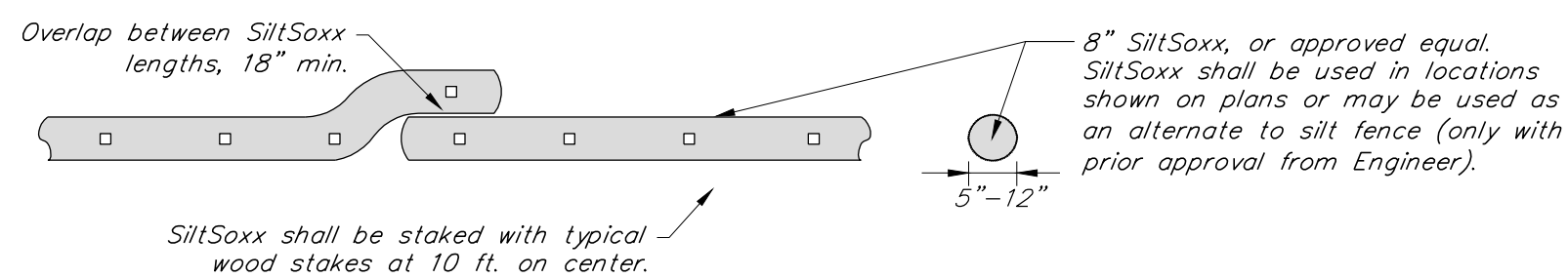
- NOTES:
1. All material to meet FILTREXX® specifications.
 2. Filter Media™ fill to meet application requirements.
 3. Compost material to be dispersed on site, as determined by engineer.

FILTREXX SiltSoxx Inlet Protection



Installation on Pavement

1. Contractor shall be responsible for the installation, maintenance, and removal of SiltSoxx in all locations shown on the plans. SiltSoxx may be left in place if the contractor seeds and mulches over SiltSoxx for growth post construction.
2. Maintenance shall be performed as needed and additional SiltSoxx will be added when sediment reaches half of product height.
3. When installing lengths of SiltSoxx, lengths will overlap by minimum 18" when transitioning to a new length of SiltSoxx.
4. Contractor shall refer to all manufacturers specifications and details.
5. SiltSoxx is a product from a specific manufacturer (Filtrex), other manufacturers with equal products may be used if approved by Engineer.



N.T.S.

Soil and Seeding Notes

Refer to Post Construction Soil Restoration Plan for additional requirements

1. Topsoil shall have a minimum 4" depth unless additional depth is specified on the Civil or Landscape plans. Topsoil shall be natural, fertile, friable soil representative of local productive soil and free of clay lumps, stones, subsoil or other foreign matter larger than 1/2 inch diameter, not frozen or muddy. Acidity pH shall range from 5.5 to 7 and shall contain 4% organic material as a minimum. Samples of topsoil are to be given to UVM Physical Plant's Ground Manager for inspection before approval. All testing costs will be paid by Contractor.
2. The Contractor shall have a soil analysis performed on the topsoil (UVM soil testing lab 656-3030). The results of soil analysis shall be provided to the UVM Physical Plant Grounds Manager for approval. The soil analysis must state:
 - a. Percentages of organic matter, inorganic matter (silt, clay, and sand), deleterious materials, and pH levels.
 - b. Sieve analysis and mineral and plant nutrient content of topsoil.
 - c. Test for herbicide contamination and provide report certifying that no herbicides are present.
 - d. State quantities of nitrogen, phosphorous, and potash nutrients and any limestone, aluminum sulfate, or other soil amendments to be added to produce satisfactory topsoil.
 - e. Topsoil shall meet the following gradation:

Sieve Sizes:	Percentage Passing:
1 inch	100%
1/2 inch	95-100%
No. 4	75-100%
No. 10	60-100%
No. 200	10-60%

3. Commercial fertilizer shall be a complete plant food containing nitrogen (50% organic) phosphoric acid and potash. Soil tests will indicate composition required. Only phosphorus free fertilizers shall be used unless a soil test identifies that phosphorus is warranted for optimum vegetative growth.
4. **Hydro seeding and tocifier is the required practice for turf establishment.** Specifications are:

Seed: Green Mountain Special Mix (6 lbs/1,000 s.f.) or UVM #1 mix using 6 lbs per 1,000 square feet.
 40% Creeping Red Fescue 71.46% Min. Futura 3000 PER RYE GRASS
 30% Perennial Rye Grass 14.81% Min. Dynasty TALL FESCUE
 30% Kentucky Blue Grass 9.74% Min. CREEPING RED FESCUE
 2.32% Max. CROP
 1.61% Max. INERT
 0.06% Max. WEED

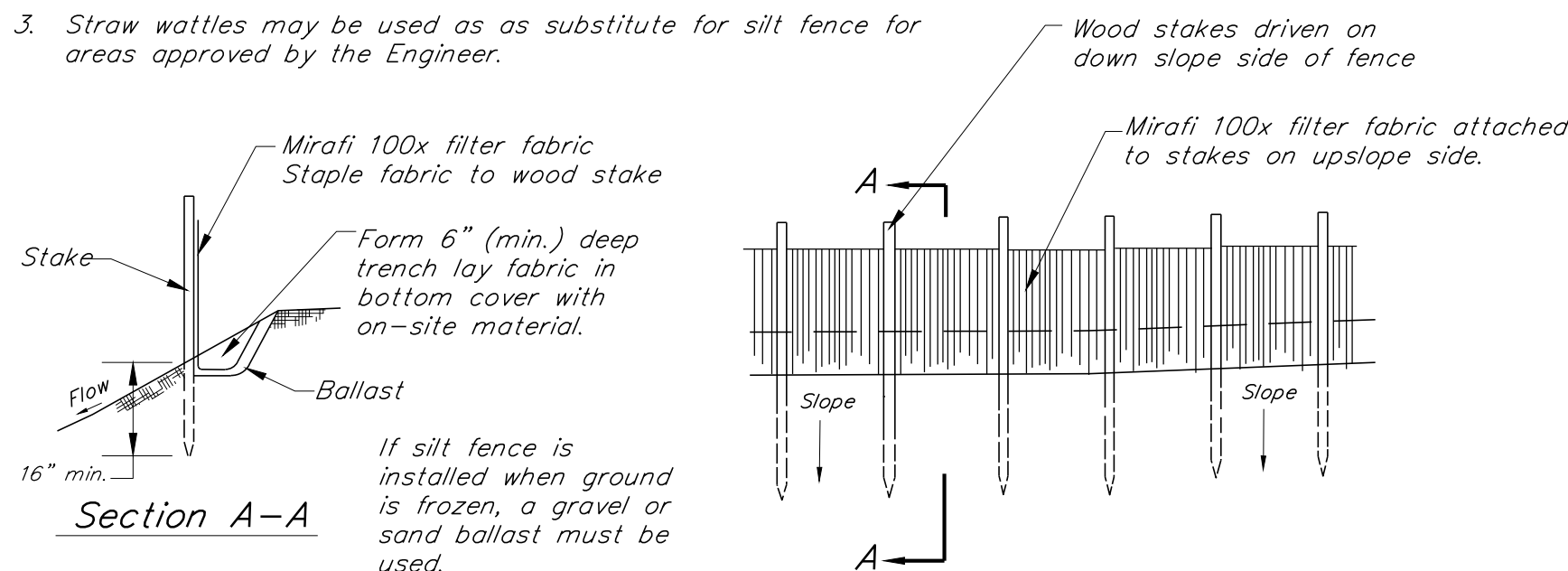
Hydroseed Additives:
 Starter Fertilizer: Use a starter fertilizer with a 1-2-1* ratio 75 lbs per 1,000 gallons of water.
 (*Refer to phosphorus note above)
 Lime: 100 lbs. per 1,000 gallons of water
 Mulch: 300 lbs. per 1,000 gallons of water.
 Tocifer: 5 lbs. per 1,000 gallons of water.

5. Manufacturer's tag shall be given to Physical Plant's Ground Manager prior to seeding for approval.
6. Areas having soil compaction as a result of construction shall be ~~rate~~-tilled prior to seeding.
7. If hand seeding, only straw mulch is to be used and secured by netting either organic or inorganic. If inorganic is used, it must be removed before the first mowing.
8. Starter fertilizer shall be applied at the manufacturer's suggested rate at the time of seeding. Only phosphorus free fertilizers shall be used unless a soil test identifies that phosphorus is warranted for optimum vegetative growth. Fertilizer application will not be allowed in sensitive areas and adjacent to drainage ways as determined by the Engineer.
9. Watering is to be done by the Contractor and is to last for the duration of the warranty period to maintain proper growth. UVM will supply the water, but all apparatus necessary to apply the water must be furnished by the Contractor (i.e. hoses, sprinklers, etc.).
10. Staking of all topsoiled areas to control foot traffic will be required. Unless otherwise specified, acceptable staking materials will be grade stakes and twine or string with flagging attached for visibility.
11. A guarantee through the first mowing is required with any sparse or bare areas larger than 1 sq. ft. to be redone.
12. The Contractor is responsible for the first mowing. After the first mowing and prior to the University taking responsibility for the lawn areas the Contractor and the Grounds Manager shall meet to inspect the vegetation establishment.
13. Contractor is responsible for all topsoil to complete the project as shown. If existing volume of topsoil is inadequate, the Contractor, at no cost to the Owner, shall purchase offsite approved topsoil as necessary.

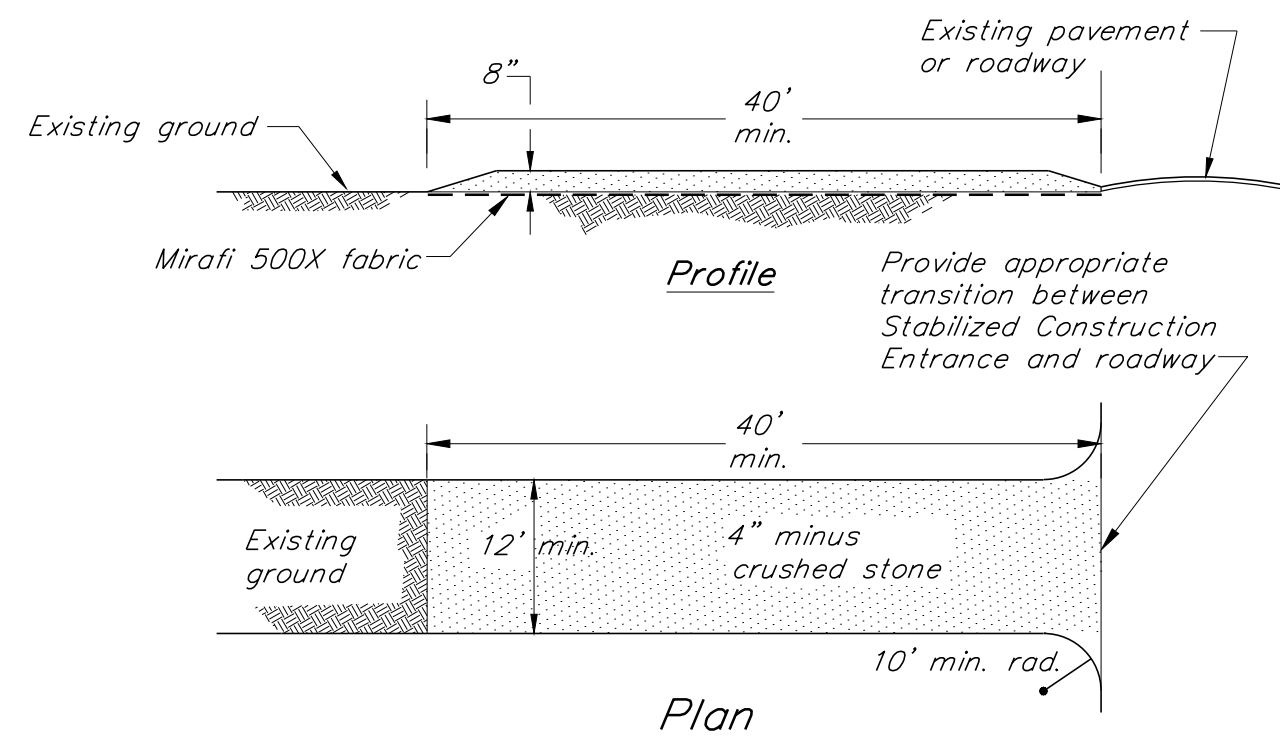
Notes

1. Contractor shall be responsible for the installation, maintenance, and removal of silt fence in all locations shown on the plans.
2. Maintenance shall be performed as needed and material removed when sediment reaches half of fabric height. Remove silt fence after successful establishment of vegetation.
3. Straw wattles may be used as substitute for silt fence for areas approved by the Engineer.

Silt fence spacing chart	
Slope	silt fence spacing
5% to 10%	50 ft. or less
10% to 20%	25 ft. or less
> 20%	15 ft. or less



N.T.S.



Note:

- Contractor shall be responsible for the installation, maintenance, and removal of a stabilized construction entrance at each construction entrance for the project. The Construction Stabilized Entrance and its continued maintenance shall be a minimum measure to prevent tracking of sediment off-site.
- Contractor to use Mirafi 500x under stone for temporary construction roads.
- Stabilized construction entrances shall be repaired when voids are 80% filled with sediment. Repair shall include adding additional 4" minus crushed stone and/or removal of contaminated stone.

THIS DETAIL TO BE USED FOR ALL TEMPORARY STONE STABILIZATION AREAS IDENTIFIED ON THE PLANS

Temporary Stabilized Construction Entrance & Staging Areas

N.T.S.

Construction Stakeout Notes

The Contractor shall be responsible for all construction stakeout for the project. The Engineer shall provide the Contractor an AutoCAD R2000 drawing of the site design. The drawing will include horizontal and vertical survey control. Additional survey control will be the responsibility of the Contractor.

1. The Contractor shall be responsible for using proper survey equipment and having properly trained personnel to use this information. Any Contractor that does not have proper equipment or personnel shall subcontract the work to a competent consultant.
2. The horizontal control datum may be based on a coordinate system that is unique for this project. Project north may not refer to astronomic or magnetic north.
3. The Contractor shall check the integrity of survey control points by occupying a control point checking distance to back sight and checking distance and angle to another control point prior to any construction stakeout. The contractor shall not proceed with stakeout if either measured distances or angles do not match calculated values.
4. Graphical images of infrastructure in the AutoCAD drawing may not be in an accurate representation of its size. It is the Contractor's responsibility to verify size and shape of all items to be staked out.
5. After completion of radial stakeout with the survey transit, the Contractor shall check each stakeout point as necessary to verify the horizontal and vertical position of the point and that it is correct in relationship to the rest of the project.
6. The Contractor shall complete all construction stakeout to an accuracy of 0.1 feet (excluding building stakeout).

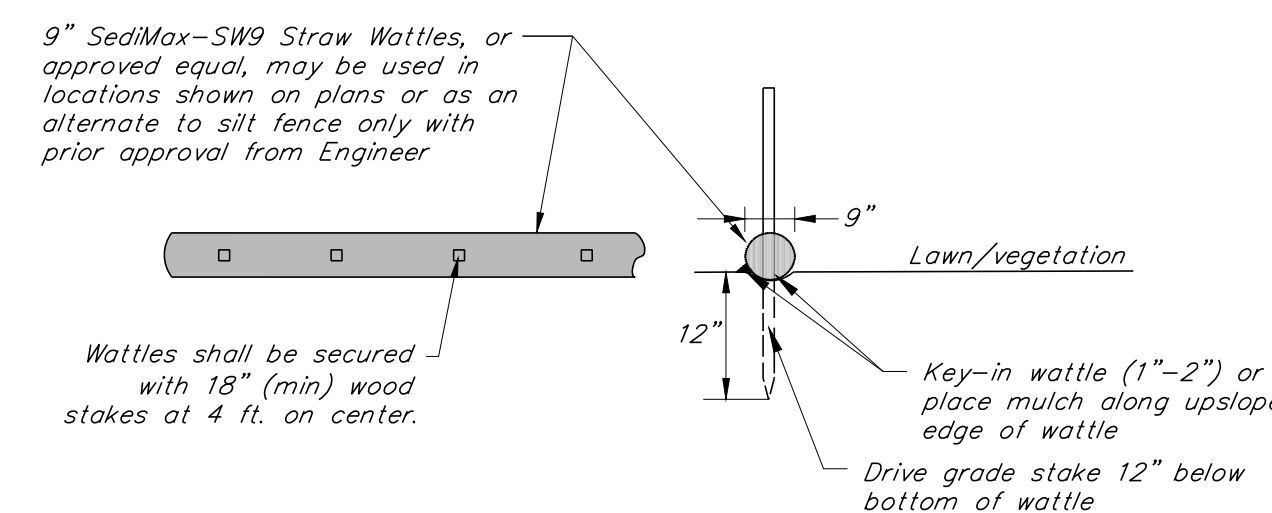
Construction Limit Barriers

- Temporary chain-linked construction fence may be used to delineate construction limits where practical or where directed in the Contract Documents.
- Orange construction fence or snow fence shall be used to demarcate short-term construction activities.
- 3" thick orange polyester mesh webbing may be used to demarcate construction disturbance limits that are not proximate to environmentally sensitive areas (wetlands, RTE plants, etc.)

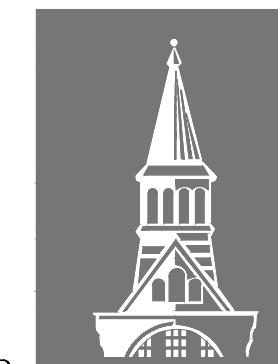
NOTES:

1. Contractor shall be responsible for the installation, maintenance, and removal of straw wattles in all locations shown on the plans.
2. Maintenance shall be performed as needed and material removed when sediment reaches half of product height. Remove wattle after successful establishment of vegetation.

Wattle spacing chart	
Slope Gradient (H:V)	Wattle spacing
< 6:1	50 ft. or less
4:1 - 6:1	35 ft. or less
> 4:1 - 2:1	20 ft. or less
> 2:1 - 1:1	10 ft. or less
> 1:1	5 ft. or less



N.T.S.



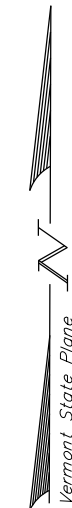
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Project:

**Physical Plant
Compound Parking**

Project No. 22309

Scale N.T.S.

Drawn by DMR

Checked by

Date 11/08/2023

Revisions

No.	Date

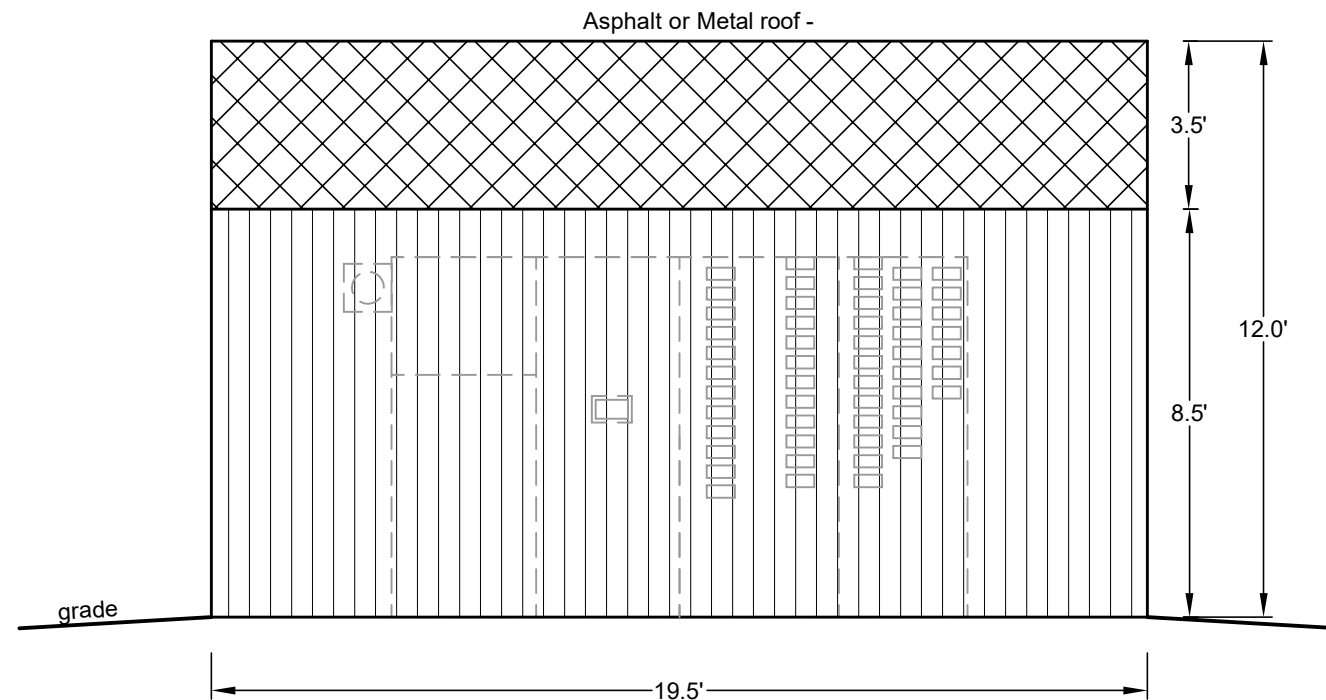
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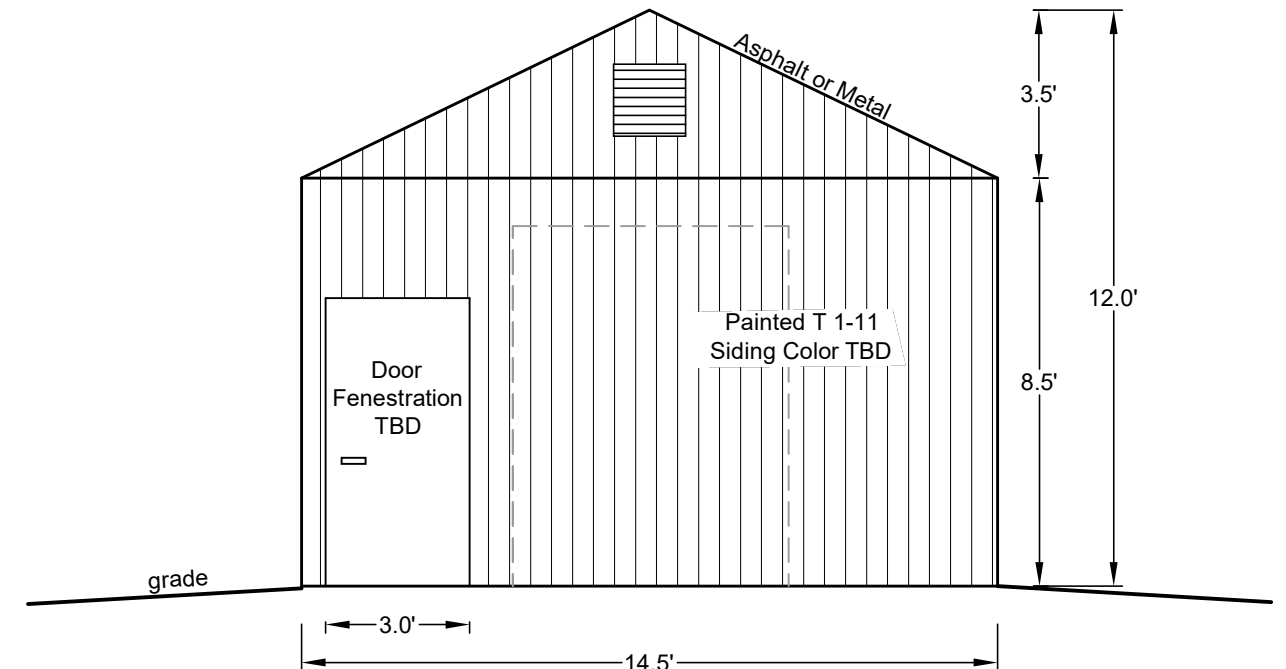
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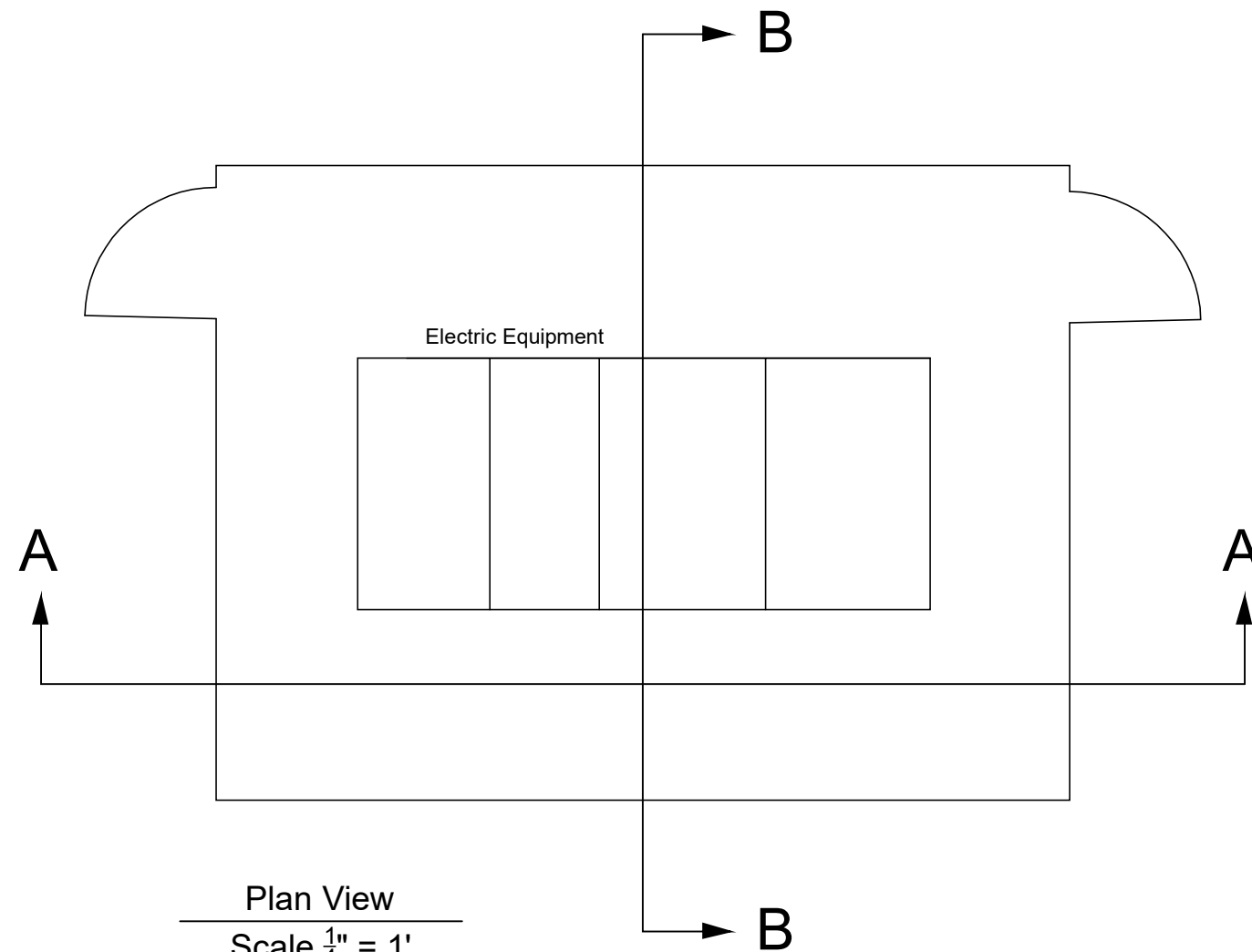




Section A-A
Scale $\frac{1}{4}" = 1'$



Section B-B
Scale $\frac{1}{4}" = 1'$



Plan View
Scale $\frac{1}{4}" = 1'$

Compound Parking Supplemental Shed Sketch

Owner: University of Vermont
Address: 0 University Road

Date 12-15-2023
Scale: As Noted



The University of Vermont
DEPARTMENT of PLANNING, DESIGN
and CONSTRUCTION

November 15, 2023

To:

Zoning Division, City of Burlington Department of Permitting & Inspections
645A Pine Street
PO Box 849
Burlington VT 05402-0849

Re: UVM Zoning Permit Application for Centennial Compound Parking Lot on University Road

Dear Zoning Division,

The University of Vermont (UVM) is proposing to improve and expand the existing Physical Plant Centennial Compound Lot and create an additional 10 space row of parking at the Centennial Complex portion of campus. The Centennial Compound Parking Lot is located on the eastern side of Main Campus on the north side of University Road and west of the Centennial Baseball Field. The site of the 10-space parking row is south of University Road near the end of a gravel drive that is primarily used by the UVM Physical Plant Department and the two electric companies that access the nearby power sub-station. The project scope will include formalizing and converting the gravel parking area to a paved lot through grading, installation of an infiltration chamber treatment system, and full subbase replacement. The improved parking area will be designed with infrastructure for electric vehicle charging. Also, within the project's scope is a small expansion of University Road aimed at improving pedestrian safety.

The existing gravel lot currently provides parking for fleet vehicles and storage of maintenance equipment for the Physical Plant Department. The lot currently has an informal capacity of approximately 80 spaces, and the new paved lot will be designed for 108 spaces. The 10-space parking row on the south side of University Road will be formalized for continued Physical Plant Department use as the location is in close proximity to the grounds department operations. The parking lot and 10-space parking row will be accessed by the existing University Road.

This parking lot improvement is included in the city approved 2023-2028 Joint Institutional Parking Management Plan (JIPMP). The current 80 spaces have been included in the previous JIPMPs as part of UVM's existing inventory.

Honeylocust trees will be planted in the parking islands and around the south edge of the parking lot. This tree was chosen because it is exceptionally salt tolerant, it can grow quickly yet has a strong branch structure that would be advisable if the trees tower over parked cars, and it

tolerates wet areas. Eastern white pine trees will be planted along the northern edge of the parking lot. The project will also be preserving an existing mature cedar hedge (total 27 trees).

The overall site is gently sloping from west to east. The project is located in the watershed that drains to the North Campus Stormwater Treatment Facility. Soil testing confirmed that the soil could support a Tier 1 practice, which is a higher tier treatment practice, so an infiltration chamber system was designed under the footprint of the proposed Centennial Compound Parking Lot.

We understand that the University is subject to limited municipal review, as per state statute 24 VSA 4413:

§ 4413. Limitations on municipal bylaws

(a)(1) The following uses may be regulated only with respect to location, size, height, building bulk, yards, courts, setbacks, density of buildings, off-street parking, loading facilities, traffic, noise, lighting, landscaping, and screening requirements, and only to the extent that regulations do not have the effect of interfering with the intended functional use.

Lot coverage: The new parking lot and road expansion, I-Centennial Sports parcel, will have a change in lot coverage from 34.82% to 34.39%. Several of the hard-packed dirt areas surrounding and in the parking lot will be re-vegetated or will add vegetated islands. The small strip that is the RL-Centennial Sports parcel increases from 82.93% to 89.38%.

The estimated construction cost is \$800,000.

Thank you for reviewing this project. Please let us know if there is any further information needed.

Sincerely,

Claire Forbes, AICP

Claire Forbes, AICP
Associate Planner
University of Vermont
Department of Planning, Design & Construction

cc:

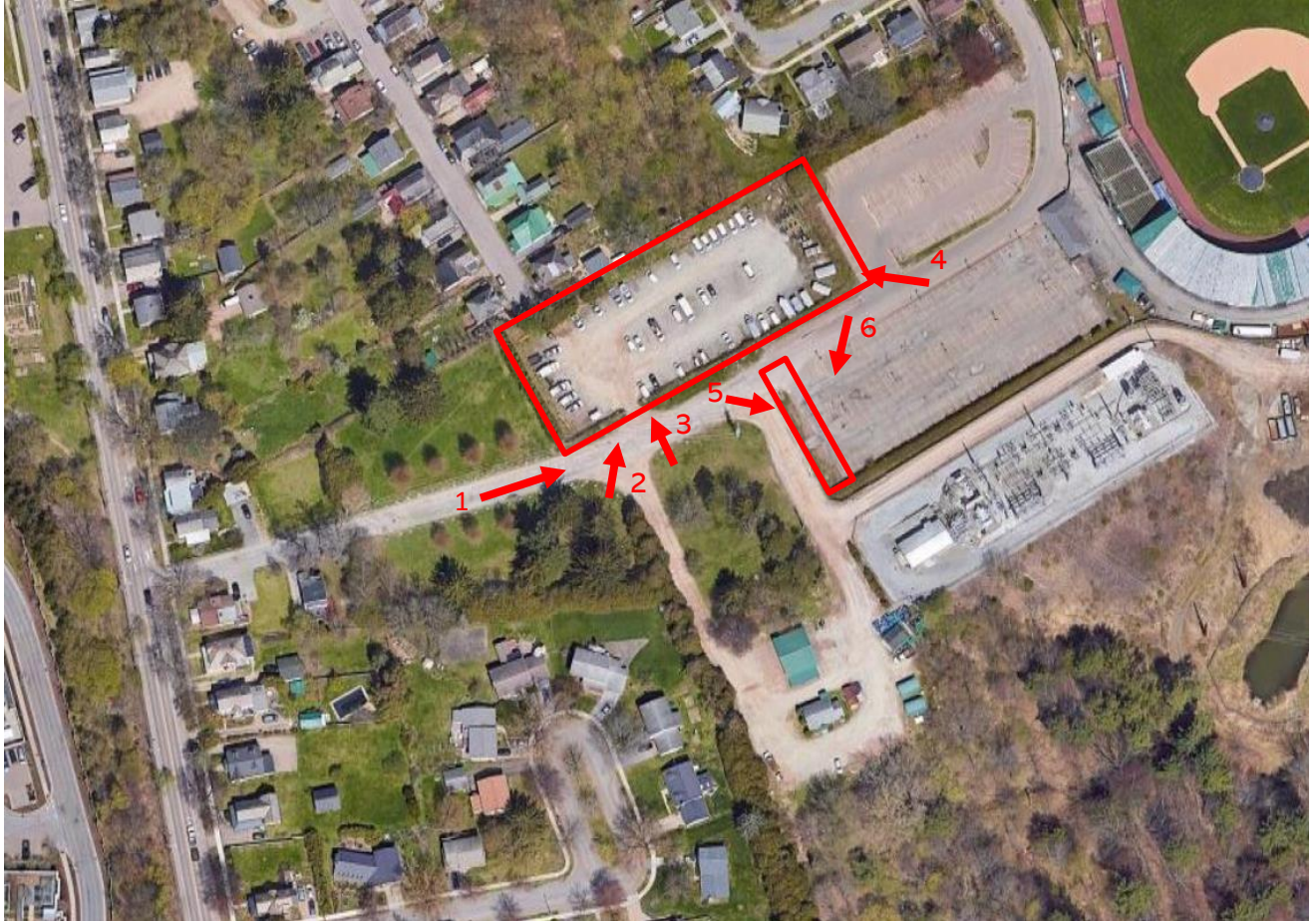
Lisa Kingsbury, Associate Director of Planning, Planning, Design & Construction
Adam Frazier, Project Coordinator, Planning, Design & Construction

campus parking space, and this remote parking lot is not needed. UVM intends to apply to amend the permit requirement for this lot and remove this lot from campus inventory. UVM will continue quarterly campus wide lot counts at peak times, to ensure ongoing management of parking spaces. Other projects will include future student housing, potentially increasing the number of residential beds by approximately 600-1200 beds, located at Trinity or elsewhere on campus as noted in Table 11 and footnote 3. It is anticipated that the full list of identified projects will have a limited impact on the gross square footage of building area on campus but will result in a net gain of approximately 628 parking spaces. See Table 11 for preliminary estimates on building area changes and estimated completion dates for these projects.

Table 11 UVM Campus Building Program Data (completed and future)

Project Name	Included in Previous JIPMP	Change in Building Area (gsf)	Associated Change in Parking (spaces)	Estimated Completion
Music Building Recital Hall Addition	Yes	3,942	3	Completed
Jeffords East Lower Lot	Yes		67	
University Heights Road (Southwick)	Yes		5	
Pomeroy Barn & 172 South Prospect Buildings	Yes	-6,067	-3	
New Research Facility for COM (Firestone)	Yes	75,000	-121	
Bioresearch Complex Parking	Yes		153	2023
Hills	No	6,408	1	
Centennial Compound	No		40	
ADA Code Compliance	Yes		-20	2024
284 East Avenue	No		30	
Waterman	No	3,000	-10	
Votey Lot	Yes		-10	
Future Student Housing ³	No	100,000	0	2025
Future Additional Parking to Accommodate New Housing	No		200	
Colchester Research Facility Lot 1 Parking ²	Yes		200	
University Road (East Ave to Compound)	Yes		15	
Interfaith Center Parking Lot	Yes		30	
Future Student Housing ³	No	150,000-500,000	-25	2026
Future Additional Parking to Accommodate New Housing	No		200	
Villa	No	12,618	-7	
Future Compound Expansion	No		66	
Virtue Field Phase 3	Yes	5,000	0	2027
Blundell Parking	Yes		5	
Tarrant (Multi-Purpose) Event Center Building	Yes	119,099	0	

Existing Site Photographs



1. Entering parking lot area looking east



2. Looking northeast at current compound parking lot



3. Looking north into current compound parking lot



4. Looking northwest at eastern edge of compound parking lot



5. Looking southeast towards area proposing 10 parking spaces



6. Looking southwest towards area proposing 10 parking spaces



Department of Permitting and Inspections

Zoning Division

645 Pine Street

Burlington, VT 05401

<https://www.burlingtonvt.gov/DPI/Zoning-Permits>

Telephone: (802) 865-7188

(802) 865-7195 (FAX)

William Ward, Director
Theodore Miles, Code Compliance Officer
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Garret King, Associate Planner
Joseph Cava, Planning Technician
Ted Boylan, Permit Administrator



MEMORANDUM

To: Development Review Board

From: Mary O'Neil, AICP, Principal Planner

Date: December 19, 2023

RE: ZP-23-536 52 Institute Road (BHS)

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.

File: ZP-23-536

Location: 52 Institute Road (BHS)

Zone: I (ICC-BHS) **Ward:** 4

Parking District: MMMU

Date application accepted: November 20, 2023

Applicant/ Owner: Joe Weith, White & Burke / Burlington School District

Request: Amend ZP-23-276/ZP-22-546 to reflect site changes required by Vermont's Department for Environmental Conservation (DEC) for Corrective Action Plan (CAP). Revision includes removal in remaining areas of contaminated soil outside of the LOD (limit of disturbance) area. Following tree removal the area will be capped with 18 inches of imported clean fill that can support vegetation growth. The placement of clean soil will cover the undulating bedrock surface and make the hillside area accessible to pedestrians and students. The City of Burlington Parks Department will plant native species to provide bank stabilization, shade and replacement of the trees removed from the area.

Background:

- **Zoning Permit ZP-23-276;** Amendment to ZP-22-546 for reconstruction of the Burlington High School and Technical Center. July 2023.
- **Zoning Permit ZP-22-546;** demolish and remediate existing high school and construct new 250,000 square foot high school/technical center. November, 2022.
- **Zoning Sketch Plan Review ZSP-22-7,** Sketch Plan Review, demolish and rebuild high school/technical center. September 2022.
- **Zoning Permit 21-0583CA;** Expansion and renovation of Burlington High School and Burlington Technical Center. Request for a parking waiver and a five year project timeline. February, 2021.
- **Zoning Review 20-0194SP;** Sketch Plan review for renovations to BHS. September 1, 2020.
- **Zoning Permit 15-0982CA;** addition of storage shed. April 2015.

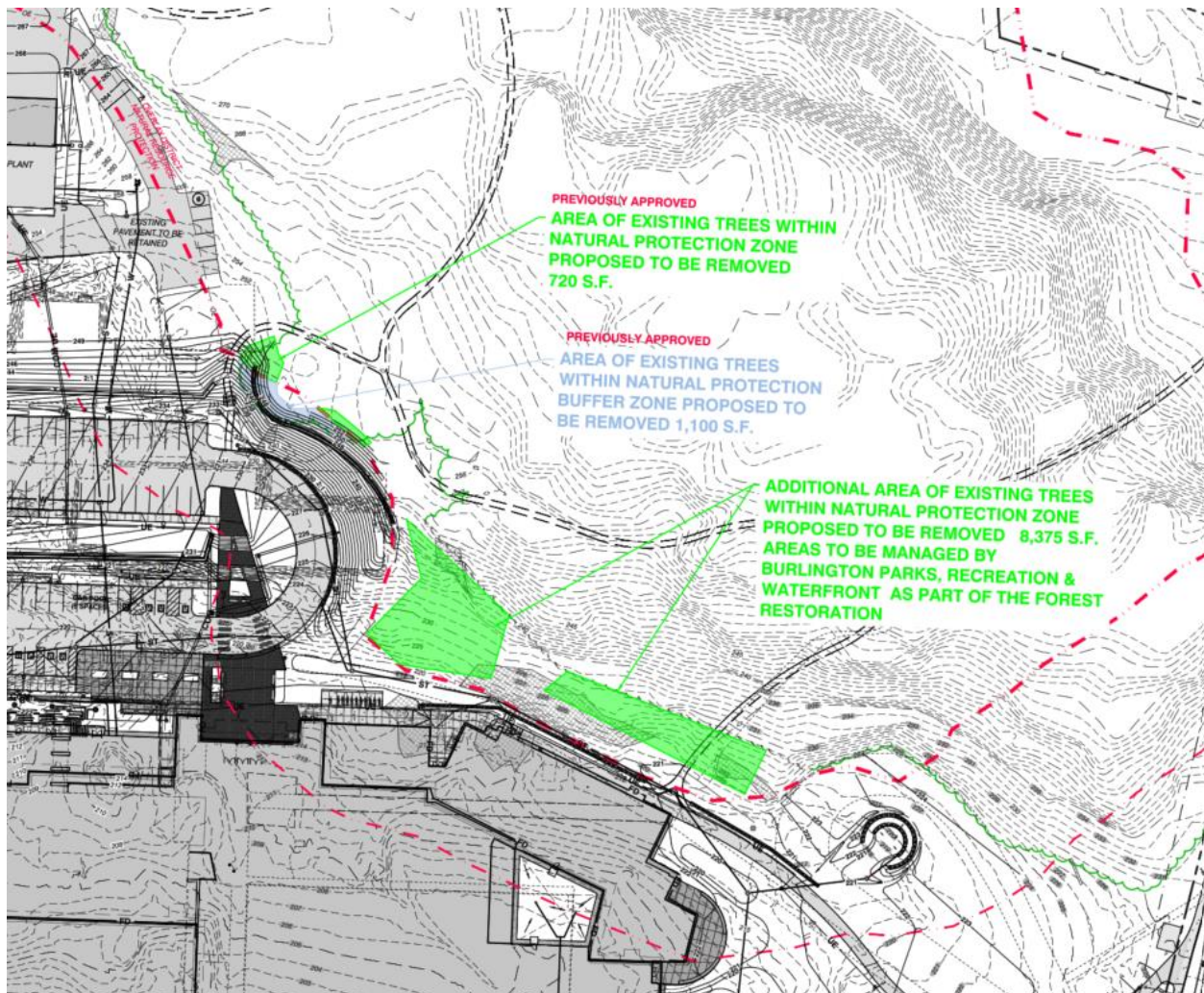
The programs and services of the City of Burlington are accessible to people with disabilities. For accessibility information call 865-7188 (for TTY users 865-7142).

- **Zoning Permit 13-0291CA**; installation of rooftop condensing units on Buildings A and B. June 2013.
- **Zoning Permit 13-1037CA**; replace existing HVAC system with new heat pump system and condenser on roof of Building A. May 2013.
- **Zoning Permit 13-0053CA**; install new shed in north east portion of property. July 2012.
- **Non-Applicability of Zoning Permit Requirements 12-0558NA**; installation of photovoltaic system, Certificate of Public Good. November 2011.
- **Zoning Permit 11-1123CA**; install condensing unit on the side of F building at BHS. July 2011.
- **Zoning Permit 10-0850CA**; two new Energy Recovery Units on roof of A Building at Burlington High School. June 2010.
- **Zoning Permit 09-616CA**; Renovations to existing press box including new membrane roof covering, roof access hatch, ladder, and safety rail. March 2009.
- **Zoning Permit 09-321SN**; Electronic sign to be added to previously approved sign. October 2008.
- **Zoning Permit 09-241CA**; Relocate solar array from building side to flat roof of building with new rack mounting structure. September 2008.
- **Zoning Permit 09-137SN**; freestanding sign for Burlington High School. August 2008.
- **Zoning Permit 08-549SN**; one freestanding, internally lit, metal sign for Burlington High School. Application **denied**, February 2008.
- **Zoning Permit 06-457CA**; construction of 3,200 square foot building to house wood chip boiler system for existing high school. March 2006.
- **Zoning Permit 06-452CA**; redevelopment of high school athletic fields, parking, new service and entrance buildings and new sewage pump station. February 2006.
- **Zoning Permit 05-305CCA**; amended plan for building-mounted solar panels at BHS. Reduction from six panels to four. Child of permit 05-058CA. November 2004.
- **Zoning Permit 05-058CA**; Install 6 solar panels attaching to a pole located approximately 35 ft. off the SE corner of building A. July 2004.
- **Zoning Permit 04-723CA**; remove old green house. Enclose with walls, new roof and windows. July 2004.
- **Zoning Permit 00-028**; Installation of two metal halide flood lights on existing poles to illuminate the existing press box for the high school athletic field. July 1999.
- **Zoning Permit 99-186**; Amend previously approved bleacher system at the Burlington High School track to include a press box. October 1998.

- **Zoning Permit 98-305;** Replace existing steel and wood bleachers with new on the east and west sides of the Burlington High School track. Proposal includes installation of a slab on the east side (Portable units on the west). January 1998.
- **Zoning Permit 98-074;** Installation of a handicapped access ramp on the front of the existing Burlington high school. Materials to be painted metal (Dark green and concrete). August 1997.
- **Zoning Permit 97-033;** Add nonilluminated message board section under the existing freestanding sign for Burlington High School. Location on North Avenue and height and overall size to remain the same. July 1996.
- **Zoning Permit 87-678 / COA 87-215;** building three bay one-story garage for storage of aircraft parts for school program. January 1988.
- **Zoning Permit 87-320;** change an existing window on west side to exterior door to provide egress to new classroom. June 1987.
- **Zoning Permit 82-435;** construct bus shelter on the site of a removed bus shelter. September 1982.

Overview: Soil testing in a specific area on the edge of the Arms Forest found levels of PAH above the states acceptable levels, leading the state to require mitigation of the soils in this area. This work will require adding 18 inches of soil to cover these areas to satisfy the state's required remediation. The area in question extends upslope just beyond the marked limits of disturbance for the project. In addition, construction of storm water infrastructure coupled with excavation and movement of heavy equipment threatens the health of existing trees. Therefore the group, with representatives from the City's Parks planning team, the Conservation division, a representative from the state, and the construction team determined that the best course of action would be to remove the existing trees within the marked area to facilitate the required soil remediation and excavation work.

There is no additional development planned within this area.



The work will require the removal of about a dozen 6- 18 inch diameter trees that are currently within the LOD as well as a grouping of medium sized 5-16 inch diameter trees that are currently at the westernmost edge of the designated area. In this area, there are some medium sized native sugar maples and hackberry as well as a small stand of buckthorne which is designated as an invasive species. The construction team has agreed that once the work is completed and the area has been covered with 18 inches of new soil, that they will provide some funding to support the replanting of the area with a variety of native tree and shrub species to re-establish vegetation along this edge of the property. The replanting will be coordinated with the Conservation division of the city's Parks and Recreation Department.

The Conservation Board reviewed the application at its December 4, 2023 meeting and voted unanimously to recommend approval, subject to the following condition:

1. Prior to re-planting, a planting and management plan, developed by Parks & Recreation, is subject to review and approval by the Conservation Board.

The project development is subject to limited municipal review per **VSA §4413**:

Limitations on municipal bylaws

(a) *The following uses may be regulated only with respect to **location, size, height, building bulk, yards, courts, setbacks, density of buildings, off-street parking, loading facilities, traffic, noise, lighting, landscaping, and screening requirements**, and only to the extent that regulations do not have the effect of interfering with the intended functional use:*

(1) ***State or community owned and operated institutions and facilities.***

(2) ***Public and private schools and other educational institutions certified by the state department of education.***

Recommended motion: Certificate of Appropriateness Consent Approval, per the following Findings and Conditions:

I. Findings

Article 5: Citywide General Regulations

Section 5.2.4 Buildable Area Calculation



(a) *For any properties two (2) or more acres in size within any RCO, WRM, RM, WRL, or RL zoning district, the maximum building density or lot coverage shall be calculated using the buildable area only. With a change of zoning district to Institutional (ICC-BHS), this standard no longer applied. Not applicable.*

(b) **Steep Slopes Overlay District** (As adopted by City Council August 15, 2022)

This overlay district consists of all lands delineated in Map 5.2.4-1 – Steep Slopes Overlay District. This overlay district contains expanses of contiguous land with an average slope of 15% or greater over 50-foot intervals and adjacent lands within 50 feet of the top of slope.

The boundaries shown on the Steep Slopes Overlay Map may be supplemented or modified by examination of one or more of the following sources by the Development Review Board whenever an application is submitted for review.

- *Contour maps prepared from the most current orthophotography.*
- *On-site survey prepared by a registered professional engineer or surveyor.*

The Zoning Administrative Officer or Development Review Board shall determine whether or not the Steep Slope Overlay District has been shown accurately on the application plans. The applicant may be required to revise the steep slope boundaries shown on the application plans.



The burden of proving the correct boundary shall be on the applicant, supported by engineering and/or surveying data or mapping.

1. District Specific Regulations

A. The Steep Slope Overlay District shall be an overlay on all zoning districts. The regulations in the overlay are in addition to those regulations of the underlying zoning district.

B. These regulations apply to applications within the Overlay District that include 400 square feet or more of

earth disturbance.

C. Finished slopes of all cuts and fills shall not exceed 30%, unless the applicant can demonstrate that steeper slopes can be stabilized and maintained adequately to the satisfaction of the ZAO or DRB in consultation with the City Engineer.

D. Any fills placed on a steep slope shall be property stabilized and, when necessary, supported by retaining walls or other appropriate measures as approved by the ZAO or DRB in consultation with the City Engineer.

E. Finished grades shall be reasonably safe from slide, collapse, or similar failure as determined by the ZAO or DRB in consultation with the City Engineer.

2. Additional Application Requirements

A. A site plan prepared by a registered professional engineer or surveyor that accurately depicts the proposed development and related land disturbance relative to the Steep Slope Overlay District boundaries, with all pertinent information describing the proposal, and a topographical survey depicting existing and proposed contour lines at no greater than 2-foot intervals. The plan shall depict all proposed cut, fill, and grading.

B. A plan depicting the extent of proposed vegetation clearing.

3. Approval Condition

A. Prior to construction, the applicant shall provide a geotechnical analysis prepared and stamped by a professional geotechnical engineer that determines the suitability of the steep slope for development.

The BHS Campus includes areas identified on the Steep Slopes Overlay Map. Areas where the project potentially impacts existing slopes of 30% or more were depicted on Sheet WS2 Slope Analysis Proposed.

The applicant has provided a revised Steep Slopes treatment report (attached), with new text in italics.

From page 1 of their report:

This revision addresses the proposed inclusion of contaminated soil remediation work in the most southeasterly portions of the Arms Forest are. The work in this area is primarily adding 18” of clean soil cap over the existing conditions. All of this area except 1,200 SF has slopes less than 30%. The east end of the remediation area, rather than being filled, will have 2-feet of the contaminated native materials removed. The fill and cut areas are further discussed on page 3.

And from p. 3 of the report:

Area 5 – There is a very small section (1,200 SF) of the Arms Forest contaminated soils remediation site which have a slope of greater than 30%. This area was/is subject to blasting of the underlying bedrock for the placement of the Stormwater conveyance line. The end result will be comprised of blasted rock tallas covered with grubbings from the site. The grubbings will infill the surface void spaces to provide vegetative cover while the underlying rock provide slope stability up to a slope of 1.5 (horizontal):1 (vertical) (66%).

This revised report/plan has been shared with the City Engineer.

Affirmative finding as conditioned.

Section 5.4.9 Brownfield Remediation

Extensive testing of building materials and soils for hazardous materials has been conducted on the property. Hazardous materials have been detected on site including asbestos, lead, PCBs, and polyaromatic hydrocarbons (PAHs) in the soils that exceed EPA and VTDEC standards. BSD has been working closely with the Vermont Department of Environmental Conservation (“VTDEC”) and EPA. A Notice of Approved Corrective Action Plan (“CAP”) was received February 17, 2022, with an amended approval issued May 1, 2023.

Remediation of hazardous materials will consist of the following:

- Accessible asbestos containing materials (ACM) will be removed prior to demolition of the buildings.
- The interiors of Buildings A – G will be abated prior to demolition activities.
- There will likely be select remediation of PCB building materials on the exterior of the building including joint and door caulking.
- The entire buildings will be demolished and disposed of as PCB bulk product waste.
- **Soil remediation will include select soil excavation and disposal to satisfy VTDEC and EPA regulations.**

The abatement, remediation, and demolition will require the following regulatory agency permits and approvals to facilitate completion of the project:

- Site Investigation Report for hazardous building materials (PCBs) to be approved by VTDEC Sites Management Section (SMS).
- Site Investigation Report for soil materials to be approved by VTDEC SMS.
- Compliance with Vermont Department of Health lead and ACM regulations.
- Corrective Action Plan (CAP) for hazardous building materials (PCBs) and soil remediation to be approved by VTDEC SMS. This includes public notice and final decision.
- Corrective Action Construction Completion Report to be prepared for completed hazardous building materials (PCBs) and soil remediation.
- Performance based disposal of PCBs in accordance with the EPA 40 CFR section 761.61(b). This includes proper EPA notification and closure requirements.

As noted, the Corrective Action Plan is now mandating an 18" clean soil "cap" on an area at the edge of the Arms Forest, where no development is planned. Additionally, trees will be removed in that area, as it unlikely they will thrive after site excavation and the soil addition. This directive is from the State of Vermont DEC, and the development team and City Conservation/Parks representatives have agreed to a plan to mitigate the tree loss with new plantings. See Section 5.5.4, below.

Affirmative finding as conditioned.

Section 5.5.4 Tree Removal

The Natural Resources Report prepared by Gilman & Briggs Environmental dated 9/30/22 concluded that areas proposed for tree removal within the Natural Resources Protection Overlay District and associated buffer zone would not have significant effect on the forested community since the natural community lies upslope and further to the northern portion of the property. The Burlington Development Review Board approved the proposed areas of tree removal on 11/21/23 and 7/19/23.

The additional 8,375 square feet of tree removal area being proposed with this application lies further downslope from the previously approved tree removal areas. Since these new areas are further downslope, the proposed corrective action will not have significant effect on the forested community which is located further upslope to the northern portion of the property. The City Arborist also indicated that many of the trees in the area proposed for tree removal are invasive species and supports tree removal in these areas.

The Conservation Board reviewed the plan December 4, 2023, and unanimously recommended approval with a single condition: That prior to replanting, the planting and management plan is subject to review and approval by the Conservation Board. **Affirmative finding as conditioned.**

Section 5.5.3 Stormwater and Erosion Prevention

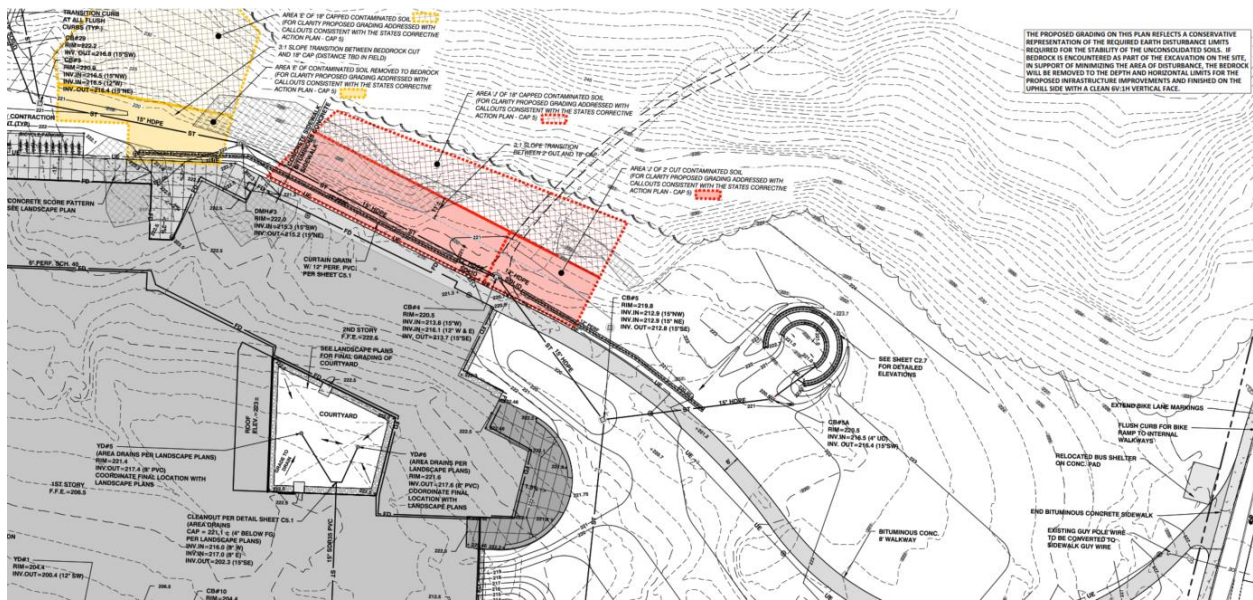
Written approval by Water Resources and the Stormwater Program remains a condition of the last two approved plans. Their review must now acknowledge the revised plan now proposed. The Stormwater Engineering team has been advised of this amendment, and invited to comment.

Affirmative finding as conditioned.

Section 5.5.4 Tree Removal

Potential impacts to the Natural Resources Protection Overlay District were earlier assessed by Gilman & Briggs Environmental. As indicated in their assessment memorandum dated 9.30.22, Gilman & Briggs concluded that, overall, the project will not have significant effect on the forested community. VT DEC is requiring a soil cap as part of the Correction Action Plan, which in concert with excavation and stormwater improvement threatens the health of additional trees. The development team, with state representation and the City Arborist have agreed to a plan for defined tree removal, with replacement and management by Burlington's Parks and Recreation Department to replant the newly covered area.

Affirmative finding as conditioned.



Article 6: Development Review Standards

Part 2: Site Plan Design Standards

Sec. 6.2.2 Review Standards

(a) Protection of Important Natural Features:

A study was commissioned of Gilman and Briggs Environmental Consultants; provided in an earlier Sketch Plan Review and updated for this application. This analysis included a list of identified plant and tree species, with mapping to indicate both rare and endangered species.

The ultimate examination of Gilman and Briggs resulted in a determination of no impact relative to the area of construction, a recommendation to limit tree clearing.

The City Arborist offered the following information relative to this revision:

Yesterday afternoon [Nov. 27, 2023] I met with Joe Weith of White and Burke at the Burlington High School construction site to review the proposed tree removal along the northern edge of the property adjacent to Arms Forest. This was my second visit to the site following a visit there

more than a month ago with representatives from the City's Parks planning team, our Conservation division, a representative from the state, and the construction team. Due to soil testing in this area that found levels of PAH above the states acceptable levels, the state is requiring mitigation of the soils in this area. This work will require adding 18 inches of soil to cover these areas to satisfy the state's required remediation. The area in question extends upslope just beyond the marked LOD for the project. In addition, blasting of ledge is required within the LOD along this perimeter to allow for the construction of storm water infrastructure. It was determined at the time of the initial site visit that the combination of blasting and excavation coupled with the addition of 18 inches of soil over the root systems of the trees within this area would likely result in the decline and death of the existing trees. Therefore the group determined that the best course of action would be to remove the existing trees within the marked area to facilitate the required soil remediation and excavation work. All members of the City team that were present have approved of this plan.

*The work will require the removal of about a dozen 6- 18 inch diameter trees that are currently within the LOD as well as a grouping of medium sized 5-16 inch diameter trees that are currently at the westernmost edge of the designated area. In this area, there are some medium sized native sugar maples and hackberry as well as a small stand of buckthorne which is designated as an invasive species. The construction team has agreed that once the work is completed and the area has been covered with 18 inches of new soil, that they will provide some funding to support the replanting of the area with a variety of native tree and shrub species to re-establish vegetation along this edge of the property. The replanting will be coordinated with the Conservation division of the city's Parks and Recreation Department. As I stated earlier, the city team members involved in the initial site visit and discussion of remediation options have all agreed on this course of action. **Affirmative finding as conditioned.***

(b) Topographical Alterations:

The addition of 18" of soil/loam will affect the overall finished grade. See BHS BTC Steep Slopes Report for engineer's revision to the last approved plan. **Affirmative finding.**

(f) Brownfield Sites:

Approval of a Corrective Action Plan ("CAP") was received February 17, 2023, with an amendment in May of 2023. This application is a result of conditions imposed by DEC as part of the CAP. All conditions and requirements of that plan remain in effect. **Affirmative finding as conditioned.**

II. Conditions of Approval

1. Any conditions imposed by ZP-22-546 or 23-276 not herein altered remain in effect.
2. Confirmation of approval of the revised plan shall be required from the Stormwater Engineer prior to release of the zoning permit.
3. Prior to re-planting, a planting and management plan, developed by Parks & Recreation, is subject to review and approval by the Conservation Board.
4. Standard Permit Conditions 1-15.

NOTE: These are staff comments only. The Development Review Board, who may approve, table, modify, or deny projects, makes decisions.



MEMORANDUM

To: Burlington Development Review Board
Mary O'Neil, Principal Planner
Scott Gustin, Principal Planner & Asst. Administrative Officer

From: Joe Weith, Senior Project Manager

Date: November 17, 2023

Re: BHS | BTC – Narrative for Amendment to ZP-23-276

This application is to amend ZP-23-276 (which amended ZP-22-546) for reconstruction of the Burlington High School/Burlington Technical Center (“BHS/BTC”) property at 52 Institute Road. This amendment involves additional tree removal and minor grading changes in an area of the Natural Resources Protection Overlay District (i.e., Arms Forest) which is required by the Vermont Department of Environmental Conservation (“VTDEC”) as part of the approved corrective action plan (“CAP”) for the project.

Soil Management Activities Required by VTDEC

VTDEC is requiring further soil management activities to be performed in accordance with the approved CAP for the BHS/BTC project. These activities are proposed in an area of the Natural Resources Protection Overlay District just beyond the project’s limit of disturbance. We are not proposing any development in this area, only the corrective actions being required by the VTDEC.

The proposed corrective action includes tree removal and capping the areas of known urban soils with 18 inches of imported clean soil that can support vegetation growth. A

more detailed description of the proposed corrective action and meetings with State and City officials is contained in the attached memo from Fuss & O'Neil dated 11/7/23.

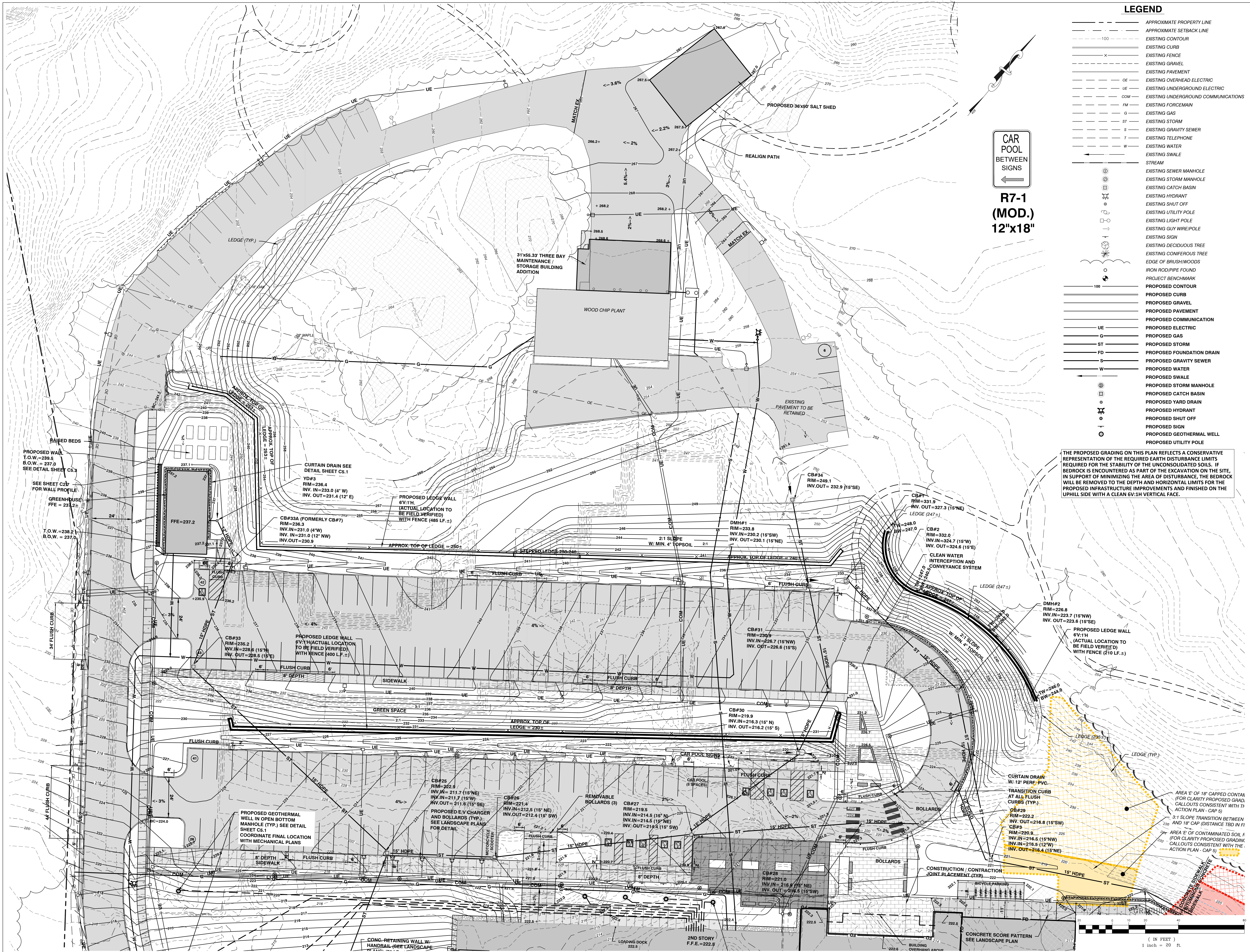
This amendment proposes an additional area of 8,375 square feet of tree removal in the Natural Resource Protection Overlay District (see attached plan WS2 Overlay District Natural Resource Protection). Detailed notes regarding grading changes in this area (e.g., cut and fill) are included on attached plans C2.3 and C2.5.

Natural Resources Impacts

The Natural Resources Report prepared by Gilman & Briggs Environmental dated 9/30/22 concluded that areas proposed for tree removal within the Natural Resources Protection Overlay District and associated buffer zone would not have significant effect on the forested community since the natural community lies upslope and further to the northern portion of the property. The Burlington Development Review Board approved the proposed areas of tree removal on 11/21/23 and 7/19/23. The additional 8,375 square feet of tree removal area being proposed with this application lies further downslope from the previously approved tree removal areas. Since these new areas are further downslope, the proposed corrective action will not have significant effect on the forested community which is located further upslope to the northern portion of the property. The City Arborist also indicated that many of the trees in the area proposed for tree removal are invasive species and supports tree removal in these areas.

Approval by VTDEC and Burlington Parks & Rec

This plan to remove trees and cap the area with 18" of clean soil has been approved by VTDEC and the City Arborist, City Land Steward and Parks Project Coordinator (see attached written email approvals). The Parks Department will plan native species to provide bank stabilization, shade and replacement of the trees removed from the area. Burlington School District has agreed to provide resources to the Burlington Parks Department including plant materials and staffing to assist in this effort.



LEGEND

- APPROXIMATE PROPERTY LINE
- APPROXIMATE SETBACK LINE
- EXISTING CONTOUR
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- EXISTING FENCE
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- EXISTING CATCH BASIN
- EXISTING HYDRANT
- EXISTING SHUT OFF
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE/POLE
- EXISTING SIGN
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EDGE OF BRUSH/WOODS
- IRON ROD/PIPE FOUND
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- PROPOSED YARD DRAIN
- PROPOSED HYDRANT
- PROPOSED SHUT OFF
- PROPOSED SIGN
- PROPOSED GEOTHERMAL WELL
- PROPOSED UTILITY POLE

CAR POOL
BETWEEN
SIGNS
R7-1
(MOD.)
12"x18"

THE PROPOSED GRADING ON THIS PLAN REFLECTS A CONSERVATIVE REPRESENTATION OF THE REQUIRED EARTH DISTURBANCE LIMITS REQUIRED FOR THE STABILITY OF THE UNCONSOLIDATED SOILS. IF BEDROCK IS ENCOUNTERED AS PART OF THE EXCAVATION ON THE SITE, IN SUPPORT OF MINIMIZING THE AREA OF DISTURBANCE, THE BEDROCK WILL BE REMOVED TO THE DEPTH AND HORIZONTAL LIMITS FOR THE PROPOSED INFRASTRUCTURE IMPROVEMENTS AND FINISHED ON THE UPHILL SIDE WITH A CLEAN 6V:1H VERTICAL FACE.

BURLINGTON HIGH
SCHOOL &
BURLINGTON
TECHNICAL CENTER

CONFORMED SET
NOVEMBER 2ND, 2023

52 INSTITUTE ROAD,
BURLINGTON, VERMONT

CEA PROJECT NO.

21255

ORIGINATION DATE:

06/23/2023

SCALE:

1" = 20'

DRAWN BY:

MAB

CHECKED BY:

DSM

ISSUE NO.

CD ISSUE - 06/23/2023

ADDITIONAL #3

08/18/2023

CP1

09/20/2023

ADDITIONAL #4

11/02/2023

COST REDUCTION - REV.5

11/02/2023

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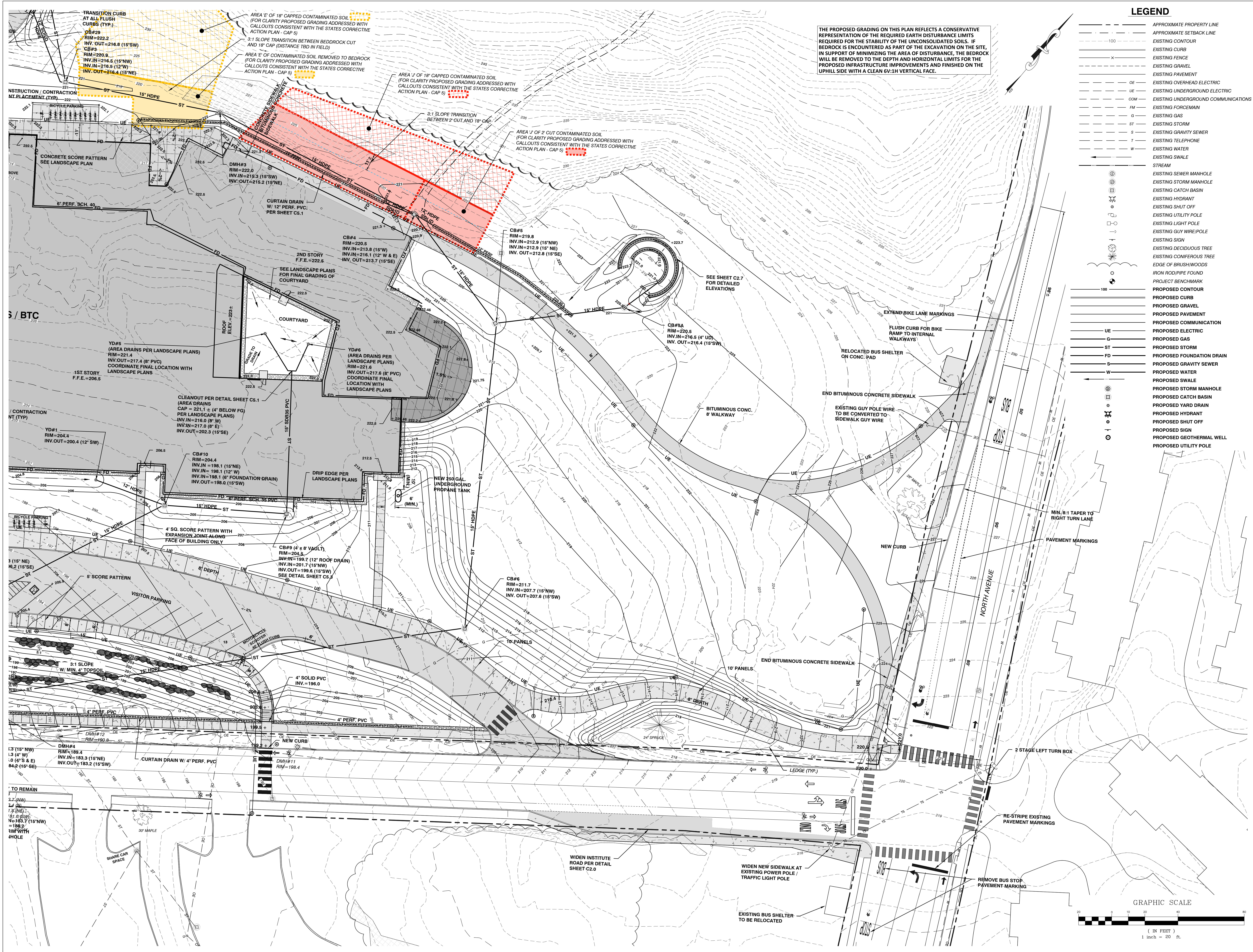
PARTIAL
GRADING AND
DRAINAGE -
NORTH

SHEET NO.:

C2.3

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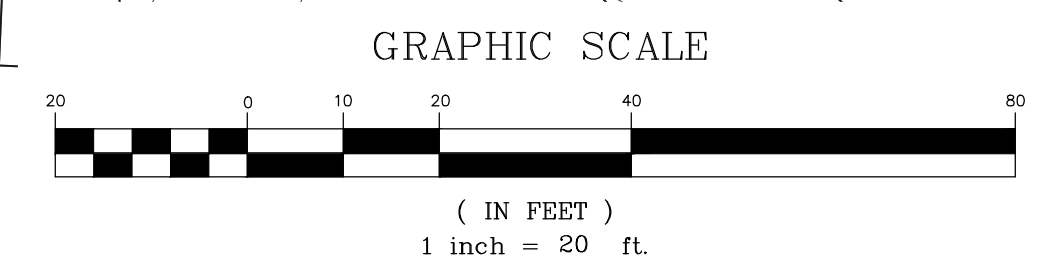
Page 72 of 20



THE PROPOSED GRADING ON THIS PLAN REFLECTS A CONSERVATIVE REPRESENTATION OF THE REQUIRED EARTH DISTURBANCE LIMITS REQUIRED FOR THE STABILITY OF THE UNCONSOLIDATED SOILS. IF BEDROCK IS ENCOUNTERED AS PART OF THE EXCAVATION ON THE SITE, IN SUPPORT OF MINIMIZING THE AREA OF DISTURBANCE, THE BEDROCK WILL BE REMOVED TO THE DEPTH AND HORIZONTAL LIMITS FOR THE PROPOSED INFRASTRUCTURE IMPROVEMENTS AND FINISHED ON THE UPHILL SIDE WITH A CLEAN 6V:1H VERTICAL FACE.

LEGEND

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- PROPOSED UTILITY POLE



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CONFORMED SET
NOVEMBER 2ND, 2023

52 INSTITUTE ROAD,
BURLINGTON, VERMONT

CEA PROJECT NO: **21255**

ORIGINATION DATE:	06/23/2023	SCALE:	1" = 20'
DRAWN BY:	MAB	CHECKED BY:	DSM

REVISIONS:

CD ISSUE - 06/23/2023	06/18/2023
ADDENDUM #3	09/20/2023
CP1	10/03/2023
CP2	11/02/2023
ADDENDUM #4	
COST REDUCTION - REV. 5	11/02/2023

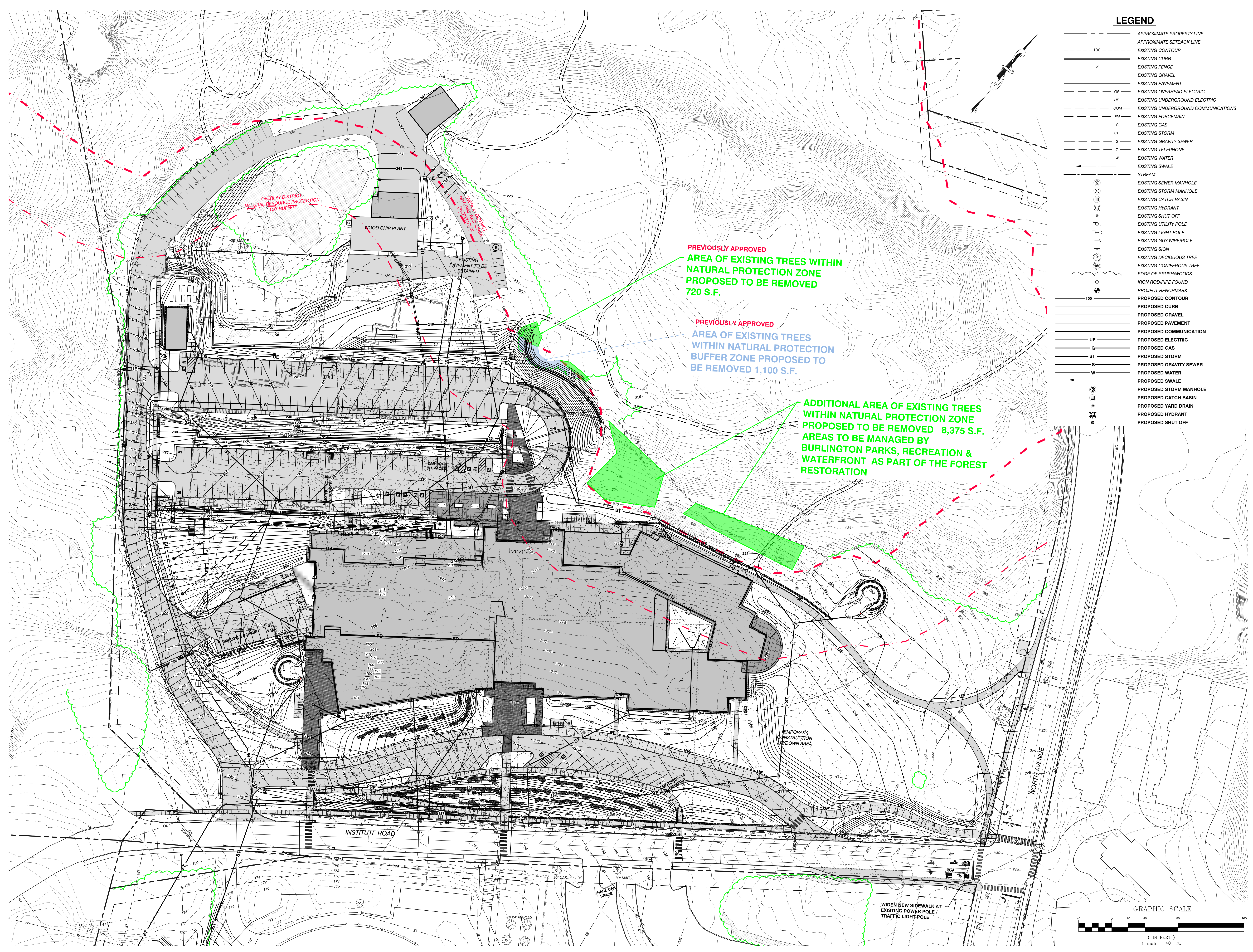
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PARTIAL GRADING AND DRAINAGE - NORTH

SHEET NO: **C2.5**

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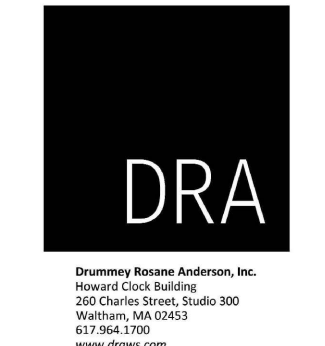
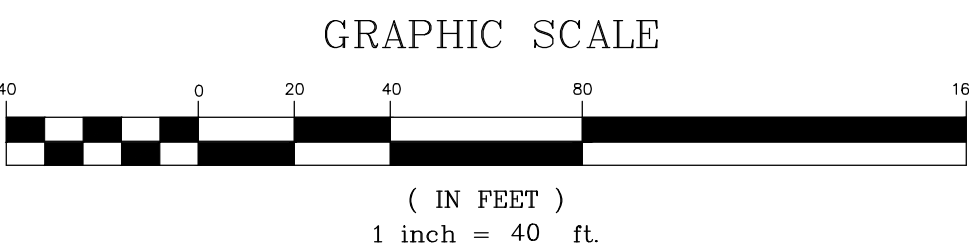
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- PROPOSED YARD DRAIN
- PROPOSED HYDRANT
- PROPOSED SHUT OFF

PREVIOUSLY APPROVED
AREA OF EXISTING TREES WITHIN
NATURAL PROTECTION ZONE
PROPOSED TO BE REMOVED
720 S.F.

PREVIOUSLY APPROVED
AREA OF EXISTING TREES
WITHIN NATURAL PROTECTION
BUFFER ZONE PROPOSED TO
BE REMOVED 1,100 S.F.

ADDITIONAL AREA OF EXISTING TREES
WITHIN NATURAL PROTECTION ZONE
PROPOSED TO BE REMOVED 8,375 S.F.
AREAS TO BE MANAGED BY
BURLINGTON PARKS, RECREATION &
WATERFRONT AS PART OF THE FOREST
RESTORATION



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CONFORMED SET
NOVEMBER 2ND, 2023

52 INSTITUTE ROAD,
BURLINGTON, VERMONT

CEA PROJECT NO: 21255	
ORIGINATION DATE: 06/23/2023	SCALE: 1" = 40'
DRAWN BY: MAB	CHECKED BY: DSM
ISSUE LOG: 06/02/2023 11/08/2023	ISSUE FOR PERMITTING REVISED TREE CLEARING

SHEET CONTENTS:
OVERLAY
DISTRICT
NATURAL RESOURCE
PROTECTION

WS2



November 7th, 2023

RE: BHS – Arms Forest Soil Management
Burlington High School, 52 Institute Road, Burlington, VT
Fuss & O'Neill Project No. 20191400.A10

Fuss & O'Neill prepared this technical memo on behalf of the Burlington School District (BSD) to provide details for soil management activities to be performed in accordance with *Corrective Action Plan* and *Risk Based On-Site Cleanup and Disposal Plan (CAP/RBDP)*. The project requires soil management activities (corrective actions) for VTDEC regulated soils including soil excavation and disposal, and soil capping activities to protect human health and the environment. Our goal is to coordinate the corrective actions with the City of Burlington Department of Parks, Recreation & Waterfront (BPRW).

An on-site meeting was held on October 11th with the following entities: Fuss & O'Neill, Civil Engineering Associates, Whiting Turner (Construction Manager), SD Ireland (Site Contractor), Mr. Shawn Donovan from VTDEC SMS, Mr. VJ Comai (City of Burlington Arborist), Mr. Max Madalinski (City of Burlington Associate Parks Project Manager), and Mr. Daniel Schmidt (City Parks). Mr. Daniel Cahill (City of Burlington Land Steward) was not present at the meeting and was consulted at a later date.

All parties involved discussed the implementation of soil management activities required by the CAP/RBDP for regulated soils outside of the limits of disturbance (LOD) for the new school construction project. The group discussed that the corrective action options to address the remaining regulated soil are limited due to the site topography, presence of underbrush, and established trees in the Arms Forest area. Furthermore, invasive species including Buckthorn were identified by the City Arborist and Parks representatives. It was determined that many trees within the area outside the LOD are invasive species. The group also raised concerns with equipment tracking over roots and burying tree roots that would ultimately kill the trees. Consequently, the group determined the approach as outlined below.

Proposed Corrective Action

The proposed corrective action includes tree removal in remaining areas of contaminated soil outside of the LOD area. Following tree removal, the area will be capped with 18 inches of imported clean fill that can support vegetation growth. The placement of clean soil will cover the undulating bedrock surface and make the hillside area accessible to pedestrians and future Burlington High School students.

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The City of Burlington Parks Department will plant native species to provide bank stabilization, shade, and replacement of the trees removed from the area. Burlington School District has committed an allotment of resources to BPRW for plant materials and staffing, which includes planting and monitoring of trees. A plan that depicts the area is included as *Attachment A*.

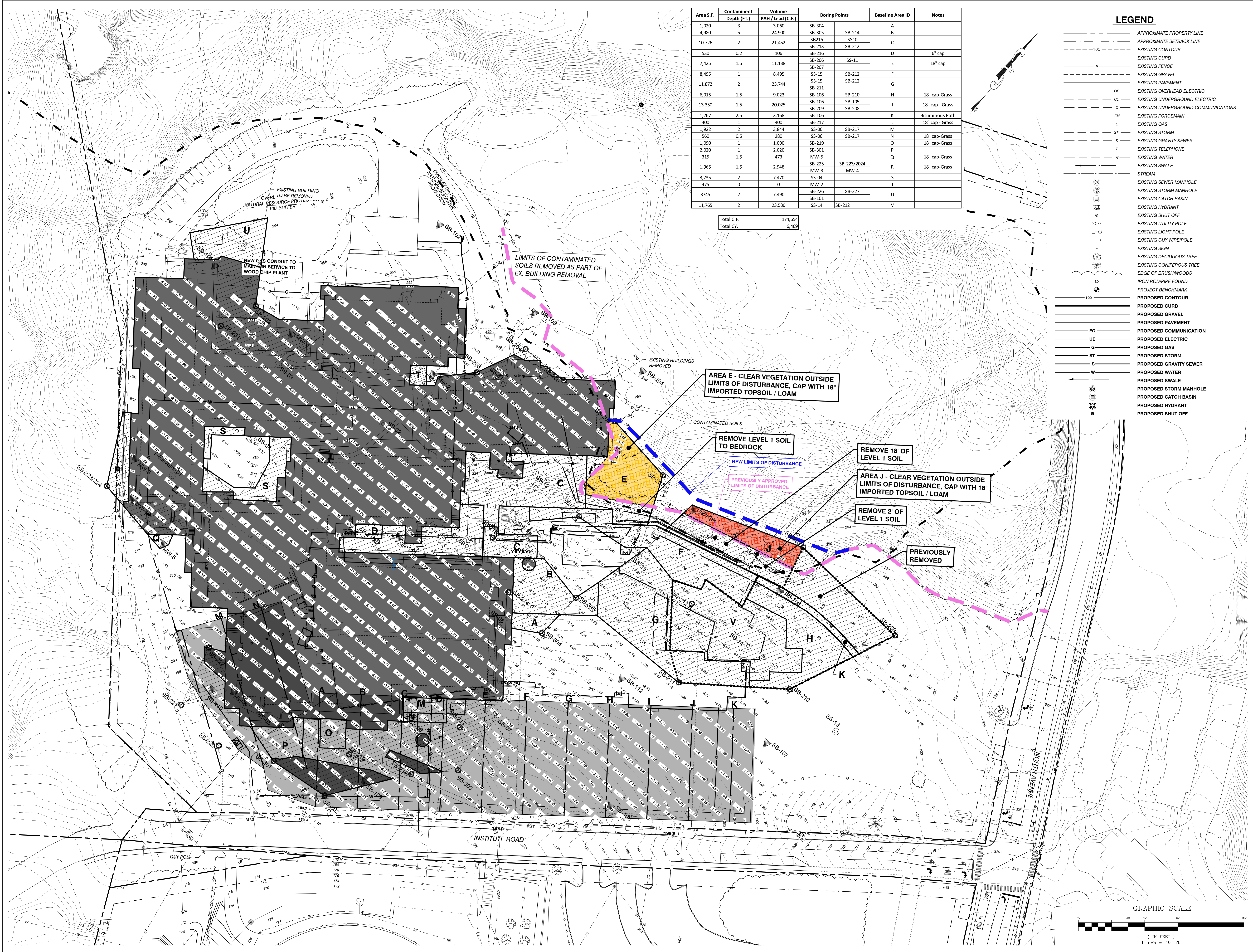
If you have any questions or require further detail, please contact us.

Sincerely,

Joshua Robinson
Project Manager

CC: David Marshall, Civil Engineering Associates
Marty Spaulding, PCI Consulting, Inc.
Joe Weith, White and Burke Real Estate

Attachment A – CAP-5



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BURLINGTON HIGH SCHOOL & BURLINGTON TECHNICAL CENTER

CONFORMED SET
NOVEMBER 2ND, 2023

52 INSTITUTE ROAD,
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CEA PROJECT NO: **21255**

ORIGINATOR DATE: **10/20/2022** SCALE: **1" = 40'**

DRAWN BY: **MAB** CHECKED BY: **DSM**

ISSUE LOG:
UPDATED AREA "V"
REVISED AREA E AND J

04/21/23
11/03/23

PROPOSED IMPROVEMENTS CONTAMINATED SOILS

CAP-5

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January 11, 2023 *Supplemented November 29, 2023 (see pages 1 and 3)*

Mr. Norm Baldwin, P.E., City Engineer
City of Burlington Department of Public Works
645 Pine Street, Suite A
Burlington, Vermont 05401



**Re: BHS-BTC Condition of Approval #4 of ZP-22-5436 FOF
Steep Slope Stability Report**

Dear Mr. Baldwin:

As a condition of the Development Review Board's November 21, 2022 approval of the Site Plan application for the replacement of the High School and Technical Center, the School District is required to address the requirements set forth in Section 5.2.4 (b) - Steep Slopes Overlay District of the Zoning Ordinance.

This revision addresses the proposed inclusion of contaminated soil remediation work in the most southeasterly portions of the Arms Forest are. The work in this area is primary adding 18" of clean soil cap over the existing conditions. All of this area except 1,200 SF has slopes less than 30%. The east end of the remediation area, rather than being filled, will have 2-feet of the contaminated native materials removed. The fill and cut areas are further discussed on page 3.

We have outlined below verbatim the language of the Ordinance in support of creating the context for the responses to each subsection.

(b) Steep Slopes Overlay District

This overlay district consists of all lands delineated in Map 5.2.4-1 – Steep Slopes Overlay District. This overlay district contains expanses of contiguous land with an average slope of 15% or greater over 50-foot intervals and adjacent lands within 50 feet of the top of slope

The boundaries shown on the Steep Slopes Overlay Map may be supplemented or modified by examination of one or more of the following sources by the Development Review Board whenever an application is submitted for review.

- Contour maps prepared from the most current orthophotography.
- On-site survey prepared by a registered professional engineer or surveyor.

The plans submitted with the Site Plan application was a combination of site survey integrated into a more global LIDAR based topographical mapping from the most recent State generated orthophotography of the area.

The Zoning Administrative Officer or Development Review Board shall determine whether or not the Steep Slope Overlay District has been shown accurately on the application plans. **The submitted plan of the site represents a conservative representation of the areas with slopes >15% as the points are taken over an interval of 10 feet rather than the allowed 50' grid.** The applicant may be required to revise the steep slope boundaries shown on the application plans. **This was not requested as part of the application review process but could subsequently be requested as part of this submittal.**

The burden of proving the correct boundary shall be on the applicant, supported by engineering and/or surveying data or mapping.

1. District Specific Regulations

- A. The Steep Slope Overlay District shall be an overlay on all zoning districts. The regulations in the overlay are in addition to those regulations of the underlying zoning district. **Acknowledged.**
- B. These regulations apply to applications within the Overlay District that include 400 square feet or more of earth disturbance. **This project will disturb more than 400 SF of surface area. The EPSC and Operational Stormwater reviews are currently pending before the Water Resource Division.**
- C. Finished slopes of all cuts and fills shall not exceed 30%, unless the applicant can demonstrate that steeper slopes can be stabilized and maintained adequately to the satisfaction of the ZAO or DRB in consultation with the City Engineer. **The project grading for the facility has been designed to comply with the 30% standard as this enables the active use areas to be mowed. Those portions of the site that exceed the 30% slope are outlined below with the supporting structural BMPs employed to ensure their long term stability.**

Area 1 – Sheet C2.3 - There are portions of the site in which the slopes are greater than 30% which have been designed so as to minimize the limits if disturbance. These steeper slopes, primarily adjacent to the proposed upper parking lots will be comprised of blasted rock tallas covered with grubbings from the site. The grubbings will infill the surface void spaces to provide vegetative cover while the underlying rock provide slope stability up to a

slope of 1.5 (horizontal):1 (vertical) (66%). The steepest slopes on the site plan are identified as being 2H:1V.

Area 2 – Sheet C2.4 - There is a small area on the south side of the building, just west of the south entrance, where 2:1 slopes were utilized to avoid the need for a retaining wall system. There, the slope is buttressed with landscaping boulders as a means of minimizing saturated soil sloughing by breaking up the length of the surficial shear plane.

Area 3 – Sheet C2.4 – The slopes between the parking area and the amphitheater are proposed to a slope of 2.5H:1V. This area is protected by upgradient surface runoff through the use of curbing in the parking lot. The bottom of the slope is anchored with the seating system which is underlain by a crushed stone base and underdrain. This system will provide improved shear resistance through the anchoring and dewatering at the toe in support of the avoidance of a slip plane failure of this area.

Area 4 – Sheet C2.2 – The stormwater management facility includes 2H:1V slopes as a means of minimizing the areas of disturbance in this forested area. In this area, the vertical changes in elevation on the east side of the facility were broken up by the maintenance access. Even steeper slopes were avoided through the use of a boulder retaining wall along a short run of the access way adjacent to the forebay at the north end of the facility. Initial surface slope stability of this area is being enabled through the use of coir fiber logs placed along the contour of the slope. As depicted in the typical detail in the top right of Sheet C2.2. The slope on the east side of the facility will also benefit from groundwater dewatering associated with the collection and conveyance capabilities of the bedding for the clean stormwater bypass piping strategically placed to provide mid-slope soil strengthening with the bedding groundwater discharge occurring at the stabilized overflow rock at the south end of the facility.

Area 5 – *There is a very small section (1,200 SF) of the Arms Forest contaminated soils remediation site which have a slope of greater than 30%. This area was/is subject to blasting of the underlying bedrock for the placement of the Stormwater conveyance line. The end result will be an will be comprised of blasted rock tallas covered with grubbings from the site. The grubbings will infill the surface void spaces to provide vegetative cover while the underlying rock provide slope stability up to a slope of 1.5 (horizontal):1 (vertical) (66%).*

- D. Any fills placed on a steep slope shall be properly stabilized and, when necessary, supported by retaining walls or other appropriate measures as approved by the ZAO or DRB in consultation with the City Engineer. **The proposed means of stabilizing the areas with slopes >3H:1V is identified in Section C above.**
- E. Finished grades shall be reasonably safe from slide, collapse, or similar failure as determined by the ZAO or DRB in consultation with the City Engineer. **The means of protecting the four (4) identified areas from slope failure is outlined in Section C above.**

2. Additional Application Requirements

- A. A site plan prepared by a registered professional engineer or surveyor that accurately depicts the proposed development and related land disturbance relative to the Steep Slope Overlay District boundaries, with all pertinent information describing the proposal, and a topographical survey depicting existing and proposed contour lines at no greater than 2-foot intervals. The plan shall depict all proposed cut, fill, and grading. The attached **Sheets C2.0 – C2.5 indicate the existing and proposed conditions. Sheet WS2 shows all of those areas with slopes greater than 15% with those areas highlighted within the proposed project areas of disturbance,**
- B. A plan depicting the extent of proposed vegetation clearing. **These areas are depicted on Sheet WS1 depicting the limits of the Natural Resources Protection Overlay district.**

3. Approval Condition

- A. Prior to construction, the applicant shall provide a geotechnical analysis prepared and stamped by a professional geotechnical engineer that determines the suitability of the steep slope for development. **This is that report.**

This completes our summary of the proposed steep slope areas and the proposed means of providing the necessary slope stability for those areas. If you should have any questions, please feel free to contact me at *802) 864-2323 x310 or at dmarshall@cea-vt.com.

Respectfully,



David S. Marshall, P.E.
Principal Engineer

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City of
Burlington, Vermont
645 Pine Street

Zoning Permit – Conditions of Approval

ZP #:

Tax ID:

Issue Date:

Decision:

Property Address:

Description:

Standard Permit Conditions:

- Other City, State or Federal Permits.** The owner is solely responsible for obtaining all other required City, state and federal approvals. Failure to do so may invalidate this Zoning Permit and result in enforcement actions. Wastewater permits are issued by the State and are frequently required as a result of expansion or change in use.
Note: All projects receiving a Zoning Permit also require a Construction Permit or written confirmation that a Construction Permit is not required from Department of ~~Public Works~~ Permitting & Inspections ~~Inspection Services~~ Trades Division (~~DPW-ISD~~). All construction permits must be closed out by way of approved inspections by Trades ~~DPW-ISD~~ before issuance of a ~~Unified~~ Zoning Certificate of Occupancy (UZCO) by the ~~Code Enforcement Office~~ Zoning Division as per Condition 3, below. **Note:** All projects involving earth disturbance of 400 square feet or more require a reviewed and approved erosion prevention and sediment control (EPSC) permit prior to the start of construction. ~~review by the Burlington Stormwater Program under Chapter 26: Wastewater, Stormwater, & Pollution Control.~~ This review is closed out by way of a completed EPSC Permit and an ~~approved inspection by Stormwater Program staff, Code Enforcement staff, or licensed project engineer~~ their designee before issuance of a UZCO as noted above.
- Time Limits.** This zoning permit shall become invalid unless work or action authorized by the permit is commenced within 1 year of approval. The owner shall complete the approved project and obtain a UZCO (combined Zoning and Building certificates of occupancy, still applicable even if a zoning or building permit was not required) within 3 years or be subject to enforcement actions.

These time limits are binding upon the owner unless one of the following apply: a) longer or shorter time limits are specifically imposed by a condition of approval; or b) the time limits are tolled by additional state or federal permitting for the project or by an appeal; or c) an extension of time has been granted. An extension of time must be requested in writing PRIOR to the expiration of the permit. If the owner has enacted the permit and it lapses, the owner may be responsible to obtain a new zoning permit, if required, which shall be subject to the current Comprehensive Development Ordinance (CDO).
- ~~Unified~~ Zoning Certificate of Occupancy (UZCO):** It shall be unlawful to use or occupy (or allow the use or occupancy of) any land or structure or part thereof which has been created, changed, converted, or wholly or partly altered or enlarged in its use or structure without a UZCO.

If the project is partially completed, meets “prior to issuance of a U~~Z~~CO” conditions of approval, meets all ~~health~~ **life** and safety standards, and all municipal fees for the project are paid, a Temporary Zoning CO may be requested and issued. **Upon completion of the project**, applicant shall request and obtain a Final U~~Z~~CO from the **Zoning Division Code Enforcement Office** (located at 645 Pine Street). Additional information on how to request and obtain this U~~Z~~CO is available at this office. **Failure to obtain a Zoning certificate of occupancy** places the property in violation of the CDO and is subject to enforcement. In addition, **Failure to obtain a U~~Z~~CO within the time limits above is subject to** “after the fact” fees ranging from \$75 - \$1500 (in addition to the UCO fee).

4. **Project Modifications.** The project shall be completed as shown on the plans, which have been stamped “approved” and dated by the administrative officer, **operated, and maintained in accordance with: (a) the conditions of this permit and (b) the permit application, plans (which have been stamped “approved” and dated by the administrative officer), and exhibits on file with the Board and other material representations. In the event of any conflict, the terms and conditions of this permit shall supersede the approved plans and exhibits.** The project shall not deviate from the approved plans or conditions of approval without prior written approval from the administrative officer.
5. **Property Inspection.** By acceptance of this permit, the owner authorizes City Officials and/or their authorized representatives, access to the subject property for the purpose of observing work in progress, inspecting and/or measuring the property or improvements until such time the project has been issued a Final U~~Z~~CO.
6. **Completion and Maintenance of Improvements and Landscaping.** Owner or successor in interest is responsible for completing all improvements shown on approved plans. By acceptance of this permit, Owner agrees to maintain all improvements in a satisfactory condition. Any landscaping installed according to the approved plan which becomes diseased or dies shall be replaced by similar species and size no later than the first available planting season.
7. **Off-Site Drainage.** Issuance of this permit does not authorize the discharge of stormwater runoff or other surface drainage from the subject premises onto adjoining property or properties including but not limited to the public Right of Way.
8. **Errors.** The owner is solely responsible for the accuracy of all information contained in the Zoning Permit application. Any errors contained therein may invalidate the Zoning Permit and may result in enforcement action by the City.
9. **Transfer of Ownership. All zoning permits run with the land.** In the event of a transfer of ownership, partial or whole, of the subject premises, the transferee shall become permittee and subject to compliance with the terms and conditions of this permit.
10. **Violations/Penalties.** A violation of any of the conditions of this permit or of any provision of the CDO may result in enforcement actions, including but not limited to a penalty of up to two hundred dollars (\$200) per day, municipal tickets, and/or additional permitting fees.
11. **Incorporation and Reference of All Plans Presented.** This approval incorporates by reference all plans and drawings presented and all verbal representations by the applicant on the subject application to the extent that they are not in conflict with other stated conditions or regulations.

12. **For Properties Involved in Boundary Disputes.** Boundary disputes are not within the jurisdiction of the administrative officer or the Development Review Board. When an application is submitted and the boundary of the subject property is called into question, the boundary will be determined based upon the best evidence available, for instance a survey or other official document. If a permit is issued and contrary evidence is presented to the City after the fact, such as a survey or Superior Court ruling with respect to the boundary lines, the permit may be amended or revoked by the City.
If the permit is amended or revoked, owner shall bear all costs to remedy the situation, including removal of the structure(s) if necessary, that is if the structure(s) is/are unable to meet the requirements of the CDO and receive an amended permit in light of the actual boundary line.
13. **Damage to City Property.** The Owner is responsible for any damage to the City of Burlington's property, including but not limited to its right-of-way, sewer/water lines, etcetera, that occurs during the site improvements authorized by this permit. If damage occurs, the Owner shall restore the property to a condition equal to or better than the condition of the property prior to such damage.
14. **City Rights-of-Way and Ownership.** Permit approval does NOT authorize any work to be undertaken within the public ROW. Any work in the ROW can only occur with prior authorization by DPW and/or City Council, as required. Any work or improvements that are taken within the City's right of way does not diminish the City's ownership or authority regarding said right of way.
15. **Liquor License Required.** An approval of any use that includes the sale of alcoholic beverages is contingent upon the receipt of a liquor license from the City of Burlington or the State of Vermont, whichever is applicable.

An interested person may appeal a decision of the Zoning Administrator to the Development Review Board within 15 days after the decision date per Sec. 12.2.2, *Appeals of Administrative Officer Decisions*. Appeals may be filed online at [burlingtonvt.viewpointcloud.com/categories/1098](https://www.burlingtonvt.viewpointcloud.com/categories/1098) or in-person at 645 Pine Street, Burlington, Vermont. <https://www.burlingtonvt.gov/DPI/Appealing-a-Zoning-Decision>