Burlington Development Review Board
Department of Permitting & Inspections
645 Pine Street
Burlington, VT 05401
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Marina Campbell, (Alternate)
Chase Taylor, (Alternate)

Development Review Board

Tuesday, April 7, 2026, 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. Consent

5. Public Hearing

5.1.
ZP-26-12; 436 Riverside Avenue (NAC-R, Ward 1) Americo Real Estate Company / Douglas Goulette
Proposed redevelopment of former Koffee Kup Bakery site into self-storage U-Haul building with associated site improvements. (Project Manager, Mary O'Neil)

5.2.
ZAP-26-2; 108; 108 South Winooski Avenue (FD5, Ward 8) L & M Properties, LLC / Merrill Jarvis
Appeal of administrative denial of ZP-25-620 for the after-the-fact installation of chain link fencing. (Project Manager, Kirk Dressing)

6. Certificate of Appropriateness

6.1.
ZP-26-3; 63 Walnut Street (RM, Ward 2) Kate Desrochers / Daniel Jordan
Discretionary review of vertical expansion within setback. (Project Manager, Mary O'Neil)

6.2.
ZP-26-64; 86 Lakeview Terrace (RM, Ward 2) Latha Mangipudi / Krishna Mangipudi
Proposed construction of a single-family home with detached garage and ADU above. (Project Manager, Mary O'Neil)

6.3.
ZP-26-67 / ZP-26-68; 180 / 266 Queen City Park Road (E-LM, Ward 5) Burton Corporation / Will Feltus Proposed installation, conveyance, and treatment of stormwater improvements across 180 Queen City Park Road and 266 Queen City Park Road with associated site and utility improvements. (Project Manager, Kirk Dressing)

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.

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Department of Permitting and Inspections
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William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Kirk Dressing, Associate Planner
Collin Naheedy, Zoning Compliance Officer
Joseph Cava, Planning Technician

MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Principal Planner
Date: April 7, 2026
RE: 436 Riverside Avenue; ZP-26-12

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-26-12
Location: 436 Riverside Avenue
Zone: NAC-R **Ward**: 1
Date application accepted: January 9, 2026
1st DAB review: February 10, 2026
Applicant/ Owner: Douglas Goulette / Americo Real Estate Company/ Jeffrey Vaine
Request: Redevelopment of former Koffee Kup Bakery site into self-storage U-Haul building with associated site improvements.

Background:

- **Zoning Permit ZP-22-584;** Demolition of existing structure to slab/foundation or existing grade elevation where applicable. Installation of construction fencing around site to prevent use of parking lots, and pending redevelopment application. November 2022.

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 00-432 / COA 00-035;** improvements to the existing parking area for the manufacturing plant which include added fill, retaining wall and lighting. Approved with conditions April 2000.
- **Non-Applicability of Zoning Permit Requirements 14-0553NA;** recover existing rubber roof with like material. November 2013.
- **Non-Applicability of Zoning Permit Requirements 14-498NA;** remove existing green ribbed metal roofing and replace with like material. October 2013.
- **Zoning Permit 08-143;** Install 24 ft. X 24 ft. walk-in freezer. April 2008.
- **Zoning Permit 81-606; install foundation and flour tank. N.d.**
- **Zoning Permit 80-724;** add two new additions to existing building. One will be a warehouse and one will be bakery space. January 1980.
- **Zoning Permit 79-599**; erect storage facility 24 x 24 concrete block with corrigated metal roof to store equipment in conjunction with storage of flour. October 1979
- **Zoning Permit 79-539;** install a covered over an existing walk between two buildings. September 1979.
- **Zoning Permit 79-452**; put a new flour storage tank approximately 35' high for Koffee Kup Bakery. August, 1979.
- **Zoning Permit 79-439**; install 60' sidewalk between structures at former laundry building (428 Riverside.) August 1979.
- **Zoning Permit 77-857**; Koffee Kup Donut Shop to erect a 45' x 53' addition to the southeast side of the existing building. Approved by the Board of Aldermen. May 1977.
- **Zoning Permit 77-451**; Koffee Kup Donut Shop to erect a 91' foundation wall at grade level and a 4' x 160' retaining wall at the rear of the building. October 1976.
- **Zoning Permit n.n**.; Koffee Kup Donut Shop, Inc. to erect a 40' x 60' addition to the non-conforming use building. Addition to be on the west side and is less than the required 25% provision of the ordinance. January 1975.
- **Zoning Permit n**.n.; Koffee Kup Donuts, Inc. to install a shortening tank on the rear of the lot, 20' from the rear property line. October 1973.
- **Zoning Permit n**.n; erect a 27'6" x 64'4" addition to the west side of the doughnut shop to be used for storage. March 1973.
- **Zoning Permit n.n**.; seeking a special exception to erect a 27' x 40' addition to the west sideof the existing storage building. Existing storage building to be used for a bread bakery and the addition is to be used for storage, warehousing and distribution. October 1971.

Overview: This application is for the re-development of the site formerly occupied by Koffee Kup Bakery. The new use is proposed to be a self-storage U-Haul Building with a footprint of

approximately 30,000 sf to be served by new municipal sewer and water services. New parking, drives, and stormwater systems are also proposed. The project is subject to Major Impact review.

The **Design Advisory Board** reviewed the application at their February 10, 2026 meeting and voted to **Table** the application, requesting design edits that simplify decorative elements, and consider appropriate signage.
The **DAB** reviewed again at their March 17, 2026 meeting, and voted unanimously to **recommend approval** of the revised plans, with adoption of recommended staff conditions.

The **Conservation Board** reviewed the project February 2, 2026 and recommended approval with the condition that exterior lighting be downshielded to minimize upslope impacts from light pollution.

Recommended motion: Major Impact and Certificate of Appropriateness approval, per the following Findings and Conditions:

I. Findings

Article 2: Administrative Mechanisms
Section 2.7.8 Withhold Permit
The administrative officer is authorized to deny all zoning permits or certificates of occupancy for any property with an uncorrected zoning violation (i.e. notice of zoning violation and/or municipal complaint ticket has been issued and is not under appeal.) The administrative officer is also authorized to deny all zoning permits for any property with an expired zoning permit without a final certificate of occupancy.
Instead of withholding or denying a zoning permit, the administrative officer may grant such permit subject to the condition that the uncorrected zoning violation is corrected or the expired zoning permit is closed out with a final certificate of occupancy. Such actions) shall take place before the issuance of a final certificate of occupancy on the new permit.
There is an open expired zoning permit (ZP-22-584) that needs a Certificate of Occupancy before a CO can be issued for this permit. **Affirmative finding as conditioned.**

Article 3: Applications, Permits and Project Reviews
Part 3: Impact Fees
Impact fees may be due within 7 days of issuance of a certificate of occupancy, as determined by the Water Resources Division and the Technical Services Division of the Department of Public Works based on water and wastewater flows and peak hour vehicle trip ends, respectively. **Affirmative finding as conditioned.**

Part 5. Conditional Use and Major Impact Review
Section 3.5.2 Applicability
(b) Major Impact Review
Table 3.5.2-1 Zoning Districts

Neighborhood Mixed Use: non-residential or mixed-use development with a development footprint of twenty thousand (20,000) sq. ft. or more, or the creation of forty thousand (40,000) sq. ft. or more of gross floor area.
Within the NAC-R corridor, the development footprint is approx. 30, 138 sq. ft. triggering Major Impact Review.

Section 3.5.6 Review Criteria
(b) Major Impact Review Standards

Before a major impact development may receive approval, the DRB must be satisfied, based on documentation provided by appropriate city agencies, experts, interested parties and/or the applicant that the proposed development shall:

1. *Not result in undue water, air or noise pollution;*

The application is accompanied by a Stormwater treatment system that according to the applicant exceeds state standards. There will be no emissions from the proposed use. No noise impacts are anticipated. **Affirmative finding as conditioned.**

2. *Have sufficient water available for its needs;*

A letter of adequate water and sewer capacity from Burlington's Water Resources division shall be required **prior to release of the zoning permit.**

3. *Not unreasonably burden the city's present or future water supply or distribution system;*

The intended use as a storage warehouse does not suggest unusual water consumption; however, Burlington's Water Resources division will assess for anticipated flows resulting in Impact Fees per the more recently adopted regulations. **Affirmative finding as conditioned.**

4. *Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;*

The parcel intended for redevelopment falls within the Steep Slopes overlay; however, most of the development is proposed north of the mapped area. The installation of a replacement retaining wall south of the drive area will trigger the requirements of the Steep Slopes overlay. See Section 5.2.4 (b) for submission requirements. **Affirmative finding as conditioned.**

5. *Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;*

The parcel is located on a major city corridor (Riverside Avenue) within a zoning district intended for commercial development. The Department of Public Works will assess traffic impacts as part of Impact Fee calculations, and assess any fees as appropriate based on peak hour vehicle trips. **Affirmative finding as conditioned.**

6. *Not cause an unreasonable burden on the city's ability to provide educational services;*

As a storage warehouse, no impacts to education services are identified. **Affirmative finding.**

7. *Not place an unreasonable burden on the city's ability to provide municipal services;*

As redevelopment of a previously developed commercial site, there are no identified impacts on the city's ability to provide municipal services that are not addressed specifically within the Impact Fee review. **Affirmative finding.**

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*

There are no identified historic resources, significant natural areas or archaeological sites at this development site. **Affirmative finding.**

9. *Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities;*

Riverside Avenue is a major corridor into the city; identified as an area for commercial development. No adverse impacts to the city's intended growth or investment in public services and facilities is identified by redevelopment. **Affirmative finding.**

10. *Be in substantial conformance with the city's municipal development plan and all incorporated plans;*

- *Evaluate capacity of neighborhood mixed-use areas to support additional development*. Burlington as a distinctive city. **Section 1.5**, *plan BTV: Comprehensive Plan 2019 Update.*
- *Expand stormwater management measures in new and existing development.* **Section 1.3**, *plan BTV; Comprehensive Plan 2019 Update.*
- *Create and ordinance regarding green and high-performing buildings*. [Burlington's Thermal Energy Ordinance] **Section 6.4;** *plan BTV: Comprehensive Plan 2019 Update.*
- *Encourage infill and redevelopment of underutilized sites.* **Section 8.1***; plan BTV; Comprehensive Plan 2019 Update.*

Affirmative finding.

11. *Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;*

The redevelopment of his historically commercial site will present no identified impacts to present or projected housing needs of the city. **Affirmative finding.**

and/or

12. *Not have an undue adverse impact on the present or projected park and recreation needs of the city.*

The redevelopment of his historically commercial site will present no identified impacts to the projected park and recreation needs of the city. **Affirmative finding.**

(C) Conditions of Approval:

In addition to imposing conditions of approval necessary to satisfy the General Standards specified in (a) or (b) above, the DRB may also impose additional conditions of approval relative to any of the following:

1. *Mitigation measures, including but not limited to screening, landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area.*

The redevelopment site backs up to a hillside, eliminating any impacts that would require screening or headlights, or any auditory impacts of the use. The mechanical equipment is proposed to be screened with landscaping. The Conservation Board has recommended a condition that exterior lighting be down-shielded to minimize upslope impacts from light pollution. Within a zoning district historically associated with commercial uses, the proposed project aligns with the intent of the district. **Affirmative finding as conditioned.**

2. *Time limits for construction.*

Unless a phased plan is requested, zoning permits have a three-year life. Construction must be complete and a Certificate of Occupancy issued three years from the date of approval. **Affirmative finding as conditioned.**

3. *Hours of operation and/or construction to reduce the impacts on surrounding properties.*

Construction hours are limited to M-F 7:30 am to 5:30 pm. Saturdays are reserved for internal construction, with no construction activities on Sundays. **Affirmative finding as conditioned.**

4. *That any future enlargement or alteration of the use return for review to the DRB to permit the specifying of new conditions;*

Any future enlargement or alternation shall be reviewed under regulations in effect at the time of application. **Affirmative finding as conditioned.**

and,

5. *Such additional reasonable performance standards, conditions and safeguards, as it may deem necessary to implement the purposes of this chapter and the zoning regulations.*

This is at the discretion of the DRB.

<u>Article 4: Zoning Maps and Districts</u>

Sec. 4.4.2 Neighborhood Mixed Use Districts

(a)Purpose:

The Neighborhood Mixed Use districts promote development that combines non-residential and residential uses on a single site. These zones allow an increased intensity of development than would typically be found in the surrounding residential areas, and provides neighborhood-oriented goods and services and employment opportunities within walking and biking distance. This development type will support transit use, provide a buffer between busy streets and residential neighborhoods, and provide new commercial and residential opportunities in the City. The emphasis of nonresidential uses should primarily be oriented to serving the needs of the surrounding residential neighborhoods and other neighborhood commercial uses.

Development is intended to consist primarily of businesses on the ground floor with housing and other non-residential uses on upper stories. The exception to this is the NAC – Cambrian Rise district that is intended to be more residential in nature than the other Neighborhood Mixed Use districts and thereby is expected to incorporate residential uses at the street level. Development is intended to be pedestrian-oriented with buildings oriented to the sidewalk, especially at corners. Parking is intended to be hidden from the street, since its appearance is out of character with the surrounding residential development and the desired orientation of the buildings.

3. *The **NAC – Riverside** (NAC-R) is intended to allow commercial development in areas already predominantly built along this important travel corridor while encouraging emerging mixed-use development. The zone allows a full range of retail and service businesses with a local or regional market orientation. Light industrial uses are allowed but limited in size to avoid adverse effects different in kind or amount than commercial uses and to ensure that they do not dominate the character of the commercial area. The zone's development standards promote attractive development, an open and pleasant street appearance, and compatibility with adjacent residential areas. Development is intended to be aesthetically pleasing for motorists, transit users, pedestrians, and the businesses themselves. Parking is intended to be placed behind or to the side of principle buildings.*

Table 4.4.2 -1 Dimensional Standards and Density

Districts	**Max. Intensity** (floor area ratio[1])	**Max. Lot Coverage**	**Minimum Building Setbacks** (feet) Front[3]	Side	Rear	**Building Height** (feet)
NAC-Riverside	2.0 FAR	80%	0	0[2]	0[2]	Min: 22', 2 stories Max: 35
Proposed 436 Riverside Avenue	0.7 FAR	60%	6' (22' from curb)	35'	60'	32'2"

1. Floor area ratio is described in Sec. 5.2.7. Measurement of and exceptions to height limits are found in Sec 5.2.6. Bonuses for additional FAR and height where available are described in section (d)3 below, and additional height, FAR

and lot coverage is afforded by-right for inclusionary housing projects under Sec. 9.1.12. Actual maximum build out potential may be reduced by site plan and architectural design considerations of Art 6.

2. Structures shall be setback a minimum of 15-feet along any zoning district boundary line that abuts a residential zoning district. Lots of record existing as of September 9, 2015 that are split by neighborhood mixed use and residential zones are exempt from this district boundary setback.
3. Structures shall be setback a minimum of 12-feet from the curb on a public street.
4. Exceptions to maximum lot coverage are provided in (d)2.
5. Notwithstanding footnote 3, the NMU district at the intersection of Pine St. and Flynn Avenue shall have a minimum front yard setback of 10 feet.
6. Side and rear yard setbacks are applicable only to the periphery of the NAC-CR district and not to individual parcels within the district.
7. Front yard setbacks for buildings fronting on North Avenue shall be 20' min and 30' max.

Affirmative finding.

(c) Permitted and Conditional Uses:

The principal land uses that may be permitted, or conditionally permitted pursuant to the requirements of Article 3, within the Neighborhood Mixed Use districts shall be as defined in Appendix A – Use Table.

Warehouse-self storage is a permitted use in the NAC-R zoning district. Footnote 15 notes: *Excludes storage or uncured hides, explosives, and oil and gas products.*
Affirmative finding as conditioned.

(d) District Specific Regulations:

1. Ground Floor Residential Uses Restricted

In order to maintain an active streetscape for pedestrians and pedestrian-oriented businesses and activities, residential uses shall not be permitted within 25-feet of a public street right-of-way along the street-level frontage in the NAC District. This restriction shall not apply in the NAC – Riverside and NAC – Cambrian Rise districts.
Not applicable in NAC-R.

2. Exception to Maximum Lot Coverage in NAC District

The following exceptions to the maximum lot coverage standards for the NAC District of Table 4.4.2 -1 may be provided as follows:
The noted exceptions are not applicable to the NAC-R district.

3. Development Bonuses/Additional Allowances

No development bonuses are sought. Not applicable.

A. Inclusionary Housing:

Not applicable.

B. Housing for Older Persons and Individuals with Disabilities:

Not applicable.

C. Maximum Bonus: Not applicable.

Article 5: Citywide General Regulations

Section 5.2.1 Reserved

Section 5.2.2 Required Frontage or Access
This is an existing parcel that has previously been developed with access on Riverside Avenue. **Affirmative finding.**

Section 5.2.3 Lot Coverage Requirements
See Table 4.4.2-1, above.

Section 5.2.4 Buildable Area Calculation & Steep Slopes Overlay District
(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 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.

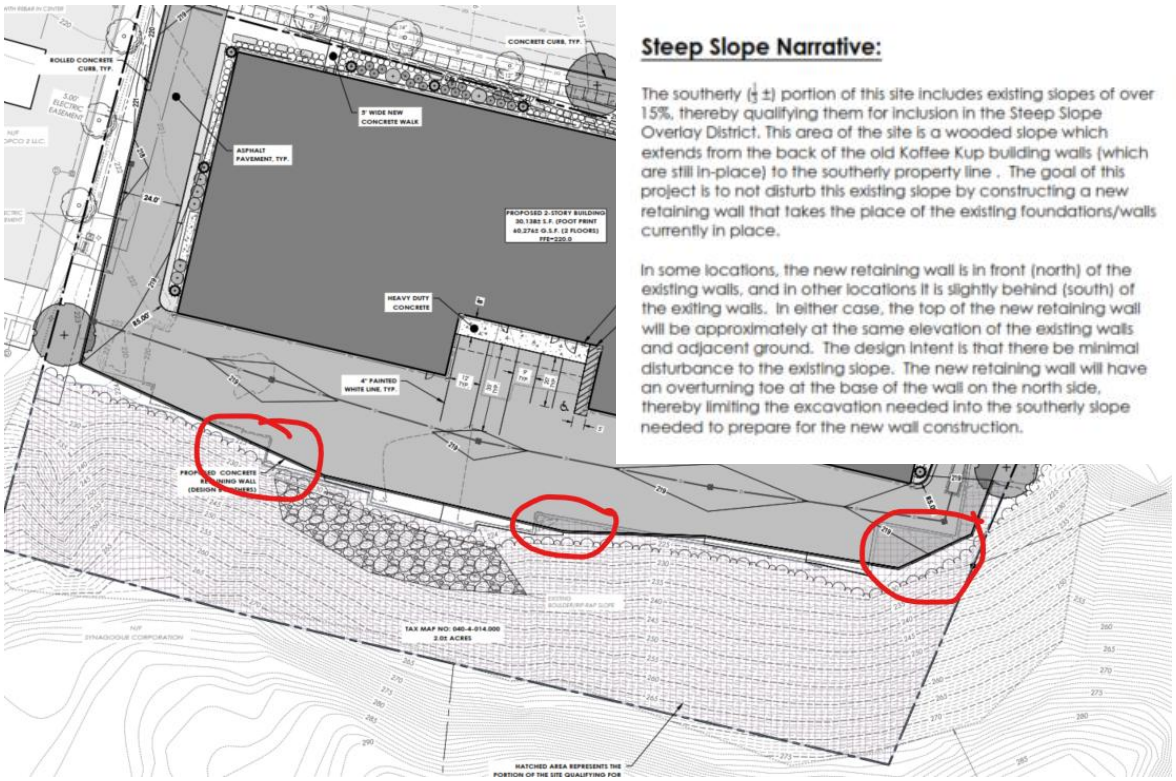
2. *Additional Application Requirements*

   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.



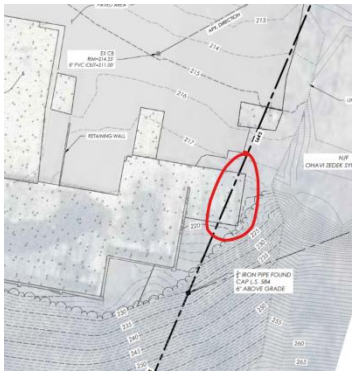
The plan largely avoids the Steep Slope Overlay, with the exception of a replacement retaining wall behind the new building. Plans indicate that a geotechnical analysis was made by Terracon (see notation, Plan C1.02) in October 2024. That document may be sufficient to address the proposed encroachment into the Steep Slopes Overlay, however has not been provided.

It will be necessary to supplement this information with the required analysis stamped by a geotechnical engineer that determines the suitability of the steep slope for the proposed retaining wall.
Affirmative finding as conditioned.

Section 5.2.5 Setbacks
See Table 4.4.2-1, above.

Section 5.2.6 Building Height Limits
See Table 4.4.2-1, above.

Section 5.2.7 Density and Intensity of Development Calculations
See Table 4.4.2-1, above.



Part 3: Non-Conformities
The prior building has been demolished, with only foundational remnants. The development will not seek to continue any non-conformities.
A portion of one structure crosses the (easterly) boundary line. That will be removed, requiring a companion permit for 420 Riverside Avenue to reflect the change in lot coverage.
Affirmative finding as conditioned.

Sec. 5.4.8 Historic Buildings and Sites
Not applicable.

Section 5.4.9 Brownfields
436 Riverside Avenue is not listed on Vermont's Department of Environmental Conservation's list of brownfields. Not applicable.

Part 5: Performance Standards
Section 5.5.2 Outdoor lighting
Plan L1.01 defines 7 wall mounted LED fixtures and 2 LED pole lights. Photometric measurements are compliant. Pole height may not exceed 25'. The Conservation Board recommends exterior lighting be down-shielded to minimize upslope impacts from light pollution. **Affirmative finding as conditioned.**

Section 5.5.3: Stormwater and Erosion Control
A Stormwater Plan and Erosion Prevention and Sediment Control Plan shall be provided for review and approval by the Stormwater Engineer. **Affirmative finding as conditioned.**

Section 5.5.4 Tree Removal
The submitted landscaping plan LA.01 does not include any tree removal. **Not applicable.**

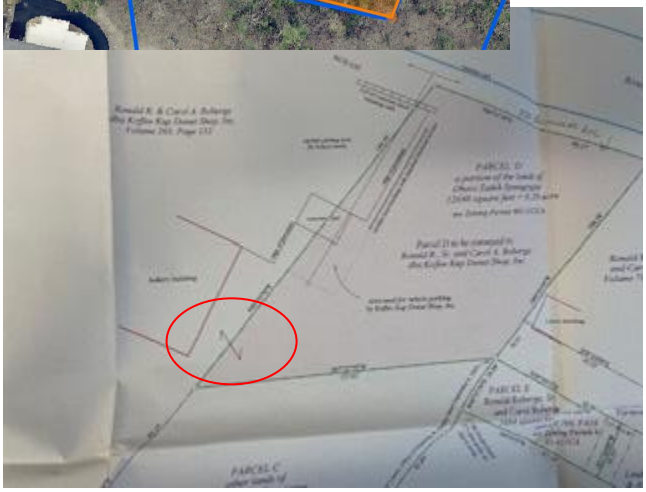
Article 6: Development Review Standards

Sec. 6.1.1 Applicability

These standards are enacted to apply to all development subject to the provisions of this ordinance found in Art. 10 – Subdivisions or Art. 11 – Planned Development involving the subdivision of land, or an adjustment or reconfiguration of lot lines.

Part 1: Land Division Design Standards

While no subdivision is proposed within this application, 436 Riverside Avenue presents on tax maps as two separate parcels. Additionally, a boundary line adjustment in 2005 conveyed a parcel (420 Riverside Avenue) to Ronald and Carol Roberge dba *Koffee Kup Donut Shop, Inc.* (ZP-05-351CA.) The approved plan shows that easterly parcel joined with 436 Riverside Avenue.



The Assessor's office notes the following note on a record dated August 2022:

"Corrective deed filed to remove 420 riverside av PID# 040-4-013-000 from the transfer record. that commercial land should remain property of different owner - Rocar, LLC. Only this parcel should have transfered at 436 (and 428 too but city does not recognize that as separate parcel even if it is a separate physical address)."

A 2022 Property Transfer Record defines the lot as 1.89 acres, so it is reasonable to assume that the conveyance was limited to the two westerly lots, and excluded the parcel further east. The applicant shall confirm that the redevelopment is limited to the dual parcel defined as 436 Riverside, and to actively extinguish the interior lot line. A companion Boundary Line Adjustment would satisfy that need and clarify the tax map issue. **Affirmative finding as conditioned.**

Note: Plan C1.02 defines the abutting parcel as owned by Ohavi Zedek; however ZP-05-351CA transferred this land to the owners of Koffee Kup Donut Inc.

Part 2: Site Plan Design Standards

Sec. 6.2.1 Applicability.

These standards shall be satisfied for the approval of all development subject to the provisions of this ordinance found in Article 3, Section 3.4.2(1) – Site Plan Review.

Sec. 6.2.2 Review Standards

(a) Protection of Important Natural Features:

The landscape, existing terrain and any significant trees and vegetation shall be preserved in their natural state insofar as practicable in keeping with the objectives of the underlying zoning district. Development and site disturbance shall preserve watercourses, wetlands, steep slopes, flood-prone areas, rock outcroppings, wildlife habitat and travel corridors, specimen trees and contiguous stands of forest, and other sensitive ecological and geological areas insofar as practicable in keeping with the objectives of the underlying zoning district. Site plans shall provide suitable buffers from any proposed site improvements, and maintain continuity and contiguousness of greenspace while allowing reasonable development in support of the overall intent of the zoning district. Where any natural features are proposed to be removed or the topography altered, special attention shall be given to replace or mitigate the loss of such features. Any development occurring on parcels containing significant natural areas identified in the city's Open Space Protection Plan shall avoid disturbance to these natural areas and establish appropriate buffers that protect their natural functions.

436 Riverside Avenue falls within the Steep Slope Overlay. Revised overlay mapping illustrates the proposed development area just north of the continuous land with average slope 15% or greater over 50' intervals. See Section 5.2.4 (b), above.

(b) Topographical Alterations:

Alteration to the natural contour of the site shall minimize grading, cut, and fill, and shall take necessary measures to protect against erosion and future instability. Any grade changes shall be in keeping with the general appearance of neighboring developed areas. In areas where more intense levels of development are encouraged, development should seek to take advantage of topographical changes to hide and/or blend new construction into the landscape. Proposed design and construction details for any cut and fill, or retaining walls over 3-feet in height, or any height along the lakeshore, shall be subject to review and approval by the city engineer before receiving approval of the site plan.

This site is a partially demolished manufacturing site (Koffee Kup Bakery) with concrete remnants and voids in the foundation. If the redevelopment includes any changes to the topography/slope, the applicant shall provide details and engineering support for such changes, which includes installation of any retaining walls. **Affirmative finding as conditioned.**

(c) Protection of Important Public Views:

There are no protected views from or through this site. Not applicable.

(d) Protection of Important Cultural Resources:

There are no listed historic resources at this development site. Not applicable.

(e) Supporting the Use of Renewable Energy Resources:

Where feasible, the site plan should be so designed as to take advantage of the site's inherent potential to utilize sources of renewable energy including direct sunlight, wind, or running water. The site plan should also incorporate site planning and landscaping decisions intended to minimize energy demand such as siting buildings to maximize solar access or the use of deciduous and coniferous trees to create shade and windbreak.

Buildings should, where appropriate within the context of the neighborhood development pattern, maximize their solar exposure by being oriented to maximize natural light and heat gain during winter months, and to minimize casting shadows into ground floor living space of a building on an adjacent property.

Due to the topography of the site, the southerly exposure immediately fronts a significant grade increase that would prevent a typical siting advantage for solar gain.

No part of this application will preclude the use of rooftop solar, wind, water, geothermal or other renewable energy resource. **Affirmative finding.**

(f) Brownfield Sites:

Where a proposed development involves a known or suspected brownfield, the site plan shall indicate areas of known or suspected contamination, and the applicant shall identify completed or planned remediation necessary to support the intended use(s).

436 Riverside Avenue is not listed on the Brownfield or Hazardous Site list on the Agency of Natural Resources Vermont Environmental Research Tool site. Not applicable.

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

Both Stormwater and Erosion Prevention and Sediment Control Plans are required. Preliminary plans have been provided and shared with the Stormwater engineer.

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated.

The pedestrian entry on the north is protected by a canopy; the entry on the east is located under a staircase; and the entry on the south (rear) is within a protected canopy cover. **Affirmative finding as conditioned.**

(h) Building Location and Orientation:

The introduction of new buildings and additions shall be consistent with the intent of the district. New buildings and additions should be aligned with the front façade of neighboring buildings to reinforce the existing "street-edge," or where necessary, located in such a way that complements existing natural features and landscapes. Buildings placed in mixed-use areas where high volumes of pedestrian traffic are desired should seek to provide sufficient space (optimally 12-15 feet) between the curbline and the building face to facilitate the flow of pedestrian traffic. In such areas, architectural recesses and articulations at the street-level are particularly important, and can be used as an alternative to a complete building setback in order to maintain the existing street wall.

Principal buildings shall have their main entrance facing and clearly identifiable from the public street.

The building is pulled up close to the front property line to reinforce the existing street edge and align companionably with the neighboring building. (Front yard setback in NAC is 0'.) A pedestrian entry is available on the north (front) elevation, covered by a small canopy and with a sidewalk directing visitors to that entry. **Affirmative finding.**

(i)Vehicular Access:

Curb cuts shall be arranged and limited in number to reduce congestion and improve traffic safety. A secondary access point from side roads is encouraged where possible to improve traffic flow and safety along major streets. The width and radius of curb cuts should be kept to the minimum width necessary, and sight triangles and sufficient turnarounds for vehicles shall be provided to reduce the potential for accidents at points of egress.

Driveways for commercial properties may require a traffic study to identify the impacts of the movement of traffic to and from the property, and design for safe access. Access for service and loading areas should be located behind buildings or otherwise screened from streets or public ways with landscaping or other barriers. Whether commercial or residential, shared driveways are encouraged, where possible and appropriate.

There are two curb cuts/access points to facilitate vehicular circulation, which is likely to include larger trucks and trailers intended to be transporting storage and bulk items. The circulation plan is commensurate yet clearly functional to the intended use on this almost 2-acre site, and better organized than the previous bakery/manufacturing site plan. The Department of Public works has been invited to provide comment on the vehicular circulation and site plan. **Affirmative finding.**

(j) Pedestrian Access:

Pedestrians shall be provided one or more direct and unobstructed paths between a public sidewalk and the primary building entrance. Well defined pedestrian routes shall be provided through parking areas to primary building access points and be designed to provide a physical separation between vehicles and pedestrians in a manner that

minimizes conflicts and improves safety. Where sidewalks and driveways meet, the sidewalk shall be clearly marked by differentiated ground materials and/or pavement markings.

As noted, there is a short walkway from the public sidewalk to a principal entry on the north elevation; however, it is understood that the majority of the traffic will come by truck/trailer/car for the purposes of delivering and accessing internal storage. **Affirmative finding.**

(k) Accessibility for the Handicapped:

Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled.

ADA compliance is under the jurisdiction of the building official. One accessible parking space is identified on Plan C1.42, behind the storage building but adjacent to building access.

ADA accessible rest room facilites are noted on floor plans, as are accessible storage rental options. Reference is made to floor plan A1. **Affirmative finding.**

(l) Parking and Circulation:

To the extent possible, parking should be placed at the side or rear of the lot and screened from view from surrounding properties and adjacent public rights of ways.

The site plan defines 5 surface parking spaces behind the building, one of them accessible. Customers will drive to the back of the site, where they can drive *into* the building, and unload the materials they want to store. The nature of the business (storage) means fewer parking spaces are required, and customers can access storage units 24 hrs. a day by entering the building.

Parking shall be laid out to provide ease in maneuvering of vehicles and so that vehicles do not have to back out onto city streets. Dimensions of spaces shall at a minimum meet the requirements as provided in Article 8. The perimeter of all parking areas shall be designed with anchored curb stops, landscaping, or other such physical barriers to prevent vehicles from encroaching into adjacent green spaces.

The rear surface parking spaces are compliant in dimensions. Vehicular movement is naturally limited by the significant change in grade to the south, which will include a replacement retaining wall.

Surface parking and maneuvering areas should be shaded in an effort to reduce their effect on the local microclimate, air quality, and stormwater runoff with an objective of shading at least 30% of the parking lot. Shading should be distributed throughout the parking area to the greatest extent practical, including within the interior depending on the configuration. New or substantially improved parking areas with 15 or more parking

spaces shall include a minimum of 1 shade tree per 5 parking spaces with a minimum caliper size of 2.5"-3" at planting. Up to a 30% waiver of the tree planting requirement may be granted by the development review board if it is found that the standard requirement would prove impractical given physical site constraints and required compliance with minimum parking requirements. All new shade trees shall be: of a species appropriate for such planting environments, expected to provide a mature canopy of no less than 25-feet in diameter, and selected from an approved list maintained by the city arborist. Existing trees retained within 25-feet of the perimeter of the parking area (including public street trees), and with a minimum caliper size greater than 3-inches, may be counted towards the new tree planting requirement.

Opportunities for planting are limited in the rear due to the grade change. The landscaping plan (LA 01 and LA 02) define plantings both to the east and west, as well as additional street trees. The species and method of installation have been reviewed by Parks and Recreation representatives and the city arborist, and have met their approval.

All parking areas shall provide a physical separation between moving and parked vehicles and pedestrians in a manner that minimizes conflicts and gives pedestrians a safe and unobstructed route to building entrance(s) or a public sidewalk.

The limited parking in the rear is immediately adjacent to a loading area with pedestrian entrances to the building.

Where bicycle parking is provided, access shall be provided along vehicular driveways or separate paths, with clearly marked signs indicating the location of parking areas. Where bicycle parking is located proximate to a building entrance, all shared walkways shall be of sufficient width to separate bicycles and pedestrians, and be clearly marked to avoid conflicts. All bicycle parking areas shall link directly to a pedestrian route to a building entrance. All bicycle parking shall be in conformance with applicable design & construction details as provided by the dept. of public works.

No bicycling parking is identified on the site plan. Table 8.2.4-1 defines the requirement for 1 per 20,000 sq. ft Long Term bike parking spaces, and at least 2 per public entrance (1 per 25,000 sq. ft.) The applicant will need to refine the site plan to demonstrate compliance with bike parking standards. **Affirmative finding as conditioned.**

(m) Landscaping, Fences and Retaining Walls:

Landscaping shall be used to beautify the development site and to provide specific functions and benefits to the uses and buildings on the site. These include but are not limited to stormwater retention and erosion control, winter windbreaks and summer shade, recreational and habitat corridors, buffers and screening of parking areas, and creating privacy for and from adjacent property.

Existing trees shall be retained and incorporated into a landscape plan to the extent possible, and existing trees to be retained shall be protected during construction in accordance with specifications provided by the city arborist. Contiguous green space, both within the site and with adjacent properties, should be provided on a site whenever

possible and be designed to provide wildlife travel corridors and habitat preservation, as well as enabling recreational access. If open space is intended to be publicly accessible, it shall be designed to maximize accessibility for all individuals including the disabled, encourage social interaction, and facilitate ease of maintenance. Along the street edge, landscaping shall be used to provide a visual buffer into parking areas from the public street and reinforce the streetscape.

Reference is made to plans LA-01 and LA-02. Street trees have been found acceptable to the city arborist.

The selection of plant materials and planting sites should create a sustainable landscape, and consideration shall be given to factors such as hardiness, salt tolerance, disease resistance, invasiveness, root and canopy spread, underground and overhead utilities, soil conditions, and microclimates. The use of native plant materials is encouraged, and the use of plants considered invasive by VT Agency of Agriculture shall be prohibited. For more information on sustainable landscapes, applicants are encouraged to consult Planting Sustainable Landscapes: A Guide for Plan Reviewers prepared for the Vermont Department of Forests Parks and Recreation by the Vermont Chapter of the American Society of Landscape Architects.

New or replacement street trees shall be provided consistent with the city's Street Tree Master Plan. All proposed street trees shall be selected and planted in accordance with specifications provided by the city arborist.

Fences may be placed within the required setback along a property line, but shall be setback sufficiently to provide for the maintenance of both sides of the fence without entering onto the adjacent property and shall present a finished side to the adjoining property and public street. Fences placed within a clear sight triangle shall adhere to the standards of Sec. 5.2.6 I. Styles, materials, and dimensions of the proposed fence shall be compatible with the context of the neighborhood and the use of the property.

No fences are proposed. Not applicable.

Retaining walls greater than 5 feet tall shall incorporate textured surfaces, terracing, and/or vegetation to avoid long monotonous unarticulated expanses and to minimize adverse visual impacts to neighboring properties. As with fences, retaining wall styles, materials, and dimensions shall be compatible with the context of the neighborhood and use of the property.

Although a replacement retaining wall is identified on Plan C2.01, no plans are included. This replacement wall encroaches upon the identified Steep Slopes overlay, requiring engagement of a geotechnical engineer. Reference is made on the plans to a geotechnical report dated 10.31.2024 by Terracon, but it is not included within the submission materials. **Affirmative finding as conditioned.**

(n) Public Plazas and Open Space:

No public plaza is proposed, or required. Not applicable.

(o)Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

Plan L1.01 defines compliant light levels and fixture mounting/pole heights. **Affirmative finding.**

(p) Integrate infrastructure into the design:

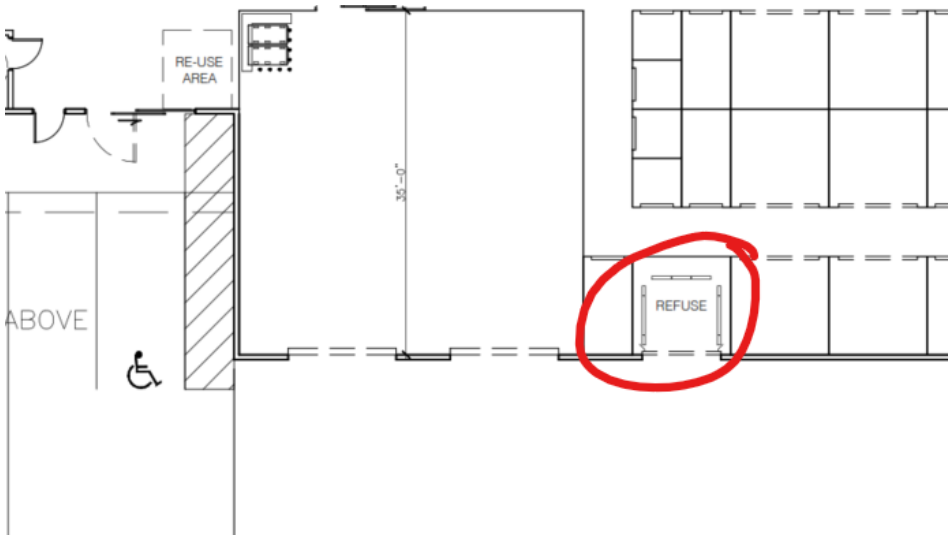
Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

An electrical transformer is illustrated adjacent to the westerly drive. This may be an existing utility connection, as it is present within an electrical easement area.

There are 0' required setbacks in the zoning district.

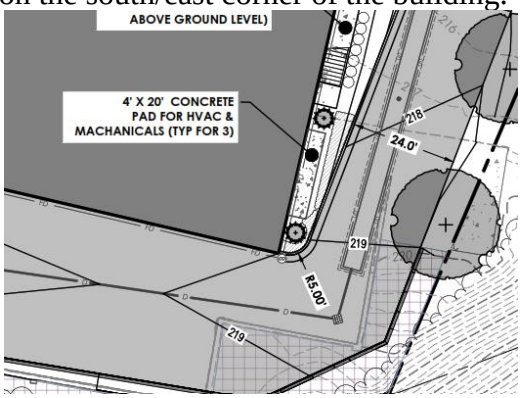
Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be place underground whenever practicable. Trash and recycling bins and dumpsters shall be located, within preferably, or behind buildings, enclosed on all four (4) sides to prevent blowing trash, and screened from public view.

Access to refuse area is identified on the floor plans; interior to the building.



Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

A concrete pad for mechanical equipment is illustrated on the south/east corner of the building. It is screened by landscaping. Some change may be anticipated to comply with Burlington's Thermal Energy Ordinance. It is the applicant's responsibility to consult with Burlington Electric Department to assure a path to compliance. **Affirmative finding as conditioned.**



Part 3: Architectural Design Standards
Sec. 6.3.1 Applicability.

These standards are enacted and shall be satisfied for the approval of all development subject to the provisions of this ordinance found in Article 3, Section 3.4.2(b) – Design Review.

Sec. 6.3.2 Review Standards

a) **Relate development to its environment:**
Proposed buildings and additions shall be appropriately scaled and proportioned for their function and with respect to the purpose of the zoning district. They should integrate harmoniously into the topography, and to the use, scale, and architectural details of existing buildings in the vicinity; however, such consideration shall not require building height to be more limited than otherwise allowed within an applicable zoning district or overlay zone per Article 4.

The following shall be considered:

b. ***Massing, Height and Scale:***

While architectural styles or materials may vary within a streetscape, proposed development should maintain an overall scale similar to that of surrounding buildings, or provide a sensitive transition, where appropriate, to development of a dissimilar scale.

Where the zoning encourages greater intensity and larger scale buildings in high density residential and non-residential zoning districts, buildings that are over 3-stories should provide a transition by employing design elements that reduce the apparent building mass from the street level. Taller buildings and elements are most appropriate where they provide a focal point of a terminal view, anchor a street corner, frame view corridors, or relate to larger scaled structures. The impacts at the street-level of increased or altered wind currents and downdrafts created by buildings over six (6) stories should be considered.

The building is proposed to be 32' in height and two stories. Abutting buildings are smaller in scale (existing UHaul facility, a convenience store, and residential to the east) reflecting earlier service-oriented development patterns. Development across the street is split between earlier industrial type uses (Queen City Steel, warehousing) but the building massing in that example is ameliorated with the steep grade changes at Intervale Road.

The proposed building is compliant with height limitations of the ordinance.

> *Buildings should maintain consistent massing and perceived building height at the street level, regardless of the overall bulk or height of the building. Buildings should maintain a relationship to the human scale through the use of architectural elements, variations of proportions and materials, and surface articulations. Large expanses of undifferentiated building wall along the public street or sidewalk shall be avoided. The apparent mass and scale of buildings shall be broken into smaller parts by articulating separate volumes reflecting existing patterns in the streetscape, and should be proportioned to appear more vertical than horizontal in order to avoid monotonous repetition. (See also (d) Provide an active and inviting street edge below.)*

Design efforts, with differing materials, colors and building articulation break up the massing of the structure and present differing volumes to the streetscape. **Affirmative finding.**

2. Roofs and Rooflines.

> *New buildings should incorporate predominant roof forms and pitches within the existing neighborhood and appropriate to the context. Large expanses of undifferentiated roof forms shall be avoided. This can be achieved by incorporating dormers or some variation in the roof form to lessen the impact of the massing against the sky. While flat roofs can be a reasonable architectural solution, pitched roof forms and architectural elements that enhance the city's skyline are strongly encouraged. Roof eaves, parapets, and cornices should be articulated as an architectural detail. Roof-top mechanicals shall be screened from view from the public street, and should be incorporated into and hidden within the roof structure whenever possible.*
>
> *Solar panels, light colored ballast or roof membranes, split roof clerestories, planted or "green" roof technologies (with a clearly articulated maintenance plan) and "gray water" collection are encouraged. Active rooftop uses are also encouraged to add to the visual complexity and activity of the city's skyline, and afford public access to otherwise unseen views of the city and surrounding landscape.*

A flat roof is proposed, consistent with other manufacturing/warehouse/commercial buildings on Riverside Avenue. At the DAB's recommendation, the wavey parapet along the roofline has been eliminated. **Affirmative finding.**

3. Building Openings

Principal entrances shall be clearly defined and readily identifiable from a public street whether by a door, a canopy, porch, or other prominent architectural or landscape features. People with physical challenges should be able to use the same entrance as everyone-else and shall be provided an "accessible route" to the building. Attention shall also be accorded to design features which provide protection from the affects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage.

Window openings shall maintain consistent patterns and proportions appropriate to the use. The window pattern should add variety and interest to the architecture, and be proportioned to appear more vertical than horizontal. Where awnings over windows or doors are used, the lowest edge of the awning shall be at least eight (8) feet above any pedestrian way, and shall not encroach into the public right-of-way without an encroachment permit issued by the dept. of public works.

Buildings placed on a side or rear property line where no setback is required shall contain neither doors nor windows along such façade so as not to restrict future development or re-development options of the adjacent property due to fire safety code restrictions. Otherwise they should be setback a minimum of 5-feet.

To meet the function of the proposed warehouse while satisfying design requirements, elements like transparent windows and doors are included. An accessible entry is available at the rear/south of the building. A pedestrian entry, with canopy, is identified on the primary façade.

Window patterns maintain consistent patterns and proportions. The building will be entirely sprinkled, satisfying building code requirements. A 56' wide awning is included over the rear loading dock area. **Affirmative finding.**

(b) Protection of Important Architectural Resources:

Although Koffee Kup Donuts were considered legenday, the remaining concrete structural remnants of the building are not. Not applicable.

(c) Protection of Important Public Views:

There are no protected views from or through this parcel. Not applicable.

(d) Provide an active and inviting street edge:

Building facades shall be varied along the street edge by the integration of architectural features, building materials, or physical step-backs of the façade along its length. Large expanses of undifferentiated building wall shall be avoided. This may be accomplished by incorporating fenestration patterns, bays, horizontal and vertical façade articulations, the rhythm of openings and prominent architectural features such as porches, patios, bays, articulated bases, stepping back an elevation relative to surrounding structures, and other street level details. The use of traditional components such as parapet caps, cornices, storefronts, awnings, canopies, transoms, kick plates, and recessed entries are highly encouraged. In areas where high volumes of pedestrian traffic are desired, the use

of architectural recesses and articulations at the street-level are particularly important in order to facilitate the flow of pedestrian traffic.

Non-residential buildings should provide visual access into the interior of building at the street level through the use of large transparent windows and/or window displays in order to create a dynamic and engaging public streetscape. The use of mirrored, frosted, or tinted glass shall not be permitted along an active pedestrian street-level façade. In contrast, residential buildings may be slightly recessed and/or elevated from the street-level in order to provide privacy. In such cases, visual interest along the streetscape can be provided through the use of landscaping, porches, and other similar features that offer a transition between public and private space.

This is a curious dynamic; where the intent of the building is to provide large-scale convenient public storage but the standards require transparent windows into the building along the pedestrian streetfrontage. The applicant team has exercised significant design efforts to make the building interesting and dynamic; but a warehouse is ultimately just that. The applicant assures the windows along the 2nd floor level frontage are transparent.
The intended use does not typically invite active visual engagement of the public along the streetscape. The use of (false) garage doors and second story windows along the streetfront are an attempt to provide interest and to break up the large building expanse; a dual advantage is that the arrangement suggests the very use that the building proposes: Storage. In some manner, the multiple false doors are a type of "window display" for the public, even if not intended to be functional. In this unique situation, the design team has successfully integrated the proposed use with a building articulating the purpose, in an interesting and spirited manner. All access is intended to be at the rear of the building.
In reality, few warehouses front a public street. **Affirmative finding, with DRB concurrence.**

(**e**) **Quality of materials:**

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts. Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

Elevation sheets define the intended use of insulated metal panels (IMP) with metal trim and a metal awning. See Sheets 3 & 4 of building elevations for further details. **Affirmative finding.**

Owners of historic structures are encouraged to consult with an architectural historian in order to determine the most appropriate repair, restoration or replacement of historic building materials as outlined by the requirements of Art 5, Sec. 5.4.8.

Not applicable.

(f) Reduce energy utilization:

New structures should incorporate the best available technologies and materials in order to maximize energy efficient design. All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

New structures should take advantage of solar access where available, and shall undertake efforts to reduce the impacts of shadows cast on adjacent buildings where practicable, in order to provide opportunities for the use of active and passive solar utilization.

As the proposed building backs up to a significant slope on the south, solar opportunities are somewhat limited. At 32' but in the proposed topographic location, the building has limited potential to cast shadows on neighboring properties. The property to the immediate east is wooded.

As new construction, Burlington's Thermal Heating Ordinance applies. The applicant is encouraged to connect with Burlington Electric staff to understand requirements for compliance. **Affirmative finding as conditioned.**

(g)Make advertising features complementary to the site:

Where signs and other advertising features are proposed, the applicant shall meet the requirements as per Article 7 – Signs. The size, location, design, texture, lighting, and materials of all exterior signs and advertising features shall not detract from the use and enjoyment of proposed buildings or surrounding properties. National branding through signage and architecture shall be discouraged.

Any signage shall require a separate sign permit. **Affirmative finding as conditioned.**

(h) Integrate infrastructure into the building design:

Exterior machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory features shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties.

Rooftop mechanicals, including heating and cooling devices and elevator equipment, should be incorporated into the structure's design, and shall be arranged to minimize their visibility from the street level. Such features, in excess of one foot in height, shall be either enclosed within the roof structure, outer building walls, or parapets, or designed so that they are integrated into the overall design and materials of the building. Where such rooftop features do not exceed ten percent (10%) of the total roof area, they may be considered "ornamental and symbolic features" pursuant to Sec. 5.2.7 for the purposes of measuring building height.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize any adverse impact on neighboring

properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

See Section 6.2.2 (p) above.

(b) **Make spaces secure and safe:**

Spaces shall be designed to facilitate building evacuation, accessibility by fire, police or other emergency personnel and equipment, and, to the extent feasible, provide for adequate and secure visibility for persons using and observing such spaces. Building entrances/entry points shall be visible and adequately lit, and intercom systems for multi-family housing should be incorporated where possible, to maximize personal safety.

The fire marshal has expressed concern about the isolation between the proposed building and the embankment at the rear; especially where no employees are proposed to be in the building. A methodology to monitor activity in the back and prepare for immediate response is recommended, i.e. video monitoring with a system for response to minimize the opportunity for malicious or nefarious unmonitored activity. **Affirmative finding as conditioned.**

Article 7: Signs

Any signage will require a separate zoning permit. **Affirmative finding as conditioned.**

Article 8: Parking

Table 8.1.9-1 Maximum Off-Street Parking Requirements

Within the Multimodal Mixed-Use District, Ware-Self Storage Facility has a maximum parking allowance of 1 space per resident manager plus 1 per 100 leasable storage spaces.
With 500 storage units, the maximum off-street parking limit is 1 + 5 parking spaces, or 6 total. The site plan defines 5 parking spaces; one of which is handicap accessible (exempt from the maximum count by Section 8.1.9 (a) 4.) **Affirmative finding.**

Section 8.1.16 Transportation Demand Management

Table 8.1.16-1 defines this redevelopment as an Applicable Project that must meet All provisions of Section 8.1.16 (c):

(c) ***Transportation Demand Management (TDM) Program****: A TDM Program shall include each of the following elements at a minimum:*

1. ***Outreach and Education****:*

    i. *Designation of a Transportation Coordinator who directly, or indirectly through membership in a Transportation Management Association, shall be responsible for each of the following:*

        1. *Prepare and always make available to all residents and employees informational and educational materials regarding available TDM strategies and opportunities for increased use and participation;*

        2. *Preparation and dissemination of an annual travel survey of all residents and employees; and,*

3. *Record-keeping and reporting to City upon request of all TDM activities offered and rates of participation (including parking utilization if applicable).*

2. ***TDM Strategies**: In addition to compliance with the on-site Bicycle Parking requirements found in Article 8, Part 2, each TDM Program must incorporate TDM strategies to minimize the amount of parking demand associated with the project. At a minimum, **a TDM Program shall select no less than two (2) of the following TDM strategies**, which shall be selected and filed with the Administrative Officer on an annual basis:*

    a. Maintain an ongoing and active membership in a Transportation Management Association (TMA);
    b. Provide GMT Transit passes to all residents and employees at a minimum discount of 50%;
    c. Provide a free car share membership to all residents and employees;
    d. Provide a free bike share membership to all residents and employees;
    e. If not already provided through a TMA membership, provide residents and employees with a shuttle service, guaranteed ride home program, or ride to a nearby transit center.

3. ***Parking Management**: Where on-site or off-site parking is also made available:*

    a. Conduct parking utilization studies at least annually for a period of 7 years from receipt of a Certificate of Occupancy;

    b. With the exception of permanently affordable housing units, the cost of parking shall be un-bundled from all residential and non-residential leases and deeds and made available at a market rate;

    c. Where parking spaces are made available to off-site users, parking spaces may be made available by a renewable lease, provided the term of any lease does not exceed one (1) year; and,

    d. Priority parking spaces: when on-site parking is provided, the following must be located in closest proximity to a primary building entrance and/or public street frontage:

        1. *ADA Accessible spaces;*
        2. *Bicycles, scooters, and motorcycles spaces;*
        3. *Car-share: where 1 space must be offered for projects with 20 or more residential units, subject to an agreement with a car-share provider; and,*
        4. *Carpool and/or Vanpool vehicles: where more than 20 spaces are available for non-residential uses. In such cases, 5 spaces or 5% of*

the parking spaces on site, whichever is less, must be reserved for carpool/vanpool use before 9:00 AM on weekdays.

4. ***TDM Agreement****: Each TDM Plan shall include a signed commitment to and acknowledgement of each of the following on a form provided by the Administrative Officer:*

    a. *Commitment to ongoing implementation of the TDM requirements as set forth above;*

    b. *Acknowledgement that the project has no claim to the ongoing availability of nearby on-street public parking, and that, as is the case with other on-street public parking, the City retains the right to charge for, restrict or remove such on-street parking at any time;*

    c. *Acknowledgement that failure to maintain transportation demand management as required above is a violation of this ordinance, and understanding that, pursuant to Sec. 2.7.8 of this ordinance, no zoning permit or certificate of occupancy may be granted until any such violation has been remedied; and,*

    d. *Commitment to notify any subsequent owners and tenants in writing of their obligations under this section as part of any purchase and sale and/or lease agreements.*

Review and Enforcement: *The Administrative Officer shall be responsible for determining compliance with the TDM Program requirements as set forth above, and ongoing implementation shall be included as a condition of any discretionary or administrative permit required for development subject to the conditions of this Section.*

Failure to maintain a TDM Program as required above shall be a violation of this ordinance, and pursuant to Sec. 2.7.8 of this ordinance no zoning permit or certificate of occupancy may be granted without a TDM Program in effect.

Guidelines regarding compliance with these TDM requirements shall be developed and provided to applicants by the Administrative Officer.

A TDM is a requirement for redevelopment at this site which must be provided **prior to release of the zoning permit**. **Affirmative finding as conditioned.**

II. Conditions of Approval

1. There is an open expired zoning permit (ZP-22-584) that needs a Certificate of Occupancy before a CO can be issued for this permit.
2. **Impact fees may be due within 7 days of issuance of a certificate of occupancy**, as determined by the Water Resources Division and the Technical Services Division of the Department of Public Works based on water and wastewater flows and peak hour vehicle trip ends, respectively.

3. A plan for stormwater treatment shall be reviewed and approved by the Stormwater administrator **prior to release of the zoning permit.**
4. To clarify tax parcel boundaries, a Boundary Line Adjustment is recommended to merge the two effected parcels, and to correct / revoke the inclusion of 420 Riverside Avenue in the redevelopment. (Per zoning permit ZP-05-351CA.)
5. A letter of adequate water and sewer capacity from Burlington's Water Resources division shall be required **prior to release of the zoning permit.**
6. A State Waste Water permit is likely required. It is the responsibility of the applicant to confirm and comply.
7. This project is subject to Burlington's Thermal Energy Ordinance. It is recommended that the applicant consult with Burlington Electric Department to assure a path to compliance with the ordinance standards.
8. Construction activities are limited to M-F 7:30 am to 5:30 pm. Saturdays are reserved for internal construction, with no construction activities on Sundays.
9. Any future enlargement or alternation shall be reviewed under regulations in effect at the time of application.
10. **Appendix A Use Table**, Footnote 15 limits Warehouse-Self Storage as follows: *Excludes storage or uncured hides, explosives, and oil and gas products*.
11. The Conservation Board has recommended exterior lighting be down-shielded to minimize upslope impacts from light pollution.
12. **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. A structural plan for the retaining wall shall be provided.
13. A companion permit with a site plan and lot coverage calculation is required for the removal of the structure that crosses the property boundary line onto 420 Riverside Avenue.
14. A methodology for building monitoring, especially in the rear of the building, is recommended by the fire marshal to prevent malicious or unlawful behaviour. A plan for response, in the case of such behaviour is also recommended.
15. Any signage will require a separate sign permit.
16. **Prior to release of the zoning permit**, the applicant shall provide a **Transportation Demand Management Plan** (Section 8.1.16); outlining proposed Outreach and Education, TDM Strategies (must identify at least 2), Parking Management and a TDM agreement. Failure to maintain a TDM Program as required above shall be a violation of the ordinance, and pursuant to Sec. 2.7.8 of this ordinance no zoning permit or certificate of occupancy may be granted without a TDM Program in effect.
17. At least 2 short term bicycle parking spaces shall be provided near a pedestrian entrance; and one long term bike parking space. (This may include on the interior.)
18. 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.

Project Summary to accompany Zoning Permit Application

Project: Proposed U-Haul Storage Building at 436 Riverside Avenue

By: Doug Goulette, Project Civil Engineer, Bowman

Date: 12.19.2025

Introduction: Amerco Real Estate Company (aka U-Haul) owns this site, and is proposing to construct a U-Haul internal self-storage facility on it. This is the former site of Koffee Kup Bakery.

The following is a brief outline of the proposed project:

- The parcel size is 2.0 acres, and the tax parcel ID is 040-4-014-000
- This parcel is in the Neighborhood Activity Center Riverside Zoning District (NAC-R), Steep Slope Overlay District, and Design Review Overlay District
- The proposed building footprint is approximately 30,138 sq.ft.
- The proposed building is a two-story structure, with a height of 32'.
- There are two (2) proposed curb-cut access points off Riverside Avenue for ease of customer access and emergency vehicle convenience and safety
- All loading and unloading will be done on the south (rear) side of the building.
- There is no proposed storage of vehicles or materials on the exterior of the building.
- Customers will drive to the back of the site, where they can drive into the building, and unload the materials they want to store.
- There are 500 storage units proposed within the building.
- Based on ITE Trip Generation Edition 12, daily traffic generation is estimated to be 90 vehicle trip ends, a peak hour am volume of 6 vph, and pm peak hour volume of 9 vph.
- This will be a self-service building open 24/7/365 with no full-time onsite employee presence.
- The building will be fully sprinklered.
- There is a proposed retaining wall along the south side of the paved area to the south of the building. This new wall will replace the existing building walls from the previous structures which are acting as retaining walls currently.
- There is no anticipated significant earthwork proposed on the steep slope along the south (rear) side of the property. A "Steep Slope Narrative" can be found on plan sheet C2-01.
- I hereby certify that a Pre-Application Public Neighborhood Meeting was held on June 11, 2025.

Per Article 3.5.6 (b) of the Comprehensive Development Ordinance, the following items address the Major Impact Review Standards:

1. The proposed stormwater system to treat stormwater runoff exceeds Vermont and City standards. It is not anticipated that air quality will be degraded as this use does not create emissions, except for customer vehicles. As all of the storage is within

the interior of the building, excess noise from this site is not anticipated. As a result, it is the opinion of the applicant that the project will **not result in undue water, air, or noise pollution.**

2. There will be no full time employees working at this building. Only an occasional worker will visit the building to clean common areas and inspect the building. No other water use other than a single public bathroom and cleaning water is anticipated. As a result, it is the opinion of the applicant that the project will **have sufficient water available for its needs.**
3. There will be no full time employees working at this building. Only an occasional worker will visit the building to clean common areas and inspect the building. No other water use other than a single public bathroom and cleaning water is anticipated. As a result, it is the opinion of the applicant that the project will **have sufficient water available for its needs.**
4. Earth disturbance is primarily associated with the redevelopment of areas of the site already improved with pavement and building slabs. During construction EPSC measures such as straw waddles will be placed downslope of earth disturbance to limit runoff from the site toward Riverside Avenue. Minimal disturbance of the steeper slope to the south is proposed, with a new retaining wall being constructed to support the existing slope. Impervious surface area is decreasing as a result of this project, improving the site's ability to hold water. As a result, it is the opinion of the applicant that the project will **not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that dangerous or unhealthy conditions may result.**
5. Based on the ITE 12 Edition Trip Generation, 500 storage units will create a total of 90 vehicle trip ends. If 12 hours is used for modeling (say 7:00 am to 7:00 pm), the resulting average vehicle arrival/departure is 1 vehicle every 8 minutes. The peak hour am volume is 6 vph, and the pm peak hour volume of 9 vph. These volumes are likely lower than trip generation when the Koffee Kup Bakey use was in full operation. Given the nature of the building use, the vast majority of unit renters are anticipated to drive to this facility, with very little pedestrian traffic. As a result, it is the opinion of the applicant that the project will **not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed.**
6. This self-storage use will not generate school age children. As a result, it is the opinion of the applicant that the project will **not cause unreasonable burden on the City's ability to provide educational services.**
7. The proposed use will not result in any new infrastructure to be dedicated to the City. All infrastructure will remain private. As a result, it is the opinion of the applicant that the project will **not cause an unreasonable burden on the City's ability to provide municipal services.**

8. There is no documentation that this site contains rare, irreplaceable or significant natural areas, historic or archaeological sites, nor impact the scenic or natural beauty of the area or any part of the city. As a result, it is the opinion of the applicant that the project will **not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city.**
9. This project is a re-development of a former commercial/industrial site. It is the opinion of the applicant that the project will **not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor the city's investment in public service and facilities.**
10. The project falls within the Neighborhood Activity Center – Riverside (NAC-R) zoning district, which allows for commercial developments. In Burlington's Comprehensive Plan, this parcel falls in the Industrial, R&D, Warehousing Land Use category. The Plan "anticipates a more urban configuration of higher-density mixed residential and commercial uses on the south side of Riverside Avenue." This project proposes a higher density commercial use, thereby meeting one of the goals of the Plan. As a result, it is the opinion of the applicant that the project will **be in substantial conformance with the city's municipal development plan and all incorporated plans.**
11. This project does not remove existing housing units, nor does it produce employees in need of housing. As a result, it is the opinion of the applicant that the project will **not have an undue adverse effect on the present or projected housing needs of the city in terms of amount, type, affordability and location.**
12. This project, being commercial in nature, will not increase the population of the city. As a result, it is the opinion of the applicant that the project will **not have an undue adverse effect on the present of projected park and recreational needs of the city.**

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

CONTEXT MAP

LOCATION MAP

DRAWING INDEX:

C1-00 - COVER
C1-01 - EXISTING CONDITIONS
C1-02 - DEMOLTION & EPSC PLAN
C2-01 - SITE PLAN
C2-02 - GRADING, DRAINAGE, & UTILITY PLAN
LA-01 - LANDSCAPE PLAN
LA-02 - LANDSCAPE DETAILS
LI-01 - LIGHTING PLAN
C8-01 - SITE DETAILS
C8-02 - SEWER AND WATER DETAILS
C8-03 - STORMWATER DETAILS
C8-04 - STORMWATER DETAILS
C8-05 - EROSION DETAILS & CONSTRUCTION EPSC
C8-06 - EPSC LOW RISK 2025 SHEET 1
C8-07 - EPSC LOW RISK 2025 SHEET 2

PROJECT DESCRIPTION:

THIS PROJECT IS FOR THE REDEVELOPMENT OF A PARTIALLY DEMOLISHED COMMERCIAL BUILDING INTO NEW U-HAUL SELF STORAGE FACILITY WITH ASSOCIATED DRIVES AND PARKING.

Owner/Applicant:
AMERCO REAL ESTATE COMPANY
c/o JEFFERY VAINE, OWNERS REPRESENTATIVE
2727 N CENTRAL AVE. 5N
PHOENIX, AZ 85004

Landscape Architect & Engineer:
BOWMAN
478 BLAIR PARK ROAD
WILLISTON, VT 05495
(802) 879-6331

LOCAL PERMITTING SUBMISSION SET
(NOT FOR CONSTRUCTION)

USE AND INTERPRETATION OF THE DRAWINGS

1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.

2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.

3. Owner and Architect are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.

4. Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.

5. These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.

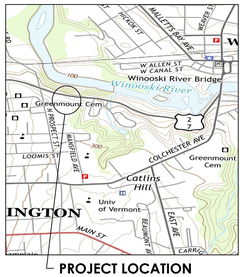
6. It is the User's responsibility to ensure this copy contains the most current revisions. If unsure, please contact TCE.

BEFORE USING THESE PLANS ENSURE THAT YOU HAVE THE LATEST REVISION

LAST REVISED:	12/19/2025

TCE PROJECT NO: 22-575
PERMIT DESCRIPTION: LOCAL PERMITTING
SPAN: 114-035-14182
PARCEL ID: 040-4-014-000

Bowman
478 BLAIR PARK ROAD, WILLISTON, VERMONT 05495
802 879 6331
WWW.TCEVT.COM



PROJECT LOCATION

LEGEND

- PAVED DRIVE OR ROAD
- GRAVEL
- PAVED DRIVE OR ROAD WITH CURB
- TREE LINE
- CONCRETE
- TOPOGRAPHIC CONTOURS
- LIDAR CONTOURS
- SEWER MAINS AND SERVICES
- STORM DRAINAGE
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- SIGN
- SEWER MANHOLE
- CATCH BASIN (CB)
- WATER SUPPLY WELL
- UTILITY POLE
- TRANSFORMER
- TELEPHONE OR TELEVISION PEDESTAL (TEL-PED/TV-PED)
- LUMINAIRE
- GAS OR ELECTRICAL METER
- BENCHMARK
- IRON PIPE
- CONCRETE MONUMENT

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

EXISTING CONDITIONS NOTES:

1. THE PURPOSE OF THE EXISTING CONDITIONS PLAN IS TO DEPICT READILY APPARENT PERTINENT EXISTING CONDITIONS AS OF 12/18/2023.
2. BEARINGS SHOWN ARE BASED UPON VERMONT GRID NORTH USING VTVRS CORS STATION.
3. VERTICAL DATUM IS BASED ON NAVD88 (GEIOD 18). A CARLSON BRx7 RTK GPS UNIT WAS EMPLOYED FOR THESE OBSERVATIONS.
4. COORDINATE SYSTEM IS BASED ON VERMONT STATE PLANE (U.S. SURVEY FEET).
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE BASED ON RESEARCH, UTILITY PLANS PROVIDED BY OTHERS, AND/OR SURFACE EVIDENCE ENCOUNTERED AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE ORDINARY STANDARD OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN ENGINEER. ADDITIONAL UTILITIES NOT SHOWN MAY EXIST. ENGINEER SHALL BE NOTIFIED IF ANY DISCREPANCIES ARE ENCOUNTERED. ACTUAL LOCATION OF UNDERGROUND UTILITIES MAY VARY. DIGSAFE MUST BE CONTACTED PRIOR TO ANY EXCAVATION. CALL 1-888-DIG SAFE (344-7233) OR CALL 811.
6. PERIMETER BOUNDARIES SHOWN HEREON FROM PLAT ENTITLED "ALTA/NSPS LAND TITLE SURVEY OF: KKB ACQUISITIONS, LLC. PROPERTY 436 RIVERSIDE AVENUE BURLINGTON, VT 05401 FOR AMERCO REAL ESTATE COMPANY" BY NORTHERN SURVEY ENGINEERING DATED 10/24/2022 AND MONUMENTATION FOUND IN THE FIELD, THIS PLAN DOES NOT DEPICT A FORMAL BOUNDARY SURVEY.

Bowman

BOWMAN
478 Blair Park Rd.
Williston, Vermont 05495

Phone: (802) 879-6331

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EXISTING CONDITIONS

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

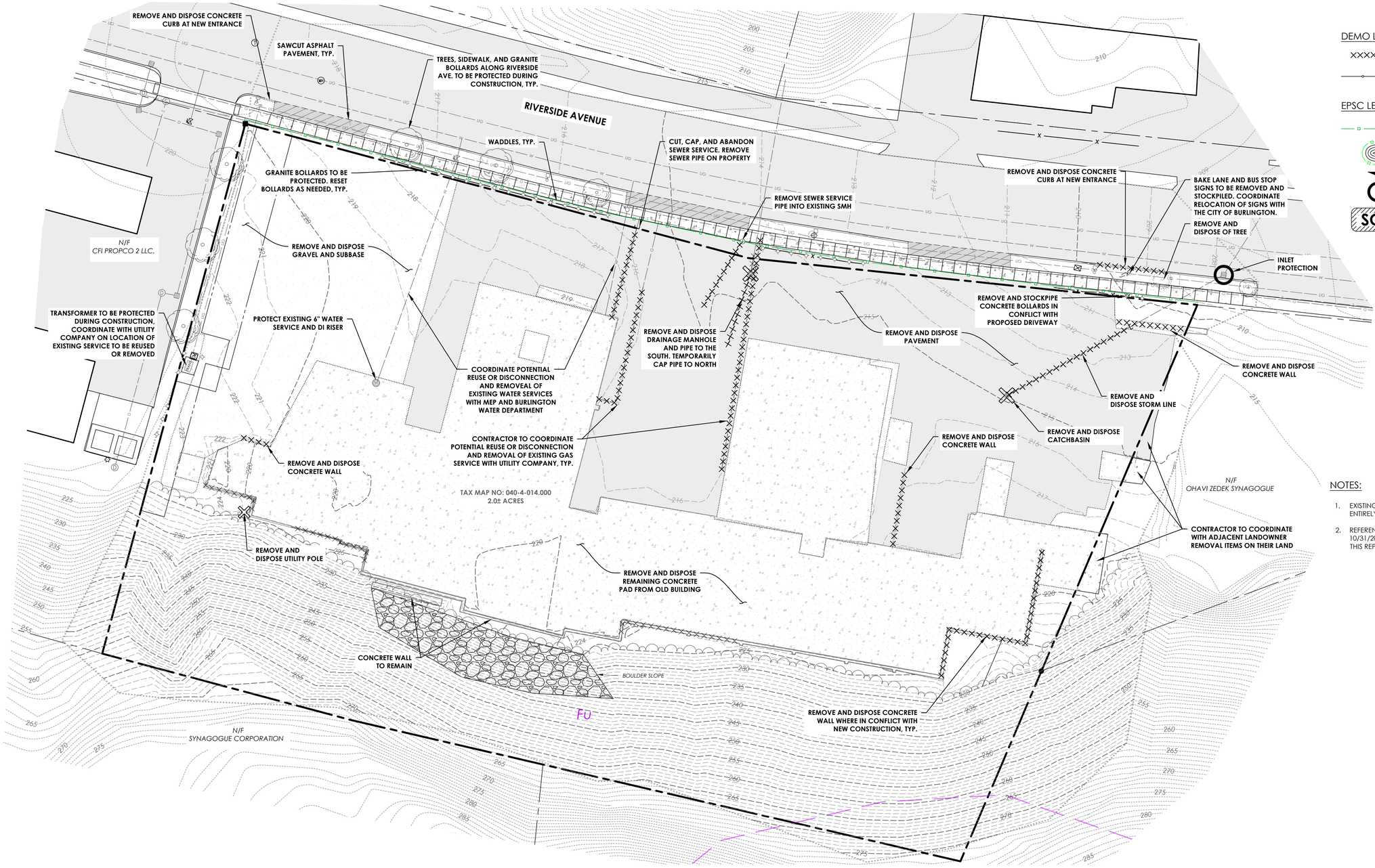
DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 09/05/2025

C1-01

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C1-01 - Existing Conditions.dwg 12/19/2025



DEMO LEGEND

- REMOVAL ITEM
- TREE PROTECTION FENCE

EPSC LEGEND

- WADDLES
- SOIL STOCK PILE
- STONE CHECK DAM
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE (SCE)

NOTES:

1. EXISTING PAVEMENT AND CONCRETE TO BE REMOVED ENTIRELY AS PART OF SITE DEMOLITION
2. REFERENCE IS MADE TO A GEOTECHNICAL REPORT DATED 10/31/2024 PREPARED BY TERRACON FOR THIS PROPERTY. THIS REPORT INCLUDES DEMOLITION RECOMMENDATIONS.

SITE PROTECTION NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE THE LIMIT OF WORK DUE TO THEIR CONTRACTOR OPERATIONS.
2. CONTRACTOR SHALL PROTECT AND SUSTAIN IN NORMAL SERVICE ALL EXISTING UTILITIES, STRUCTURES, EQUIPMENT, ROADWAYS, AND DRIVES UNLESS OTHERWISE NOTED.
3. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAW CUT TO A CLEAN SMOOTH AND SHARP EDGE AND PROTECTED UNTIL ABUTTING MATERIALS ARE INSTALLED.
4. CONTRACTOR SHALL MAINTAIN NECESSARY TRAFFIC CONTROL DEVICES, DRUMS, DELINEATORS, SIGNS, FENCES, AND BARRICADES IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL MUTCD WITH VT SUPPLEMENT TO PROPERLY PROTECT WORK, EQUIPMENT, PERSONS, AND PROPERTY FROM DAMAGE.

REMOVAL NOTES:

1. CONTRACTOR SHALL CONTACT DIG-SAFE (811) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
2. CONTRACTOR SHALL COORDINATE WITH THE OWNER/OWNER'S REPRESENTATIVE ON ALL MATERIALS TO BE REMOVED AND RECYCLED/DISPOSED OF OFF SITE. ALL HANDLING OF MATERIALS TO BE REMOVED, RECYCLED, OR DISPOSED OF MUST BE DONE SO IN A SAFE, LEGAL MANNER, IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE, FEDERAL, AND ANY OTHER APPLICABLE REGULATIONS.
2. DEMOLITION SHALL OCCUR AFTER IMPLEMENTATION OF EROSION CONTROL MEASURES IN ACCORDANCE WITH APPLICABLE STATE PERMITS AND EROSION CONTROL PLANS.
3. ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH AND INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS APPLICABLE UNLESS OTHERWISE NOTED.
4. IF DISCREPANCIES EXIST BETWEEN THE PLANS AND SITE CONDITIONS, CONTRACTOR SHALL NOTIFY THE ENGINEER AND/OR OWNERS REPRESENTATIVE FOR CLARIFICATION.
5. IN SOME CASES ABANDONED UTILITIES CAN REMAIN AT THE ENGINEER OR OWNER'S DISCRETION.
6. EXISTING ITEMS INDICATED TO BE SALVAGED OR STOCKPILED SHALL BE CAREFULLY REMOVED AND STORED AS DIRECTED BY THE OWNER/OWNER'S REPRESENTATIVE.
7. TREE, SHRUB, AND VEGETATION REMOVAL SHALL INCLUDE THE FILLING, CUTTING, GRUBBING OUT OF THE ENTIRE ROOT SYSTEM AND SATISFACTORY OFF SITE DISPOSAL OF ALL TREE, SHRUBS, STUMPS, VEGETATION, AND EXTRANEOUS DEBRIS PRODUCED THROUGH THE REMOVAL OPERATIONS. FELL TREES IN SUCH A WAY AS TO NOT DAMAGE ADJACENT BUILDINGS OR OTHER TREES TO BE SAVED.
8. CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL TO FULL DEPTH WITHIN LIMIT OF GRADING BEFORE COMMENCING EXCAVATION AND GRADING OPERATIONS. TOPSOIL SHALL NOT BE REMOVED FROM THE SITE, UNLESS APPROVED BY THE OWNER/OWNER'S REPRESENTATIVE.

EROSION CONTROL NOTES:

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS.
3. CONTRACTOR AND/OR OWNER (OR APPOINTED DESIGNATE) SHALL INSPECT ALL EROSION CONTROL FEATURES AT LEAST ONCE PER WEEK AND AFTER ANY STORM EVENT GENERATING RUNOFF FROM THE SITE.
4. AFTER VEGETATION HAS BEEN FULLY ESTABLISHED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED.
5. PROVIDE EROSION CONTROL MATTING ON ALL DISTURBED SLOPES WITH A PITCH OF 3H:1V OR GREATER.
6. EXCAVATION AND PIPE INSTALLATION SHALL BE AVOIDED DURING PERIOD OF SIGNIFICANT PRECIPITATION.
7. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH DETAILS.

SNOW MANAGEMENT:

TO ENSURE ADEQUATE STORAGE AND CONTROL OF MELTWATER, CLEARED SNOW MUST BE STOCKPILED DOWNSLOPE OF DISTURBED AREAS.

SNOW STOCKPILES MUSTY BE KEPT CLEAR OF STORMWATER TREATMENT STRUCTURES. DRAINAGE STRUCTURES SHOULD BE CHECKED REGULARLY AND KEPT FREE OF SNOW AND ICE JAMS.

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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DEMOLTION & EPSC PLAN

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

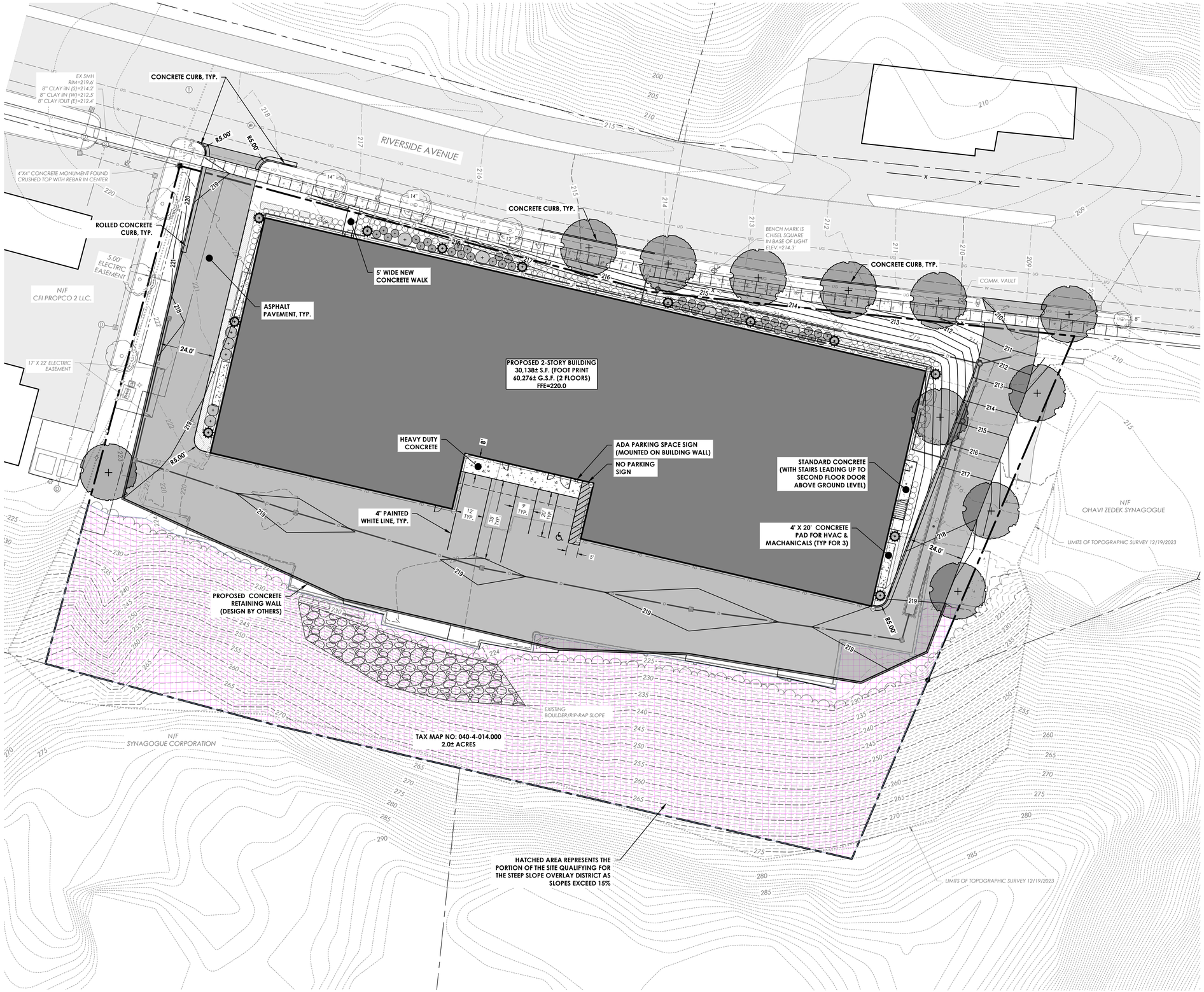
CML	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 12/19/2025

C1-02

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C1-02 - Demolition & EPSC Plan.dwg 12/19/2025



Steep Slope Narrative:

The southerly (⅓ ±) portion of this site includes existing slopes of over 15%, thereby qualifying them for inclusion in the Steep Slope Overlay District. This area of the site is a wooded slope which extends from the back of the old Koffee Kup building walls (which are still in-place) to the southerly property line . The goal of this project is to not disturb this existing slope by constructing a new retaining wall that takes the place of the existing foundations/walls currently in place.

In some locations, the new retaining wall is in front (north) of the existing walls, and in other locations it is slightly behind (south) of the exiting walls. In either case, the top of the new retaining wall will be approximately at the same elevation of the existing walls and adjacent ground. The design intent is that there be minimal disturbance to the existing slope. The new retaining wall will have an overturning toe at the base of the wall on the north side, thereby limiting the excavation needed into the southerly slope needed to prepare for the new wall construction.

PROJECT INFORMATION:

1.	OWNER OF RECORD:	AMERCO REAL ESTATE COMPANY
2.	APPLICANT:	AMERCO REAL ESTATE COMPANY
3.	TAX PARCEL ID:	040-4-014-000
4.	SPAN:	114-035-14182
5.	PHYSICAL ADDRESS OF PROPERTY:	436 RIVERSIDE AVENUE BURLINGTON, VERMONT 05401
6.	PARCEL SIZE:	± 2.00 ACRES
7.	BASE ZONING DISTRICT:	NEIGHBORHOOD ACTIVITY CENTER RIVERSIDE (NAC - R)
8.	OVERLAY DISTRICT:	DESIGN REVIEW
9.	DIMENSION REQUIREMENTS	

	REQUIRED	PROPOSED
FRONT SETBACK:	0' AND 12' OFF CURB	6' AND 22' OFF OF CURB
SIDE REAR:	0'	35'
MAX. LOT COVERAGE:	80%	60%
MAX BUILDING HEIGHT:	35'	32' - 2'
MAX. FLOOR AREA RATIO:	2	0.7

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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SITE PLAN

UHAUL COMMERCIAL, BURLINGTON
436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

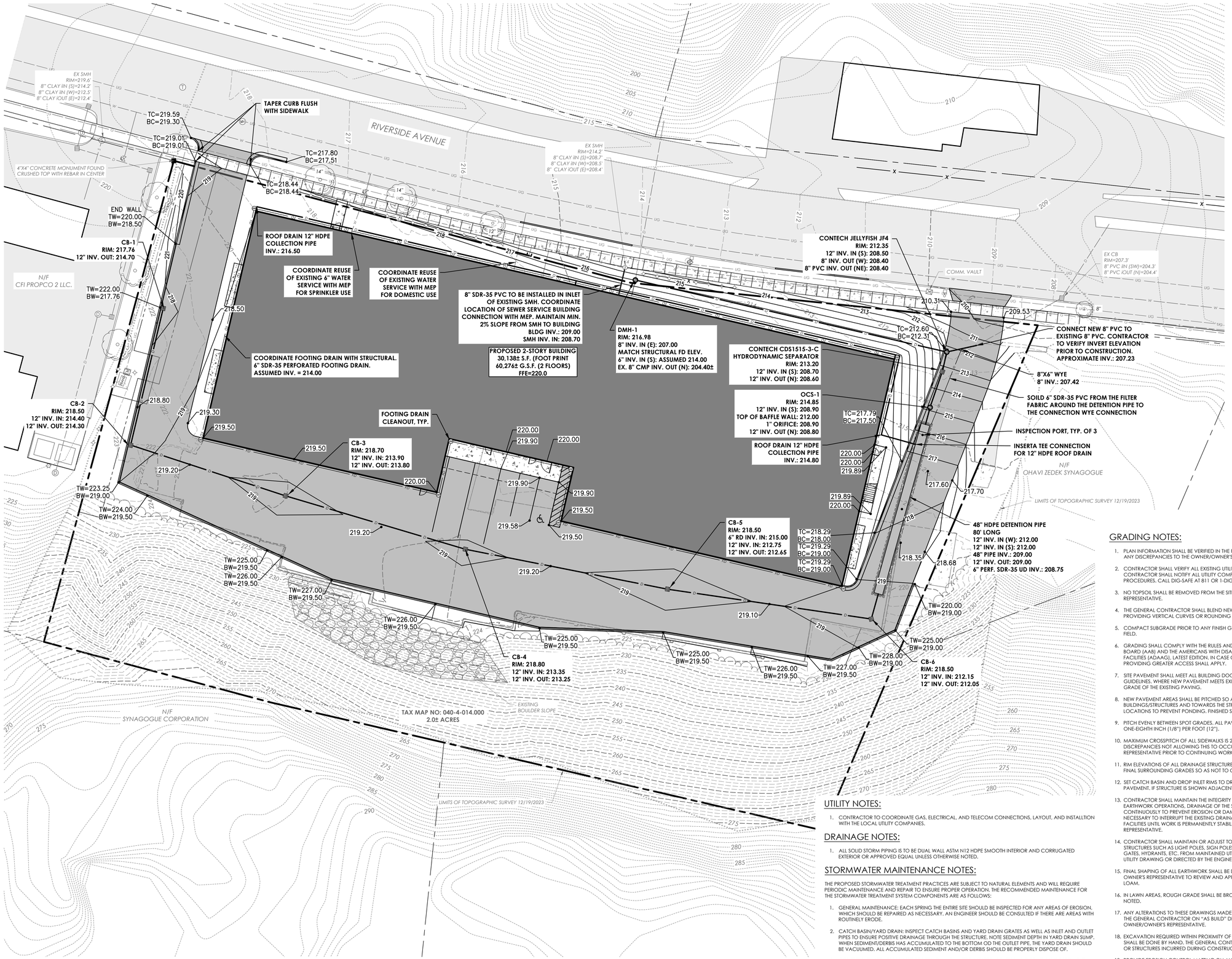
DATE	DESCRIPTION

DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
DATE : 12/19/2025

C2-01

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C2-01 - Site Plan.dwg 12/23/2025



GRADING NOTES:

1. PLAN INFORMATION SHALL BE VERIFIED IN THE FIELD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPORT ANY DISCREPANCIES TO THE OWNER/OWNER'S REPRESENTATIVE IMMEDIATELY.
2. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION. THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH "DIG-SAFE" NOTIFICATION PROCEDURES. CALL DIG-SAFE AT 811 OR 1-DIG-SAFE AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED WORK.
3. NO TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS APPROVED IN ADVANCE BY THE OWNER/OWNER'S REPRESENTATIVE.
4. THE GENERAL CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING EARTHWORK, PROVIDING VERTICAL CURVES OR ROUNDING AT ALL TOPS AND BOTTOMS OF SLOPES.
5. COMPACT SUBGRADE PRIOR TO ANY FINISH GRADING. REMOVE ALL SOFT SPOTS OBSERVED OR IDENTIFIED IN FIELD.
6. GRADING SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE LOCAL ARCHITECTURAL ACCESS BOARD (AAB) AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG), LATEST EDITION. IN CASE OF CONFLICT BETWEEN REGULATIONS, THE GUIDELINES PROVIDING GREATER ACCESS SHALL APPLY.
7. SITE PAVEMENT SHALL MEET ALL BUILDING DOOR THRESHOLDS FLUSH AND IN ACCORDANCE WITH ADA GUIDELINES. WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT, NEW PAVING SHALL MEET THE LINE AND GRADE OF THE EXISTING PAVING.
8. NEW PAVEMENT AREAS SHALL BE PITCHED SO AS TO PROVIDE POSITIVE DRAINAGE AWAY FROM FACE OF BUILDINGS/STRUCTURES AND TOWARDS THE STREET CURB AND/OR PROPOSED DRAINAGE STRUCTURES AT ALL LOCATIONS TO PREVENT PONDING. FINISHED SURFACES SHALL BE FREE FROM IRREGULAR SURFACE CHANGES.
9. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF ONE-EIGHTH INCH (1/8") PER FOOT (12").
10. MAXIMUM CROSSPITCH OF ALL SIDEWALKS IS 2%. RAMPS SHALL NOT EXCEED 1 IN 12 OR 30' IN LENGTH. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER/OWNER'S REPRESENTATIVE PRIOR TO CONTINUING WORK.
11. RIM ELEVATIONS OF ALL DRAINAGE STRUCTURES AND OTHER UTILITY STRUCTURES SHALL BE SET FLUSH WITH FINAL SURROUNDING GRADES SO AS NOT TO CAUSE A TRIP EDGE.
12. SET CATCH BASIN AND DROP INLET RIMS TO DRAIN SURROUNDING AREAS AND AT SAME PITCH AS SLOPING PAVEMENT. IF STRUCTURE IS SHOWN ADJACENT TO CURB, SET GRATE TIGHT TO FACE OF CURB.
13. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE EXISTING DRAINAGE SYSTEM AT ALL TIMES, DURING EARTHWORK OPERATIONS. DRAINAGE OF THE SITE AND ADJACENT AREAS SHALL BE MAINTAINED CONTINUOUSLY TO PREVENT EROSION OR DAMAGE RESULTING FROM CONCENTRATED RUN-OFF. WHEN IT IS NECESSARY TO INTERRUPT THE EXISTING DRAINAGE PATTERNS AND/OR UTILITIES, PROVIDE TEMPORARY FACILITIES UNTIL WORK IS PERMANENTLY STABILIZED AND APPROVED BY THE ENGINEER OR OWNER/OWNER'S REPRESENTATIVE.
14. CONTRACTOR SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADE AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS LIGHT POLES, SIGN POLES, MANHOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC. FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED ON THE UTILITY DRAWING OR DIRECTED BY THE ENGINEER OR OWNER/OWNER'S REPRESENTATIVE.
15. FINAL SHAPING OF ALL EARTHWORK SHALL BE DIRECTED AND APPROVED IN THE FIELD BY THE ENGINEER OR OWNER'S REPRESENTATIVE TO REVIEW AND APPROVE SUBGRADE IN PLANT BEDS PRIOR TO PLACING ANY LOAM.
16. IN LAWN AREAS, ROUGH GRADE SHALL BE BROUGHT TO WITHIN 4" OF FINISHED GRADE UNLESS OTHERWISE NOTED.
17. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS BUILD" DRAWINGS AND BE PRE-APPROVED WITH THE ENGINEER OR OWNER/OWNER'S REPRESENTATIVE.
18. EXCAVATION REQUIRED WITHIN PROXIMITY OF TREES TO REMAIN OR WITHIN 3 FEET OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. THE GENERAL CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
19. PROVIDE EROSION CONTROL MATTING ON ALL DISTURBED SLOPES WITH A PITCH OF 3H:1V OR GREATER.

UTILITY NOTES:

1. CONTRACTOR TO COORDINATE GAS, ELECTRICAL, AND TELECOM CONNECTIONS, LAYOUT, AND INSTALLTION WITH THE LOCAL UTILITY COMPANIES.

DRAINAGE NOTES:

1. ALL SOLID STORM PIPING IS TO BE DUAL WALL ASTM N12 HDPE SMOOTH INTERIOR AND CORRUGATED EXTERIOR OR APPROVED EQUAL UNLESS OTHERWISE NOTED.

STORMWATER MAINTENANCE NOTES:

THE PROPOSED STORMWATER TREATMENT PRACTICES ARE SUBJECT TO NATURAL ELEMENTS AND WILL REQUIRE PERIODIC MAINTENANCE AND REPAIR TO ENSURE PROPER OPERATION. THE RECOMMENDED MAINTENANCE FOR THE STORMWATER TREATMENT SYSTEM COMPONENTS ARE AS FOLLOWS:

1. GENERAL MAINTENANCE: EACH SPRING THE ENTIRE SITE SHOULD BE INSPECTED FOR ANY AREAS OF EROSION, WHICH SHOULD BE REPAIRED AS NECESSARY. AN ENGINEER SHOULD BE CONSULTED IF THERE ARE AREAS WITH ROUTINELY ERODE.
2. CATCH BASIN/YARD DRAIN: INSPECT CATCH BASINS AND YARD DRAIN GRATES AS WELL AS INLET AND OUTLET PIPES TO ENSURE POSITIVE DRAINAGE THROUGH THE STRUCTURE. NOTE SEDIMENT DEPTH IN YARD DRAIN SUMP. WHEN SEDIMENT/DEBRIS HAS ACCUMULATED TO THE BOTTOM OD THE OUTLET PIPE, THE YARD DRAIN SHOULD BE VACUUMED. ALL ACCUMULATED SEDIMENT AND/OR DERBIS SHOULD BE PROPERLY DISPOSE OF.
3. CONTECH JELLYFISH TREATMENT PRACTICE: ANNUAL RINSING OF THE FILTERS AND REMOVAL OF SEDIMENT FROM THE SUMP. REFER TO MANUFACTURER MAINTENANCE SCHEDULE.

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GRADING, DRAINAGE, & UTILITY PLAN

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

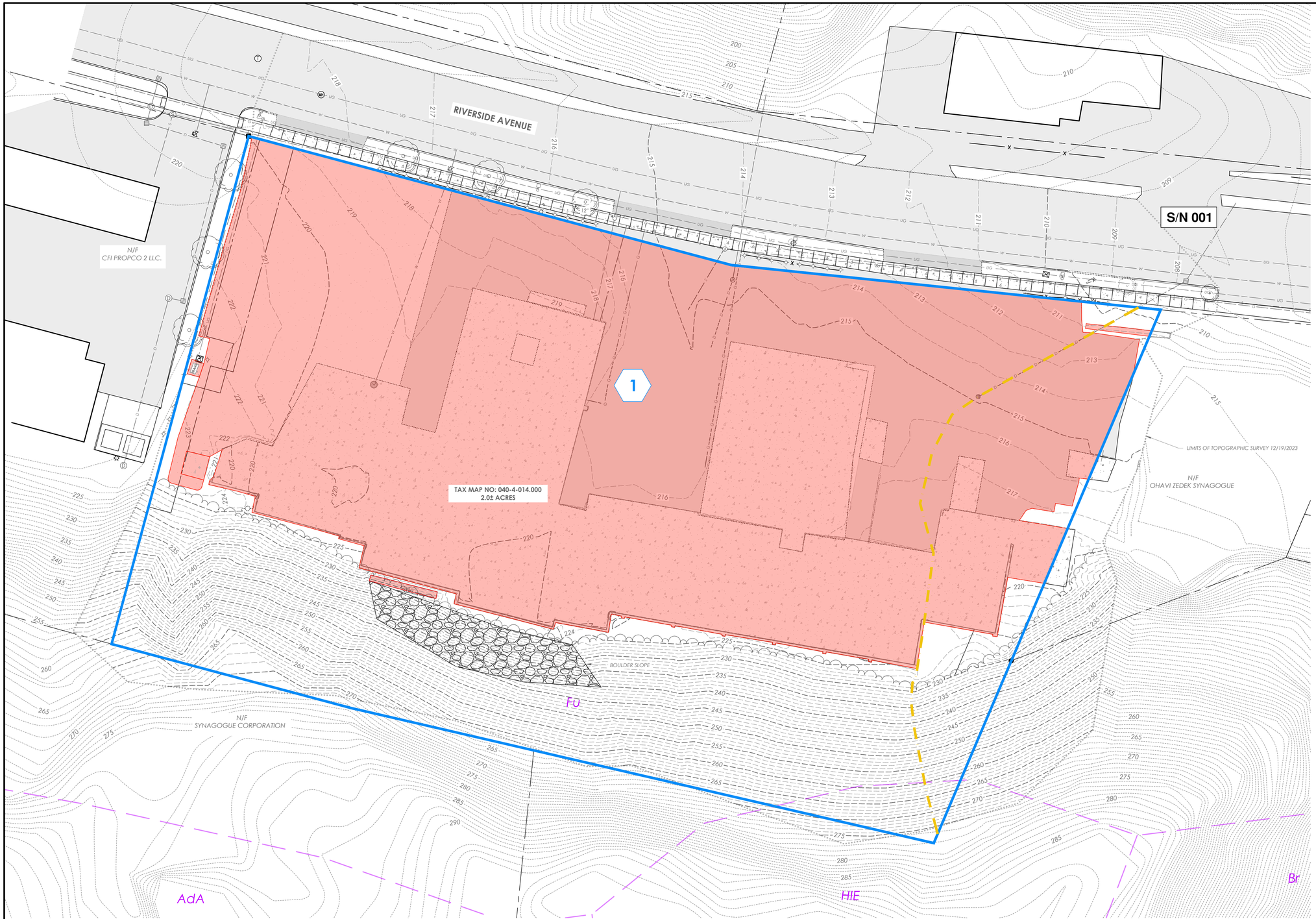
CML	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 12/19/2025

C2-02

CAD FILE: Q:\VT-WLL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C2-02 - Grading, Drainage, & Utility Plan.dwg 12/19/2025



SITE AREA SUMMARY

TOTAL AREA	2.01 AC
TOTAL IMP. AREA	1.40 AC

STORMWATER NOTES

1. REFER TO STORMWATER NARRATIVE WITH ATTACHED HYDROCAD MODELING OF SUBCATCHMENT AREA AND RUNNOFF RATE.
2. HYDROLOGIC SOIL GROUP A AND B ASSUMED BASED ON NRCS SOIL MAPPING. SEE GEOTECHNICAL REPORT BY TERRACON FOR MORE SOILS INFORMATION.

STORMWATER LEGEND

- SUBCATCHMENT BOUNDARY
- SUBCATCHMENT LABEL (1)
- NRCS HSG BOUNDARY
- TC PATH
- EXISTING IMPERVIOUS SURFACE (1.40 AC)

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

NRCS SOIL REPORT

SOIL KEY	SOIL DESCRIPTION	HYDROGROUP
Fu	Fill land	A
HIE	Hartland very fine sandy loam, 25 to 60 percent slopes	B

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EXISTING STORMWATER PLAN

UHAUL COMMERCIAL, BURLINGTON
436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

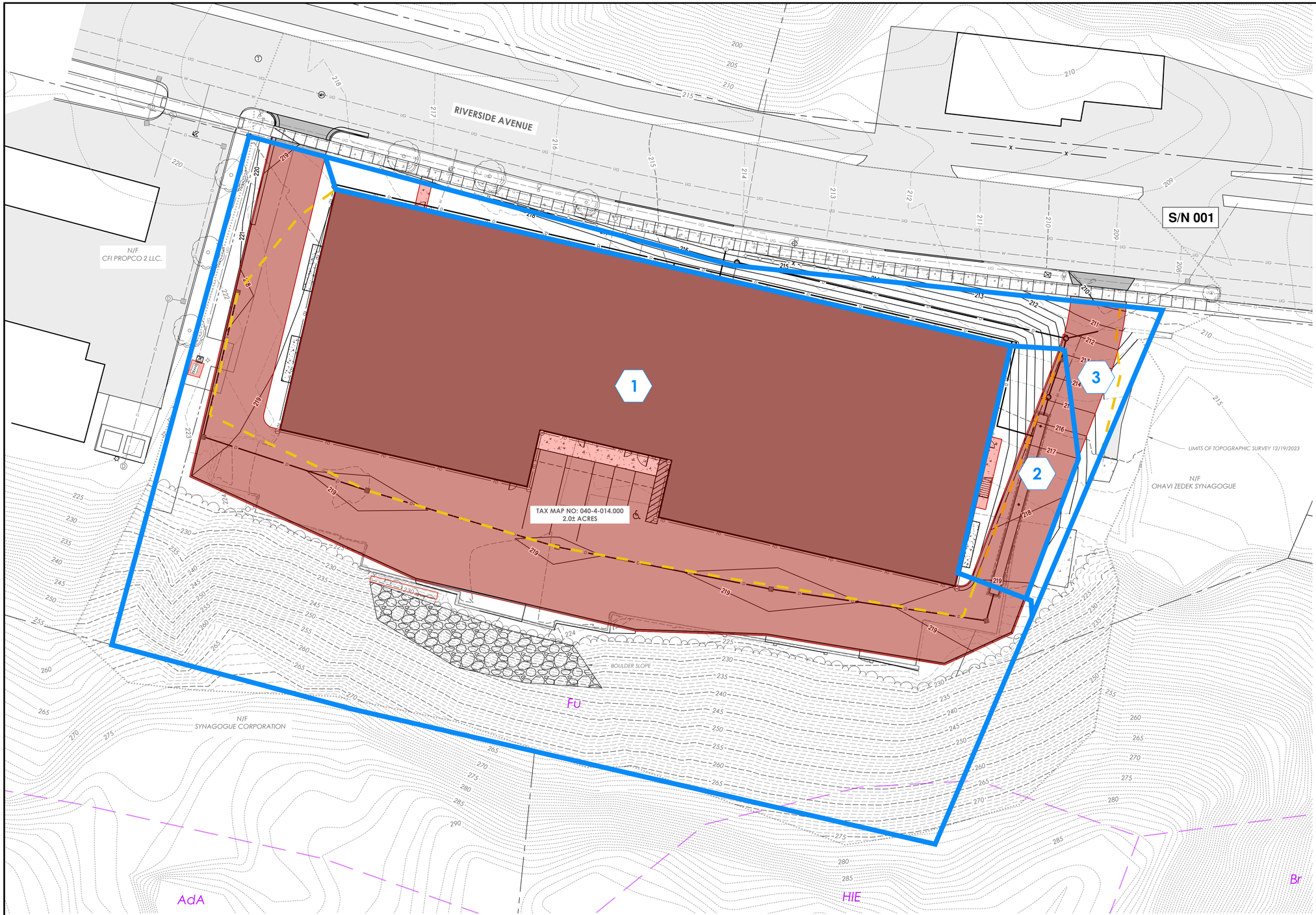
DATE	DESCRIPTION

CML	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
DATE : 12/19/2025

C4-01

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C4-01 - Existing Stormwater Plan.dwg 12/19/2025



SITE AREA SUMMARY

SUBCAT 1		
TOTAL AREA	1.78	AC
IMP. AREA	1.14	AC
SUBCAT 2		
TOTAL AREA	0.08	AC
IMP. AREA	0.05	AC
SUBCAT 3		
TOTAL AREA	0.14	AC
IMP. AREA	0.03	AC
TOTAL SITE		
TOTAL AREA	2.01	AC
IMP. AREA	1.20	AC

STORMWATER NOTES

1. REFER TO STORMWATER NARRATIVE WITH ATTACHED HYDROCAD MODELING OF SUBCATCHMENT AREA AND RUNNOFF RATE.
2. HYDROLOGIC SOIL GROUP A AND B ASSUMED BASED ON NRCS SOIL MAPPING. SEE GEOTECHNICAL REPORT BY TERRACON FOR MORE SOILS INFORMATION.

STORMWATER LEGEND

- SUBCATCHMENT BOUNDARY
- SUBCATCHMENT LABEL (1)
- NRCS HSG BOUNDARY
- TC PATH
- NEW IMPERVIOUS SURFACE (1.22 AC)

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

NRCS SOIL REPORT

SOIL KEY	SOIL DESCRIPTION	HYDROGROUP
Fu	Fill land	A
HIE	Hartland very fine sandy loam, 25 to 60 percent slopes	B

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PROPOSED STORMWATER PLAN

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS	
DATE	DESCRIPTION

CML	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 12/19/2025

C4-02

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C4-02 - Proposed Stormwater Plan.dwg 12/19/2025

PLANTING NOTES

1. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANTING PLAN SHALL GOVERN.
2. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL NEW PLANT MATERIALS AND SOIL VOLUMES SHALL BE IN ACCORDANCE WITH ANSI Z-60.1 OF THE AMERICAN STANDARD FOR NURSERY STOCK.
4. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER-GROWN, UNLESS OTHERWISE NOTED ON THE PLANT LIST.
5. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
6. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
7. ALL NEW PLANTS MAY BE TAGGED AND APPROVED BY THE LANDSCAPE ARCHITECT AT THE NURSERY PRIOR TO DIGGING OR DELIVERY TO THE SITE.
8. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
9. STAKE LOCATION OF ALL PROPOSED PLANTING FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
10. NEW SHRUBS AND GROUND COVER SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS IT BORE TO PREVIOUS GRADE. TREES SHALL BE SET 3" HIGHER THAN PREVIOUS GRADE. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.
11. ALL PLANT BEDS SHALL RECEIVE THREE INCHES (3") OF BARK MULCH.
12. ALL EXISTING TREES TO REMAIN SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. PROTECTION TECHNIQUES SHALL BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT.
13. PRUNE TREES IN ACCORDANCE WITH THE SPECIFICATIONS SO THAT DISTURBED AREAS ARE RETURNED TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
14. CONTRACTOR SHALL PROVIDE FULL DEPTHS OF LOAM AS NOTED ON DETAILS AND AS SPECIFIED, FOR ALL PLANTING.
15. ALL LAWN AREAS DISTURBED BY CONSTRUCTION OPERATIONS INSIDE AND OUTSIDE THE LIMIT OF WORK SHALL BE LOAMED AND SEEDED AS SPECIFIED.
16. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED REGULARLY DURING THE ESTABLISHMENT PERIOD (3-6 MONTHS AFTER PLANTING) IF THERE IS INSUFFICIENT NATURAL RAINFALL TO PROVIDE ADEQUATE MOISTURE LEVELS FOR PLANTS.PLANTS SHALL BE GUARANTEED FOR ONE (1) YEAR MINIMUM AFTER INSTALLATION. ANY DEAD, DISEASED, AND/OR DYING PLANTS SHALL BE REPLACED IMMEDIATELY OR AT THE NEXT BEGINNING OF THE NEXT GROWINGS SEASON.

PLANT SCHEDULE:

SYM	QTY	SCIENTIFIC NAME	COMMON NAME	INSTALL SIZE	CONDITION	COMMENTS / SPACING
DECIDUOUS TREES						
AF	3	Acer freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	2.5" Cal	B&B	Limb to 7' HT
AR	2	Acer rubrum	Red Maple	2.5" Cal	B&B	Limb to 7' HT
PA	3	Platanus x acerifolia 'Exclamation'	Exclamation Sycamore	2.5" Cal	B&B	Limb to 7' HT
TC	3	Tilia cordata 'Greenspire'	Greenspire Little Leaf Linden'	2.5" Cal	B&B	Limb to 7' HT
EVERGREEN TREES						
TO	6	Thuja occidentalis 'Smagrad'	Emerald Eastern Arborvitae	8-10' HT	B&B	As Shown
TP	6	Thuja plicata 'Northern Spire'	Northern Spire Western Arborvitae	8-10' HT	B&B	As Shown
SHRUBS						
AM	9	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	#3	Cont.	4' O.C.
PO	42	Physocarpus opulifolius 'Nanus'	Dwarf Ninebark	#3	Cont.	3.5' O.C.
RM	4	Rhododendron 'Maxecat'	Maxecat Rhododendron	#4	Cont.	As Shown
PERENNIALS, GRASSES, & FERNS						
CA	5	Calamagrostis acutiflora var. Brachytricha	Korean Feather Reed Grass	#2	Cont.	36" O.C.
EP	95	Echinacea purpurea mix	Purple Coneflower (mixed)	#1	Cont.	24" O.C.; Use equal mix: 'Pica Bella', 'Magnus', 'Mellow Yellow', 'Pallida', 'Sensation Pink', 'Soft Orange' in groups of 5 or more
ER	161	Epimedium x rubrum	Red Barrenwort	#1	Cont.	18" O.C.
HH	74	Hosta 'Halycone'	Halycone Hosta	#1	Cont.	30" O.C.
HP	76	Hosta 'Patriot'	Patriot Hosta	#1	Cont.	30" O.C.
MS	12	Matteuccia struthiopteris	Ostrich Fern	#2	Cont.	36" O.C.
RF	24	Rudbeckia fulgida	Black-eyed Susan	#1	Cont.	24" O.C.

N

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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LANDSCAPE PLAN

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

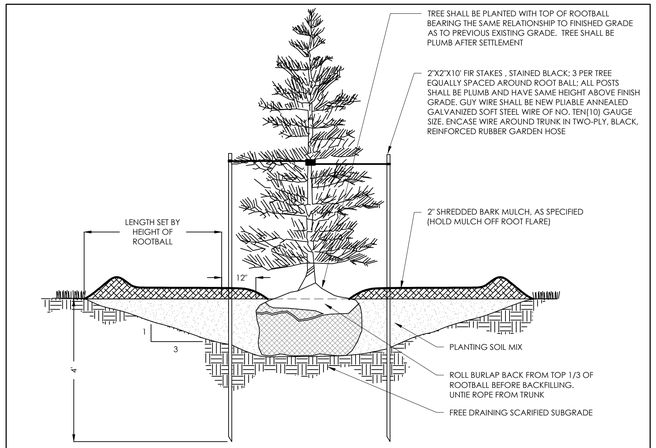
DATE	DESCRIPTION

LET	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 12/19/2025

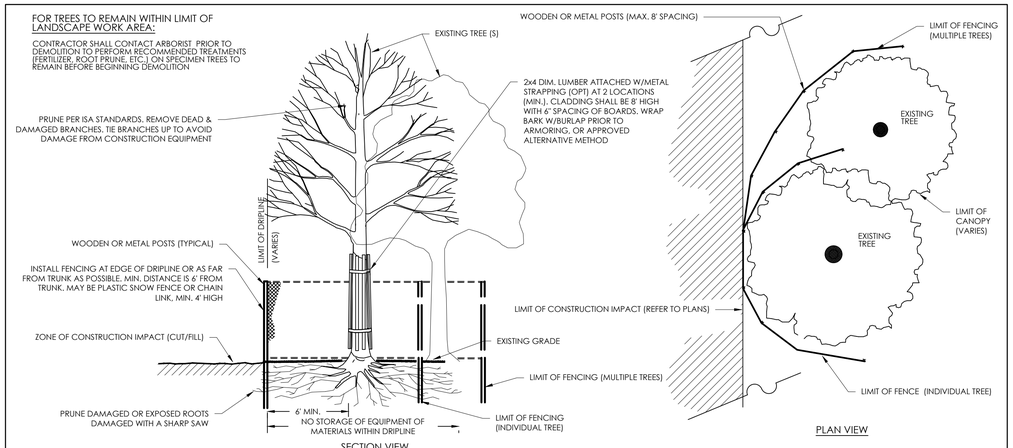
LA-01



EVERGREEN TREE PLANTING

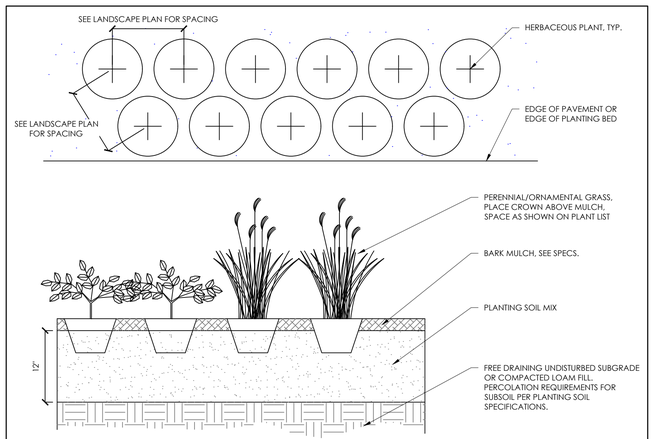
1/2" = 1'

LAST REVISED 12/29/2020 L-010.1.5



TREE PROTECTION

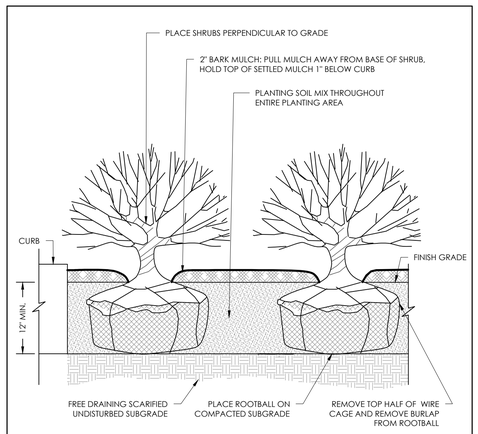
LAST REVISED 12/29/2020 L 050.1.3



PERENNIAL PLANTING

1" = 1'-0"

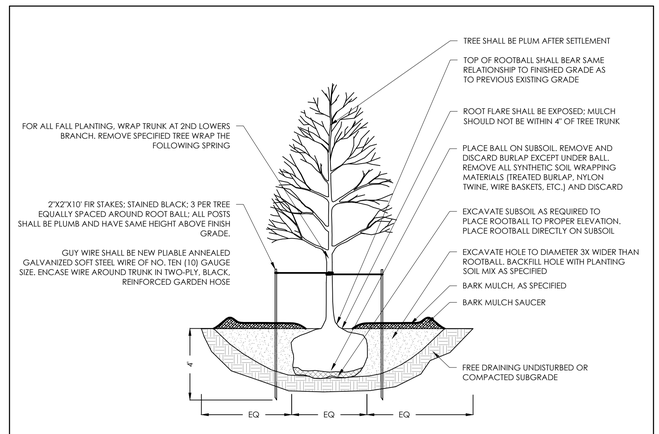
LAST REVISED 11/12/2021



SHRUB PLANTING

1" = 1'

LAST REVISED 11/02/2021 L-020.1.5



DECIDUOUS TREE PLANTING

1/4" = 1'

LAST REVISED 03/10/2022 L-010.1.7

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LANDSCAPE DETAILS

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

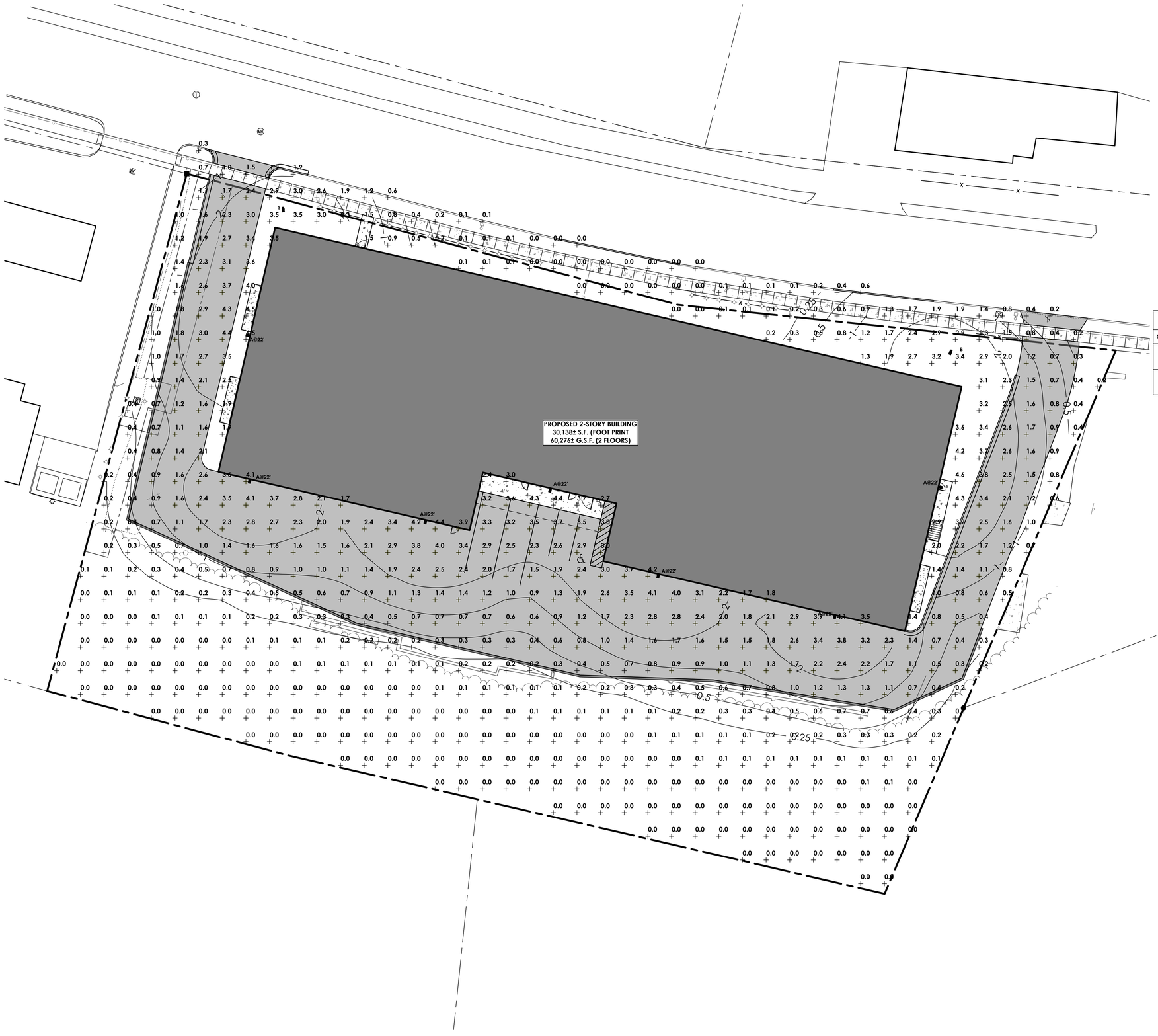
DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE N.T.S.

DATE : 12/19/2025

LA-02

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\LA-01 - Landscape Details.dwg 12/19/2025



LUMINAIRE SCHEDULE

SYMBOL	LABEL	QTY	MNFCTR	CATALOG NUMBER	DESCRIPTION	HEIGHT
	A	7	PQL	STL3P-80-5000K-B-MP-HC-P	PQL STEALTH AREA LIGHT - TYPE III LED 80W - WALL-MOUNTED	22'
	B	2	PQL	STL3P-100-5000K-B-MP-HC-P	PQL STEALTH AREA LIGHT - TYPE III LED 100W - POLE-MOUNTED	25'

NOTES:

1. AREA LIGHT AND BUILDING LAYOUT AS SHOWN FOR PERMITTING AND INSTALLATION PURPOSES. BUILDING-MOUNTED FIXTURES ARE SHOWN FOR PERMITTING PURPOSES ONLY.
2. DISCREPANCIES BETWEEN THIS SHEET AND OTHER CIVIL, ELECTRICAL, OR ARCHITECTURAL PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION.
3. QUANTITIES AND CATALOG NUMBER SHOWN IN TABLE SHOULD BE VERIFIED BY ELECTRIC CONTRACTOR PRIOR TO ORDERING.

LEGEND

- 0.25 FOOTCANDLES (fc)
- 0.5 FOOTCANDLES (fc)
- 1.0 FOOTCANDLES (fc)
- 2.0 FOOTCANDLES (fc)
- 5.0 FOOTCANDLES (fc)

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LIGHTING PLAN

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

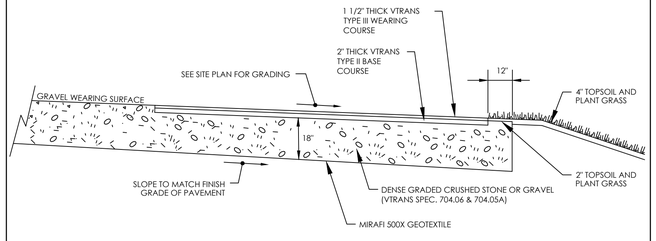
DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

DATE : 12/19/2025

LI-01

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\LI-01 - Lighting Plan.dwg 12/19/2025

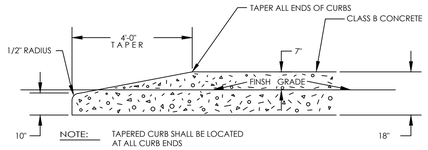


NOTES:

1. IN ALL AREAS WHERE UNSTABLE/UNSUITABLE SUBGRADE SOILS ARE PRESENT, THE SUBGRADE SHALL BE OVER-EXCAVATED TO REMOVE THE UNSUITABLE MATERIAL AND BACKFILLED WITH SAND BORROW OR SELECT NATIVE MATERIAL.
2. SUBGRADE SOIL AND NEW SUBBASE GRAVEL SHALL BE ADEQUATELY COMPACTED IN LIFTS TO NOT LESS THAN 95% OF THE OPTIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D698).
3. THE SUBGRADE SHALL BE SLOPED TO DAYLIGHT THE SUBBASE MATERIAL WHEREVER POSSIBLE.

TYPICAL DRIVE & PARKING AREA CROSS SECTION

LAST REVISED 03/02/2023

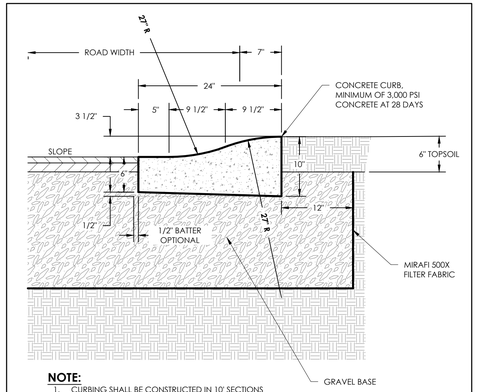


NOTE: TAPERED CURB SHALL BE LOCATED AT ALL CURB ENDS

TYPICAL TAPERED CURB DETAIL

NTS

LAST REVISED 03/16/2023

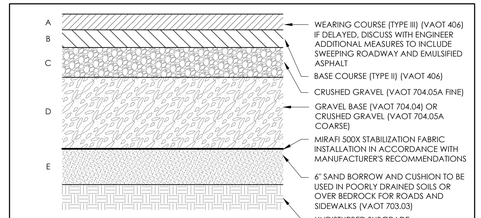


NOTE:

1. CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
2. CURBING EXPANSION JOINTS SHALL BE INSTALLED EVERY 20' (1/2" SPONGE RUBBER OR CORK)

ROLLED CURB DETAIL

1" = 1'



SECTION

	THICKNESS (INCHES)				
	ROADS		PARKING LOTS		PRIVATE
	RESIDENTIAL	COMMERCIAL	RESIDENTIAL	COMMERCIAL	DRIVEWAYS
A	1-1/2	2	1	1 1/2	2
B	2-1/2	3	2	2 1/2	N/A
C	6	6	6	6	4
D	12	18	12	18	12
E	6	6	6	6	6

NOTES:

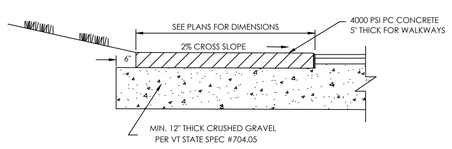
1. SUBBASE, SAND CUSHION AND SUBGRADE SHOULD BE CONSTRUCTED AND COMPACTED TO THE DIMENSIONS SHOWN IN ACCORDANCE WITH VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS, STANDARD A-76, WHERE MORE STRINGENT LOCAL ORDINANCES HAVE BEEN ADOPTED RELATIVE TO ROAD DIMENSIONS AND CONSTRUCTION, THEY SHOULD GOVERN.
2. COMPACT ALL SUBBASE MATERIALS TO 95% MAXIMUM DENSITY (STANDARD PROCTOR).
3. IF GROUNDWATER OR SOFT SPOTS ARE ENCOUNTERED CONTACT THE ENGINEER TO DISCUSS ADDED MEASURES SUCH AS UNDERDRAIN OR MORE SUBBASE MATERIALS. SLOPE SUBBASE TO UNDERDRAIN LOW POINTS.

TYPICAL BITUMINOUS PAVEMENT

1" = 1'

LAST REVISED 03/04/2021 SD 010.3.1

FROST PROTECTION NOTE:
WHERE THE SIDEWALK IS LOCATED AT BUILDING ENTRANCES, SEE BUILDING PLANS FOR FROST PROTECTION MEASURES



NOTES:

1. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4,000 PSI AT 28 DAYS, AIR ENTRAINED WITH AN ADMIXTURE PRODUCING AN AIR CONTENT OF BETWEEN 5% AND 7% BY VOLUME.
2. AFTER THE INITIAL CURING PERIOD IS OVER (APPROXIMATELY 28 DAYS), ALL EXPOSED SURFACES SHALL RECEIVE TWO COATS OF ANTI-SPALLING COMPOUND.
3. SEE ARCHITECTUAL PLANS AND DETAILS AT BUILDING ENTRANCE LOCATIONS FOR ADDITIONAL FOUNDATION AND SUPPORT DETAILS FOR FROST PROTECTION.

CONCRETE SIDEWALK DETAIL

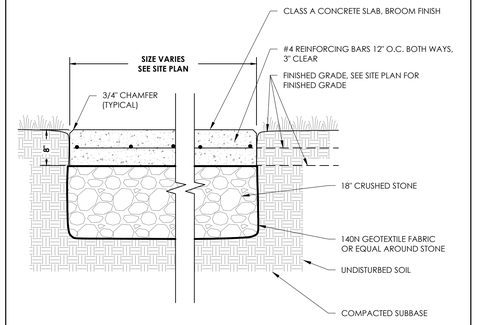
LAST REVISED 03/02/2023 XX-XXX

SANDY SOIL SEED MIX		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
35	70	NAVIGATOR II CREEPING RED FESCUE
30	60	FIESTA 4 PERENNIAL RYE GRASS
20	40	TALL FESCUE
10	20	ANNUAL RYEGRASS
5	10	WHITE CLOVER
200	200 # LIVE SEED PER ACRE	

SANDY SOIL MIX BY L.D. OLIVER SEED COMPANY

SANDY SOIL SEED MIX

LAST REVISED 03/02/2023



NOTE:
CONTRACTOR TO COORDINATE KNOCKOUT LOCATIONS IN CONCRETE FOR CONDUITS IF APPLICABLE.

REINFORCED CONCRETE PAD

1"=1'

LAST REVISED 03/10/2021

1. **CONTRACT DOCUMENTS:** THESE PLANS WERE PREPARED BY BOWMAN AND ARE INTENDED TO BE USED IN CONJUNCTION WITH THE STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT, #C-700 PREPARED BY THE ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE (EJCDC), LATEST EDITION. COPIES ARE AVAILABLE AT WWW.NSPE.ORG/EJCDC
2. **UNDERGROUND IMPROVEMENTS:** THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE ASSUMED BASED ON RESEARCH, UTILITY PLANS PROVIDED BY OTHERS, AND/OR SURFACE EVIDENCE AVAILABLE AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE ORDINARY STANDARD OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN ENGINEER.
3. **DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS:** IF CONTRACTOR BELIEVES THAT ANY SUBSURFACE OR PHYSICAL CONDITION AT OR CONTIGUOUS TO THE SITE THAT IS UNCOVERED OR REVEALED EITHER: (1) IS OF SUCH A NATURE AS TO ESTABLISH THAT ANY "TECHNICAL DATA" ON WHICH CONTRACTOR RELIED IS MATERIALLY INACCURATE; OR (2) IS OF SUCH A NATURE AS TO REQUIRE A CHANGE IN THE PLANS/ CONTRACT DOCUMENTS; OR (3) DIFFERS MATERIALLY FROM THAT SHOWN OR INDICATED IN THE PLANS/CONTRACT DOCUMENTS; OR (4) IS OF AN UNUSUAL NATURE, AND DIFFERS MATERIALLY FROM CONDITIONS ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLANS/CONTRACT DOCUMENTS; THEN CONTRACTOR SHALL, PROMPTLY AFTER BECOMING AWARE THEREOF AND BEFORE FURTHER DISTURBING THE SUBSURFACE OR PHYSICAL CONDITIONS OR PERFORMING ANY WORK IN CONNECTION THEREWITH (EXCEPT IN AN EMERGENCY), NOTIFY OWNER AND ENGINEER ABOUT SUCH CONDITION. CONTRACTOR SHALL NOT FURTHER DISTURB SUCH CONDITION OR PERFORM ANY WORK IN CONNECTION THEREWITH (EXCEPT AS AFORESAID) UNTIL RECEIPT OF WRITTEN ORDER TO DO SO.
4. **UTILITIES:** PRIVATE AND PUBLIC UTILITIES SUCH AS ELECTRIC, TELEPHONE, GAS, CABLE, FIBER OPTIC ETC. ARE THE RESPONSIBILITY OF THE RESPECTIVE UTILITY COMPANY. ANY INFORMATION SHOWN BY BOWMAN SHOULD BE CONSIDERED PRELIMINARY (USUALLY TO ASSIST WITH PERMITTING). FINAL DESIGN, CONSTRUCTION AND MAINTENANCE ARE THE RESPONSIBILITY OF RESPECTIVE UTILITY COMPANIES. COMPLIANCE WITH EASEMENTS AND REGULATIONS (STATE AND LOCAL) ARE THE RESPONSIBILITY OF RESPECTIVE UTILITY COMPANY.
5. **DIGSAFE:** IN ACCORDANCE WITH VERMONT STATE LAW (VSA TITLE 30 CHAPTER 86 AND PSB RULE 3,800) THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT DIGSAFE SYSTEMS, INC. "DIGSAFE" AT 1-888-344-7233 AT LEAST 48 HOURS , EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, BUT NOT MORE THAN 30 DAYS BEFORE COMMENCING EXCAVATION ACTIVITIES. EXCEPT IN AN EMERGENCY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRE-MARKING THE SITE AND MAINTAINING DESIGNATED MARKINGS. FOR MORE INFORMATION ON DIGSAFE REQUIREMENTS SEE WWW.DIGSAFE.COM.
6. **JOBSITE SAFETY:** NEITHER THE PROFESSIONAL ACTIVITIES OF BOWMAN, NOR THE PRESENCE OF BOWMAN OR ITS EMPLOYEES AND SUB CONSULTANTS AT A CONSTRUCTION SITE, SHALL RELIVE THE GENERAL CONTRACTOR AND ANY OTHER ENTITY OF THEIR OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. BOWMAN AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS. THE CLIENT AGREES THAT THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT SHALL BE MADE EVIDENT IN THE CLIENT'S AGREEMENT WITH THE GENERAL CONTRACTOR. THE CLIENT ALSO AGREES THAT THE CLIENT, BOWMAN AND BOWMAN'S CONSULTANTS SHALL BE INDEMNIFIED AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S GENERAL LIABILITY INSURANCE POLICY.
7. **CODES AND STANDARDS COMPLIANCE:** BOWMAN SHALL EXERCISE USUAL AND CUSTOMARY PROFESSIONAL CARE IN ITS EFFORTS TO COMPLY WITH CODES, STANDARDS, REGULATIONS, AND ORDINANCES IN EFFECT. THE OWNER ACKNOWLEDGES THAT SUCH REQUIREMENTS MAY BE SUBJECT TO VARIOUS AND CONTRADICTORY INTERPRETATIONS. BOWMAN, THEREFORE, WILL MAKE REASONABLE PROFESSIONAL EFFORTS AND JUDGMENT TO INTERPRET APPLICABLE REQUIREMENTS AS THEY APPLY TO THE PROJECT. BOWMAN, HOWEVER, CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT THE PROJECT WILL COMPLY WITH ALL INTERPRETATIONS OF SUCH REQUIREMENTS.
8. **CONSTRUCTION OBSERVATION:** BOWMAN MAY VISIT THE PROJECT AT APPROPRIATE INTERVALS DURING CONSTRUCTION TO BECOME GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE CONTRACTOR'S WORK AND TO DETERMINE IF THE WORK IS PROCEEDING IN GENERAL ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE OWNER HAS NOT RETAINED BOWMAN TO MAKE DETAILED INSPECTIONS OR TO PROVIDE EXHAUSTIVE OR CONTINUOUS PROJECT REVIEW AND OBSERVATION SERVICES. BOWMAN DOES NOT GUARANTEE THE PERFORMANCE OF, AND SHALL NOT HAVE RESPONSIBILITY FOR, THE ACTS OR OMISSIONS OF ANY CONTRACTOR, SUB-CONTRACTOR, SUPPLIER OR ANY OTHER ENTITY FURNISHING MATERIALS OR PERFORMING ANY WORK ON THE PROJECT. BOWMAN SHALL NOT SUPERVISE, DIRECT OR HAVE CONTROL OVER THE CONTRACTOR'S WORK NOR HAVE ANY RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF THE CONTRACTOR. IF THE OWNER DESIRES MORE EXTENSIVE PROJECT OBSERVATION OR FULL-TIME PROJECT REPRESENTATION, THE OWNER SHALL REQUEST SUCH SERVICES BE PROVIDED BY BOWMAN AS ADDITIONAL SERVICES.

CONSTRUCTION NOTES FOR CONTRACTOR & CLIENT/OWNER

LAST REVISED 02/17/2021 SD 000.1.2

CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTION AND PROGRAMS IN CONNECTION WITH THE WORK. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE INJURY OR LOSS TO:

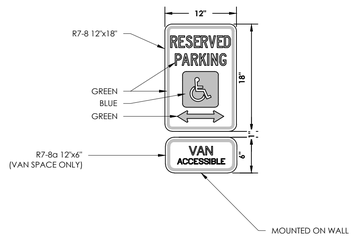
1. ALL EMPLOYEES ON THE WORK AND OTHER PERSONS WHO MAY BE AFFECTED THEREBY,
2. ALL THE WORK AND ALL MATERIALS OR EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, AND
3. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAYS, STRUCTURES AND UTILITIES NOT DESIGNATED FOR REMOVAL, RELOCATION OR REPLACEMENT IN THE COURSE OF CONSTRUCTION.

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STANDARDS (SPECIFICALLY INCLUDING OSHA, VOSHA AND ANY OTHER STATE ADOPTED OSHA PROGRAM), LAWS ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR TO PROTECT THEM FROM DAMAGE, INJURY OR LOSS, AND SHALL ERECT AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR SUCH SAFETY AND PROTECTION. CONTRACTOR SHALL NOTIFY OWNERS OF ADJACENT PROPERTY AND UTILITIES WHEN EXECUTION OF THE WORK MAY AFFECT THEM.

CONTRACTOR'S RESPONSIBILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL THE WORK IS COMPLETED.

SAFETY AND PROTECTION

LAST REVISED 02/17/2021 SD 000.1.1



"RESERVED PARKING" SIGN

1" = 1'

LAST REVISED 02/10/2021 MS-010.1.4

BOWMAN
478 Blair Park Rd.
Williston, Vermont 05495

Phone: (802) 879-6331

www.bowman.com

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SITE DETAILS

UHAUL COMMERCIAL, BURLINGTON
436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS	
DATE	DESCRIPTION

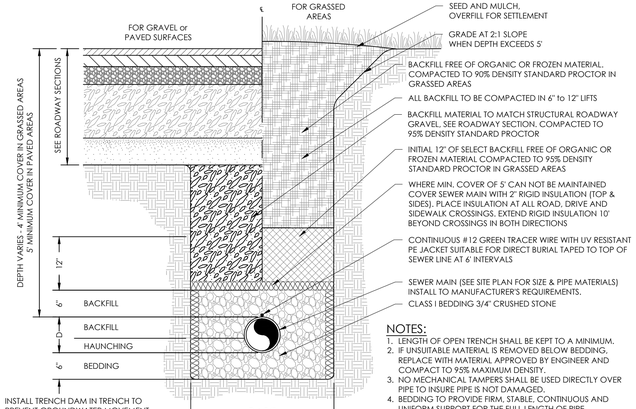
DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE N.T.S

DATE : 12/19/2025

C8-01

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C8-01 - Site Details.dwg 12/19/2025



TYPICAL SEWER TRENCH

3/4" = 1'-0"

NOTES:

1. LENGTH OF OPEN TRENCH SHALL BE KEPT TO A MINIMUM.
2. IF UNSUITABLE MATERIAL IS REMOVED BELOW BEDDING, REPLACE WITH MATERIAL APPROVED BY ENGINEER AND COMPACT TO 95% MAXIMUM DENSITY.
3. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
4. BEDDING TO PROVIDE FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
5. INSTALL TO STRICTEST INTERPRETATION OF REQUIREMENTS (PLANS, SPECS & MANUFACTURER)

LAST REVISED 09/28/2023 S-010.1.1

AIR TESTING SEWERS

ALL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE TOWN ENGINEER OR PUBLIC WORKS DEPARTMENT AND TRUDELL CONSULTING ENGINEERS (TCE). CONTRACTOR SHALL PRE-TEST SUCCESSFULLY PRIOR TO CONTACTING ENGINEER. THE PRE-TEST IS TO ENSURE PASSING RESULTS PRIOR TO OFFICIAL TESTING OBSERVATION.

TESTING SHALL BE DONE IN ACCORDANCE WITH EPR CH. 1 1-1003(o)(2) PAGE 156.

A. TEST THE GRAVITY SEWER BY A PRESSURIZED AIR TEST BETWEEN CONSECUTIVE MANHOLES. PLUG ALL OPENINGS OF THE TEST SECTION AND CONNECT THE AIR CONTROL EQUIPMENT TO THE TAPPED END.

B. SUPPLY AIR SLOWLY TO THE PIPE UNTIL REACHING A CONSTANT PRESSURE OF 4.0 PSI GREATER THAN THE AVERAGE PRESSURE OF ANY SURROUNDING GROUNDWATER. PRESSURE WILL NORMALLY DROP AS TEMPERATURE STABILIZES. SUPPLY THE AIR SO THAT THE PRESSURE REMAINS ABOVE 3.0 PSI FOR AT LEAST 5 MINUTES DURING TEMPERATURE STABILIZATION. USE A PRESSURE GAUGE HAVING A RANGE FROM 0 TO 5 PSI. THE GAUGE SHOULD HAVE MINIMUM DIVISIONS OF 0.1 PSI AND AN ACCURACY OF +- 0.04 PSI. REGULATE THE AIR PRESSURE TO PREVENT IT FROM EXCEEDING 5.0 PSI.

C. AFTER STABILIZATION, ADJUST PRESSURE TO 3.5 PSI OR ABOVE AND SHUT OFF AIR SUPPLY. START THE STOP WATCH. THE TIME REQUIRED FOR THE TEST IS DEPENDENT ON PIPE DIAMETER PER TOTAL LENGTH OF PIPE BEING TESTED AND MUST BE AT LEAST:

NOMINAL PIPE DIA. IN INCHES	T (TIME) MIN/100 FT.	NOMINAL PIPE DIA. IN INCHES	T (TIME) MIN/100 FT.
3	0.2	21	3.0
4	0.3	24	3.6
6	0.7	27	4.2
8	1.2	30	4.8
10	1.5	33	5.4
12	1.8	36	6.0
15	2.1	39	6.6
18	2.4	42	7.3

D. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO EQUAL THE TOTAL SECTION TEST TIME.

E. IF THERE IS GROUND WATER ABOVE THE SEWER LINE THE AIR TEST PRESSURE WILL BE INCREASED BY 0.5 PSI FOR EACH FOOT OF WATER ABOVE THE INVERT OF THE PIPE. DIFFERENCES DUE TO AIR TEMPERATURE AND BAROMETRIC PRESSURE WILL BE CONSIDERED NEGLIGIBLE.

F. IF THE PRESSURE DROPS MORE THAN 1 PSI DURING THE TEST TIME, THE PIPE WILL HAVE FAILED AND ADEQUATE REPAIRS AND RETESTING WILL BE REQUIRED AT NO EXPENSE TO OWNER.

G. IT IS NOT NECESSARY TO HOLD THE TEST FOR THE WHOLE PERIOD WHEN IT IS CLEARLY EVIDENT THAT THE RATE OF AIR LOSS IS LESS THAN THE ALLOWABLE.

DEFLECTION TESTING SEWERS

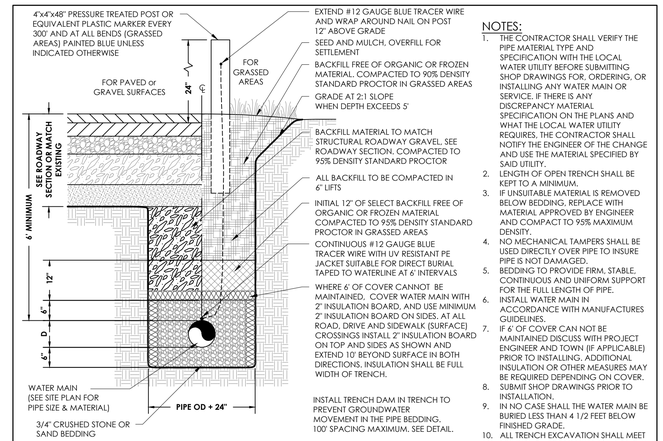
A. AFTER A FLEXIBLE PIPE SEWER, SUCH AS PVC, HAS BEEN BACKFILLED FOR 30 DAYS, A PIPE DEFLECTION TEST SHALL BE PERFORMED.

B. THE TEST SHALL BE CONDUCTED USING A RIGID BALL OR MANDREL HAVING A DIAMETER EQUAL TO 92.5% OF THE PIPE DIAMETER. THIS DEVICE WILL BE PULLED THROUGH THE SEWER BY A ROPE WITHOUT THE MEANS OF MECHANICAL EQUIPMENT. THE MAXIMUM ALLOWABLE VERTICAL DEFLECTION SHALL BE 7.5%.

C. IF THE BALL OR MANDREL CANNOT BE SUCCESSFULLY PULLED THROUGH THE SEWER PIPE, THOSE SECTIONS OF PIPE NOT MEETING THE DEFLECTION REQUIREMENTS SHALL BE EXCAVATED AND THE EMBEDMENT AND BACKFILL REPLACED. IF, IN THE OPINION OF THE ENGINEER, THE PIPE HAS BEEN DAMAGED, IT SHALL BE REMOVED AND REPLACED.

TESTING GRAVITY SEWERS

LAST REVISED 12/28/2020 S 000.1.1



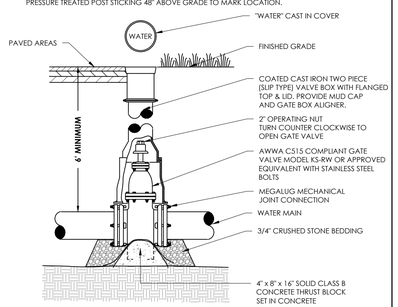
TYPICAL WATER MAIN TRENCH

NOTES:

1. THE CONTRACTOR SHALL VERIFY THE PIPE MATERIAL TYPE AND SPECIFICATION WITH THE LOCAL WATER UTILITY BEFORE SUBMITTING SHOP DRAWINGS FOR, ORDERING, OR INSTALLING ANY WATER MAIN OR SERVICE. IF THERE IS ANY DISCREPANCY MATERIAL SPECIFICATION ON THE PLANS AND WHAT THE LOCAL WATER UTILITY REQUIRES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CHANGE AND USE THE MATERIAL SPECIFIED BY SAID UTILITY.
2. LENGTH OF OPEN TRENCH SHALL BE KEPT TO A MINIMUM.
3. IF UNSUITABLE MATERIAL IS REMOVED BELOW BEDDING, REPLACE WITH MATERIAL APPROVED BY ENGINEER AND COMPACT TO 95% MAXIMUM DENSITY.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. BEDDING TO PROVIDE FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
6. INSTALL WATER MAIN IN ACCORDANCE WITH MANUFACTURES GUIDELINES.
7. IF 6' OF COVER CAN NOT BE MAINTAINED DISCUSS WITH PROJECT ENGINEER AND TOWN (IF APPLICABLE) PRIOR TO INSTALLING. ADDITIONAL INSULATION OR OTHER MEASURES MAY BE REQUIRED DEPENDING ON COVER.
8. SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.
9. IN NO CASE SHALL THE WATER MAIN BE BURIED LESS THAN 4 1/2 FEET BELOW FINISHED GRADE.
10. ALL TRENCH EXCAVATION SHALL MEET OSHA, STATE, & LOCAL REQUIREMENTS & SAFETY REGULATIONS.

LAST REVISED 09/28/2023 W 010.1.1

NOTE:
IN REMOTE AREAS SUCH AS CROSS COUNTRY WATER LINE ROUTES, PROVIDE A CONCRETE PAD 24"x24"x8" THICK BEDDED ON 12" OF GRAVEL AND FLUSH WITH GRADE. ALSO PROVIDE 4"x4" PRESSURE TREATED POST STICKING 48" ABOVE GRADE TO MARK LOCATION.

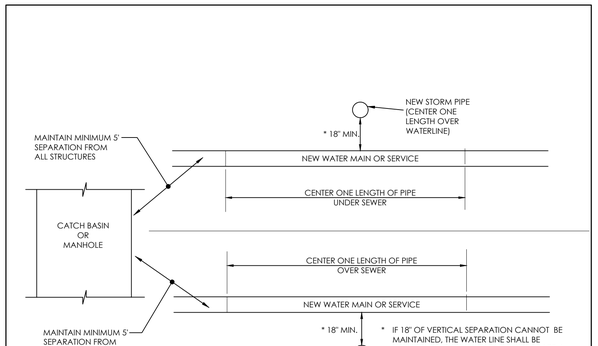


NOTES:

1. INSTALL IN ACCORDANCE WITH MANUFACTURES INSTALLATION GUIDELINES.
2. SUBMIT SHOP DRAWING TO PROJECT ENGINEER PRIOR TO INSTALLATION.
3. COORDINATE WITH TOWN PUBLIC WORK DEPARTMENT AND STANDARDS WHEN APPLICABLE.
4. PROVIDE ONE VALVE KEY TO OWNER.

TYPICAL GATE VALVE (4" TO 12")

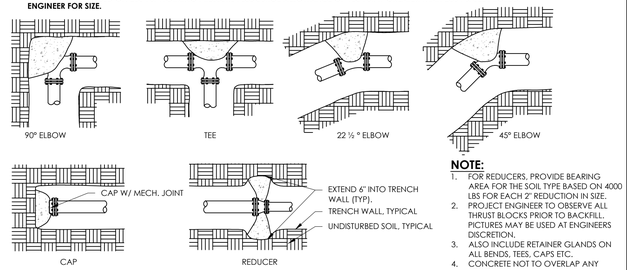
LAST REVISED 02/09/2021 W 020.1.1



STORMWATER/WATER SEPARATION DETAIL FOR CROSSINGS

NTS

USE CLASS D (2500 PSI) CONCRETE FOR THRUST BLOCKS. PLACE 4 MIL. POLYETHYLENE BETWEEN FITTING AND THRUST BLOCK. PLACE THRUST BLOCK AGAINST UNDISTURBED TRENCH WALL - CONCRETE BEARING AREA ON FITTING TO BE A MINIMUM OF 1/2 SQUARE FOOT. THRUST BLOCKS BASED ON 200 PSI WORKING PRESSURE PLUS SURGE ALLOWANCE OF 100 PSI. IF GREATER THAN 200 PSI SEE PROJECT ENGINEER FOR SIZE.



NOTE:

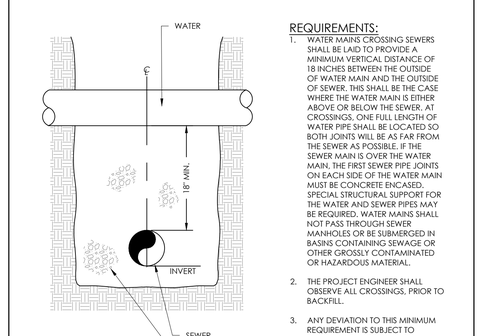
1. FOR REDUCERS, PROVIDE BEARING AREA FOR THE SOIL TYPE BASED ON 4000 LBS FOR EACH 2" REDUCTION IN SIZE.
2. PROJECT ENGINEER TO OBSERVE ALL THRUST BLOCKS PRIOR TO BACKFILL. PICTURES MAY BE USED AT ENGINEERS DISCRETION.
3. ALSO INCLUDE RETAINER GLANDS ON ALL BENDS, TEES, CAPS ETC.
4. CONCRETE NOT TO OVERLAP ANY JOINT.

THRUST BLOCK TABLE — MINIMUM BEARING AREA IN SQUARE FEET ON UNDISTURBED TRENCH WALL

SOIL TYPE	SAFE BEARING LOAD LBS/FT.²	2", 3" & 4"				6"				8"				10"				12"			
		CAP OR TEE	90°	45°	22.5°	CAP OR TEE	90°	45°	22.5°	CAP OR TEE	90°	45°	22.5°	CAP OR TEE	90°	45°	22.5°	CAP OR TEE	90°	45°	22.5°
CLAY	1000	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	28.0	38.0	21.0	10.5	39.0	55.0	30.0	15.0
SAND	2000	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	14.0	19.0	10.0	5.0	20.0	27.5	15.0	8.0
GRAVEL	3000	2.0	2.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	9.0	12.5	7.0	4.5	13.0	18.5	10.0	5.0
TILL	4000	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.5	2.0	7.0	9.5	5.0	2.5	10.0	14.0	7.5	4.0
SHALE	10000	0.5	1.0	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	3.0	3.5	2.0	1.0	4.0	5.5	3.0	1.5

TYPICAL WATER MAIN THRUST BLOCKS

LAST REVISED 02/16/2021 W 040.1.1



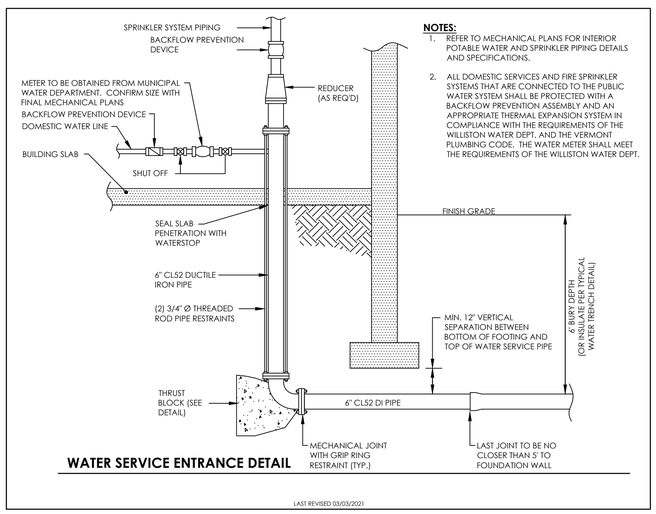
REQUIREMENTS:

1. WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF WATER MAIN AND THE OUTSIDE OF SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF THE SEWER MAIN IS OVER THE WATER MAIN, THE FIRST SEWER PIPE JOINTS ON EACH SIDE OF THE WATER MAIN MUST BE CONCRETE ENCASED. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED. WATER MAINS SHALL NOT PASS THROUGH SEWER MANHOLES OR BE SUBMERGED IN BASINS CONTAINING SEWAGE OR OTHER GROSSLY CONTAMINATED OR HAZARDOUS MATERIAL.
2. THE PROJECT ENGINEER SHALL OBSERVE ALL CROSSINGS, PRIOR TO BACKFILL.
3. ANY DEVIATION TO THIS MINIMUM REQUIREMENT IS SUBJECT TO REVIEW AND APPROVAL OF REGULATORY AUTHORITIES.
4. PRIOR TO CROSSING THE CONTRACTOR SHALL SUPPLY INVERT OF SEWER AND WATER TO PROJECT ENGINEER.

TYPICAL WATER/SEWER CROSSING

WSR APPENDIX SUBSECTION 8.6.3

LAST REVISED 02/16/2021 W 030.1.1



NOTES:

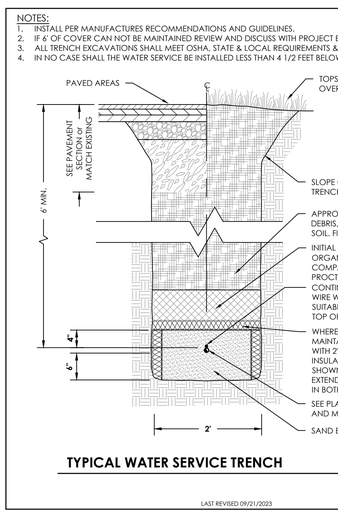
1. REFER TO MECHANICAL PLANS FOR INTERIOR POTABLE WATER AND SPRINKLER PIPING DETAILS AND SPECIFICATIONS.
2. ALL DOMESTIC SERVICES AND FIRE SPRINKLER SYSTEMS THAT ARE CONNECTED TO THE PUBLIC WATER SYSTEM SHALL BE PROTECTED WITH A BACKFLOW PREVENTION ASSEMBLY AND AN APPROPRIATE THERMAL EXPANSION SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF THE WILLISTON WATER DEPT. AND THE VERMONT PLUMBING CODE. THE WATER METER SHALL MEET THE REQUIREMENTS OF THE WILLISTON WATER DEPT.

WATER SERVICE ENTRANCE DETAIL

LAST REVISED 03/03/2021

NOTES:

1. INSTALL PER MANUFACTURES RECOMMENDATIONS AND GUIDELINES.
2. IF 6' OF COVER CAN NOT BE MAINTAINED REVIEW AND DISCUSS WITH PROJECT ENGINEER.
3. ALL TRENCH EXCAVATIONS SHALL MEET OSHA, STATE & LOCAL REQUIREMENTS & SAFETY REGULATIONS.
4. IN NO CASE SHALL THE WATER SERVICE BE INSTALLED LESS THAN 4 1/2 FEET BELOW FINISHED GRADE.

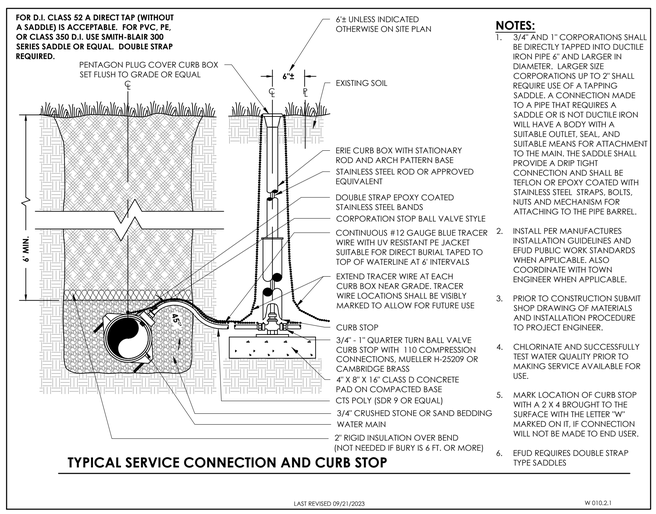


TYPICAL WATER SERVICE TRENCH

3/4"=1'

LAST REVISED 09/21/2023 W 010.1.2

FOR D.I. CLASS 52 A DIRECT TAP (WITHOUT A SADDLE) IS ACCEPTABLE. FOR PVC, PE, OR CLASS 350 D.I. USE SMITH-BLAIR 300 SERIES SADDLE OR EQUAL. DOUBLE STRAP REQUIRED.



NOTES:

1. 3/4" AND 1" CORPORATIONS SHALL BE DIRECTLY TAPPED INTO DUCTILE IRON PIPE 6" AND LARGER IN DIAMETER. LARGER SIZE CORPORATIONS UP TO 2" SHALL REQUIRE USE OF A TAPPING SADDLE. A CONNECTION MADE TO A PIPE THAT REQUIRES A SADDLE OR IS NOT DUCTILE IRON WILL HAVE A BODY WITH A SUITABLE OUTLET, SEAL, AND SUITABLE MEANS FOR ATTACHMENT TO THE MAIN. THE SADDLE SHALL PROVIDE A DRIP TIGHT CONNECTION AND SHALL BE TEFLON OR EPOXY COATED WITH STAINLESS STEEL STRAPS, BOLTS, NUTS AND MECHANISM FOR ATTACHING TO THE PIPE BARREL.
2. INSTALL PER MANUFACTURES INSTALLATION GUIDELINES AND EFUD PUBLIC WORK STANDARDS WHEN APPLICABLE. ALSO COORDINATE WITH TOWN ENGINEER WHEN APPLICABLE.
3. PRIOR TO CONSTRUCTION SUBMIT SHOP DRAWING OF MATERIALS AND INSTALLATION PROCEDURE TO PROJECT ENGINEER.
4. CHLORINATE AND SUCCESSFULLY TEST WATER QUALITY PRIOR TO MAKING SERVICE AVAILABLE FOR USE.
5. MARK LOCATION OF CURB STOP WITH A 2 X 4 BROUGHT TO THE SURFACE WITH THE LETTER "W" MARKED ON IT, IF CONNECTION WILL NOT BE MADE TO END USER.
6. EFUD REQUIRES DOUBLE STRAP TYPE SADDLES

TYPICAL SERVICE CONNECTION AND CURB STOP

LAST REVISED 09/21/2023 W 010.2.1

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SEWER AND WATER DETAILS

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

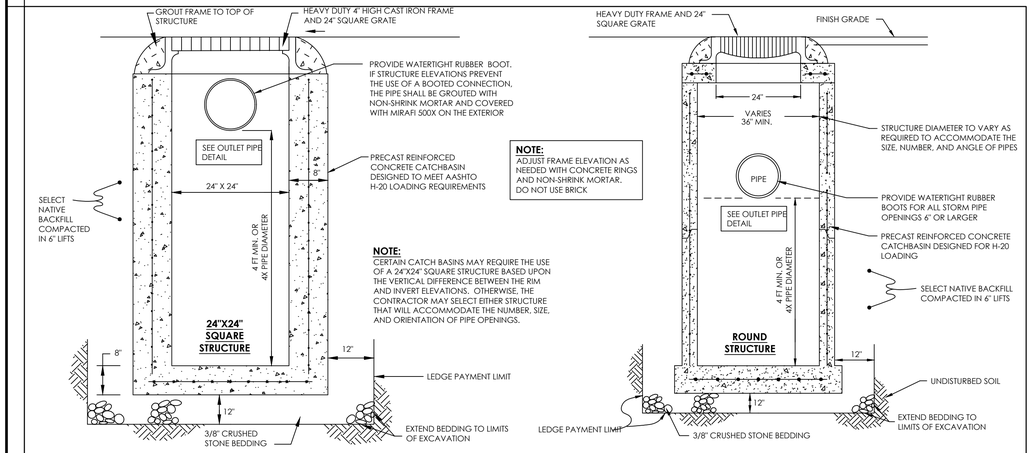
DJG DESIGN	ANL DRAWN	DJG CHKD

SCALE N.T.S.

DATE : 12/19/2025

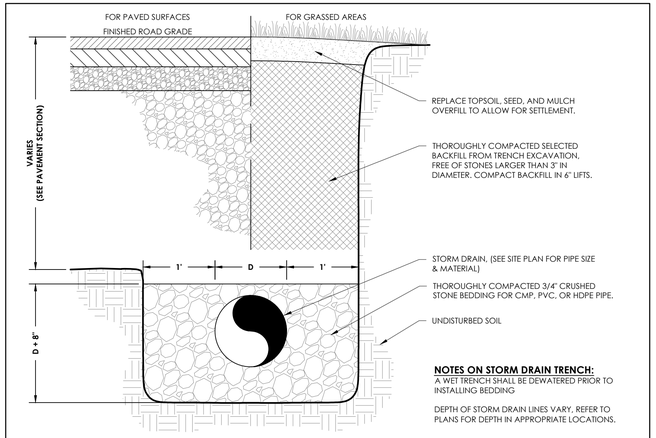
C8-02

CAD FILE: G:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C8-02 - Sewer and Water Details.dwg 12/19/2025



TYPICAL PRECAST CONCRETE DEEP SUMP CATCH BASIN

LAST REVISED 03/02/2023



NOTES ON STORM DRAIN TRENCH:
A WET TRENCH SHALL BE DEWATERED PRIOR TO INSTALLING BEDDING

DEPTH OF STORM DRAIN LINES VARY, REFER TO PLANS FOR DEPTH IN APPROPRIATE LOCATIONS.

TYPICAL STORM DRAIN TRENCH

1" = 1'

LAST REVISED 03/15/2021 SW 010.1.1

CONTRACTOR'S CERTIFICATION REQUIRED

PRIOR TO THE DESIGN ENGINEER CERTIFYING THAT THE INSTALLATION HAS BEEN INSTALLED IN ACCORDANCE WITH THE PERMITTED DESIGN, THE CONTRACTOR SHALL PROVIDE A CERTIFICATION THAT THE STORMWATER SYSTEM WAS INSTALLED AND TESTED (IF APPLICABLE)IN GENERAL ACCORDANCE WITH THE APPROVED DESIGN PLANS. STATE PERMITS REQUIRE THERE SHALL BE NO SIGNIFICANT DEVIATIONS FROM THE APPROVED PLANS WITHOUT PRIOR APPROVALS. THE DESIGN ENGINEER SHALL BE NOTIFIED AND ALLOWED TO OBSERVE THE CRITICAL PHASES OF CONSTRUCTION INCLUDING ANY REQUIRED TESTS. LIKEWISE, THE DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DEVIATIONS FROM THE APPROVED PLANS. SINCE THE DESIGN ENGINEER DOES NOT CUSTOMARILY OBSERVE ALL PHASES OF THE WORK, OR ALL TESTING, HE WILL RELY ON THE CONTRACTOR'S CERTIFICATION AS THE BASIS FOR FINAL CERTIFICATION. CRITICAL STORMWATER SYSTEM COMPONENTS TO BE CERTIFIED MAY INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, SHAPES OF DRAINAGE SWALES, VOLUMES OF TREATMENT PRACTICES, SLOPE OF DISCONNECT AREAS, AND OUTLET SIZE AND ELEVATIONS. THE CONTRACTOR SHALL SHALL THEREFORE SIGN AND RETURN A COPY OF THE FOLLOWING CERTIFICATION UPON COMPLETION OF THE WORK:

"I HEREBY CERTIFY THAT I HAVE INSTALLED, PROPERLY TESTED (IF APPLICABLE), AND SUCCESSFULLY PASSED THOSE TESTS, AND THE STORMWATER TREATMENT AND COLLECTION SYSTEM(S) ARE BUILT IN GENERAL ACCORDANCE WITH THE APPROVED DESIGN PLANS AND APPLICABLE PERMIT CONDITIONS."

CONTRACTOR NAME

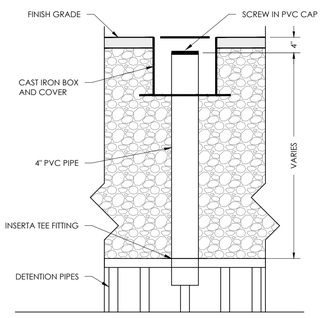
AUTHORIZED AGENTS NAME

SIGNATURE DATE

NOTE ANY DEVIATIONS FROM APPROVED PLANS HERE:

CONTRACTOR CERTIFICATION FOR STORMWATER SYSTEM

LAST REVISED 08/17/2015 SWM-002



INSPECTION PORT

SOIL DEPTH AND QUALITY REQUIREMENTS

1. THE OPERATIONAL STORMWATER PERMIT REQUIREMENTS FOR THIS PROJECT INCLUDE PROVISIONS FOR RESTORING THE ABSORPTIVE CAPACITY OF DISTURBED AREAS WHERE INDICATED ON THE SITE PLAN(S) AND WITHIN THIS DETAIL. TO COMPLY WITH THESE REQUIREMENTS, TOPSOIL AND SUBSOIL IMPROVEMENTS, AMENDMENTS, DOCUMENTATION AND TESTING ARE REQUIRED PER THE INFORMATION HERE;
2. ALL AREAS INDICATED ON THE SITE PLANS WHICH ARE TO BE GRASSED AND HAVE BEEN DISTURBED OR COMPACTED BY CONSTRUCTION ACTIVITIES ARE SUBJECT TO SOIL DEPTH & QUALITY REQUIREMENTS AND SHALL HAVE FINAL GRADE PREPARED BY ONE OF THE FOLLOWING METHODS.

OPTION 1: REMOVE AND STOCKPILE EXISTING TOPSOIL PRIOR TO GRADING.

- STOCKPILE SOIL ON SITE IN A DESIGNATED CONTROLLED AREA, AT LEAST 50 FEET FROM SURFACE WATERS, WETLANDS, NEW FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS;
- SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
- STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS:
  - PRE-APPROVED RATE: COMPOST SHALL BE INCORPORATED WITH AN ORGANIC MATTER CONTENT
  - BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 1:3 TO ACHIEVE 4 INCHES OF SETTLED TOPSOIL, OR
  - CALCULATED RATE: INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4 INCHES OF SETTLED TOPSOIL AT 4% ORGANIC CONTENT;

3. REPLACE STOCKPILED TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES PRIOR TO PLANTING; AND
4. RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.

OPTION 2: AMEND EXISTING SITE TOPSOIL OR SUBSOIL IN PLACE.

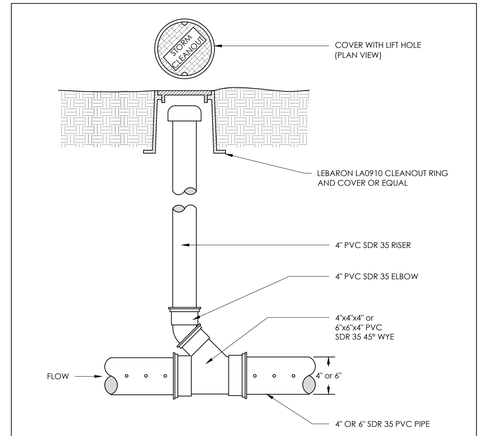
- SCARIFY OR TILL SUBSOILS TO 4 INCHES OF DEPTH OR TO DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 8 INCHES OF UNCOMPACTED SOIL AFTER CALCULATED AMOUNT OF AMENDMENT IS ADDED. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
- AMEND SOIL TO MEET ORGANIC CONTENT REQUIREMENTS:
  - PRE-APPROVED RATE: PLACE 1 INCH OF COMPOSTED MATERIAL WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% AND ROTOTILL INTO 3 INCHES OF SOIL, OR
  - CALCULATED RATE: PLACE CALCULATED AMOUNT OF COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AND ROTOTILL INTO DEPTH OF SOIL NEEDED TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT;
  - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER; AND
  - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

OPTION 3: IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.

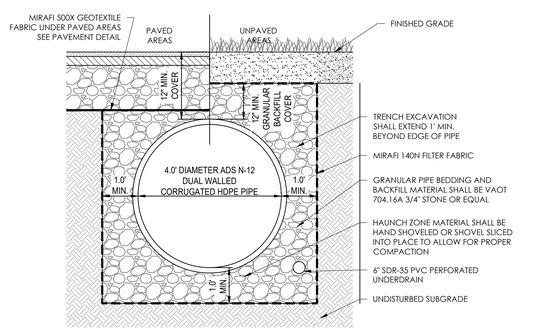
- SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
- PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA;
- RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER; AND
- WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

5. IF AREAS THAT WERE INDICATED ON THE SITE PLAN AS NOT TO BE DISTURBED OR COMPACTED ARE IMPACTED BY CONSTRUCTION ACTIVITIES, THEY WILL BE REQUIRED TO BE RESTORED BY ONE OF THE METHODS ABOVE.
6. THE CONTRACTOR SHALL PROVIDE LAB REPORTS, VOLUMETRIC CALCULATIONS, OR OTHER EVIDENCE THAT THE FINAL SOIL PROPERTIES MEET THE ABOVE ORGANIC CONTENT REQUIREMENTS.
7. THE CONTRACTOR SHALL PREPARE A SOIL DEPTH SAMPLING PLAN WITH SOIL DEPTH TEST HOLE LOCATIONS AT A RATE OF 9 TEST HOLES PER ACRE OF LAND SUBJECT TO THIS STANDARD AND AT LEAST 50' APART FOR APPROVAL BY THE ENGINEER. SOIL DEPTH TEST HOLES SHALL BE EXCAVATED USING A HAND SHOVEL DRIVEN SOLELY BY BODY WEIGHT TO A DEPTH OF 8". THE CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE FINAL SOIL PROPERTIES MEET THE ABOVE COMPACTION SAMPLING REQUIREMENTS.
8. SOIL DEPTH & QUALITY METHODS SHALL BE EMPLOYED TOWARDS THE END OF CONSTRUCTION AND ONCE ESTABLISHED SHALL BE PROTECTED FROM COMPACTION FROM MACHINERY OR VEHICLE TRAFFIC AND FROM EROSION. AREAS WHICH ARE COMPACTED OR DAMAGED SHALL BE REESTABLISHED PER THE METHODS ABOVE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING COMPLIANCE WITH THIS STANDARD.

SOIL DEPTH AND QUALITY



TYPICAL UNDERDRAIN CLEANOUT

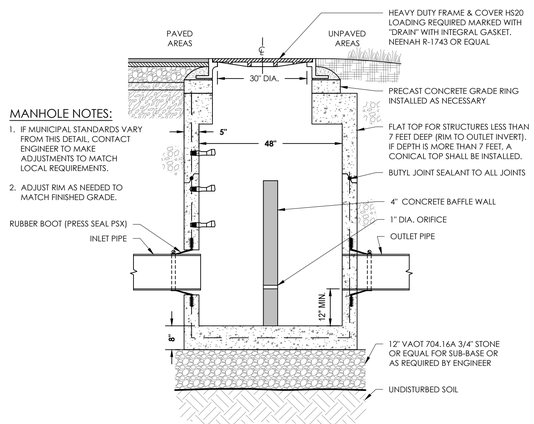


NOTES:

1. A MINIMUM OF 2' OF SEPARATION SHALL BE MAINTAINED BETWEEN PIPES AND WALLS OF TRENCH TO ALLOW FOR PROPER COMPACTION OF THE HAUNCH MATERIALS DURING INSTALLATION.
2. BACKFILL MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AND SHALL BE WORKED INTO THE PIPE HAUNCHES AND COMPACTED BY MEANS OF VIBRATORY PLATE COMPACTOR, SHOVEL-SLICING, AND/OR OTHER METHOD APPROVED BY THE ENGINEER. COMPACTION SHALL MEET 90% STANDARD PROCTOR DENSITY. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO-LIFT DIFFERENTIAL BETWEEN THE SIDES OF ANY PIPE IN THE SYSTEM AT ALL TIMES DURING THE BACKFILL PROCESS. BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON ANY PIPES IN THE SYSTEM.
3. GRANULAR BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL AND RIDGED PAVEMENT IF APPLICABLE.
4. FILTER FABRIC TO BE INSTALLED ON THE BOTTOM AND SIDES OF THE EXCAVATION. IN PAVED AREAS, FILTER FABRIC TO EXTEND UP AND BE CONNECTED TO FABRIC PLACED BELOW ROAD SUBBASE. IN GRASSED AREAS, FILTER FABRIC TO BE INSTALLED ON TOP OF THE GRANULAR BACKFILL.

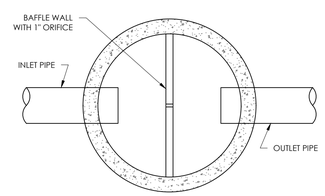
HDPE DETENTION PIPES

N.T.S.



MANHOLE NOTES:

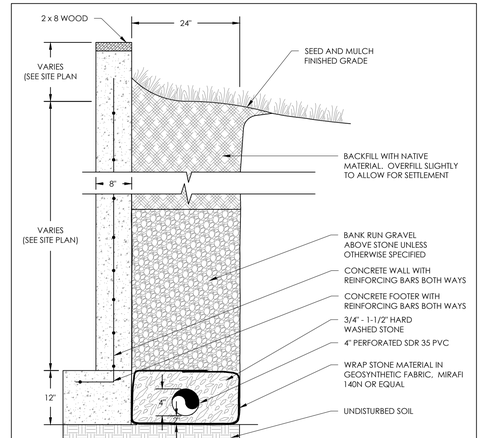
1. IF MUNICIPAL STANDARDS VARY FROM THIS DETAIL, CONTACT ENGINEER TO MAKE ADJUSTMENTS TO MATCH LOCAL REQUIREMENTS.
2. ADJUST RIM AS NEEDED TO MATCH FINISHED GRADE.



PLAN VIEW

OUTLET CONTROL STRUCTURE 4

N.T.S.



TYPICAL FOOTING DRAIN CROSS SECTION FINAL REQUIREMENTS BY STRUCTURAL ENGINEER

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STORMWATER DETAILS

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

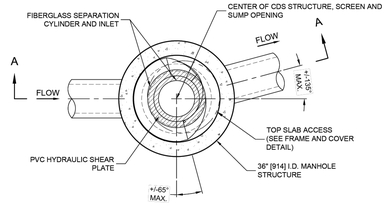
DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE N.T.S.

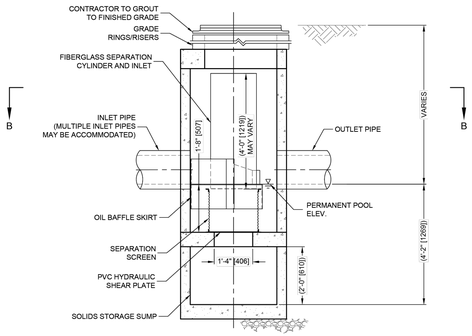
DATE : 12/19/2025

C8-03

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C8-03 - Stormwater Details.dwg 12/19/2025



PLAN VIEW B-B
NOT TO SCALE

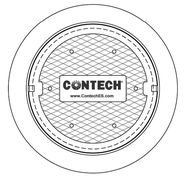


ELEVATION A-A
NOT TO SCALE

CDS1515-3-C DESIGN NOTES

CDS1515-3-C STANDARD CONFIGURATION IS SHOWN.

FOR NJDEP PROJECTS, PLEASE CONTACT YOUR LOCAL CONTECH REPRESENTATIVE FOR APPROVED CONFIGURATIONS.



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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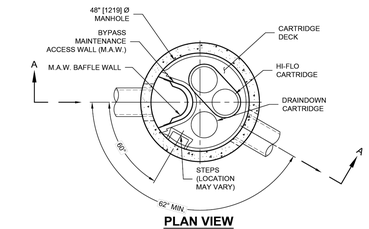
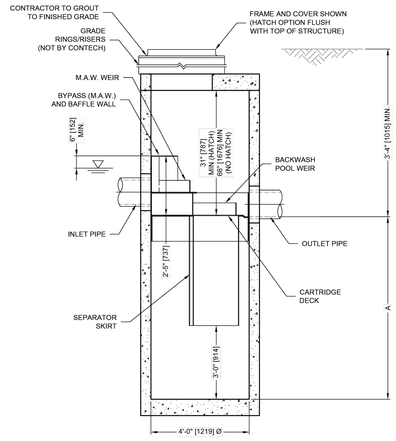
CDS1515-3-C
ONLINE CDS
STANDARD DETAIL



PLAN VIEW
TOP SLAB NOT SHOWN



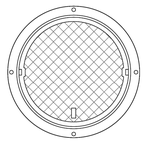
SECTION A-A

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SIZE, TYPE AND QUANTITY. THE STANDARD MANHOLE STYLE IS SHOWN. THE 48" [1219 mm] Ø MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 0.45 cfs [12.74 L/s] AND MAXIMUM BYPASS CAPACITY IS 2.50 cfs [70.79 L/s]. IF THE SITE CONDITIONS EXCEED THE BYPASS CAPACITY OF THE SYSTEM, AN UPSTREAM DIVERSION STRUCTURE IS REQUIRED. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SIZE	54	40	27	15
FLOW RATE, HIGH-FLO / DRAINDOWN (cfs [L/s])	0.18 / 0.09 [5.10 / 2.55]	0.13 / 0.065 [3.68 / 1.84]	0.09 / 0.045 [2.55 / 1.28]	0.05 / 0.025 [1.42 / 0.71]
MAXIMUM CARTRIDGE QUANTITY HIGH-FLO / DRAINDOWN	2 / 1			
PEAK TREATMENT CAPACITY (cfs [L/s])	0.45 [12.74]	0.33 [9.34]	0.22 [6.23]	0.12 [3.40]
OUTLET INVERT TO STRUCTURE INVERT (A) (ft. [mm])	7.42 [188]	6.25 [159]	5.17 [131]	4.17 [106]

FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE



HATCH
(36" Ø CAST INTO SLAB)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
NUMBER OF CARTRIDGES REQUIRED (HF / DD)			
CARTRIDGE SIZE (54, 40, 27, 15)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 3' [305], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. INLET HGL NOT TO EXCEED 6" [152] BELOW THE TOP OF THE M.A.W. DURING THE PEAK DESIGN STORM, OR 10-YEAR STORM (WHICHEVER IS GREATER).
7. INLET PIPE INVERT ELEVATION VARIES FROM 1" TO 6" [25 TO 152] ABOVE THE OUTLET PIPE INVERT.
8. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
9. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
10. THE DIFFERENCE IN THE INLET AND OUTLET PIPE ELEVATIONS FOR RETROFIT INSTALLATIONS TO EXISTING STORM DRAIN PIPES SHALL BE EQUAL TO THE SLOPE OVER THE DIAMETER OF THE MANHOLE; NOT THE EXCEED 6" [152] IN VERTICAL DIFFERENTIAL BETWEEN INLET AND OUTLET PIPES.
11. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.
12. ALTERNATE UNITS ARE SHOWN IN [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
D. WHEN ACTIVATED PRIOR TO SITE STABILIZATION, CONTRACTOR TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ACCORDING TO THE PROVISIONS IN THE ACTIVATION CHECKLIST AND THE QUOTED SCOPE OF WORK. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (800) 338-1122.

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,425,262 B2; 7,470,366 B2; 8,303,816 B2; 8,512,561 B2; OTHER INTERNATIONAL PATENTS PENDING

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JF4
ONLINE CONFIGURATION
STANDARD DETAIL

I:\COMMON\CAD\TREATMENT\CDS\CDS STANDARD DRAWINGS\ONLINE (CDS-CI)\PDF WITHOUT TREATMENT FLOW\DWG\CDS1515-3-C-DTL.DWG 8/9/2021 3:33 PM
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,322,629; 5,707,527; 5,759,415; 6,027,639; 6,649,048; 7,186,333; AND 8,470,181; OTHER INTERNATIONAL PATENTS PENDING

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STORMWATER DETAILS

UHAUL COMMERCIAL, BURLINGTON

436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE N.T.S.

DATE : 12/19/2025

C8-04

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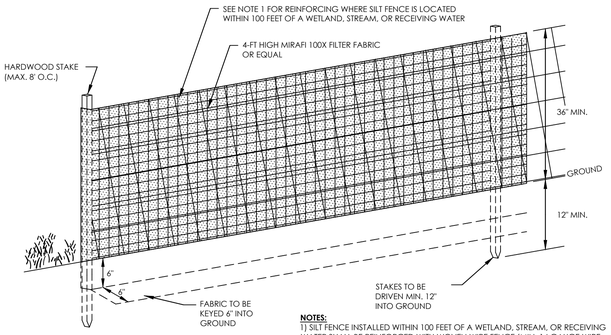
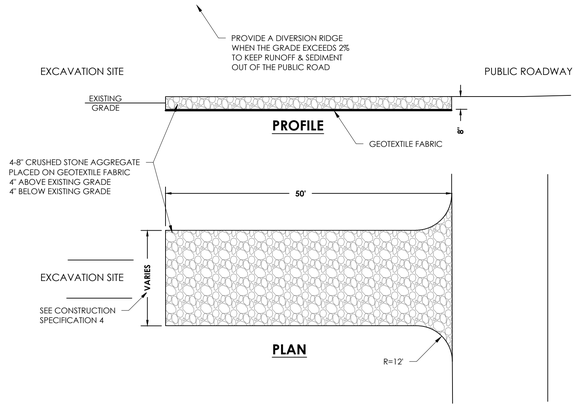


TEMPORARY SILT FENCE

NOTES:
1) SILT FENCE INSTALLED WITHIN 100 FEET OF A WETLAND, STREAM, OR RECEIVING WATER SHALL BE REINFORCED WITH WOVEN WIRE FENCE (MIN. 14 GAUGE WIRE WITH 6" MAX. MESH SPACINGS)
2) USE ONLY MANUAL METHODS OF INSTALLATION AND CLEANING WITHIN WETLAND AND BUFFER ZONE.
3) PRIOR TO BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SILT FENCE AT THE LIMIT OF DISTURBANCE SHOWN ON THE SITE PLAN.
4) FROZEN MATERIAL SHALL NOT BE USED TO KEY IN THE BOTTOM OF THE SILT FENCE. IF NECESSARY, GRANULAR BORROW SHALL BE USED BY THE CONTRACTOR TO KEY IN THE SILT FENCE RATHER THAN FROZEN NATIVE MATERIAL.
5) THE CONTRACTOR SHALL INSTALL SILT FENCE AROUND THE PERIMETER OF TOPSOIL STOCKPILES AND AT OTHER LOCATIONS AS NEEDED.

LAST REVISED 03/02/2023

CONSTRUCTION SPECIFICATIONS
1. STONE SIZE - USE 4-8" CRUSHED STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS - NOT LESS THAN 8".
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILES MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY AND DISPOSED OF IN ACCORDANCE WITH THE EPSC PLANS. (i.e. PLACED IN A SOIL STOCKPILE OR AREA WHERE IT CAN BE STABILIZED PER EPSC DETAILS). IF SWEEPING IS THE CHOSEN METHOD FOR REMOVAL THE SWEPT MATERIAL MUST BE COLLECTED AND DISPOSED OF AS STATED ABOVE.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS BASED ON SITE CONDITIONS, WEATHER AND FLOW OF TRAFFIC.



STABILIZED CONSTRUCTION ENTRANCE

LAST REVISED 04/01/2021

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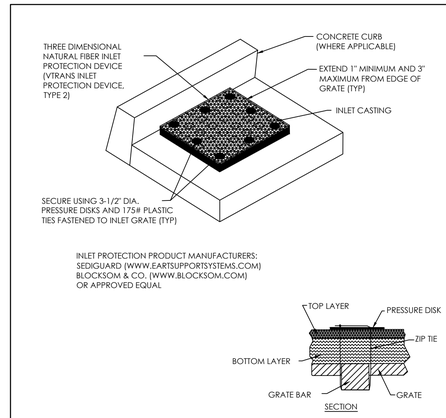


INLET PROTECTION

LAST REVISED 03/02/2023

WESTERN EXCELSIOR

Installation Instructions Logs and Wattles

Step 1 - Site Preparation
Prepare site to design profile and grade. Remove debris, rocks, clods, etc. Ground surface should be smooth prior to installation to ensure log remains in contact with slope.

Step 2 - Staple Selection
At a minimum, 1 in. by 1 in. by 24 in., stakes are to be used to secure the log to the ground surface. Installation in rocky, sandy or other loose soil may require longer stakes.

Slope Installation
Place RECP along slope to provide upstream apron for log. Secure RECP according to standard slope installation instructions including upstream anchor trench. Secure log to blanket, ensuring log remains in intimate contact with the RECP over the length of the installation. A minimum of one foot upstream apron and two foot downstream apron are required for installation. Subsequent, downslope rows of logs should be spaced appropriately for site conditions to minimize acceleration of flow. Further, log seams are to be offset to ensure continuous filtration. Figure A presents a schematic of a slope installation in profile view.

Channel Installation
Place RECP along channel to provide upstream and downstream apron for log identically to slope installation. Secure log to blanket, ensuring log remains in intimate contact with the RECP over the length of the installation. A minimum of one foot upstream apron and two foot downstream apron are required for installation. Subsequent, downslope rows of logs should be spaced appropriately for site conditions to minimize acceleration of flow. Further, log seams are to be offset to ensure continuous filtration. Figure A / Figure C presents a schematic of a channel installation.

Drain Filter Installation
Surround drain inlet to be protected with log, ensuring seams are overlapping to minimize flow circumventing log. Secure logs to ground surface ensuring the log remains in intimate contact with the ground surface over the entire installation. Provide RECP apron secured to the ground surface between drain and log.

Please contact Western Excelsior Technical Support Division at 800-967-4009 with specific questions or for further information.

Slope/Channel Installation

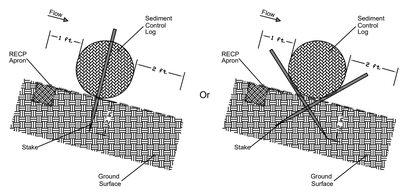


Figure A - Profile View

Flat Ground (Perimeter Guard) Installation

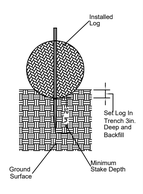
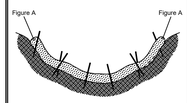


Figure B - Profile View

Channel Installation



Minimum stake in ground, 12 in.

Do not allow flow to overtop installation.

Figure C - Cross-Section View

Drain Filter

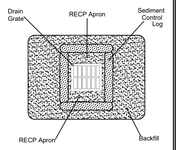


Figure D - Cross-Section View

Curbside Installation

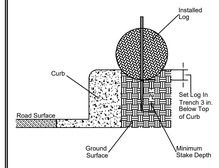


Figure E - Cross-Section View

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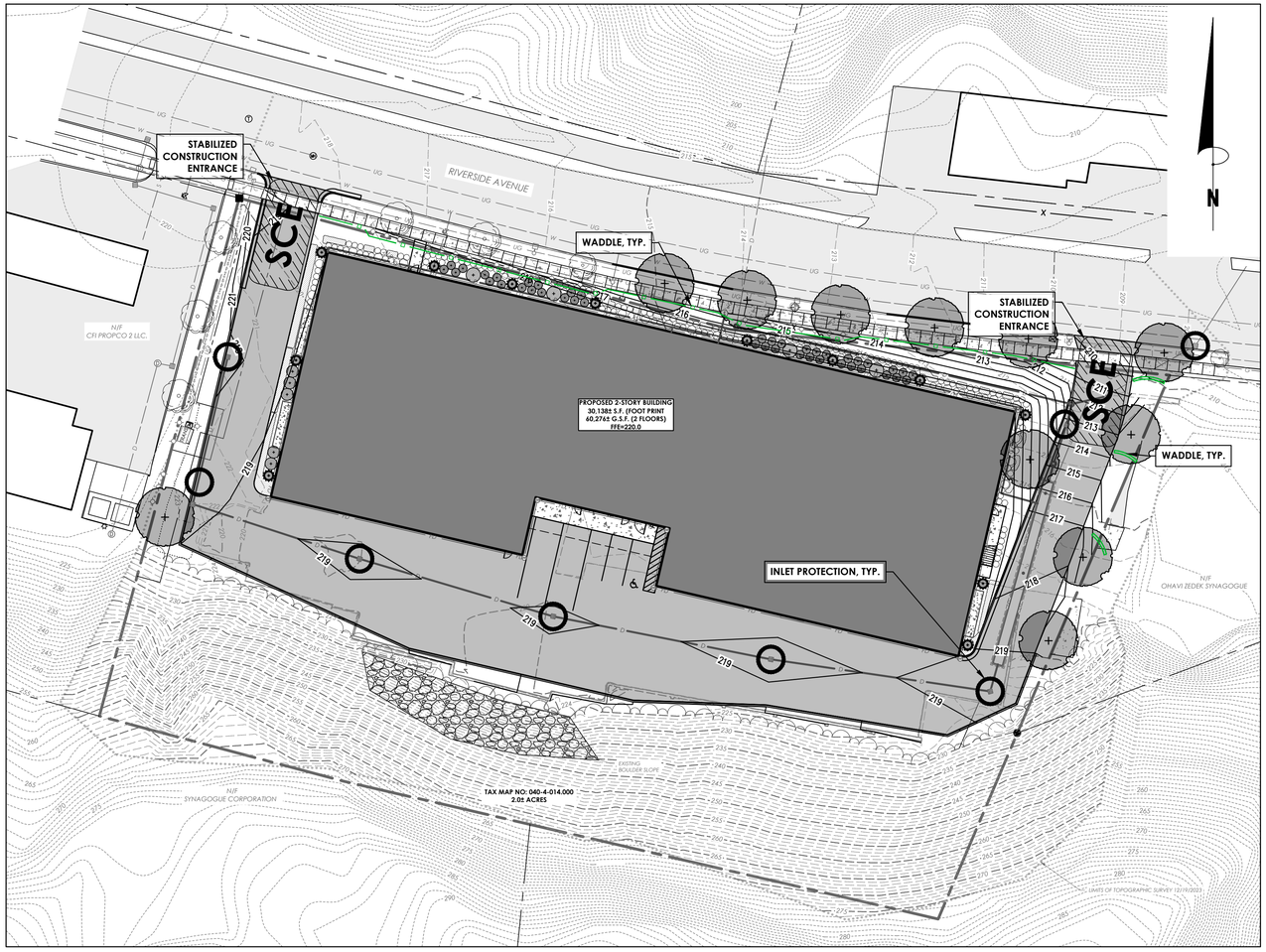

EPSC LEGEND

- WADDLES
- INLET PROTECTION
- SCE — STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION EPSC

SCALE 1" = 30'

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EROSION DETAILS & CONSTRUCTION EPSC

UHAUL COMMERCIAL, BURLINGTON
436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS	
DATE	DESCRIPTION

DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE AS NOTED

DATE : 12/19/2025

C8-05

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June 2025

THE HANDBOOK

The Low Risk Handbook for Erosion Prevention and Sediment Control

An onsite reference for all low risk stormwater construction projects.

VERMONT
ENVIRONMENTAL CONSERVATION

Additionally, a project within a common plan of development can qualify as an independent project or phase that can apply for coverage under a separate Notice of Intent (NOI). To qualify as an independent project or phase within a common plan of development, the phases must meet one of the following criteria: 1) each phase is constructed separately, with no construction of phases occurring simultaneously, such that "final stabilization", as defined in the general permit's APPENDIX C, is achieved on one phase prior to the commencement of construction activity on a subsequent phase; or 2) Phases do not share a common landowner or a common operator, or; 3) The phase is an off-site support activity for which coverage is required. When determining the risk category for an independent phase, only the data applicable to that phase needs to be considered.

When should phasing be utilized on a construction site?

Phasing is essential to minimize concurrently exposed soil and to decrease a site's potential to discharge sediment laden runoff. Phasing a project is required when 1) project earth disturbance is greater than 2 acres; and the project will be limited to 2 acres or less as a mitigation factor in the Appendix A – Risk Evaluation; or 2) if the project earth disturbance is greater than 5 acres. The CGP requires phasing plans to be included in the applications to illustrate the sequencing and limits of each phase. It should provide clear direction as to the requirements for stabilization of one phase before another begins, acreage of each phase, and required items to complete before initiating the subsequent phase. More details on phasing requirements are found in the general permit's Appendix B.

Figure 1 *Example of a site phasing plan.*

Winter Construction

The winter construction period starts October 15 and continues through April 15. This period requires the installation and implementation of additional EPSC measures and BMPs to ensure proper site stabilization and sediment control during the winter and spring thaw. This handbook details winter construction requirements in **Subsection 4.2** , and additional details can be found within *The Vermont Standards*.

Pollution Prevention

Pollution prevention during construction is important to prevent the release of chemicals and other construction related materials from entering waters of the state. A storage, spill prevention, and clean-up plan for all potential pollution sources are required to mitigate these risks. Potential pollution sources include, but are not limited to, building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, etc.

What is a Site Drawing and why do I need one?

A Site Drawing is required for all low-risk permit applications. The goal of the Site Drawing is to provide the construction site personnel with a general strategy tailored to the site and project for preventing erosion and containing eroded sediment on-site. The Site Drawing must adhere to this handbook and the general permit and must satisfy the requirements listed in the *Vermont Application Requirements for Construction Permits*. This drawing helps the permittee, contractor, Secretary, and the public understand the project and visualize how the permittee plans to control erosion and sediment during construction activities. The drawing will also include generic language describing some major requirements of the CGP, including but not limited to, inspection details, stabilization schedule, total and concurrent earth disturbance, etc. When planning for construction projects, it is important to consider all environmental factors to mitigate erosion and control sediment runoff.

Section 3 - Best Management Practices

Best Management Practices (BMPs) for construction sites are broadly defined as methods to prevent or mitigate construction related stormwater runoff and its associated pollutants from discharging into surface water, ground water, and any other water of the state.

This section contains the most commonly used BMPs (sediment control, runoff control, and soil stabilization practices) for low-risk construction sites. These BMPs must be utilized, when necessary, during construction to mitigate sediment laden runoff and erosion of exposed soils. These practices are also used to slow water movement through the site. This water control will decrease erosion and allow for sediment laden runoff to settle before leaving the construction site.

3.1 Perimeter Control

Perimeter controls are essential for ensuring construction sites are controlling runoff and containing sediment on site. In some cases (e.g., diversion berm), a perimeter control is the first line of defense in mitigating construction site runoff by diverting upland runoff around the site. In other cases (e.g., erosion control berm, silt fence), a perimeter control is the last measure before runoff leaves the site, and therefore, the last chance to intercept and filter sediment laden runoff before it enters a surface water.

Diversion of surface water away from exposed soils provides the most economic and effective erosion control possible since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment.

To help determine which BMPs are best suited for a given construction site, this subsection will detail commonly used perimeter or sediment control practices for low-risk construction sites.

Requirements:

Perimeter controls must be installed:

- On the downhill side of the construction activities for sediment laden runoff interception or uphill of earth disturbances for diversion berms; and
- Between any ditch, swale, storm drain, or surface water and the disturbed soil;
  - Perimeter controls not labeled as biodegradable shall be removed once the drainage area has reached final stabilization.

NOTE: Hay bales must not be used exclusively as sediment barriers due to their tendency to degrade and fall apart and may only be used in support of other required practices.

How to Comply:

Select and install a perimeter control from the following options: Diversion Berm, Silt Fence, Erosion Control Berms, or Filter Socks or Straw Wattles (detailed in **Subsection 3.3**).

Installation:

Silt Fence, Erosion Control Berms, or Filter Socks or Straw Wattles

- Place on the downhill side of disturbed soil;
  - If space is available, place perimeter control 10-ft from the bottom of the slope, otherwise place along the contour at the bottom of the slope.
- Ensure the control catches all runoff from disturbed soil;
- Maximum drainage area is ¼ acre for 100-ft of silt fence and erosion control berm;
- Install across the slope (not up and down slope);
- Install multiple rows on long slopes to intercept flow; and
- Do not install across ditches, channels, or streams.

Diversion Berm

- Place on the uphill side of disturbed soil;
- Install across the slope (not up and down slope);
- Do not install across ditches, channels, or streams.
- Stabilize the flow channel with seed and mulch or erosion control matting. Line the channel with 4 inch stone if the channel slope is greater than 20%.
- Ensure the berm drains to an outlet stabilized with riprap. Ensure that there is no erosion at the outlet.

3.1.3 Diversion Berm

Diversion berms intercept stormwater runoff contributing from above the construction site and direct it around the disturbed area. This prevents offsite runoff from entering the construction site, thus reducing the potential for erosion and reducing the drainage area contributing to the site.

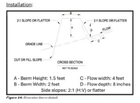
Figure 2A *Berms and ditches divert upslope contributing runoff around construction sites and reduce erosion and sediment problems. Stabilize berms and ditches after construction.*

Requirements:

If stormwater runoff contributes to the construction site from upslope areas and the site meets the following two (2) conditions, you are required to first install a diversion berm and stabilized swale before disturbing any additional soil:

1. One or more acres of soil will be disturbed at any one time; and
2. Average slope of the disturbed area is 20% or steeper.

Installation:



A – Berm Height: 1.5 feet
B – Berm Width: 2 feet
Side slopes: 2:1 (H:V) or flatter
C – Flow width: 4 feet
D – Flow depth: 8 inches

Figure 2B *Run-on berm detail.*

- Construct berm to the minimum specification above;
- Compact the berm with a shovel or earth-moving equipment;
- Seed and mulch berm or cover with erosion control matting immediately after installation;
- Stabilize the flow channel with seed and mulch or erosion control matting. Line the channel with 4 inch stone if the channel slope is greater than 20%;
- Ensure the berm drains to an outlet stabilized with riprap. Ensure that there is no erosion at the outlet; and
- The diversion berm shall remain in place until the disturbed areas are completely stabilized.

Figure 2C *Detail construction, seeding, and stabilization of channel berm. Note that diversion ditch is lined with grass on flatter part of slope, and with rock on steeper part.*

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Section 2 - Pre-Construction Requirements

It is essential for sites to plan for and implement erosion prevention and sediment control measures before the commencement of earth disturbing construction activities. The installation of these pre-construction EPSC measures are crucial for mitigating the environmental impacts of the site and preventing unnecessary disturbances and sediment transportation.

2.1 Site Preparation

This subsection contains required EPSC measures that must be installed before any earth is disturbed on site (excluded disturbance required to access the site and install these EPSC measures).

Reference **Section 4** for additional requirements and practices.

2.1.1 Limits of Disturbance Demarcation

Delineating the site will help to: 1) limit the area of disturbance to only what is necessary for construction, 2) prevent unauthorized disturbance, 3) preserve existing vegetation, and 4) limit erosion potential on the site.

Figure 3 *LOD demarcation sketch*

Requirement:

You must physically mark the limits of construction activity using one of the methods described below. These methods shall be utilized to mark the entire construction boundary, as well as, phasing boundaries as the project progresses.

Figure 3A *Properly placed barrier tape marks the boundaries and limits of construction on this site.*

How to Comply:

Before initiating any earth disturbance activities, install a perimeter fence, orange barrier tape, or flagging on stakes or trees to physically demarcate the approved limits of earth disturbance for the entire site and the active phase of the construction project.

Maintenance:

The LOD demarcation shall be maintain or replaced when necessary to ensure phasing boundaries and earth disturbing limitations are properly established.

3.1.1 Erosion Control Berm

Erosion control berms collect runoff from a construction site, allowing it to pond, settle, and filter before flowing off site. These berms are comprised of a dense mixture of intertwining wood fragments and grit that form a stable, long lasting mulch. Common sources include stump grindings, and aged wood waste.

Installation Requirements:

The erosion control berm should be a minimum of one (1) foot tall and two (2) feet wide. On longer or steeper slopes, a larger berm may be necessary.

How to Comply:

Stump grindings from land clearing are an excellent source of material for erosion control berms and may be readily produced when the area to be developed is forested.

Erosion control berms are effective on frozen ground, rock outcrops, and forested areas with heavy root cover. It may be necessary to pack down or remove vegetation to prevent the creation of voids or bridges which will allow berm washout and pass sediment laden water offsite.

Erosion Control Berm Placement:

Slope Steepness	Maximum Length (ft)
2:1	30
3:1	50
4:1	75
5:1 or flatter	100

Table 2 *Maximum allowable slope lengths contributing runoff to an erosion control berm placed on a slope.*

Maintenance:

Erosion control berms must be redressed and reshaped as necessary to ensure that sediment doesn't accumulate more than halfway up the berm face.

Figure 4 *The erosion control berm above is allowing for both ponding and filtering of stormwater.*

3.2 Runoff Prevention

Where extensive disturbance cannot be avoided, stormwater run-on should be managed to control erosion. This can be accomplished by diverting runoff around the disturbance (perimeter control), by providing a stable conveyance through the disturbance, or by dispersing concentrated flows through stable outlet structures.

This subsection will detail commonly used runoff control practices for low-risk construction sites to help determine which BMPs are bested suited for a given construction site.

3.2.1 Storm Drain Inlet Protection

To prevent heavily sediment laden water from entering a storm drain system, a storm drain inlet protection device must be installed. Existing and new storm inlets on construction sites receiving flow from disturbed areas must be protected from sediment laden runoff. The practices below allow stormwater to settle and filter through the practice and not bypass the intent entirely.

Requirements:

Stormwater inlets shall be 4 inches above grade, or an acceptable inlet control or protection should be installed.

Figure 4A *Use of stone inlet protection with the incorporation of a stone outlet in place of inlet blocks for the stone and block specification.*

Installation:

Proprietary Inlet Protection

Shall provide for storage and removal of sediment and be sized appropriately for the drainage area, while allowing stormwater to filter through. These may be used if installed and maintained in accordance with the manufacturer's specifications.

Stone and Block Drop Inlet Protection

Concrete blocks placed around an inlet with a circle of filtering stone sloped against the blocks.

Filter Fabric and Stone Inlet Protection

Vertical filter fabric installed around drop inlet with stone around fabric for stormwater filtering and creating ground contact with filter fabric. Alternatively, fabric may be buried below ground.

Figure 4B *The silt fence in detention is meant not (proprietary) inlet protection. Resulting in a discharge of sediment laden water that required the removal of sediment from the stormwater system.*

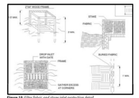

Figure 4C *Filter fabric and stone inlet protection detail.*

Maintenance:

The inlet protections shall be inspected, cleaned, and repaired after each rain or snow melt event. Accumulated sediment must be removed and damaged devices must be replaced to ensure proper performance.

1 acre = 43,560 square feet = 4,840 square yards

Area in acres (width in feet x length in feet)

(w) x (l)	100	150	200	300	400	500
100	0.2	0.3	0.5	0.7	0.9	1.1
150	0.3	0.5	0.7	1.0	1.4	1.7
200	0.5	0.7	0.9	1.4	1.8	2.3
300	0.7	1.0	1.4	2.1	2.8	3.4
400	0.9	1.4	1.8	2.8	3.7	4.6
500	1.1	1.7	2.3	3.4	4.6	5.7

Chart to help estimate earth disturbance area.

2.1.2 Stabilized Construction Access

A Stabilized Construction Entrance (SCE) must be utilized to help remove mud and sediment from vehicles and equipment to prevent tracking onto roads and decrease the environmental impact of construction vehicles.

Requirements:

A stabilized construction access must be installed before earth disturbing activities at all points where construction vehicles will exit the construction site.

Figure 4 *Good stabilized construction access. Adequate width to accommodate two-way traffic. Stone is large enough to prevent mud tracking offsite. Ensure that the pad is 6 inches deep and 40 feet long.*

Figure 5 *Poor example, or lack of, a stabilized construction access. Does not have adequate stone to prevent tracking. Stone is undersized, uneven sizes, and does not meet the minimum depth requirement of 6 inches.*

Installation:

- **Rock size** - Mix of 1 to 4 inch stone;
- **Depth** - 8 inches minimum;
- **Width** - 12 feet minimum, flared at the road for vehicle turning radius (10 feet per side);
- **Length** - 40 feet minimum (length of driveway for shorter, residential project access);
- **Geotextile** - Filter cloth under the entire stone bed.

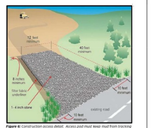

Figure 6 *Construction access detail. Access pad must keep mud from tracking onto both paved and gravel roads.*

Maintenance:

Redress with clean stone or scarify to open voids as required to keep sediment from tracking onto the roads.

Where sediment has been tracked-out from your site onto roads, sidewalks, or other paved areas outside your site, remove the deposited sediment by the end of the same business day in which track-out occurs. There should be no re-routing of the construction access.

- Remove track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal.
- You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the state.

3.1.2 Silt Fence

Silt fences are a temporary barriers of geotextile fabric installed on the contours across a project site to intercept sediment laden runoff from small drainage areas of disturbed soil.

Requirements:

Silt fence must be installed on the downhill side of the construction activities, between any ditch, swale, storm drain, or surface water and the disturbed soil.

Figure 8 *Excellent demonstration of a properly installed silt fence along a construction access road.*

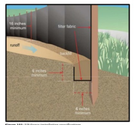

Figure 10 *Silt fence installation specifications.*

Installation:

- Dig a trench 6 inches deep across the slope;
- Unroll silt fence along the trench;
- Ensure stakes are on the downhill side of the fence;
- Join fencing by rolling the end stakes together;
- Drive stakes in against downhill side of trench;
- Drive stakes until 16 inches of fabric is in trench;
- Push fabric into trench; and
- Fill trench with soil and pack down.

NOTE: Gravel can be used to create ground contact with filter fabric when bedrock, ledge, or nearby tree roots do not allow for trenching. (A secondary perimeter control can be effective in these locations as well.)

J-hooking the silt fence may trap sediment running along the fence or catch flows from higher velocities to slow sediment.

Figure 9 *Excellent installation of reinforced silt fence and j-hooks in front of a storm drain inlet and drainage channel.*

Maintenance:

- Remove accumulated sediment before it reaches halfway to top of the fence;
- Ensure that silt fence is trenched into the ground with no gaps between the fence and the ground and between neighboring fences; and
- Replace any silt fence that is torn, ripped, or otherwise damaged as they are no longer effective.

3.2.2 Concrete Truck Washout

Concrete truck washouts are required to prevent the discharge of concrete pollutants. Concrete wash-water often contains a slurry of heavy metals, can be caustic, and has a high pH. As a result, concrete wash-water is not a permitted discharge and must be maintained on site.

Requirements:

Concrete wash-water and excess washout must be stored in a lined washout to allow for wash-water to evaporate or used as storage until the wash-water can be removed and disposed of properly rather than discharge from the site with stormwater. This washout should be accessible to the cement truck and at least 50-ft away from stormwater inlets and surface water.

Care should be given to assure that the washout does not overtop during a storm event. Proprietary lined and contained concrete washout basins may also be utilized in accordance with manufacturers specifications.

Figure 11 *Properly installed concrete truck washout.*

Maintenance:

Utilized BMPs must be inspected, cleaned, and repaired as necessary to ensure adequate waste containment. Concrete washout shall be pumped to a concrete truck as necessary, for disposal or reuse at a batch plant. Washout may also be allowed to evaporate/harden for disposal in accordance with applicable local, state, and federal regulations.

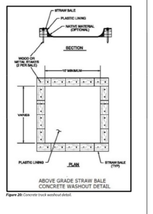

Figure 12A *Concrete truck washout detail.*

Section 1 - Introduction

1.1 What is Erosion Prevention and Sediment Control

On most construction sites, the existing vegetation that holds the soil in place and protects it from the erosive forces of rain and runoff is removed, leaving large areas of exposed soil. During rainfall or snowmelt, wind, etc., the exposed soil may be easily eroded and transported to nearby streams, lakes, wetlands, or other surface waters.

Stormwater runoff carrying sediment into these streams, lakes, and wetlands is a large contributor to surface water quality challenges in Vermont. The water quality of these waters can be degraded because of the discharge of eroded sediment from unmanaged construction sites. Sediment entering surface waters may cause harmful alterations or destruction of aquatic habitats and could have lasting impacts on fish and other aquatic organisms. In addition, sediment serves as a vehicle for the transport of stormwater pollutants that diminish water quality. Phosphorus, for example, which can contribute to excessive algae growth, is commonly transported by being bound to mobile sediment.

To mitigate these negative effects, construction site best management practices (BMPs) should be implemented to control erosion and contain soil on the project's site. The most effective approach to prevent a sediment discharge is temporary and final stabilization of exposed soils. Controls to sediment laden runoff are necessary at times but should not be used as the primary means of prevention. Consideration for soil properties, flow velocities, topography, vegetation, and climate are all factors to be considered when using best management practices.

This Low-Risk Handbook is a tool which provides generic information for the most frequently used BMPs on a given construction site in Vermont and should be used in lieu of an Erosion Prevention and Sediment Control Plan (EPSC Plan) for Low-Risk Authorizations. This handbook is referenced in all Low-Risk permit authorizations and should be maintained onsite. More information on EPSC measures described in Section 2 and additional EPSC measures not included within this handbook can be found within *The Vermont Standards for Erosion Prevention and Sediment Control (The Vermont Standards)*, and additional permit requirements are found in the *2025 Stormwater Construction General Permit 3-9020* and a project's Notice of Authorization (NOA).

The 2025 Vermont Stormwater Construction General Permit (CGP) 3-9020 assesses the potential risk to water quality from proposed construction activity and categorizes the project's activity as Low-Risk, Moderate-Risk, or a project that requires an Individual Stormwater Construction Discharge Permit. The practices within this handbook serve as the required EPSC Plan for construction activity that has been categorized as "Low-Risk". Projects involving work within other jurisdictional programs should contact those individual Programs for technical assistance (e.g., Wetlands, Rivers, Lakes and Ponds, Fish and Wildlife, etc.).

1.2 Construction General Permit Considerations

When is a Stormwater Construction Discharge Permit required?

A stormwater construction discharge permit must be obtained for construction activity that 1) result in a total earth disturbance of equal to or greater than one acre of land area or 2) result in a total earth disturbance of less than one acre that are part of a larger "common plan of development or sale" that will ultimately disturb equal to or greater than one acre of land area.

A common plan of development is defined as a development that is completed in phases or stages when such phases or stages share a common state or local permit related to the regulation of land use, the discharge of wastewater or a discharge to surface waters or groundwater, or a development designed with shared common infrastructure. Common plans include, but are not limited to, subdivisions, industrial and commercial parks, university and other campuses, and ski areas. Additionally, a common plan of development can share state and/or local permits; or share common infrastructure; or share discharges to wastewater, surface waters, or groundwaters.

2.1.3 Stockpile Management

It is essential to manage stockpiles as they are extremely vulnerable to erosion and sediment laden runoff discharges. To control runoff from stockpiles, related stockpiles of soils, cement and asphalt concrete rubble, and aggregate base or subbase, proper BMPs must be installed.

Stockpile management includes measures to minimize erosion and sediment transport from stockpiles of construction related materials. Stockpile management procedures and practices are designed to reduce or eliminate storm water pollution from construction site stockpiles.

Requirements:

Stockpile locations must be determined and appropriate BMPs installed before the commencement of construction related earth disturbances.

- Sediment control practices shall be place around the perimeter of the stockpile (such as silt fence, erosion control berms, straw wattles, etc.).
- A designated access point shall be established on the upgradient side of the stockpile;
- The stockpile must be stabilized (utilizing surface roughening, temporary seeding and mulching, or Rolled Erosion Control Products (RECP)).
  - Soils stockpiled for an extended period should be seeded and mulched with a temporary grass cover once the stockpile is placed (within 14 days).
  - Use of mulch or RECPs only is acceptable if the stockpile will be in place for a more limited time.

Figure 7 *Excellent application of hay mulch. Good mulch cover and perimeter control around such site factor.*

How to Comply:

Locate stockpiles away from all drainage system components including storm sewer inlets. Where practical, choose stockpile locations that will remain undisturbed for the longest period of time as the phases of construction progress.

Stockpiles should not be placed in streets or paved areas unless no other practical alternative exists. For paved areas, filter socks must be used for permitter control and all inlets with the potential to receive sediment from the stockpile must be protected, including vehicle tracking.

Maintenance:

Inspect stockpiles and utilized BMPs periodically for condition and effectiveness. Areas producing sediment should be remedied immediately.

When temporary removal of a perimeter BMP is necessary to access a stockpile, ensure BMPs are reinstalled in accordance with their respective design detail.

When the stockpile is no longer needed, properly dispose of excess materials and revegetate or otherwise stabilize the ground surface where the stockpile was located.

2.2 Installation of Pre-Construction EPSC Measures

To control runoff and sediment from the project's initial disturbances, the permittee is required to install EPSC measures ahead of any earth disturbing construction activities occurring on site.

In addition to the controls mentioned previously in this section, the permittee shall install all diversion berms, silt fence, storm drain protectors, and any other BMPs necessary to mitigate erosion and control sediment from disturbances associated with the early stages of the project.

These BMPs are detailed in **Section 3** below.

3.2.3 Dewatering Devices

Dewatering devices are necessary to minimize and prevent discharges of sediment as a result of dewatering activities.

Dewatering Devices allow sediment laden water to settle or filter out while allowing relatively clean water to outlet or discharge to drainageways. It is an appurtenance to a sediment trapping structure or device such as a basin, trap, or geotextile filter bag that allows sediment laden water to pond or filter.

Requirements:

Stormwater and groundwater from dewatering activities shall be uncontaminated and shall be filtered or passed through a sediment trapping device, or both, and routed in a manner that does not result in visually turbid discharges to waters.

As a minimum, sediment traps and basins should have their temporary storage dewatered over a 48-hour period to maximize sediment retention.

Pump intake for dewatering must be at or near the surface of the ponding area to prevent disturbance of the settled material. Visually turbid water must not be pumped directly to storm drains or other conveyance that leads to waters without implementing one or more of the practices described below.

- Implement sock filters or sediment filter bags on dewatering pump discharge hoses or pipes;
- Route dewatering pump into silt fence enclosures or into staked hay bale enclosures lined with filter fabric; or
- Route dewatering pump to vegetated area at least 50 feet from surface waters and at a slope no greater than 5%.

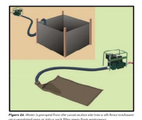

Figure 4D *Model is pumped from the construction site and flows are released into an vegetated cover or into a sock filter away from waterways.*

Maintenance:

Dewatering devices shall be inspected before, during, and after each use to ensure proper filtration.

- Filter fabric or media shall be replaced when necessary.
- Any malfunctioning skimmer or its components shall be repaired or replaced before use of the dewatering device.

Sediment shall be removed from the system when it reaches the level marked in a sediment cleanout stake or the top of the skimmer landing area. Geotextile filter bags are considered full when remaining bag flow area has been reduced to 75%. At this point, it should be replaced with a new bag.

The structure shall only be removed when the tributary area has been properly stabilized. Geotextile filter bag disposal may be accomplished by removing the bag to an appropriate designated upland area, cut open, remove the geotextile for disposal, and spread sediment contents and seeded and mulched according to the vegetative plan.

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EPSC LOW RISK 2025 SHEET 1
UHAUL COMMERCIAL, BURLINGTON
436 RIVERSIDE AVENUE, BURLINGTON, VT 05401

22-575
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

DJG	ANL	DJG
DESIGN	DRAWN	CHKD

SCALE N.T.S.
DATE : 12/19/2025

C8-06

CAD FILE: Q:\VT-WILL-TC\Shared_TCE PROJECTS\2022\575-UHaul-Commercial-Burlington\2-CAD-GIS\Engineering Plans\C8-06 - EPSC Low Risk 2025 Sheet 1.dwg 12/19/2025

3.2.4 Unconfined Flows

Areas of a site that are relatively open are still prone to erosion, regardless of slope, and must be protected to mitigate runoff and sediment discharges to waters of the State. In addition to the installation of diversion berms (**Subsection 3.2.2**) and soil stabilization practices (**Subsection 3.3**), the BMPs in this subsection can be installed to control, slow, contain, and filter sediment laden runoff as it flows through the site.

These BMPs should be used to reduce the amount of rill and sheet erosion that are typical of exposed construction sites. They can be utilized on steep slopes and flat areas and must be installed to mitigate water movement through or exiting a construction site.

Reference *The Vermont Standards* for more details and for additional measures that can be applied for unconfined areas.

3.2.4.1 Filter Socks

A manufactured tube made of either a synthetic material or an organic fiber which is filled with erosion control mix or other finely shredded organic material such as coconut fiber. They are an excellent practice for slowing runoff on long open slopes and for use around stockpiles.

Installation:

- Filter socks are best used for small areas of disturbance, at the base of stockpiles, across slope contours and across paved areas;
- Full contact with the ground is critical for filter socks to be effective and to prevent bypass. A trench 2"-3" deep shall be dug along the path of the filter sock, with the exception of installations across paved areas;
- Most applications will require staking at 10-ft intervals, which should help both keep the filter sock in place and push it downward for maximum contact with the ground**,** and

Slope (%)	Maximum Slope Length (ft)			
	12in*	18in*	24in*	32in*
<5	225	250	275	325
5-10	110	150	200	275
10-15	60	75	100	150
20-25	50	55	100	120
25-33	40	45	60	75
>33	25	30	35	50

Table 2: *Criteria for filter sock spacing.*

Maintenance:

- Accumulated sediment must be removed and placed in an upland location when material reaches half of the filter sock height; and
- Filter socks should be reshaped if they become flattened or caked in sediment to ensure proper sediment control.

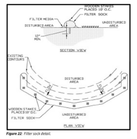


Figure 22: *Filter sock details.*

Figure 23: *Good use of filter sock along a slope to slow runoff velocity.*

3.3 Soil Stabilization

For those areas where soil disturbance is necessary, erosion can be minimized by ensuring that disturbance operations take place as quickly as possible, followed by prompt stabilization of the disturbed soils. Depending upon the size of the disturbed area and the risk to water quality, this might require limiting concurrent disturbance to an area small enough to allow for quick stabilization of the site in advance of predicted rain events.

Temporary stabilization shall be utilized when an area is scheduled to be exposed for an extended amount of time (typically greater than 14 days). Seeding and mulching, applying erosion control matting, and hydroseeding are all methods to temporarily stabilize exposed soil and prevent soil erosion prior to vegetative growth. Mulches and matting should be utilized to protect the soil surface while grass is establishing.

Areas of earth disturbance may also be stabilized with stone, such as riprap or gravel, or other impervious surfaces such as pavement and concrete.

Requirements:

All areas of earth disturbance must have temporary or final stabilization within 14 days of initial disturbance, as stated in the project authorization. After this time, disturbed areas must be temporarily stabilized or permanently stabilized in advance of any runoff producing event. A runoff producing event is an event that produces runoff from the construction site.

How to Comply:

As required by the authorization, temporary stabilization for areas of earth disturbance shall be completed utilizing one or more of the methods described in this section.

Figure 24: *How to calculate slope.*

3.3.1 Flat Slope Stabilization

Surface stabilization measures designed to protect flat surfaces or near flat slopes that are prone to erosion due to wind, precipitation, and snowmelt. These stabilization measures are typical on slopes less than 3:1 (H:V).

How to Comply:

Use of one of the listed slope protection practices below on slopes less than 3:1. Measures listed under **Subsections 3.3.2** and **3.3.3** may also be used on these flatter surfaces if necessary.

1. Seeding, Hydroseed, and Sod
2. Mulching
3. Fiber Rolls and Filter Socks (**Subsection 3.2.4**)

3.3.1.1 Mulching

Mulching is essential to provide initial erosion control while seeding or shrub planting is established. Applying mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both and will prevent soil surface crusting and aid in weed control.

**Mulch is also used alone for temporary stabilization in non-growing months.*

Requirements:

Hay or Straw Mulch:

Date Range	Hay or Straw Application Rate
Construction Season April 15th – October 14th	1 inch depth. (1-2 bales/1000 ft²)
Winter Construction Season October 15th – April 14th	2 inch depth (3-4 bales/1000 ft²)

Table 3: *Hay or straw application rate based on construction season. Seed may also be incorporated.*

Figure 25: *Excellent application of hay mulch. Good mulch cover and perimeter control around soil stockpile.*

3.3.3 Seeding, Hydroseed, and Sod

All areas of disturbance must have permanent stabilization within 48 hours of reaching final grade. Seeding and hydroseed can be used in conjunction with mulching or RECPs to bring the site to final stabilization. Vegetative cover, such as grass, naturally protects exposed soils from wind, rain, flooding, and other erosive events.

The permittee must work to bring the site, or sections of the site, to final grade and implement permanent stabilization measures as soon as possible. This will reduce the need for additional EPSC measures, decreasing the total disturbed area and ultimately the total cost of the project.

Reference Part 5 of *The Vermont Standards* for more details on these and other soil stabilization practices.

Topsoil Details:

Site Conditions	Intended Use	Minimum Topsoil Depth
Deep Sand or Loamy Sand	Mowed Lawn; Tall/Legumes, Unmowed; Tall Grass, Unmowed	6" 3" 1"
Deep Sandy Loam	Mowed Lawn; Tall/Legumes, Unmowed; Tall Grass, Unmowed	5" 3" 1"
6" or More Silt Loam, Loams, or Silt	Mowed Lawn; Tall/Legumes, Unmowed; Tall Grass, Unmowed	4" 3" 1"

Figure 26: *Excellent application of hydromulch with a mulch component. Entire soil surface has been covered and is temporarily stabilized.*

* Add inoculant immediately prior to seeding

How to Comply:

The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

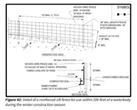
- Broadcasting, drilling, cultipack type seeding, or hydroseeding are acceptable methods;
- Proper contact between the soil and the seed is crucial to successful germination.
- Mulch the area with hay or straw at 2 tons/acre.
- Spring, summer, or early fall: seed the area with ryegrass (annual or perennial) at 20 lbs. per acre.
- Late fall or early winter: seed Certified 'Aroostook' winter rye (cereal rye) at 90 lbs. per acre.
  - Hydroseed alone is not an acceptable method during the winter construction period.

General Seeding Details:

	Variety	$^{PLS}/_{Bulk}$	lbs 1000 sq ft
Birdsfoot Trefoil*	Empire/ Pardee	5¹	0.10
Common White Clover	Common	8	0.20
PLUS			
Tall Fescue	95 (b)/ Rebel	10	0.25
PLUS			
Redtop OR	Common	2	0.05
Ryegrass (Perennial)	Pennfine/ Linn	5	0.10

¹ Mix 2 lbs each of Empire and Pardee OR 1 lb. of Birdsfoot and 2.5 lbs. white clover per acre.

Figure 27: *Poor hydroseed application. Not applied at the appropriate rate, soil not prepared, and very little mulch component in mix.*



Preliminary Drawings

Project Designed By

A&M ASSOCIATES, INC.
2727 N. CENTRAL AVENUE
PHOENIX, ARIZONA 85004
P: 602.263.6841

Project - Client

Burlington
Burlington, VT
(791087)

Composite Rendering

SHEET 01

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Preliminary Drawings

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Project - Client

U-HAUL
Burlington
Burlington, VT
(791087)

Northwest Elevation
Composite Rendering

SHEET 02

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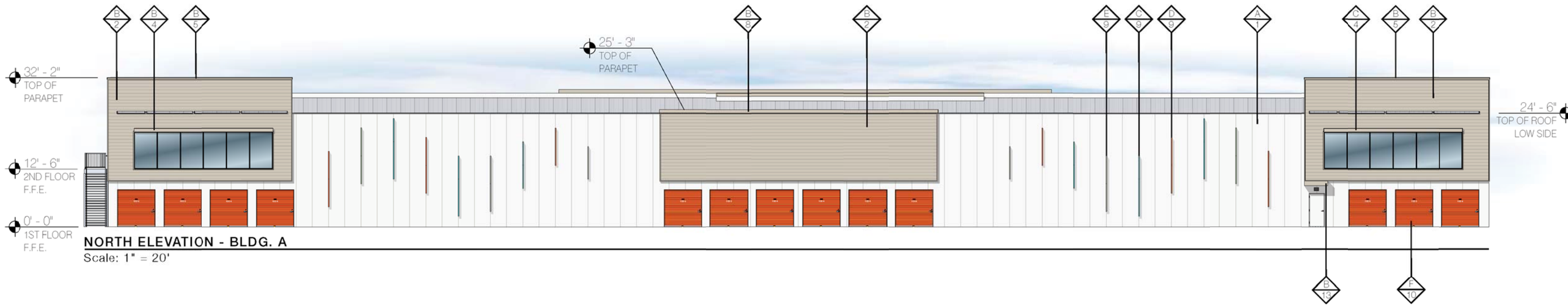
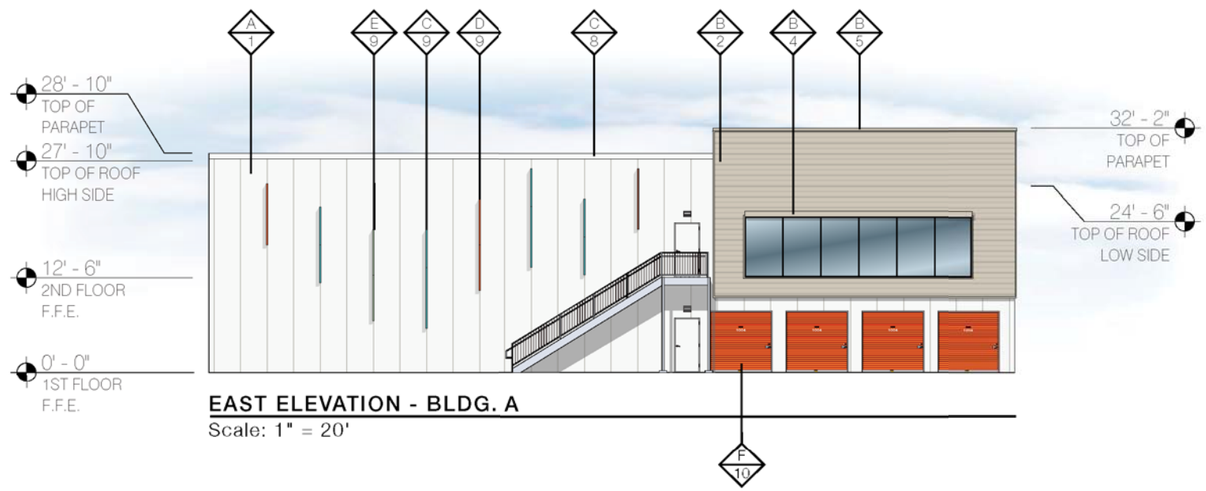


NORTH ELEVATION - BLDG. A
Scale: 1" = 20'



EAST ELEVATION - BLDG. A
Scale: 1" = 20'

COLORS						MATERIALS			
A		IMPERIAL WHITE *(IMP CUSTOM COLOR)*	I		IRONWOOD *(FAUX WOODGRAIN FINISH)*	1	42"W KINGSPAN KS SERIES AZTECO STUCCO EMBOSSED VERTICAL IMP	9	9"D LYRICAL ARTICULATED ACCENT FIN *(DESIGN ELEMENT)*
B		SANDSTONE *(IMP CUSTOM COLOR)*	J		U-HAUL FOREST GREEN P9	2	16"W MORIN INTEGRITY XAB-16 HORIZONTAL PANELS	10	ARCHITECTURAL DETAIL
C		DESERT JEWEL P62				3	LIGHT BROOM TILT-UP CONCRETE	11	ULTRA-GRAIN CLASSIC WALNUT CARRIAGE DOORS
D		SW 6884 AMBER EARTH P63				4	9"H x 3"D ARCHITECTURAL DETAILS	12	UNDULATING DESIGN
E		SW 6451 NURTURE GREEN P61				5	4.5"H TRIM TYP.	13	2'D METAL AWNING
F		SIERRA SUNSET P6				6	10.25"H FLAT METAL TRIM TYP.	14	PAINT DETAIL
G		SW EGGSHELL BLACK P100				7	3"H FLAT METAL TRIM TYP.	15	2'H x 56'W x 10'D STORAGE: LOAD/UNLOAD AWNING
H		LIGHT BROOM FINISHED TILT WALL				8	9"H FLAT METAL TRIM TYP.		

GENERAL NOTES:

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D1 - THE PROPOSED IMP USES FULL-WIDTH PANELS. **DO NOT CUT IMP** DUE TO PAINT VARIATIONS.
CONTACT THE DESIGNER AT A&M ASSOCIATES TO FIND A SOLUTION. P: 602.623.6841

D2 - THE PROPOSED PROJECT CONSISTS OF **42" WIDE IMP**. DEVIATING FROM THIS SIZE PANEL WILL ALTER THE LYRICAL FIN DESIGN. PLEASE CONTACT THE DESIGNER AT A&M ASSOCIATES SO THE PLAN DRAWINGS CAN BE UPDATED.
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Preliminary Drawings

Project Designed By

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PHOENIX, ARIZONA 85004
P: 602.263.6841

Project - Client

U-HAUL
Burlington
Burlington, VT
(791087)

Colors & Materials

SHEET 03

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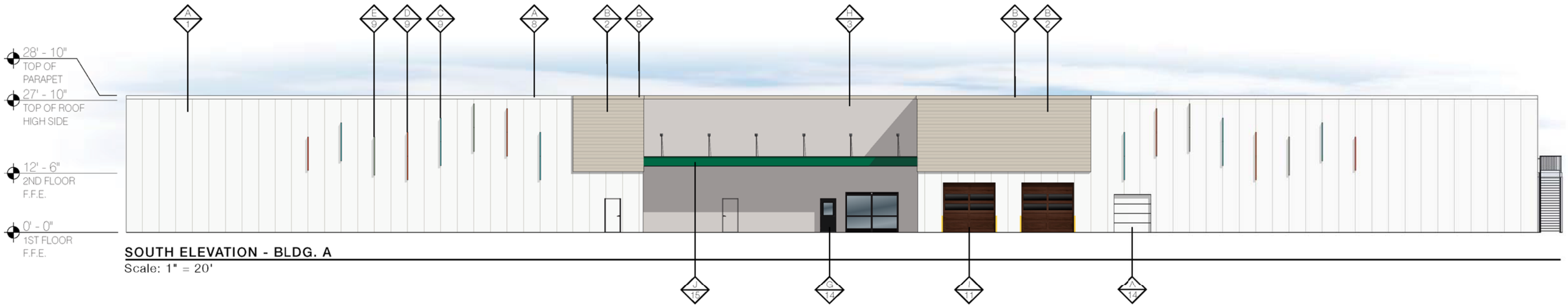

SOUTH ELEVATION - BLDG. A
Scale: 1" = 20'

WEST ELEVATION - BLDG. A
Scale: 1" = 20'

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COLORS						MATERIALS			
A		IMPERIAL WHITE *(IMP CUSTOM COLOR)*	I		IRONWOOD *(FAUX WOODGRAIN FINISH)*	1	42"W KINGSPAN KS SERIES AZTECO STUCCO EMBOSSED VERTICAL IMP	9	9"D LYRICAL ARTICULATED ACCENT FIN *(DESIGN ELEMENT)*
B		SANDSTONE *(IMP CUSTOM COLOR)*	J		U-HAUL FOREST GREEN P9	2	16"W MORIN INTEGRITY XAB-16 HORIZONTAL PANELS	10	ARCHITECTURAL DETAIL
C		DESERT JEWEL P62				3	LIGHT BROOM TILT-UP CONCRETE	11	ULTRA-GRAIN CLASSIC WALNUT CARRIAGE DOORS
D		SW 6884 AMBER EARTH P63				4	9"H x 3"D ARCHITECTURAL DETAILS	12	UNDULATING DESIGN
E		SW 6451 NURTURE GREEN P61				5	4.5"H TRIM TYP.	13	2'D METAL AWNING
F		SIERRA SUNSET P6				6	10.25"H FLAT METAL TRIM TYP.	14	PAINT DETAIL
G		SW EGGSHELL BLACK P100				7	3"H FLAT METAL TRIM TYP.	15	2'H x 56'W x 10'D STORAGE: LOAD/UNLOAD AWNING
H		LIGHT BROOM FINISHED TILT WALL				8	9"H FLAT METAL TRIM TYP.		

Preliminary Drawings

Project Designed By

A&M ASSOCIATES, INC.
2727 N. CENTRAL AVENUE
PHOENIX, ARIZONA 85004
P: 602.263.6841

Project - Client

U-HAUL
Burlington
Burlington, VT
(791087)

Colors & Materials

SHEET 04

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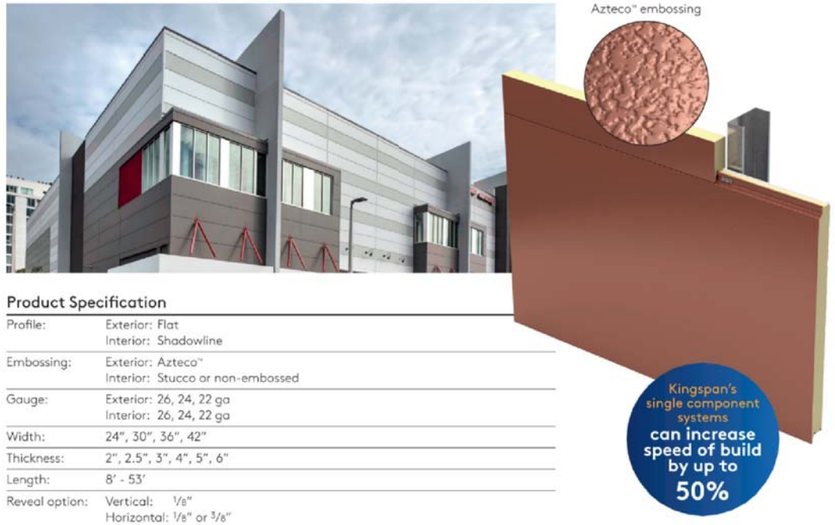
KS Azteco™ Data Sheet

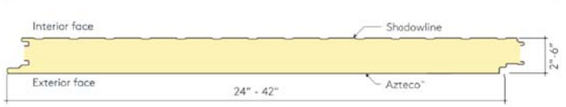
Insulated Wall Panel System

Kingspan



Product Specification

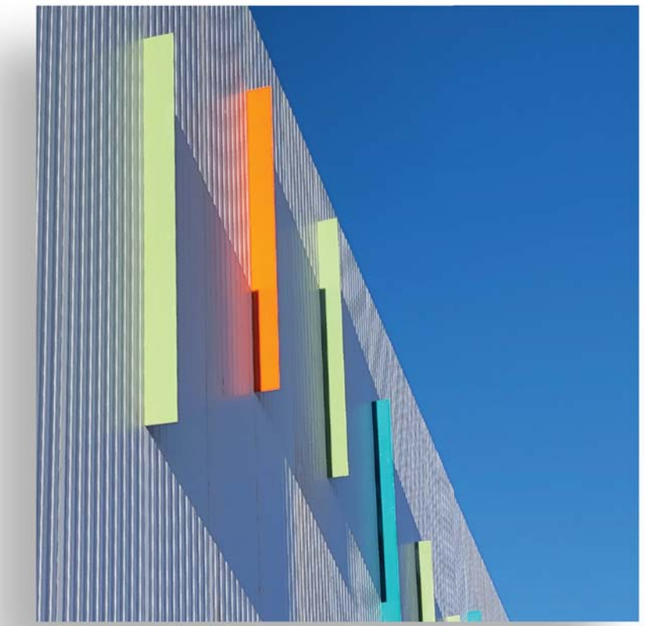
Profile:	Exterior: Flat Interior: Shadowline
Embossing:	Exterior: Azteco™ Interior: Stucco or non-embossed
Gauge:	Exterior: 26, 24, 22 ga Interior: 26, 24, 22 ga
Width:	24", 30", 36", 42"
Thickness:	2", 2.5", 3", 4", 5", 6"
Length:	8' - 53'
Reveal option:	Vertical: ⅛" Horizontal: ⅛" or ⅜"
Orientation:	Vertical or horizontal
Post fabrication (optional):	Trimless ends (Manufacturing limitations apply. Please contact us for detailed information)
R-value:	≈ 7.2 per inch per ASTM C518 @ 75°F mean temperature ≈ 8.25 per inch per ASTM C518 @ 35°F mean temperature

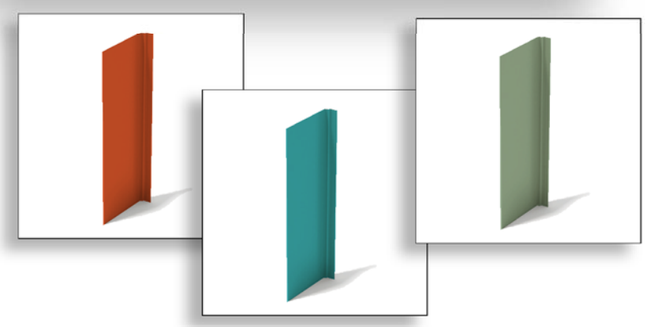


Stucco Embossed IMP

EXAMPLE

9"D Lyrical Articulated Design Element



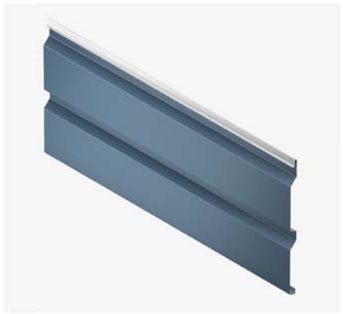


Light Broom Finished

TILT-UP CONCRETE EXAMPLE

Morin®

A Kingspan Group Company



Integrity XAB-16

INTEGRITY SERIES

The Integrity Series is a concealed fastener rainscreen, wall panel system. With a consistent depth of 7/8", it offers a minimalist design solution. Integrity Series offers 13 unique profiles featuring an asymmetrical box rib in varying configurations. Combine with other Integrity panels, or with panels from our Matrix Series or Pulse Series.

XAB-16

Preliminary Drawings

Project Designed By

A&M ASSOCIATES, INC.
2727 N. CENTRAL AVENUE
PHOENIX, ARIZONA 85004
P: 602.263.6841

Project - Client

U-HAUL
Burlington
Burlington, VT
(791087)

Material Board

SHEET 05

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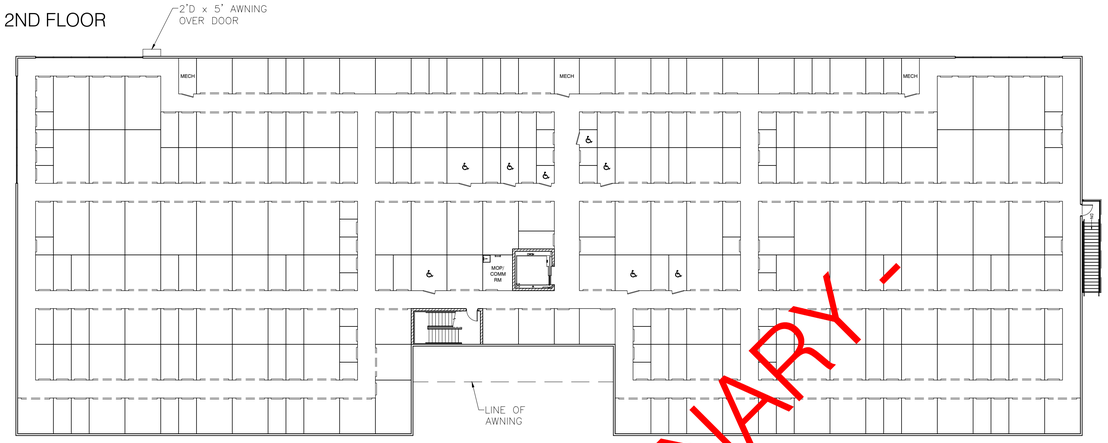
PROPOSED MIX

LOCKER SIZE	INTERIOR								
	1st Flr	SQ. FT.	%	2nd Flr	SQ. FT.	%	TOTAL	SQ. FT.	%
5 x 5	30	750	4%	40	1,000	5%	70	1,750	4%
5 x 8	1	40	0%	0	0	0%	1	40	0%
5 x 10	119	5,950	29%	119	5,950	27%	238	11,900	28%
7 x 10	2	140	1%	1	70	0%	3	210	1%
10 x 8	4	320	2%	1	80	0%	5	400	1%
10 x 10	97	9,700	48%	93	9,300	43%	190	19,000	45%
10 x 15	22	3,300	16%	35	5,250	24%	57	8,550	20%
TOTAL	275	20,200	100%	289	21,650	100%	564	41,850	100%

♿ 18 ADA LOCKERS REQUIRED/PROVIDED

2ND FLOOR



1ST FLOOR

- PRELIMINARY -

PRELIMINARY FLOOR PLAN

SCALE: 1" = 20'-0"

SHEET NOTES:

REVISIONS:

NO:	DATE	INITIALS	NOTES
1	11/15/24	BLC	UPDATE ELEVATOR TO CURRENT STANDARD
2	11/27/24	AS	NEW OPTION WITH REVISED INTERIOR LOADING
3	07/11/25	AS	ADD DOOR PER ART DEPT ELEVATIONS
4	07/22/25	AS	SMALL DOOR CHANGES, ADD ADA ROOMS
5			
6			
7			
8			

PROFESSIONAL SEAL:

PRELIMINARY DOCUMENTS, NOT FOR CONSTRUCTION, FOR INFORMATION ONLY

ARCHITECT LOGO:

AMERCO REAL ESTATE COMPANY

CONSTRUCTION DEPARTMENT
2727 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004

P: (602) 263-6502

SITE ADDRESS:

U-HAUL OF BURLINGTON
436 RIVERSIDE AVE
BURLINGTON, VT 05401

SHEET CONTENTS:

PROPOSED
FLOOR PLAN

791087

DRAWN:	AS	A1
CHECKED:	-	
DATE:	07/15/24	

791087 A1M

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CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS

WATER RESOURCES DIVISION
234 PENNY LANE
BURLINGTON, VT 05401
802.863.4501 P
WWW.BURLINGTONVT.GOV/DPW

CHAPIN SPENCER
PUBLIC WORKS DEPARTMENT DIRECTOR

MEGAN MOIR
WATER RESOURCES DIVISION DIRECTOR

3/31/2026

Doug Goulette
Bowman
487 Blair Park
Williston, VT 05495
doug.goulette@bowman.com

Re: Burlington Water and Sewer Capacity for the U-Haul storage facility located at 436 Riverside Avenue. (New Building)

Dear Doug,

This letter is to inform you, the Planning Department, the State of Vermont Environmental District and other interested parties that the City of Burlington's Water and Wastewater facilities have sufficient capacity to handle flows associated with the proposed U-Haul storage facility located at the above address.

Using Vermont's latest Environmental Protection Rules, the calculated demand is 195 gpd (gals/day) for both water and sewer per the tables below. Flow calculations have been prepared based on information provided by the owner or their authorized agent and the VT ANR Chapter 1 flow tables. It is the responsibility of the owner or their agent to review and verify the accuracy of these flow calculations. Please note that issuance of the certificate of occupancy for the project is contingent upon the payment of water and wastewater system impact fees. An estimate is provided in the table below as well as additional information regarding potential credits or exemptions. Once those determinations have been made, and once the flow data has been reviewed and confirmed by the owner or their agent, an official impact fee invoice will be issued by the Water Resources Customer Care Office.

Wastewater flow from this area is treated at our East Wastewater Treatment Plant located at 261-267 Riverside Avenue It is important to note that this letter only addresses drinking water as well as wastewater treatment plant capacities and not distribution or collection system capacities.

This capacity allocation letter is conditional on the Owner agreeing to all of the following conditions:

1. Burlington Water Resources review and approval of plans as well as inspection and testing of infrastructure is required. The development team shall ensure Burlington's water infrastructure construction standards are met. The following link has additional information about water connections in Burlington: https://www.burlingtonvt.gov/340/Connection-Requirements

2. The development team shall work with Water Resources to satisfy all parts of the latest version of the Capacity Review Checklist which is attached. The development team is expected to work with Water Resources to resolve comments associated with the review process.

3. The development team shall work with Water Resources to satisfy all parts of the latest version of the Water System and Sewer System Checklist which is attached. The development team is expected to work with Water Resources to resolve comments associated with the review process.

4. The development team shall coordinate with Burlington's Stormwater Program Manager to finalize design, construction and maintenance of the stormwater systems and all provisions of the Water Resources stormwater standards shall be met. Erosion prevention and sediment control (EPSC) plan and post construction stormwater management plan (PCSW) approvals are required.

5. Development team shall provide record drawings stamped by a PE. The record drawings shall include all infrastructure in the right of way as well as infrastructure on the property. The record drawings shall include detailed mechanical drawings.

6. The project plan shall include a directive for the contractor to comply with AWWA C-651 section 4.8.9. The directive shall include the requirement for completion of all water main and/or service testing prior to connection of the main/service under test to the potable water system. A testable backflow prevention device that is acceptable to Water Resources shall be in place while filling and/or flushing mains/services under test while they are connected to the potable water system. Mains/services under test are to remain disconnected from the potable system with an air gap when not being filled and/or flushed.

7. Testable backflow preventers appropriate for the level of risk based on the proposed use of the buildings shall be installed on water services 1.5" diameter and larger. All fire suppression systems shall include backflow prevention devices.

8. Fire suppression system shall be designed by a licensed designer. The development team shall provide fire flow requirements compliant with NFPA and shall be approved by the Burlington Fire Marshall as well as Burlington Water Resources. Peak instantaneous fire flow and hydrant flow testing data are required prior to approval and installation of fire services.

9. Owner is responsible for managing to the satisfaction of Burlington Water Resources any adverse stormwater runoff onto adjacent properties should they arise at future dates.

10. Groundwater and/or foundation drain shall not connect to sanitary or combined sanitary sewer. Developments shall not introduce new groundwater to the sewer system and appropriate design measures shall be followed. Appropriate site inspection measures and design measures may include but are not limited to the following: test borings, test pits, groundwater pumping test, waterproofing foundations, structural designs adequate for high groundwater, and not constructing a finished space below ground level.

11. Water meter shall be sized appropriately for the proposed building and the meter shall be installed by Water Resources in accordance with the manufacturer's guidelines. Project team to provide fixture units and mechanical drawing showing the location and layout of water service entry, meter and backflow prevention devices.

This capacity letter is not a permit and does not alleviate the Owner from obtaining necessary city, state and federal permits. This letter is good for three (3) years. Any changes in flow estimates or property usage also requires reapplication. Please feel free to email or call me at 802-497-7021 if you have any questions.

Sincerely,

Martin Lee, P.E.
Water Resources Engineer
Burlington Public Works

Flow calculations are based on ANR Chapter 1.

Proposed: One employee and 45 daily clients with public restroom access.

	WW (gpd)	Water (gpd)
1 employee = 15 gpd.	15	15
45 client visits per day = 4 gpd/client = 180 gpd.	180	180
Total proposed flows.	**195**	**195**

DRAFT Impact Fee Calculations

Note, this calculation does not include any credits or exemptions that may be available for the project under Section 3.0 of the Impact Fee Regulation.

See more information about impact fees here: https://www.burlingtonvt.gov/728/Impact-Fees

Additional System Demand	GPD	Cost Per Gallon	Total
Wastewater	195	$6.30	$1,128.50
Water	195	$11.58	$2,258.10
		Total Impact Fee	**$3,386.60**

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

LAWS/REGULATIONS INVOLVED

10 V.S.A. Chapter 64, Potable Water Supply and Wastewater System Permit
Wastewater System and Potable Water Supply Rules, Effective November 6, 2023

Permittee(s): AMERCO Real Estate Company
2727 North Central Ave
Phoenix, AZ 85004

Permit Number: WW-4-1147-1

This permit affects the following property/properties in Burlington, Vermont:

Lot	Parcel	SPAN	Acres	Book(s)/Page(s)#
1	040-4-014-000	114-035-14182	2	Book:227 Page(s):578

This application consists of amending permit WW-4-1147 for the demolition of an existing building and the construction of a new U-Haul commercial storage unit facility with 1-employee and 45-patrons, served by municipal water and sewer service connections, located at 436 Riverside Ave in Burlington, Vermont, is hereby approved under the requirements of the regulations named above subject to the following conditions. Any person aggrieved by this permit may appeal to the Environmental Court within 30 days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

1. GENERAL

1.1. The permittee is responsible for recording this permit in the Burlington Land Records within 30 days of issuance of this permit and prior to the conveyance of any lot subject to the jurisdiction of this permit.

1.2. The permittee is responsible for recording the design and installation certifications and other documents that are required to be filed under these Rules or under a permit condition in the Burlington Land Records.

1.3. Each assign or successor in interest shall be shown a copy of the Wastewater System and Potable Water Supply Permit and the stamped plan(s) prior to the conveyance of a lot.

1.4. By acceptance of this permit, the permittee agrees to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with the Vermont environmental and health statutes and regulations, and permit conditions.

1.5. The Drinking Water and Groundwater Protection Division relied upon the Vermont Licensed Designer's certification that the design-related information submitted is true and correct and complies with the Wastewater System and Potable Water Supply Rules. This permit may be revoked if it is determined the design of the wastewater system or potable water supply does not comply with these rules.

1.6. This permit does not relieve the landowner from obtaining all other approvals and permits from other State Agencies or Departments or local officials prior to construction.

1.7. All conditions set forth in WW-4-1147 shall remain in effect except as amended or modified herein.

2. CONSTRUCTION

2.1. Construction shall be completed as shown on the plans and/or documents prepared by Douglas Goulette P.E., with the stamped plans listed as follows:

Title	Sheet #	Plan Date	Revision
Existing Conditions	C1-01	09/05/2025	N/A
Demolition & EPSC Plan	C1-02	12/19/2025	N/A
Grading Drainage & Utility Plan	C2-02	12/19/2025	N/A
Sewer and Water Details	C8-02	12/19/2025	N/A

2.2. Construction of wastewater systems or potable water supplies, or buildings or structures (as defined by the Wastewater System and Potable Water Supply Rules), or campgrounds, not depicted on the stamped plans, or identified in this permit, is not allowed without prior approval by the Drinking Water and Groundwater Protection Division.

3. INSPECTIONS

3.1. No permit issued by the Secretary shall be valid for a substantially completed potable water supply and wastewater system until the Secretary receives a signed and dated certification from a qualified Vermont Licensed Designer (or where allowed, the installer) on a Secretary-approved form that states:

"*I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the potable water supply and wastewater system were installed in accordance with the permitted design and all permit conditions, were inspected, were properly tested, and have successfully met those performance tests.*"

or which satisfies the requirements of §1-311 of the referenced rules.

4. DESIGN FLOW

4.1. The following table provides the flows that the wastewater system and potable water supply are designed to accept based on existing and proposed lot and building uses. The design flows in gallons per day (gpd) in the following table are derived from section 1-803 of the Rules:

Lot	Building	Building Use / Design Flow Basis	Wastewater (gpd)	Water (gpd)
1	Proposed	U-Haul commercial storage unit facility with 1-employee and 45-patrons	195	195

4.2. The table above reflects the designed capacity for wastewater systems and potable water supplies derived from the uses documented in the permit application. If additional capacities are needed, a permit amendment will be required for the total design flows.

5. WASTEWATER SYSTEM

5.1. Lot 1 is approved for connection to the City of Burlington wastewater treatment facility as depicted on the plan(s) stamped by the Drinking Water and Groundwater Protection Division.

5.2. This permit is based, in part, on a determination by the municipality that sufficient capacity exists in the wastewater treatment facility and associated sanitary sewer collection line to accommodate the design flow of this project. This permit does not imply the municipality will grant allocation to the building.

6. POTABLE WATER SUPPLY

6.1. Lot 1 is approved for connection to the water supply system owned by the City of Burlington as depicted on the plan(s) stamped by the Drinking Water and Groundwater Protection Division.

6.2. This permit is based, in part, on a determination by the municipality that sufficient capacity exists in the municipal public water system to accommodate the design flow approved by this permit. This permit does not imply that the municipality will grant allocation for the building.

6.3. The landowner shall install and maintain backflow prevention devices that conform to Vermont Department of Public Safety standards and NFPA 13 for any connection of a sprinkler fire suppression system to a public drinking water system.

Julia S. Moore, Secretary
Agency of Natural Resources

By Denise Johnson-Terk Dated March 27, 2026
Denise Johnson-Terk
Environmental Analyst VI
Essex Junction Regional Office
Drinking Water and Groundwater Protection Division

cc: Douglas Goulette P.E.

Department of Permitting & Inspections
Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone:(802) 865-7188
(802) 865-7195 (FAX)

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Kirk Dressing, Associate Planner
Joseph Cava, Permit Technician
Collin Naheedy, Code Compliance Officer

TO: Development Review Board
FROM: Kirk Dressing
DATE: April 07, 2026
RE: ZAP-26-2; 108 South Winooski Avenue

==========

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: FD5 Ward: 8

Owner/Appellant: L & M PROPERTIES LLC/ Merrill Jarvis

Request: Appeal of administrative denial for ZP-25-620 for (after-the-fact) installation of a chain-link style fence and gate across front entrance.

Overview:
The appellant is contesting the administrative denial of a chain-link fence and gate at 108 South Winooski Avenue.

Recommendation: **Uphold administrative decision** based on the following findings:

I. Findings:
Zoning permit application ZP-25-620 was initially submitted December 15, 2025. Following an initial assessment and notation of additional necessary application materials, it was made complete January 5, 2026. The application was filed following the issuance of a Notice of Zoning Violation issued for the unpermitted chain-link fence and gate November 20, 2025. That NOV was not appealed.

Following completion of the application, it was reviewed for compliance with the standards outlined in Article 14 of the Comprehensive Development Ordinance. Ultimately, the application was denied January 22, 2025 per the following reasons:

> **Reasons for Denial:**
> The property is located within the FD5 zoning district. The proposed chain-link fence and gate are located within the first lot layer of the property. Within the first lot layer in the FD5 zoning district, fencing is limited to 4ft in height, and chain-link is prohibited per Article 14.6.8b(v)(B) of the Comprehensive Development Ordinance.
>
> **Article 14.6.8b(v)(B) Site and Landscape Standards**
> Materials used for Fences and Free-standing Walls shall be limited to Brick and tile masonry; Native or sintered stone; Wood – panels, clapboard or shingles;

> Cementitious siding, metal, and woven or braided cable wire. Chain-link and welded-wire fencing shall not be used along any Frontage Line with the exception of the temporary 20 enclosure of a construction site, or where required by the Building Official to protect public safety. Barbed or razor wire shall not be used in any application. Alternate materials may be approved by the Administrative Officer after seeking input from the Design Advisory Board. Alternate materials must be considered equivalent or better than the materials listed above, and must demonstrate successful, high quality local installations. Regionally-available materials are preferred.
>
> As the height of the fence exceeds 4', and the material is chain-link, it cannot be approved. The application is, therefore, denied.

An appeal of the denial was filed within the 15-day appeal period on January 29, 2026.

The appeal questions why chain-link fencing is permissible on state-owned properties and construction sites within the FD5 zoning district, and what the legal written justification is.

Chain-link is permissible at state-owned (and some other) properties per 24 V.S.A. § 4413(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:

(A) State- or community-owned and -operated institutions and facilities;
(B) public and private schools and other educational institutions certified by the Agency of Education;
(C) churches and other places of worship, convents, and parish houses;
(D) public and private hospitals;
(E) regional solid waste management facilities certified under 10 V.S.A. chapter 159;
(F) hazardous waste management facilities for which a notice of intent to construct has been received under 10 V.S.A. § 6606a;
(G) emergency shelters; and
(H) hotels and motels converted to permanently affordable housing developments.

This statutory provision largely precludes application of material and design standards on qualifying properties. The subject property does not qualify for application of this statutory provision.

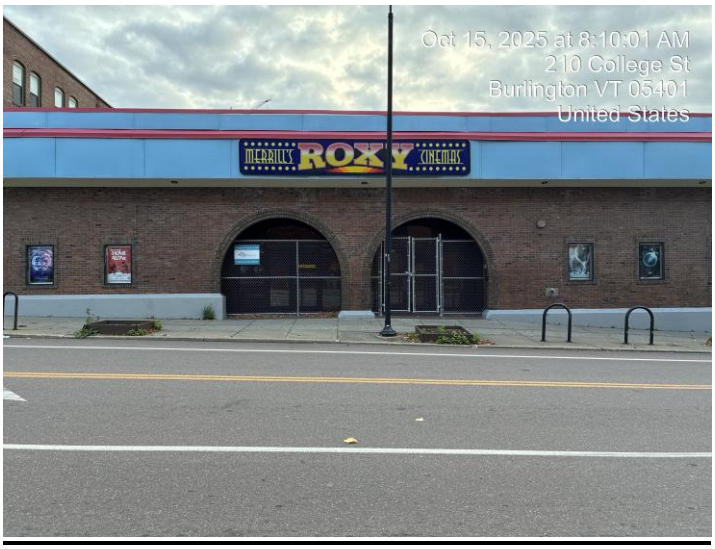
The subject property is not an active construction site, nor has it been deemed a dangerous building by the building inspector.

The appeal asserts that there is a legitimate need for the fence and gate due to safety and security concerns on the property. While this may be true, there are ways for this to be accomplished with compliant work.

The chain-link fence installation is too tall and of unacceptable material per Article 14. There is no applicable provision in the CDO that could allow it. The same to secure the entry could be achieved with a compliant installation.

II. Recommended Motion:
Uphold the administrative decision.

Site Pictures



WARNING!
24 HOUR
VIDEO & AUDIO
MONITORING
WELCOME HERE
PEOPLE LOVE US ON yelp
ENTRANCE
PLEASE NO OUTSIDE FOOD OR DRINKS
ALLOWED IN THE THEATER, THANK YOU
OD OR DRINKS
THANK YOU
BUD LIGHT

ENTRANCE
108
EXIT
EXIT

ROXY
ENTRANCE
TIX3
TIX3

PERMITTING & INSPECTIONS
645 Pine Street, Ste. A | PO Box 849
Burlington, VT 05402-0849

Housing: (802) 863-0442
Trades: (802) 863-9094
Zoning: (802) 865-7188

NOTICE OF ZONING VIOLATION (NOV ZCPT-25-13)

November 19, 2025

L&M Properties LLC
17 Lilac Lane
South Burlington, VT 05403

Mailed Certified Mail 9590-9402-8556-3186-4499-20
And FIRST-CLASS MAIL

NOTICE OF VIOLATION AT:
Address: 108 South Winooski Ave, BURLINGTON, VT
TAX LOT 049-3-162-000
Zoning Violation ZCPT-25-13

Dear Owners,

It has come to the attention of this office that a zoning violation exists at 108 South Winooski Ave, Burlington, VT.

Description of Violation: Chain-link style fencing installed across entryway area without a Zoning Permit.

Burlington Comprehensive Development Ordinance (CDO) Article(s): 2, 3, 4, 12, and 24 VSA §4451.

Please be advised that violations of the CDO are subject to fines of up to two hundred dollars ($200.00) for each day that a violation continues. You may submit an application to attempt correction of the violation, however, be advised application and filing fees are subject to a fee increase for permits required to correct a violation.

This correspondence serves as a formal notice of a zoning violation pursuant to 24 V.S.A §4451. You have seven (7) days from receipt of this notice to cure the referenced violation. Additional warnings for the violation are not required and will not be forthcoming. In the event that the violation is not cured or remedied as provided for in this notice, the City will pursue enforcement of the violation as provided for by law.

This Notice of Violation (NOV) may be appealed to the Burlington Development Review Board in accordance with the provisions of CDO Sections 2.7.12 and 12.2.2 provided that such appeal is filed within fifteen (15) days of the date of this NOV November 19, 2025, online at https://burlingtonvt.viewpointcloud.com/categories/1098 and accompanied by the appropriate fee, ($250), in accordance with Sec. 3.2.4(a) of the CDO. Or Appeal fee and complete application shall be filed with the City's Zoning Office (645 Pine Street) by **4 pm on December 4, 2025**; an appeal shall not be perfected until the fee is received.

If you have any questions, please call Collin Naheedy or William Ward at (802) 863-0442.

Sincerely,

William Ward
Zoning Administrative Officer

Sincerely,

Collin Naheedy

Collin Naheedy
Code Compliance Officer

Information available in alternative media forms for people with disabilities.
For disability access information call (802) 865-7121 or (802) 863-0450 TTY.
An Equal Opportunity Employer

Cc: Land Records for Tax Lot 049-3-162-000

VIOLATION DETAILS

LOCATION: 108 South Winooski Ave, Burlington

DECISION DATE: November 19, 2025

VIOLATION DESCRIPTION: Chain-link style fencing installed across entryway area without a Zoning Permit.

FINDINGS:

REMEDY OPTIONS: Within seven (7) days from receipt of this notice you may cure the violation by:

1) Removing the violation noted above by removing the unpermitted chain-link fence and gate **and restoring the Premises to its prior state, and informing the Zoning Office that the violation has been removed so our office may verify compliance; or**

2) Entering into an Agreement with the City of Burlington to extend deadlines in which to come into compliance with the City's ordinance **(**administrative fees required**).**

APPEAL RIGHTS: You have the right to appeal the enforcement officer's decision that a zoning violation exists on your property to the Development Review Board in accordance with the provisions of Articles 2.7.12 and 12.2.2 of the CDO within fifteen (15) days **from the date of this notice**. **The deadline for filing an appeal is 4 pm on December 4, 2025.** Submit a complete application with ZV # and appropriate fee, ($250), to the City's Zoning Office at 645 Pine St, or online at https://burlingtonvt.viewpointcloud.com/categories/1098 accompanied by a memo stating the ZV#, the owner's name and address, a brief description of the property with

respect to which the appeal is taken, a reference to the regulatory provisions applicable to that appeal, the relief you are requesting, and the alleged grounds why such relief is believed proper under the circumstances. *Failure to appeal constitutes admission that the violation exists, and the decision of the enforcement officer shall be binding 24 V.S.A §4472(d).*

REGULATION CITATION: CDO Article(s): 2, 3, 4, 12 and 24 VSA §4451

Security Gate Guide for Downtown Properties

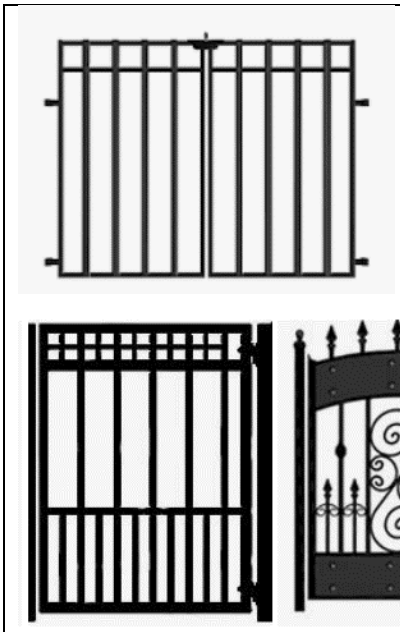
For exterior gates installed within zones FD5 & FD6 (refer to map)

Outdoor gates installed within the Downtown must be consistent with the following 4 points:

1. **Visual Access**
   - The downtown form code standards contain a number of provisions aimed at enabling public view into buildings the street level. Security gates should allow visible access to what's behind them, such as metal picket fencing.
2. **Durable Materials & Style**
   - Along any frontage line (i.e. between the front of the building and the front property line), gates should be constructed of metal, wood, or woven or braided cable. Other materials may be permissible further into the interior of a property.
3. **Prohibitions**
   - Exterior security shutters are prohibited on windows. Similarly, solid-wall gates and accordion-style exterior security gates are not allowed.
4. **Emergency Access**
   - Gates must allow for egress (out of the building) and emergency services access (into the building) at all times.

Exterior gates require zoning and building permits prior to installation.

Example of Acceptable Gates



Example of Unacceptable Gates

Appellant:
Merrill Jarvis
L & M Properties, LLC
17 Lilac Lane
South Burlington, VT 05403
802-310-1941
merrilljarvis@me.com

Property:
Merrill's Roxy Cinema
108 South Winooski Ave.
Burlington, Vermont 05401

Notice of Appeal

Pursuant to Section 12.2.2 of the Burlington Zoning Ordinance, this letter serves as a formal Notice of Appeal of the administrative decision denying the application for installation of a chain-link fence at the above-referenced property. While I understand that the zoning code generally discourages chain link fencing in the downtown area, I respectfully question the basis for allowing exceptions for certain properties while denying others that are similarly situated. State-owned properties and construction sites within the same downtown and Burlington area are permitted to install chain link fencing, even though they are equally visible and subject to the same urban context.

The zoning regulations should be applied consistently and fairly. A rule that applies to one property owner should apply to all, unless there is a clear, written legal justification explaining why certain entities are exempt while small business owners are not. At this time, it is unclear why state-owned buildings located in the same zoning district are not subject to the same design review standards.

The proposed fence is intended for safety, security, and property protection purposes and is not meant to detract from the surrounding area. I am requesting that the Board reconsider the denial or provide a detailed legal explanation supporting the exemption granted to state-owned properties while denying similar applications from private property owners.

This appeal relates to the zoning code provisions governing fences in the downtown zoning district, including design review standards and any applicable exceptions or discretionary approvals under the zoning ordinance.

I respectfully request that the Development Review Board reverse the administrative denial and approve the proposed fence or alternatively grant relief allowing installation of the fence as proposed, subject to reasonable conditions if deemed necessary.

I consider my request to be proper for the following reasons:

- The proposed fence serves a legitimate **safety and security purpose**, including protection of the patrons and property.
- Similar fencing or comparable barriers exist within the Burlington downtown area, including properties located nearby, indicating that such installations can be compatible with the character of the district.
- While exceptions were cited for state-owned properties and construction sites, I believe that the zoning code should be applied **consistently**, and that private commercial properties with documented security concerns should be afforded reasonable consideration under the same principles.
- The proposed fence does not materially detract from the streetscape and can coexist with the goals of downtown design when viewed in context.

For these reasons, I respectfully submit that approval of the fence is reasonable, appropriate, and consistent with the intent of the zoning ordinance.

Thank you for your consideration of this appeal.

Respectfully submitted,

Merrill Jarvis
Merrill's Roxy, President

Department of Permitting and Inspections
Zoning Division
645 Pine Street
Burlington, VT 05401
https://www.burlingtonvt.gov/439/Zoning-Division
Telephone: 802.865-7188
802.865.7195 (Fax)

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Kirk Dressing, Associate Planner
Collin Naheedy, Zoning Compliance Officer
Joseph Cava, Planning Technician

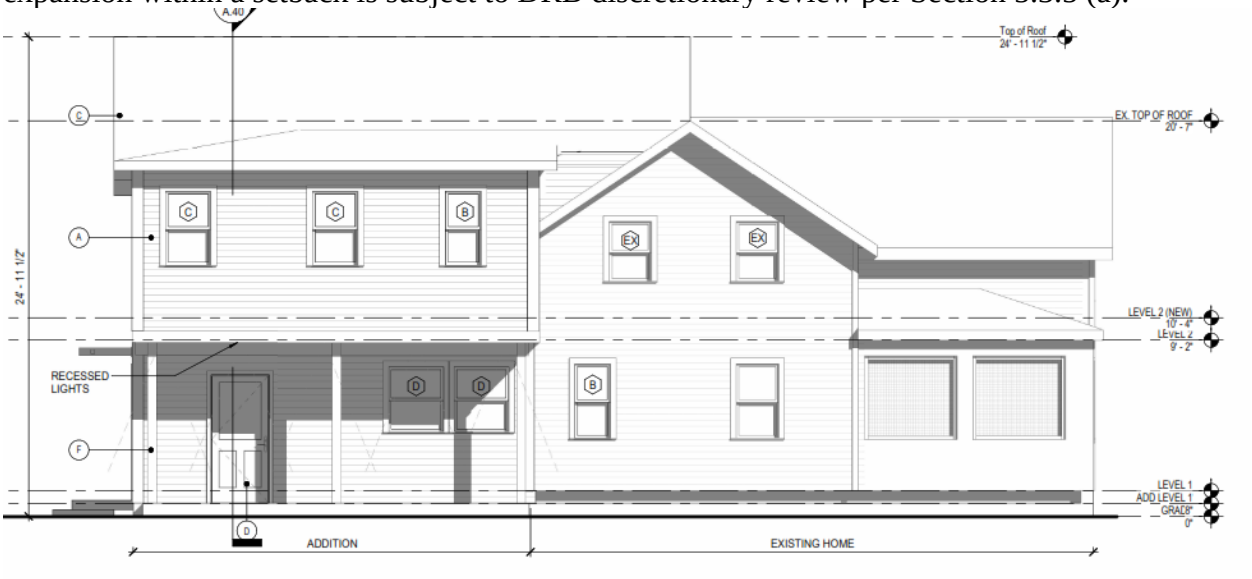
MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Principal Planner
Date: April 7, 2026
RE: ZP-26-3, 63 Walnut Street

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

File: ZP-26-3
Location: 63 Walnut Street
Zone: RM **Ward**: 2
Applicant/ Owner: Daniel Jordan
Request: Tear down existing dry storage area, construct two story addition on existing single family home.

The new addition will introduce new non-conformity to setback at the 2nd floor level; vertical expansion within a setback is subject to DRB discretionary review per Section 5.3.5 (a).



Background:

- **Zoning Permit ZP-24-113:** Proposed demolition of existing, external, cinder-block chimney with associated roofing and siding repair. April 2024.
- **Zoning Permit ZP-24-78;** Proposed construction of shed in backyard with electrical. April 2024.

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 ZP-00-377 / 01-020:** Construction of a cement (over existing brick sidewalk) Access ramp for the front entry to the existing single-family home. Remainder of ramp to be constructed within the existing porch. July 2000. Permit relinquished.
- **Zoning Permit ZP-1991-122 / 91-339;** Installation of 6' Stockade style fence to enclose rear yard and 4' Picket style fence in front yard of existing single-family home. Not a corner lot. May 1991.
- **Zoning Permit 87-030;** replace existing rear 12/ x 19' single story porch with new 12' x 19' porch. Material to be horizontal clapboard to match existing house. February 1987.

Overview: 63 Walnut Street is an existing single-family home. The owners wish to remove the rear (west) single story storage area and construct a two-story addition. Review by the DRB is warranted for the proposed vertical expansion within a required setback, as the expanded 2nd story introduces new encroachment.

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

I. Findings

Article 4: Zoning Maps and Districts
Section 4.4.5 Residential Districts

(a)Purpose:

The Residential Districts are intended to control development in residential districts in order to create a safe, livable, and pedestrian friendly environment, while enabling neighborhoods to evolve to meet the changing needs of households and the economy, and as a result of the climate emergency. They are also intended to create an inviting streetscape for residents and visitors. Development that places emphasis on architectural details and form is encouraged, where primary buildings and entrances are oriented to the sidewalk, and new buildings are interspersed within a wide range of historic development patterns across the city. Parking shall be placed either behind, within, or to the side of structures, and building facades designed for parking shall be secondary to the residential aspect of a structure.

2. *The **Residential Medium Intensity (Residential Medium, RM)** district is intended for residential development that includes a mix of housing types such as single-family detached dwellings, with or without accessory dwelling units, duplex, triplex, quadplex, and multi-unit buildings in compact, walkable neighborhoods. Building heights typically range from two to three stories, and development generally results in moderately higher lot coverage as compared to the RL district. Neighborhoods within this district are typically walkable to downtown or other mixed-use areas of the city, and commercial uses within the district take the form of home-based businesses and the adaptive reuse of historic buildings for neighborhood-serving uses.*

(b) Dimensional Standards

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

Table 4.4.5-1 Lot Size, Frontage, Setback, and Lot Coverage Standards in Residential Districts

<table>
<tr><th rowspan="2">District</th><th rowspan="2">Min. Lot Frontage[2,3,4,5] (linear feet)</th><th colspan="3">Setbacks[1,6,7,8,9]</th><th rowspan="2">Lot Coverage[1,9]</th></tr>
<tr><th>Front</th><th>Side</th><th>Rear</th></tr>
<tr><td>Residential Medium (RM)</td><td>30’</td><td>Min: Avg. of front setback 2 adjacent lots on both sides +/- 5 feet

Max required: 25 ft</td><td rowspan="2">Min: 10% of lot width or avg. of side setback of 2 adjacent lots on both sides

Max required: 20 ft

Proposed: Maintain existing non-conforming north setback on first floor (< 3.3’, 10 % lot width); Extending vertically. DRB discretionary review required per Section 5.3.5 (a).</td><td>15 ft.</td><td>55%</td></tr>
<tr><td>63 Walnut Street</td><td>Pre-existing 33’</td><td>No change to front.</td><td>98’</td><td>36.4%</td></tr>
</table>

Affirmative finding, with DRB discretionary review of vertical expansion within a required setback. See Section 5.3.5 (a).

Table 4.4.5-2 Principal & Secondary Structures Massing and Placement Standards in Residential Districts

District	Max Height & Stories[1,3,5]	Max Dwelling Units per Structure[2,3]	Max. Principal Structure Footprint[3,6,7]	Max. Secondary Structure Footprint[3,5,6,7]	Max. Linear Elevation before offset[4]	Min. Distance between Structures on same lot
Residential Medium (RM)	35’ 3 stories	4	1,800 sq.ft.	1,100 sq.ft.	50’	15’
63 Walnut	Approx.. 22’ 2 stories	1 (no change)	1,346.88 sq.ft.	N/A	N/A	N/A

Affirmative finding.

(c) Permitted and Conditional Uses:

The principal land uses that may be permitted, or conditionally permitted pursuant to the requirements of Article 3, within the Residential districts shall be as defined in Appendix A – Use Table and as may be modified by district specific regulations in Sec. 4.4.5 (d).

No change in use is proposed. The property shall remain a single-family home. **Affirmative finding.**

(d) District Specific Regulations:

1. **Additional Residential Development Permitted**

In addition to any applicable development permitted according to Article 11 – Planned Unit Development, the following additional development types and intensities shall be allowed within the Residential Districts, subject to the following standards.

A. Pocket Neighborhoods

Not applicable.

B. Rowhouses

Not applicable.

2. **Exceptions to Dimensional Standards**

A. Encroachment into Side Setback for Residential Driveways

No changes to the existing driveway are proposed. Not applicable.

B. Encroachment into the Waterfront Setback

Not applicable.

C. Exceptions to Lot Coverage for Accessory Residential Features

In addition to lot coverage exemptions in Sec. 5.2.3 (b), within the RL and RM districts, an additional ten (10) percent of lot coverage above the otherwise applicable limit may be permitted for the following amenity features accessory to residential uses provided that such features shall at no time be enclosed:

(i) *Decks;*

(ii) *Patios;*

(iii) *Porches;*

(iv) *Terraces;*

(v) *Tennis or other outdoor game courts;*

(vi) *Swimming pool aprons;*

(vii) *Walkways;*

(viii) *Window Wells; and/or*

(ix) *Pervious pavement designed and maintained to infiltrate the 1-year/24-hour storm event onsite, subject to review and approval by the Stormwater Administrator.*

The proposal is compliant for lot coverage without the bonus provision. See Table 4.4.5-1. **Affirmative finding.**

D. Exceptions to Maximum Building Footprint Limit

(i) *Except as provided for in (ii) below, existing structures legally existing as of January 1, 2024 in excess of the building footprint limits in Table 4.4.5-2 shall not be considered non-conforming. Such buildings shall only be allowed to be converted, adaptively reused, or enlarged, including for the purpose of adding additional units, within the limits this part or as otherwise permitted in Sec. 5.4.8 or Article 11.*

(ii) *Single-family homes legally existing as of January 1, 2024 in excess of the building footprint limits in Table 4.4.5-2 may be expanded to 125% of the pre-existing footprint, as long as no additional units are added.*

As proposed, the building is compliant for maximum building footprint as defined by Table 4.4.5-2. **Affirmative finding.**

3. Exception for Neighborhood Commercial Uses

Not applicable.

4. Miscellaneous Standards

A. Additions to Existing Residential Structures.

No request for an addition to an existing structure shall be considered or imply approval of an additional unit, unless requested specifically on the zoning permit application form.

The application does not request an additional unit. **Affirmative finding.**

B. Accessory Residential Structures, Buildings, and Uses

Other than a 35 sq. ft. rear porch, no other accessory residential structures are proposed within this application. **Affirmative finding.**

C. Residential Occupancy Limits.

Residential occupancy limits have been struck down by state statute. Not applicable.

D. Additional Unit on lot or within Owner-Occupied Single Detached Dwelling

Not applicable.

5. Residential Development Bonuses

No residential bonuses are sought. Not applicable.

(e) Effective Date.

The amendments to this Section 4.4.5 that allow for a secondary structure within RL and RM zones, except as may otherwise be allowed by Article 11, are effective November 1, 2024.

Article 5: Citywide General Regulations

Section 5.2.1 Existing Small Lots.

Not applicable.

Section 5.2.2 Required Frontage or Access

This is an existing developed site. No change is proposed to the current frontage or access to the parcel. **Affirmative finding.**

Section 5.2.3 Lot Coverage Requirements

See Table 4.4.5-1 above.

Section 5.2.4 Buildable Area Calculation & Steep Slopes Overlay District

The subject parcel does not exceed 2 acres. Not applicable for Buildable Area Calculation. The project area is not within the Steep Slopes Overlay District. Not applicable.

Section 5.2.5 Setbacks

See Table 4.4.5-1 above. The proposed 2 story addition will create new non-conformity to side yard setback on the north elevation. DRB discretionary review is warranted under Section 5.3.5 (a), below.

Section 5.2.6 Building Height Limits

See Table 4.4.5-2 above.

Section 5.2.7 Density and Intensity of Development Calculations

See Table 4.4.5-2 above.

Part 3: Non-Conformities

Section 5.3.5 Non-conforming Structures

(a)Changes and Modifications:

Nothing in this Part shall be deemed to prevent normal maintenance and repair or structural repair, or moving of a non-complying structure pursuant to any applicable provisions of this Ordinance.

Any change or modification to a nonconforming structure, other than to full conformity under this Ordinance, shall only be allowed subject to the following:

1. *Such a change or modification may reduce the degree of nonconformity and shall not increase the nonconformity except as provided below.*

   Within the residential districts, and subject to Development Review Board approval, existing nonconforming single-family homes and community centers (existing enclosed spaces only) that project into side and/or rear yard setbacks may be vertically expanded so long as the expansion does not encroach further into the setback than the existing structure. *Such expansion shall be of the existing nonconformity (i.e. setback) and shall:*

   i) Be subject to conformance with all other dimensional requirements (i.e. height, lot coverage, density and intensity of development);

   ii) Not have an undue adverse impact on adjoining properties or any public interest that would be protected by maintaining the existing setbacks; and,

   iii) Be compatible with the character and scale of surrounding structures.

   Existing accessory buildings of 15 feet in height or less shall not exceed 15 feet tall as expanded.

2. *Such a change or modification shall not create any new nonconformity; and,*

3. *Such a change or modification shall be subject to review and approval under the Design Review provisions of Article 3, Part 4.*

The proposed addition is placed on the existing house footprint, but as expanded vertically into a full second story introduces expanded non-conformity to setback. The addition otherwise will not create any new non-conformity, and is not anticipated to have an undue adverse impact on adjoining properties or public interest. The building official may require specific sheathing materials or limited building openings to meet life safety code. **Affirmative finding with DRB concurrence.**

(b) Demolition:

A nonconforming structure may be replaced by a new structure retaining the same degree of nonconformity as the original structure. This provision is limited to the existing dimensional nonconformity (i.e. setback, lot coverage, or height), and shall not expand the degree of nonconformity except as provided for in (a) above. The new structure shall be subject to conformance with all other dimensional requirements (i.e. setback, lot coverage, and height). Zoning permit application for the replacement structure shall be completed within 1 year of demolition of the nonconforming structure; failure to do so shall result in the loss of the ability to retain the nonconformity.

In all other cases, a nonconforming structure that has been demolished or moved shall not be re-built or relocated in any way other than in full conformance with the provisions of this ordinance. Structures or any portion thereof that are structurally unsound, and are required to be removed by order of the building inspector, may be replaced within the original footprint provided both the requirement to demolish the building is not the result of demolition by neglect and the replacement shall not expand the degree of nonconformity.

The addition will be built on the footprint of the existing structure, retaining the same level of non-conformity with the exception of new structure within the 2nd story vertical plane. Per this standard, the development must occur within one year of demolition, or the existing non-conformity will be lost. **Affirmative finding as conditioned.**

Sec. 5.4.8 Historic Buildings and Sites
63 Walnut Street is not listed on the state or National Register of Historic Resources. Not applicable.

Section 5.5.2 Outdoor Lighting

Section 5.5.3 Stormwater and Erosion Control
The site disturbance does not exceed the threshold for an Erosion Prevention and Sediment Control plan. Not applicable.

Section 5.5.4 Tree Removal
No trees are proposed for removal. Not applicable.

Article 6: Development Review Standards
Part 1: Land Division Design Standards
No land division is proposed. Not applicable.

Part 2: Site Plan Design Standards
Sec. 6.2.1 Applicability.
These standards shall be satisfied for the approval of all development subject to the provisions of this ordinance found in Article 3, Section 3.4.2(1) – Site Plan Review.

Sec. 6.2.2 Review Standards
(a)Protection of Important Natural Features:
No significant natural features are proposed for alteration. **Affirmative finding.**

(b) Topographical Alterations:

Alteration to the natural contour of the site shall minimize grading, cut, and fill, and shall take necessary measures to protect against erosion and future instability. Any grade changes shall be in keeping with the general appearance of neighboring developed areas. In areas where more intense levels of development are encouraged, development should seek to take advantage of topographical changes to hide and/or blend new construction into the landscape. Proposed design and construction details for any cut and fill, or

retaining walls over 3-feet in height, or any height along the lakeshore, shall be subject to review and approval by the city engineer before receiving approval of the site plan.

No topographical changes are included within the proposal. Not applicable.

(c) Protection of Important Public Views:

Not applicable.

(d) Protection of Important Cultural Resources:

Not applicable.

(e) Supporting the Use of Renewable Energy Resources:

Where feasible, the site plan should be so designed as to take advantage of the site's inherent potential to utilize sources of renewable energy including direct sunlight, wind, or running water. The site plan should also incorporate site planning and landscaping decisions intended to minimize energy demand such as siting buildings to maximize solar access or the use of deciduous and coniferous trees to create shade and windbreak.

No part of this application precludes the use of wind, water, solar, geothermal or other renewable energy resources. An external condensing unit is proposed for the north wall of the addition. **Affirmative finding.**

(f) Brownfield Sites:

Not applicable.

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

Site disturbance does not exceed 400 sq. ft; short of the threshold for requiring an EPSC plan. Not applicable.

(h) Building Location and Orientation:

The addition will be constructed on the footprint of an existing attached dry storage structure. **Affirmative finding**.

(i) Vehicular Access:

No changes are proposed for access. **Affirmative finding.**

(j) Pedestrian Access:

Pedestrians shall be provided one or more direct and unobstructed paths between a public sidewalk and the primary building entrance. Well defined pedestrian routes shall

be provided through parking areas to primary building access points and be designed to provide a physical separation between vehicles and pedestrians in a manner that minimizes conflicts and improves safety. Where sidewalks and driveways meet, the sidewalk shall be clearly marked by differentiated ground materials and/or pavement markings.

63 Walnut Street has access to a public pedestrian walkway. **Affirmative finding.**

(k) Accessibility for the Handicapped:

Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled.

While not a requirement for single-family homes, Vermont "Visitability" standards are encouraged. ADA compliance is subject to review by the building official.
Affirmative finding.

(l) Parking and Circulation:
Driveway parking shall remain as existing. **Affirmative finding.**

(m) Landscaping, Fences and Retaining Walls:

Fences may be placed within the required setback along a property line, but shall be setback sufficiently to provide for the maintenance of both sides of the fence without entering onto the adjacent property and shall present a finished side to the adjoining property and public street. Fences placed within a clear sight triangle shall adhere to the standards of Sec. 5.2.6 (c). Styles, materials, and dimensions of the proposed fence shall be compatible with the context of the neighborhood and the use of the property.

No changes are proposed to the existing landscaping. **Not applicable.**

(n) Public Plazas and Open Space:
Not applicable.

(o) Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

Recessed lights are proposed under the porch roof. **Affirmative finding.**

(p) Integrate infrastructure into the design:

Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be place underground whenever practicable. Trash and recycling bins and dumpsters shall be located, within preferably, or behind buildings, enclosed on all four (4) sides to prevent blowing trash, and screened from public view.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

A condensing unit is illustrated as wall-mounted on the north elevation. No change is introduced to the mailbox location. **Affirmative finding.**

Part 3: Architectural Design Standards
Sec. 6.3.2 Review Standards

(a)Relate development to its environment:

Proposed buildings and additions shall be appropriately scaled and proportioned for their function and with respect to the purpose of the zoning district. They should integrate harmoniously into the topography, and to the use, scale, and architectural details of existing buildings in the vicinity; however, such consideration shall not require building height to be more limited than otherwise allowed within an applicable zoning district or overlay zone per Article 4.

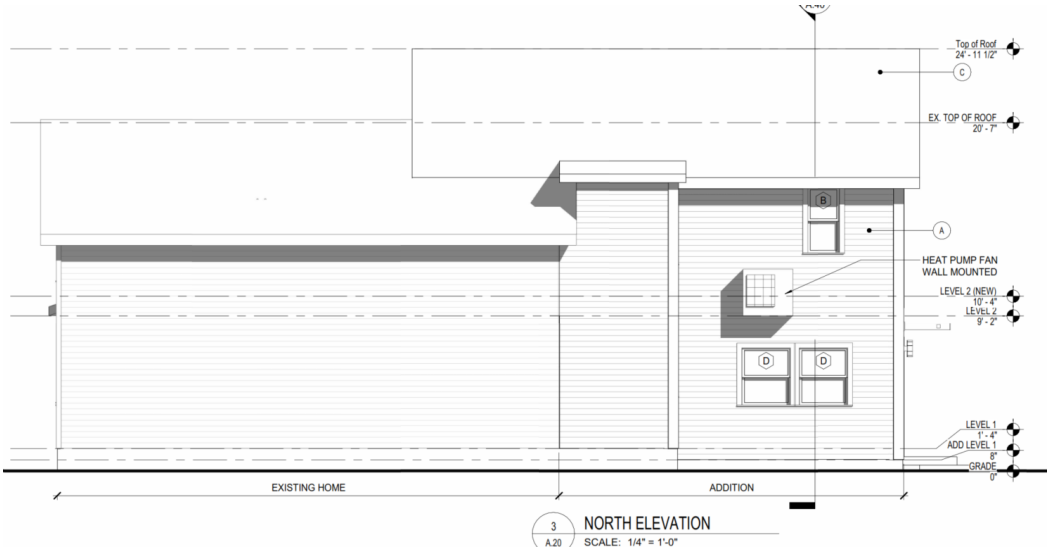
The following shall be considered:

1. Massing, Height and Scale:

While architectural styles or materials may vary within a streetscape, proposed development should maintain an overall scale similar to that of surrounding buildings, or provide a sensitive transition, where appropriate, to development of a dissimilar scale.

In low and medium residential districts, the height and massing of existing residential buildings should be carefully considered when evaluating the compatibility of additions and infill development; however, no modifications by the DRB shall be made to projects which otherwise limit the allowable Principal Structure footprint, height, and number of units per building otherwise permitted by Tables 4.4.5-1 and 4.4.5-2.

The proposed addition is more than 4' taller than the existing roofline; however per this standard there can be no interference in the allowable building height per Table 4.4.5-2.



Buildings should maintain consistent massing and perceived building height at the street level, regardless of the overall bulk or height of the building. Buildings should maintain a relationship to the human scale through the use of architectural elements, variations of proportions and materials, and surface articulations. Large expanses of undifferentiated building wall along the public street or sidewalk shall be avoided. The apparent mass and scale of buildings shall be broken into smaller parts by articulating separate volumes reflecting existing patterns in the streetscape, and should be proportioned to appear more vertical than horizontal in order to avoid monotonous repetition. (See also (d) Provide an active and inviting street edge below.)

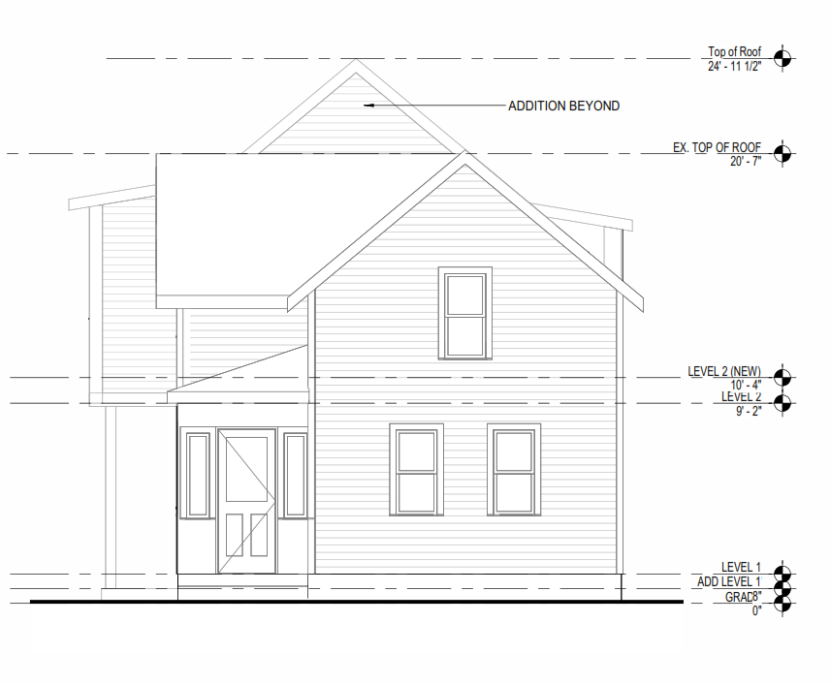
Like 69 Walnut Street, this home is a cross-gable (intersecting gable roof) design. The proximity to neighboring residences may somewhat limit the visibility of the large rear addition. **Affirmative finding with DRB concurrence**.

2. Roofs and Rooflines.

New buildings should incorporate predominant roof forms and pitches within the existing neighborhood and appropriate to the context. Large expanses of undifferentiated roof forms shall be avoided. This can be achieved by incorporating dormers or some variation in the roof form to lessen the impact of the massing against the sky. While flat roofs can be a reasonable architectural solution, pitched roof forms and architectural elements that enhance the city's skyline are strongly encouraged. Roof eaves, parapets, and cornices should be articulated as an architectural detail. Roof-top mechanicals shall be screened from view from the public street, and should be incorporated into and hidden within the roof structure whenever possible.

Residences on either side of 63 Walnut have flat roofs, while 69 Walnut features intersecting gable roofs like the subject property. The addition proposed begins to

imitate on the pitch of the existing gable front roof, but diverts into an assymetrical roof structure that segues into a modified hip at the second story south. The connection between building masses is abrupt but provides the desired second story ceiling height. **Affirmative finding.**



3. Building Openings

Principal entrances shall be clearly defined and readily identifiable from a public street whether by a door, a canopy, porch, or other prominent architectural or landscape features. People with physical challenges should be able to use the same entrance as everyone-else and shall be provided an "accessible route" to the building. Attention shall also be accorded to design features which provide protection from the affects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage.

Window openings shall maintain consistent patterns and proportions appropriate to the use. The window pattern should add variety and interest to the architecture, and be proportioned to appear more vertical than horizontal. Where awnings over windows or doors are used, the lowest edge of the awning shall be at least eight (8) feet above any pedestrian way, and shall not encroach into the public right-of-way without an encroachment permit issued by the dept. of public works.

Buildings placed on a side or rear property line where no setback is required shall contain neither doors nor windows along such façade so as not to restrict future development or re-development options of the adjacent property due to fire safety code restrictions. Otherwise they should be setback a minimum of 5-feet.

An entrance is provided under a projecting second story on the south elevation. Windows are placed at regular intervals around the addition, with a large triple door on the rear. There are limited openings on the north elevation (close to the

property line), however those that are illustrated are set back 5'. Building openings are subject to code review by the building official. **Affirmative finding as conditioned.**

(b) Protection of Important Architectural Resources:

63 Walnut Street is not listed on the state or National Register of Historic Resources. Not applicable.

(c) Protection of Important Public Views:

Not applicable.

(d) Provide an active and inviting street edge:

The addition is behind the primary residence, although the height and massing have limited visibility from the street. **Affirmative finding.**

(e) Quality of materials:

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts. Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

The owners have chosen an engineered wood clapboard siding, with asphalt shingle and standing seam metal roofing for low slopes. All are considered of accepted durability for new construction.
Affirmative finding.

(f) Reduce energy utilization:

New structures should incorporate the best available technologies and materials in order to maximize energy efficient design. All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

New structures should take advantage of solar access where available, and shall undertake efforts to reduce the impacts of shadows cast on adjacent buildings where practicable, in order to provide opportunities for the use of active and passive solar utilization.

Windows and doors are required to meet Residential Building Energy Standards. All new construction is required to meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances. **Affirmative finding as conditioned.**

(g)Make advertising features complementary to the site:

Not applicable.

(h) Integrate infrastructure into the building design:

Exterior machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory features shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

A wall-hung condensing unit is proposed for the north elevation. It, too, is required to meet appropriate setbacks. With a lot 33' wide, the condensing unit must be at least 3.3' from the property line. As illustrated, that wall plane is 5' from the north property line, so compliance is anticipated. **Affirmative finding.**

(i) Make spaces secure and safe:

Development shall adhere to all building and life safety code as defined by the fire marshal and/or building official. **Affirmative finding as conditioned.**

II. Conditions of Approval

1. The development must occur within one year of demolition, or the existing non-conformity to side yard setback will be lost.
2. Building openings and sheathing materials are subject to Code review by the building official.
3. Development shall adhere to all building and life safety code as defined by the fire marshal and/or building official.
4. All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.
5. 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.

63 Walnut St:

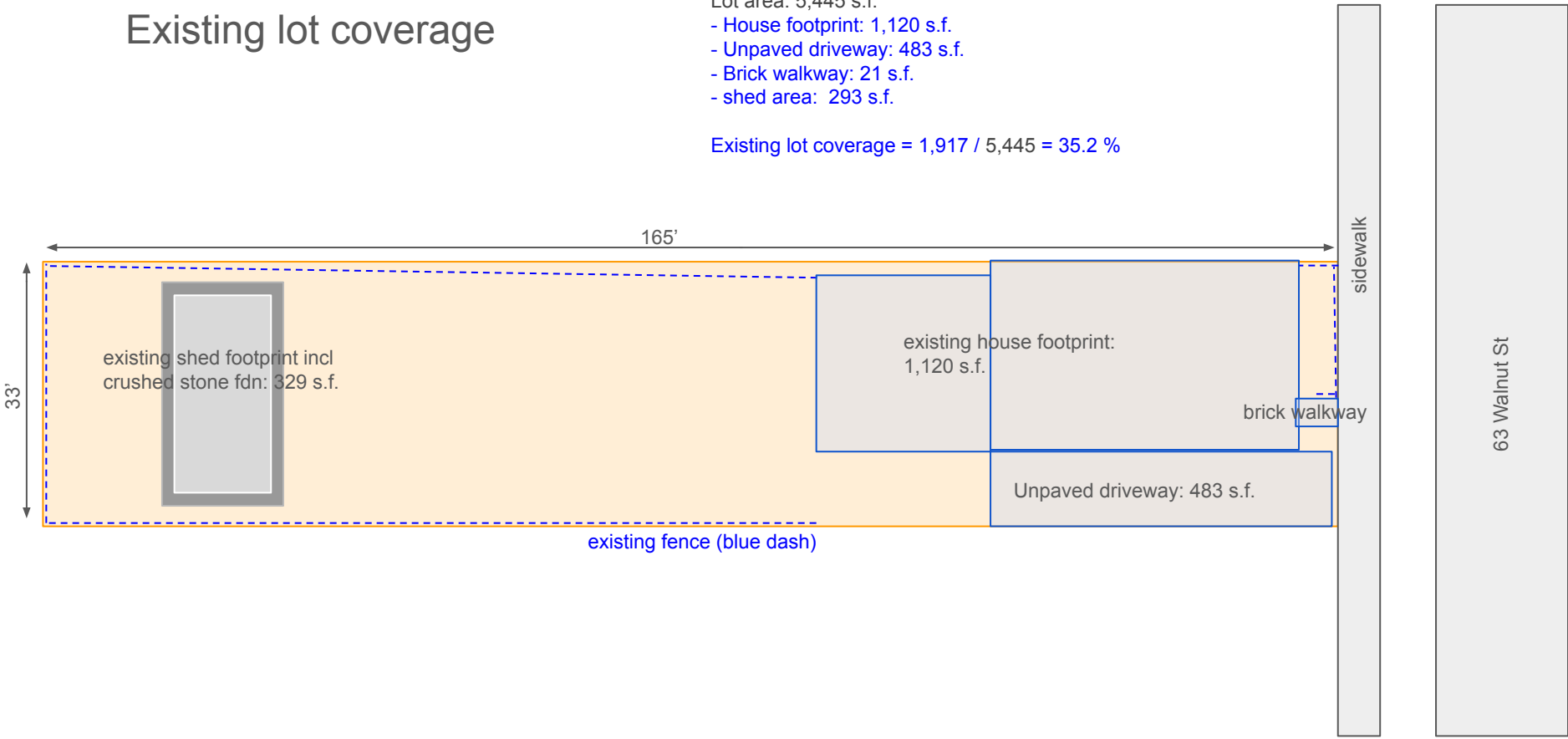
Addition Plan
& Supporting Documents

Jan 19, 2026

Existing lot coverage

Lot area: 5,445 s.f.
- House footprint: 1,120 s.f.
- Unpaved driveway: 483 s.f.
- Brick walkway: 21 s.f.
- shed area: 293 s.f.

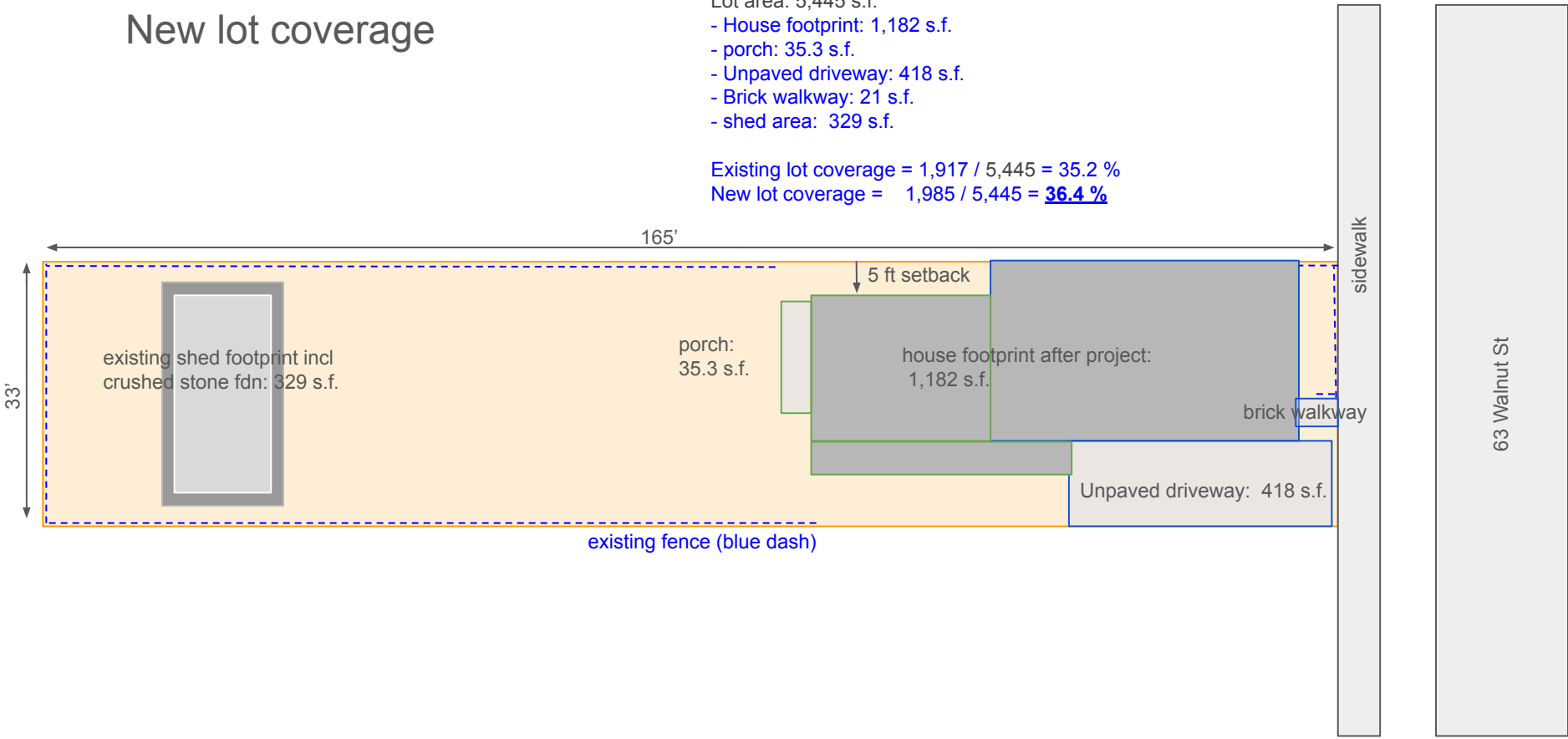
Existing lot coverage = 1,917 / 5,445 = 35.2 %



New lot coverage

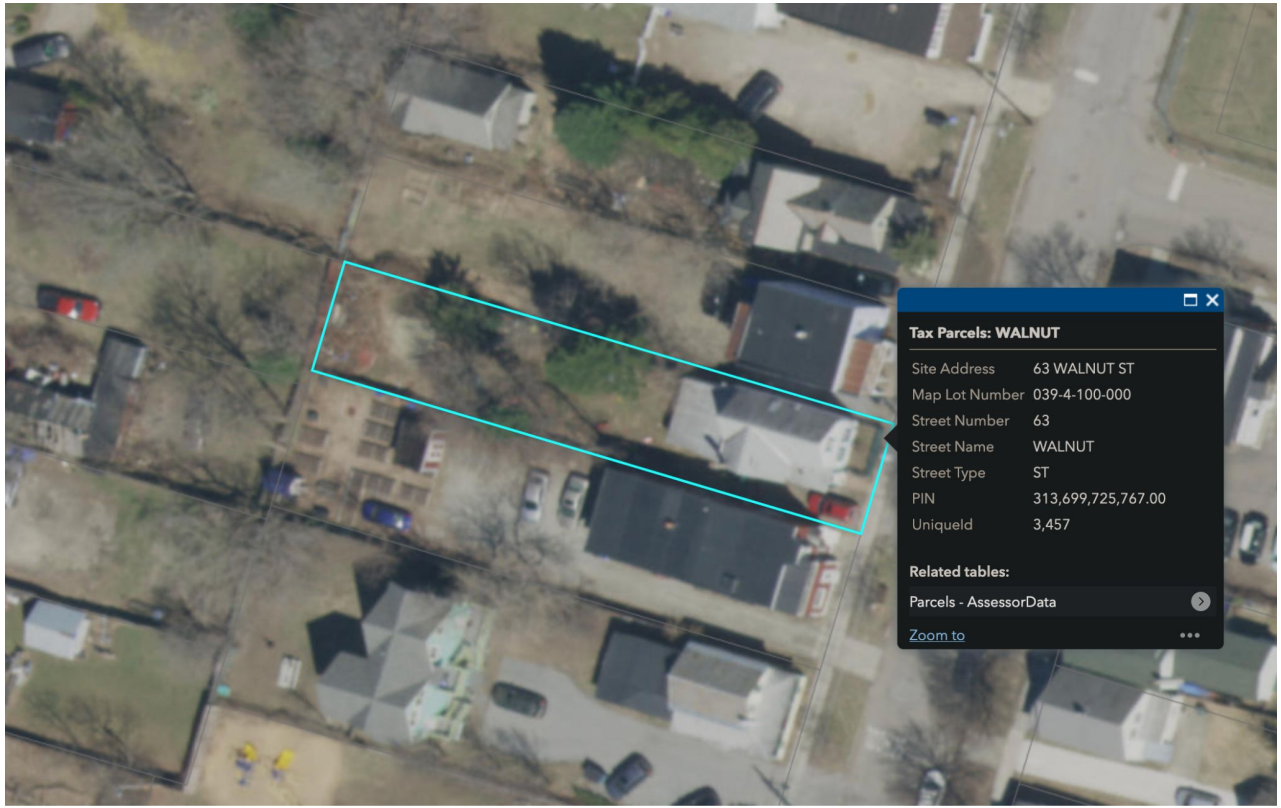
Lot area: 5,445 s.f.
- House footprint: 1,182 s.f.
- porch: 35.3 s.f.
- Unpaved driveway: 418 s.f.
- Brick walkway: 21 s.f.
- shed area: 329 s.f.

Existing lot coverage = 1,917 / 5,445 = 35.2 %
New lot coverage = 1,985 / 5,445 = **36.4 %**



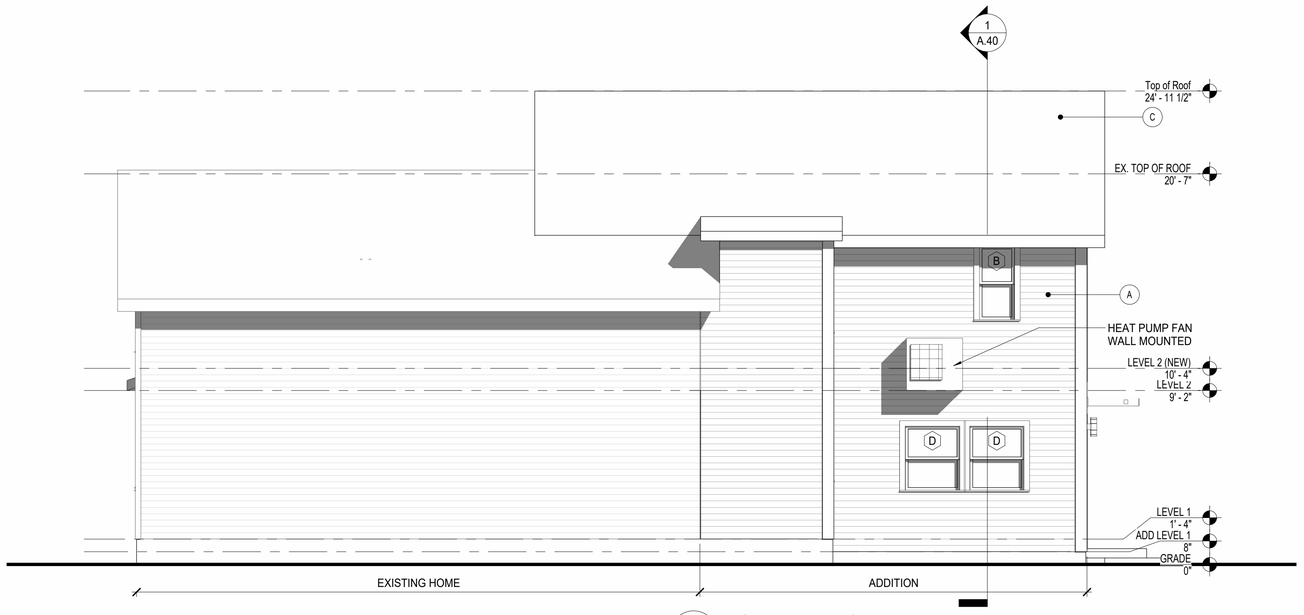
Lot aerial view 1

Neighboring parcels

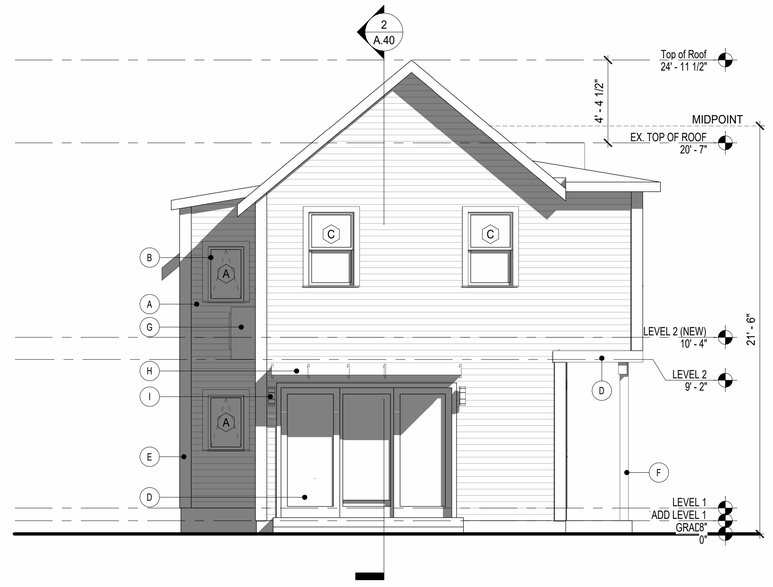


Site Photos.

Site Photos.



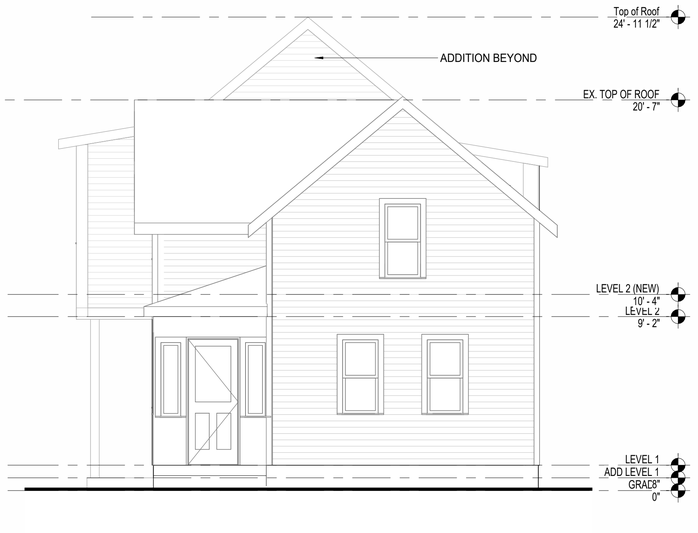
3 A.20 **NORTH ELEVATION**
SCALE: 1/4" = 1'-0"



1 A.20 **WEST ELEVATION**
SCALE: 1/4" = 1'-0"

EXTERIOR MATERIAL KEY	
Key Value	Keynote Text
A	COMPOSITE SIDING
B	VINYL WINDOW
C	METAL ROOFING
D	FIBERGLASS DOOR
E	COMPOSITE TRIM
F	CEDAR POST
G	HEAT PUMP FAN UNIT
H	ALUMINUM SUN SHADE
I	LIGHT FIXTURE

2 A.20 **SOUTH ELEVATION**
SCALE: 1/4" = 1'-0"



5 A.20 **EAST ELEVATION**
SCALE: 1/4" = 1'-0"

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Desrochers/Jordan Residence

63 WALNUT, BURLINGTON, VT

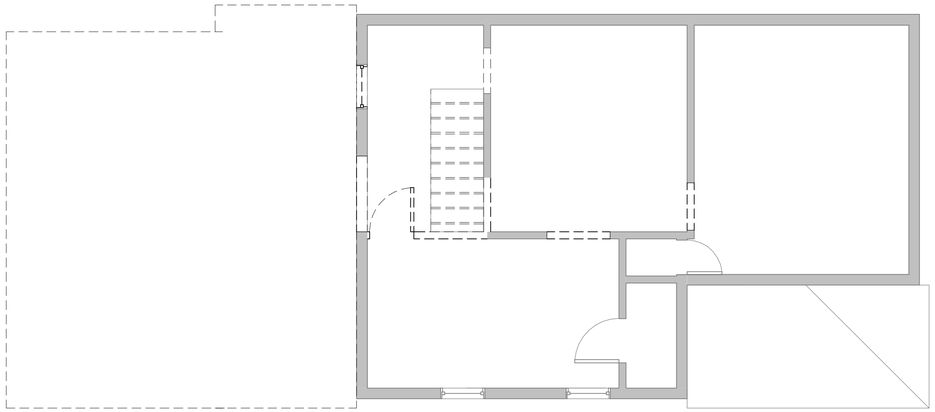
HINGE
architecture
431 Pine Street, Suite 314, Burlington, VT 05401
802.793.9840

FOR PERMIT ONLY

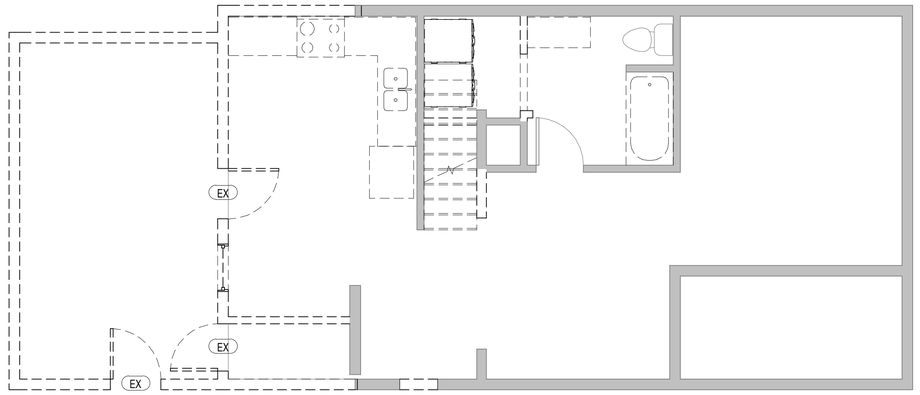
DATE:	**03/06/26**
SCALE:	**1/4" = 1'-0"**
DRAWN BY:	**MA**
CHECKED BY:	**Designer**
PHASE:	

ELEVATIONS

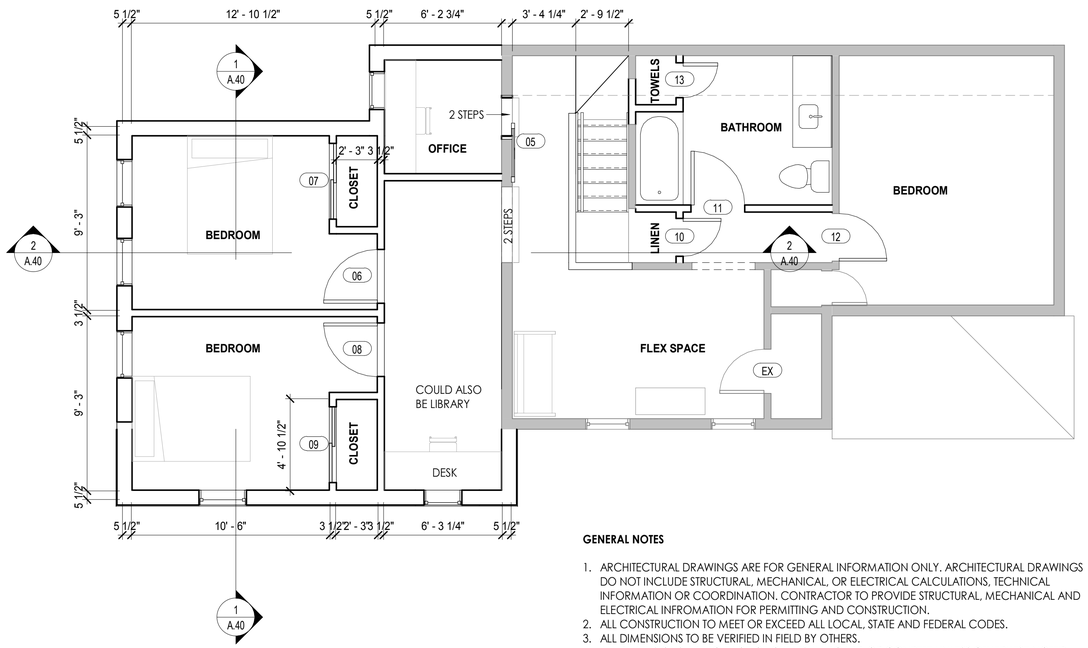
SHEET NO:
A.20



4 A.11 DEMOLITION PLAN - LEVEL 2
SCALE: 1/4" = 1'-0"



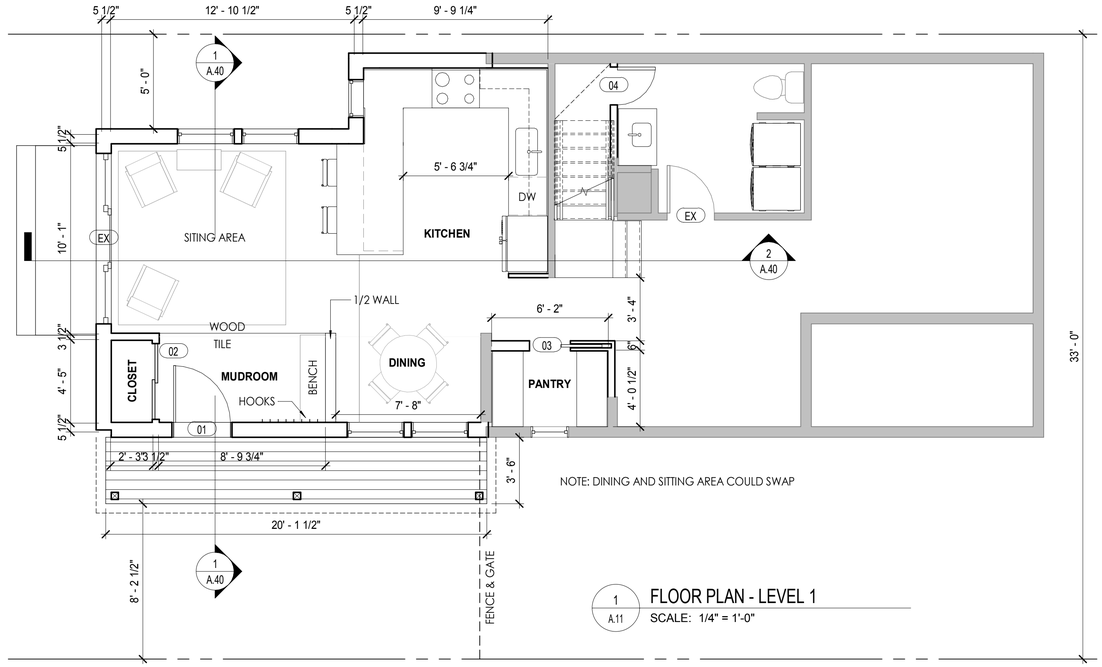
2 A.11 DEMOLITION PLAN - LEVEL 1
SCALE: 1/4" = 1'-0"



3 A.11 FLOOR PLAN - LEVEL 2
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. ARCHITECTURAL DRAWINGS ARE FOR GENERAL INFORMATION ONLY. ARCHITECTURAL DRAWINGS DO NOT INCLUDE STRUCTURAL, MECHANICAL, OR ELECTRICAL CALCULATIONS, TECHNICAL INFORMATION OR COORDINATION. CONTRACTOR TO PROVIDE STRUCTURAL, MECHANICAL AND ELECTRICAL INFROMATION FOR PERMITTING AND CONSTRUCTION.
2. ALL CONSTRUCTION TO MEET OR EXCEED ALL LOCAL, STATE AND FEDERAL CODES.
3. ALL DIMENSIONS TO BE VERIFIED IN FIELD BY OTHERS.
4. ALL DIMENSIONS ARE TO FACE OF GYMPSUM BOARD OR CONRETE UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL COORDINATE ALL WATER, SEWER AND ELECTRICAL CONNECTIONS WITH SUB-CONTRACTOR.



1 A.11 FLOOR PLAN - LEVEL 1
SCALE: 1/4" = 1'-0"

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Desrochers and Jordan Residence

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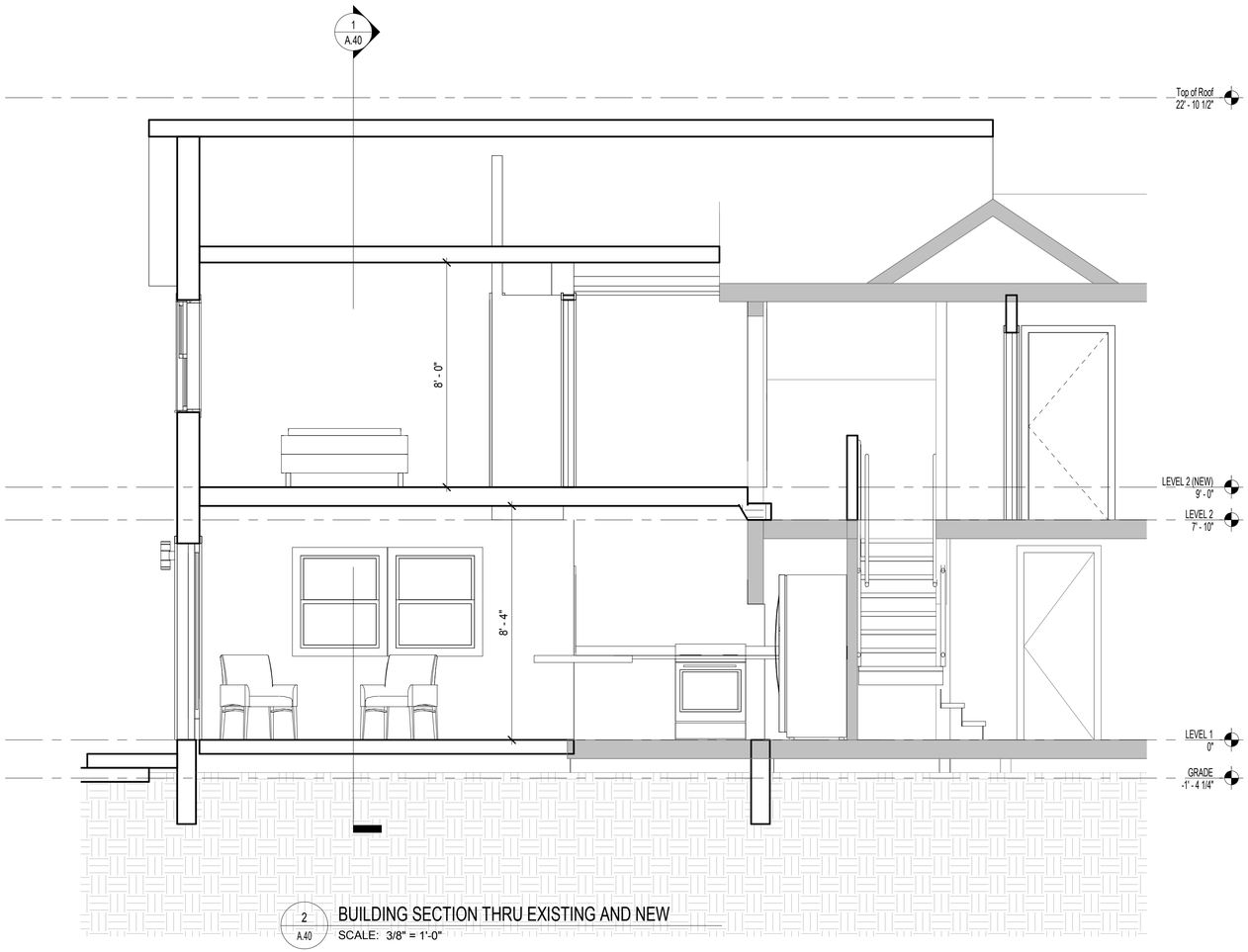
HINGE
architecture
431 Pine Street, Suite 314, Burlington, VT 05401
802.793.9840

FOR PERMIT ONLY

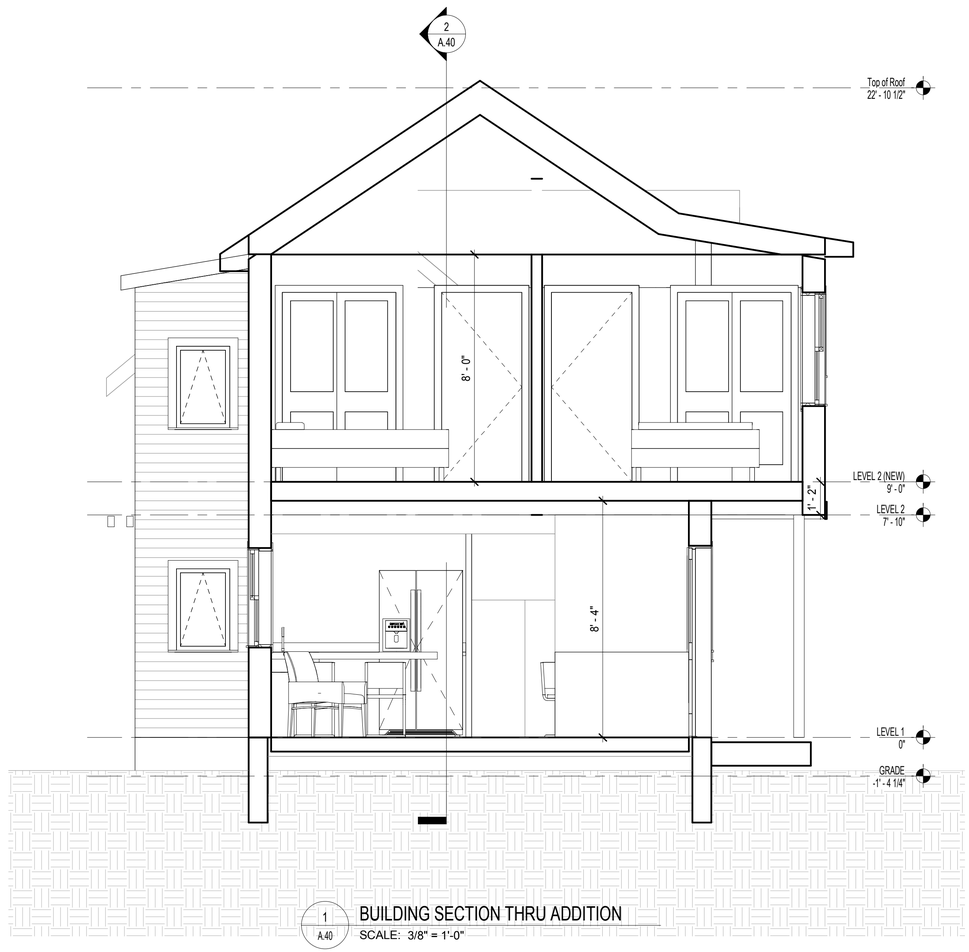
DATE: 07/11/25
SCALE: As indicated
DRAWN BY: MA
CHECKED BY: Designer
PHASE:

FLOOR PLANS

SHEET NO: A.11



2 A.40 BUILDING SECTION THRU EXISTING AND NEW
SCALE: 3/8" = 1'-0"



1 A.40 BUILDING SECTION THRU ADDITION
SCALE: 3/8" = 1'-0"

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DATE:	07/11/25
SCALE:	3/8" = 1'-0"
DRAWN BY:	ma
CHECKED BY:	Designer
PHASE:	

BUILDING SECTION

SHEET NO:

A.40

SPRING EQUINOX: 1:00PM

SUN IS ON THE SOUTH AND WEST SIDE OF THE HOUSE.

SPRING EQUINOX

SUNRISE: 6:52AM SUNSET: 7:08PM

FALL EQUINOX: 1:00PM

SUN IS ON THE SOUTH AND WEST SIDE OF THE HOUSE

FALL EQUINOX

SUNRISE: 6:49AM SUNSET: 4:25PM

WINTER SOLSTICE: 2:30PM

SUN IS ON THE WEST SIDE OF THE HOUSE. THE LOUVER OVER THE GLASS DOOR IS BEING 10% SHADED BY EXTERIOR LOUVER.

WINTER SOLSTICE: 12:30PM

SUN IS ON THE WEST SIDE OF THE HOUSE PARTIALLY. 2ND LEVEL ALLOWS LIGHT INTO FIRST LEVEL

WINTER SOLSTICE

SUNRISE: 7:25AM SUNSET: 4:16PM

SUMMER SOLSTICE

SUNRISE: 5:10AM SUNSET: 8:42PM

SUMMER SOLSTICE: 4:30PM

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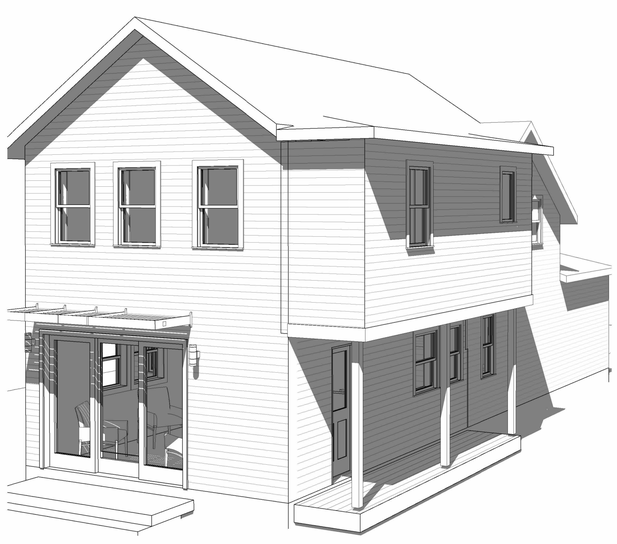

SUMMER SOLSTICE: 2:30PM

SUN IS ON THE WEST SIDE OF THE HOUSE. THE LOUVER OVER THE GLASS DOOR IS BEING 50% SHADED BY EXTERIOR LOUVER.

SUMMER SOLSTICE: 12:30PM

SUN IS ON THE WEST SIDE OF THE HOUSE. THE LOUVER OVER THE GLASS DOOR IS BEING 95% SHADED BY EXTERIOR LOUVER.

SUMMER SOLSTICE: 12:00PM

SUN IS JUST BEGINNING TO REACH THE WEST SIDE OF THE HOUSE. THE 1ST LEVEL HAS GOOD PROTECTION FROM 2ND LEVEL

11/17/2025 2:03:25 PM

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architecture
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802.793.9840

DATE: **11/17/25**
SCALE:
DRAWN BY: **MA**
CHECKED BY: **MA**
PHASE: FOR PRICING

3D VIEWS
SUN STUDY

SHEET NO:
A.30

Department of Permitting and Inspections
Zoning Division
645 Pine Street
Burlington, VT 05401
https://www.burlingtonvt.gov/439/Zoning-Division
Telephone: 802.865-7188
802.865.7195 (Fax)

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Kirk Dressing, Associate Planner
Collin Naheedy, Zoning Compliance Officer
Joseph Cava, Planning Technician

MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Principal Planner
Date: April 7, 2026
RE: 86 Lakeview Terrace; ZP-26-64

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-26-64
Location: 84-86 Lakeview Terrace (address assigned by fire marshal's office)
Zone: RM **Ward**: 2
Applicant/ Owner: Krishna and Latha Mangipudi
Request: Construct single family home, garage and ADU on vacant lot.

Background:

- **Zoning Permit Application;** Determination of Developable Lot. Application withdrawn. October 2002.

Overview:
86 Lakeview Terrace is a vacant lot. This application proposes development of a single-family home with a detached garage/ADU.

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).

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

I. Findings

Article 4: Zoning Maps and Districts
Section 4.4.5 Residential Districts

(a)Purpose:

The Residential Districts are intended to control development in residential districts in order to create a safe, livable, and pedestrian friendly environment, while enabling neighborhoods to evolve to meet the changing needs of households and the economy, and as a result of the climate emergency. They are also intended to create an inviting streetscape for residents and visitors. Development that places emphasis on architectural details and form is encouraged, where primary buildings and entrances are oriented to the sidewalk, and new buildings are interspersed within a wide range of historic development patterns across the city. Parking shall be placed either behind, within, or to the side of structures, and building facades designed for parking shall be secondary to the residential aspect of a structure.

2. *The **Residential Medium Intensity (Residential Medium, RM)** district is intended for residential development that includes a mix of housing types such as **single-family detached dwellings, with or without accessory dwelling units,** duplex, triplex, quadplex, and multi-unit buildings in compact, walkable neighborhoods. Building heights typically range from two to three stories, and development generally results in moderately higher lot coverage as compared to the RL district. Neighborhoods within this district are typically walkable to downtown or other mixed-use areas of the city, and commercial uses within the district take the form of home-based businesses and the adaptive reuse of historic buildings for neighborhood-serving uses.*

(b) Dimensional Standards

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

Table 4.4.5-1 Lot Size, Frontage, Setback, and Lot Coverage Standards in Residential Districts

District	Min. Lot Frontage[2,3,4,5] (linear feet)	Setbacks[1,6,7,8,9]			Lot Coverage[1,9]
		Front	Side	Rear	

Residential Medium (RM)	30’	**Min:** Avg. of front setback 2 adjacent lots on both sides +/- 5 feet **Max required:** 25 ft **Min:** 10% of lot width or avg. of side setback of 2 adjacent lots on both sides **Max required:** 20 ft		15 ft	55%
84-86 Lakeview Terrace	50’	5’6”	3’11” north (average) 5’ proposed south	15’	40.4% base 50% with bonus allowance

Affirmative finding.

Table 4.4.5-2 Principal & Secondary Structures Massing and Placement Standards in Residential Districts

District	Max Height & Stories[1,3,5]	Max Dwelling Units per Structure[2,3]	Max. Principal Structure Footprint[3,6,7]	Max. Secondary Structure Footprint[3,5,6,7]	Max. Linear Elevation before offset[4]	Min. Distance between Structures on same lot
Residential Medium (RM)	35’ 3 stories	4	1,800 sq.ft.	1,100 sq.ft.	N/A’	15’
84-86 Lakeview Terrace	<30’	1	1,120 sq. ft.	572		15’

Affirmative finding.

(c) Permitted and Conditional Uses:

The principal land uses that may be permitted, or conditionally permitted pursuant to the requirements of Article 3, within the Residential districts shall be as defined in Appendix A – Use Table and as may be modified by district specific regulations in Sec. 4.4.5 (d).

Single family homes with ADUs are a permitted use in the RM Zoning District. **Affirmative finding.**

(d) District Specific Regulations:

The following regulations are district-specific exceptions, bonuses, and standards unique to the residential districts. They are in addition to, or may modify, city-wide standards as provided in Article 5 of this ordinance and district standards as provided above.

1. ***Additional Residential Development Permitted***

In addition to any applicable development permitted according to Article 11 – Planned Unit Development, the following additional development types and intensities shall be allowed within the Residential Districts, subject to the following standards.

A. Pocket Neighborhoods

Not applicable.

B. Rowhouses

Not applicable.

2. Exceptions to Dimensional Standards

A. Encroachment into Side Setback for Residential Driveways

Not applicable.

B. Encroachment into the Waterfront Setback

Not applicable.

C. Exceptions to Lot Coverage for Accessory Residential Features

In addition to lot coverage exemptions in Sec. 5.2.3 (b), within the RL and RM districts, an additional ten (10) percent of lot coverage above the otherwise applicable limit may be permitted for the following amenity features accessory to residential uses provided that such features shall at no time be enclosed:

(i) *Decks;*

(ii) *Patios;*

(iii) *Porches;*

(iv) *Terraces;*

(v) *Tennis or other outdoor game courts;*

(vi) *Swimming pool aprons;*

(vii) *Walkways;*

(viii) *Window Wells; and/or*

(ix) *Pervious pavement designed and maintained to infiltrate the 1-year/24-hour storm event onsite, subject to review and approval by the Stormwater Administrator.*

With the exception of the additional lot coverage allowances provided for under Article 9: Inclusionary and Replacement Housing, requirements for such additional lot coverage shall not be permitted for any development where other bonus provisions of this ordinance are applicable.

The development includes amenities that qualify as bonus residential features; however, the application remains compliant for lot coverage nonetheless.
Affirmative finding.

D. Exceptions to Maximum Building Footprint Limit
Not applicable.

3. Exception for Neighborhood Commercial Uses
Not applicable.

4. Miscellaneous Standards

A. Additions to Existing Residential Structures.

No request for an addition to an existing structure shall be considered or imply approval of an additional unit, unless requested specifically on the zoning permit application form.

The application does include an accessory dwelling unit in the detached garage.
Affirmative finding.

B. Accessory Residential Structures, Buildings, and Uses

An accessory structure, building, and/or use as defined in Article 13 and provided under Sec. 5.1.1 and 5.1.2 customarily incidental and subordinate to a principal residential structure, building and/or use, including but not limited to private garages, carriage houses, barns, storage sheds, tennis courts, swimming pools, cabanas for swimming pools and detached fireplaces may be permitted as follows:

A. *Accessory structures or buildings shall meet the dimensional requirement set forth in the district in which they are located pursuant to Sec. 4.4.5(b) of this Article and related requirements in Art 5, Parts 1 and 2;*
Affirmative finding.

B. *Any accessory structure or building that is seventy-five percent (75%) or greater of the ground floor area of the principal structure or building shall be subject to the site plan and design review provisions of Art. 3, Part 4 and the applicable standards of Art 6;*

The garage does not exceed 75% of the ground floor area of the principal structure. Not applicable.

C. *Private garages shall be limited to as many stalls as there are bedrooms in the dwelling to which it is accessory, provided that the ground floor area is less than seventy-five percent (75%) of the ground floor area of the principal structure or building;*

The number of garage stalls does not exceed the bedroom count of the principal structure. **Affirmative finding.**

and

D. The outdoor overnight storage of commercial vehicles not otherwise associated with an approved home occupation or made available for the exclusive use of the residential occupants, or the outdoor storage of more than one unregistered vehicle, shall be prohibited. Any and all vehicles shall be stored in an approved parking space.

No commercial vehicles are proposed. **Affirmative finding as conditioned**.

C. Residential Occupancy Limits.

This has been statutorily struck down by the Vermont Legislature. Not applicable.

D. Additional Unit on lot or within Owner-Occupied Single Detached Dwelling

Where an existing Principal Structure in any Residential Zoning District contains only an owner-occupied Single Detached Dwelling, and an applicant proposes to add a single additional dwelling unit within the Principal Structure or within a detached Secondary Structure on the same lot as the owner-occupied home, the application shall be subject to administrative review and approval according to Sec.3.2.7 (a) 13, and exempt from paying impact fees, according to Sec. 3.3.1., except where otherwise required.

The ADU is proposed on the same lot as an owner-occupied single-family dwelling. The redevelopment of the entire parcel requires DRB review.

The ADU shall be exempt from Impact Fee calculations. **Affirmative finding as conditioned.**

5. Residential Development Bonuses

Not development bonuses are sought. Not applicable.

A. Housing for Older Persons and Individuals with Disabilities Bonus

Not applicable.

B. Residential Conversion Bonus

Not applicable.

C. Limitations on Residential Development Bonuses:

Not applicable.

(e) Effective Date.

The amendments to this Section 4.4.5 that allow for a secondary structure within RL and RM zones, except as may otherwise be allowed by Article 11, are effective November 1, 2024.

Article 5: Citywide General Regulations
Section 5.2.1 Reserved

Section 5.2.2 Required Frontage or Access
86 Lakeview Terrace fronts a public street; however, a curb cut permit will be required from the Department of Public Works. **Affirmative finding as conditioned.**

Section 5.2.3 Lot Coverage Requirements
See Table 4.4.5-1.

Section 5.2.4 Buildable Area Calculation & Steep Slopes Overlay District
The lot is not greater than 2 acres, exempting the lot from Buildable Area review.
86 Lakeview Terrace is not within the Steep Slopes overlay. Not applicable.

Section 5.2.5 Setbacks
See Table 4.4.5-1, above.

Section 5.2.6 Building Height Limits
See Table 4.4.5-2, above.

Section 5.2.7 Density Calculations
See Table 4.4.5-2, above.

Part 3: Non-Conformities
There are no identified non-conformities. **Affirmative finding.**

Section 5.4.8 Historic Buildings and Sites
Not applicable.

Section 5.4.9 Brownfield Remediation
86 Lakeview Terrace is not listed on Vermont Department of Environmental Conservation's list of Brownfield sites. Not applicable.

Section 5.5.2 Outdoor Lighting

Submission materials include residential style wall sconces and switchable recessed white downlights; both acceptable for the proposed installation. **Affirmative finding.**

Section 5.5.4 Tree Removal
There are no specimen trees on this vacant parcel, but overgrown shrubbery on the north and west boundaries. A landscaping plan has been included with submission documents. The applicant has been advised to observe the Clear Site Triangle when planting new trees on the north/west corner of the lot, due to its proximity to the neighbor's driveway.
Affirmative finding as conditioned.

Article 6: Development Review Standards
Part 1: Land Division Design Standards
No land division is proposed. Not applicable.

Part 2: Site plan Design Standards
Sec. 6.2.2 Review Standards

(a)Protection of Important Natural Features:

The landscape, existing terrain and any significant trees and vegetation shall be preserved in their natural state insofar as practicable in keeping with the objectives of the underlying zoning district. Development and site disturbance shall preserve watercourses, wetlands, steep slopes, flood-prone areas, rock outcroppings, wildlife habitat and travel corridors, specimen trees and contiguous stands of forest, and other sensitive ecological and geological areas insofar as practicable in keeping with the objectives of the underlying zoning district. Site plans shall provide suitable buffers from any proposed site improvements, and maintain continuity and contiguousness of greenspace while allowing reasonable development in support of the overall intent of the zoning district. Where any natural features are proposed to be removed or the topography altered, special attention shall be given to replace or mitigate the loss of such features. Any development occurring on parcels containing significant natural areas identified in the city's Open Space Protection Plan shall avoid disturbance to these natural areas and establish appropriate buffers that protect their natural functions.

At present, this is an empty lot with some shrubbery and a gate fronting Lakeview Terrace. A landscaping plan has been provided. Reference is made to Plan L1.2.

(b) Topographical Alterations:

No topographical changes are proposed. Not applicable.

(c) Protection of Important Public Views:

There are no protected public views from or through this parcel. Not applicable.

(d) Protection of Important Cultural Resources:

There are no listed historic structures on this parcel. Not applicable.

(e) Supporting the Use of Renewable Energy Resources:

Where feasible, the site plan should be so designed as to take advantage of the site's inherent potential to utilize sources of renewable energy including direct sunlight, wind, or running water. The site plan should also incorporate site planning and landscaping decisions intended to minimize energy demand such as siting buildings to maximize solar access or the use of deciduous and coniferous trees to create shade and windbreak.

Buildings should, where appropriate within the context of the neighborhood development pattern, maximize their solar exposure by being oriented to maximize natural light and heat gain during winter months, and to minimize casting shadows into ground floor living space of a building on an adjacent property.

The development is subject to Article V: Burlington's Thermal Heating Systems ordinance. The applicant shall demonstrate that the new building will utilize renewable energy thermal energy systems. Applicants utilizing a fossil fuel thermal energy system will be assessed a carbon pollution impact fee on the greenhouse gas emissions from the applicants' building. Reference is made to Section 8-9 of the ordinance for further information.

The broad expanse of roof facing south would provide an excellent location for solar panels, should the applicant develop the property "solar ready." There is nothing within the application to prevent the use of wind, water, solar, geothermal or other renewable energy resource. **Affirmative finding as conditioned.**

(f) Brownfield Sites:

Where a proposed development involves a known or suspected brownfield, the site plan shall indicate areas of known or suspected contamination, and the applicant shall identify completed or planned remediation necessary to support the intended use(s).

86 Lakeview Terrace is not listed on Vermont's Department of Environmental Conservation's list of Brownfields. Not applicable.

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

An Erosion Prevention and Sediment Control Plan, as well as a Stormwater Plan will be required for review and approval by the Stormwater engineer. **Affirmative finding as conditioned.**

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated.

A covered porch on the principal structure will provide an element of shelter for residents from inclement weather. For the same reason, a canopy has been added to the entrance to the ADU. **Affirmative finding.**

(h) Building Location and Orientation:

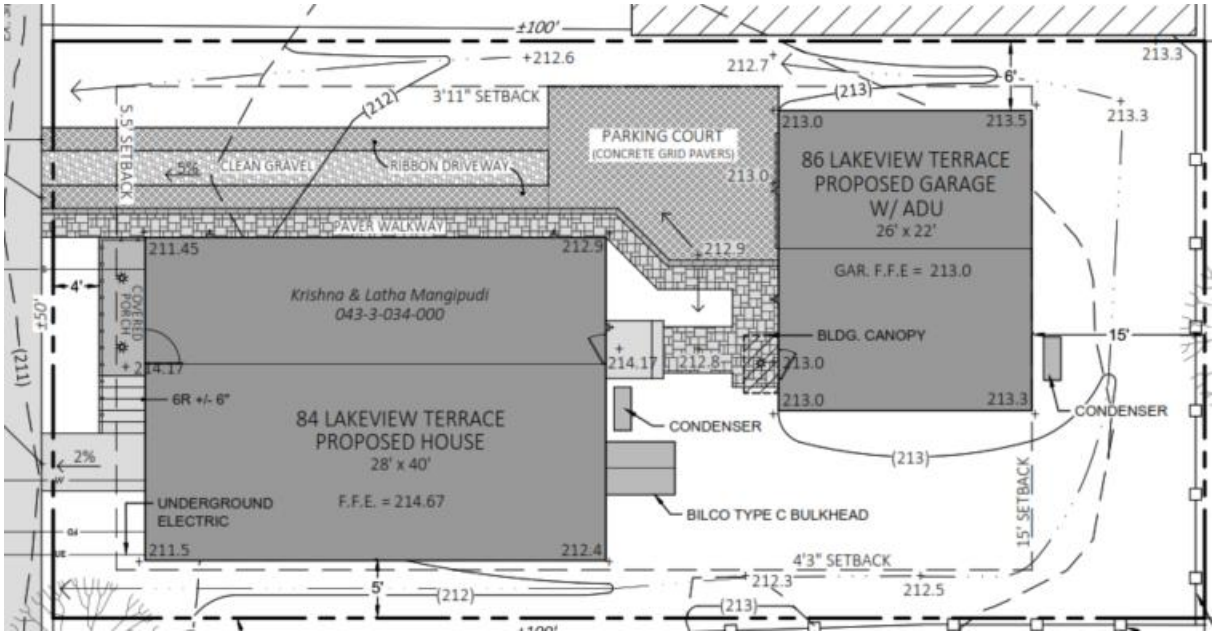
The introduction of new buildings and additions shall be consistent with the intent of the district. New buildings and additions should be aligned with the front façade of neighboring buildings to reinforce the existing "street-edge," or where necessary, located in such a way that complements existing natural features and landscapes.

The new single-family home is compliant with front yard setback requirements, and nicely "fills in the street", aligning with the front façade of neighboring buildings.

Principal buildings shall have their main entrance facing and clearly identifiable from the public street except as allowed in Sec. 5.2.2 and Sec. 11.1.5.

The proposal includes a front porch and easily identifiable front entry door.

In residential areas, accessory buildings shall be located in such a way so as to be secondary and subordinate in scale and design to the principal structure. A parking structure – either attached or detached – shall be setback from the longest street-facing wall of the principal structure and be deferential yet consistent in character and design.



The plan includes a detached garage, set behind the single-family home. It is compatible and deferential to the principal structure. **Affirmative finding.**

(i)Vehicular Access:

Curb cuts shall be arranged and limited in number to reduce congestion and improve traffic safety. A secondary access point from side roads is encouraged where possible to improve traffic flow and safety along major streets. The width and radius of curb cuts should be kept to the minimum width necessary, and sight triangles and sufficient turnarounds for vehicles shall be provided to reduce the potential for accidents at points of egress.

There is currently no curb cut for 86 Lakeview Terrace. A curb cut permit will be required from DPW Public Works.

Whether commercial or residential, shared driveways are encouraged, where possible and appropriate.

The driveway is not proposed to be shared. **Affirmative finding as conditioned.**

(j) Pedestrian Access:

Pedestrians shall be provided one or more direct and unobstructed paths between a public sidewalk and the primary building entrance. Well defined pedestrian routes shall be provided through parking areas to primary building access points and be designed to provide a physical separation between vehicles and pedestrians in a manner that minimizes conflicts and improves safety. Where sidewalks and driveways meet, the sidewalk shall be clearly marked by differentiated ground materials and/or pavement markings.

A sidewalk is proposed between the public sidewalk and the residence, and secondary paver walkway extends from the public sidewalk to the ADU. **Affirmative finding.**

(k) Accessibility for the Handicapped:

Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled.

ADA access is not required of single-family homes. Vermont "Visitability" standards are encouraged.

The building official has the jurisdiction of enforcement of ADA standards.
Affirmative finding.

(l) Parking and Circulation:

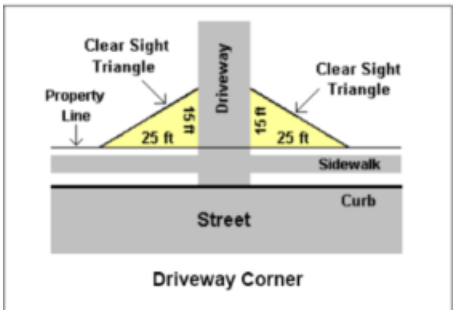
To the extent possible, parking should be placed at the side or rear of the lot and shall be screened from view from surrounding properties and adjacent public rights of ways. Parking areas of more than 20 spaces should be broken into smaller areas separated by landscaping.

Attempts to link adjacent parking lots or provide shared parking areas which can serve neighboring properties simultaneously shall be strongly encouraged.

Parking shall be laid out to provide ease in maneuvering of vehicles and so that vehicles do not have to back out onto city streets. Dimensions of spaces shall at a minimum meet the requirements as provided in Article 8. The perimeter of all parking areas shall be designed with anchored curb stops, landscaping, or other such physical barriers to prevent vehicles from encroaching into adjacent green spaces.

Surface parking and maneuvering areas should be shaded in an effort to reduce their effect on the local microclimate, air quality, and stormwater runoff with an objective of shading at least 30% of the parking lot. Shading should be distributed throughout the parking area to the greatest extent practical, including within the interior depending on the configuration.

The planting plan includes 5' tall arborvitae north of the driveway. No plantings within 25' of the driveway entrance (and 15' up the driveway) may exceed 3' in height to allow for clear visibility of pedestrians and bicyclists.



All parking areas shall provide a physical separation between moving and parked vehicles and pedestrians in a manner that minimizes conflicts and gives pedestrians a safe and unobstructed route to building entrance(s) or a public sidewalk.

A separate walkway from the public sidewalk to the ADU has been included in the plan.

Where bicycle parking is provided, access shall be provided along vehicular driveways or separate paths, with clearly marked signs indicating the location of parking areas. Where bicycle parking is located proximate to a building entrance, all shared walkways shall be of sufficient width to separate bicycles and pedestrians, and be clearly marked to avoid conflicts. All bicycle parking areas shall link directly to a pedestrian route to a building entrance. All bicycle parking shall be in conformance with applicable design & construction details as provided by the dept. of public works.

Long Term bike parking is required per the following standard: Long Term Spaces; 1 per 2 bedrooms. With 3 bedrooms in the principal structure and a studio in the rear, 2 long term bike parking spaces shall be identified within the plan. **Affirmative finding as conditioned.**

(m) Landscaping, Fences and Retaining Walls:

Landscaping shall be used to beautify the development site and to provide specific functions and benefits to the uses and buildings on the site. These include but are not limited to stormwater retention and erosion control, winter windbreaks and summer shade, recreational and habitat corridors, buffers and screening of parking areas, and creating privacy for and from adjacent property.

Existing trees shall be retained and incorporated into a landscape plan to the extent possible, and existing trees to be retained shall be protected during construction in

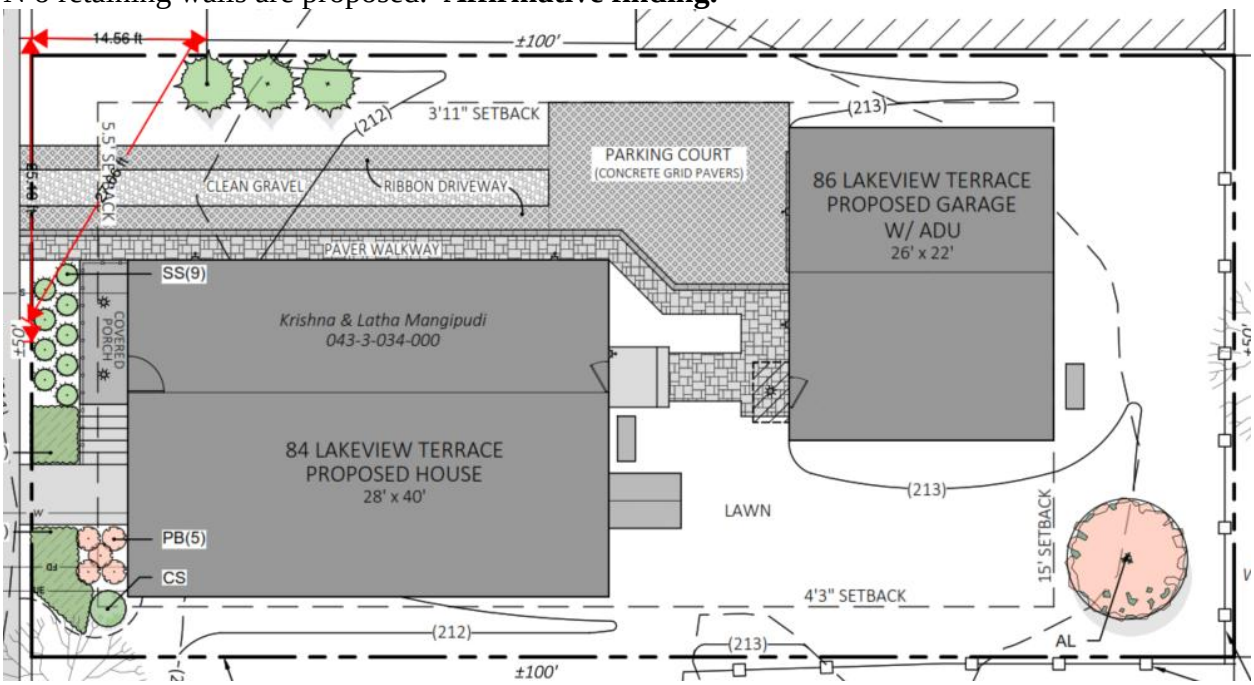
accordance with specifications provided by the city arborist. The selection of plant materials and planting sites should create a sustainable landscape, and consideration shall be given to factors such as hardiness, salt tolerance, disease resistance, invasiveness, root and canopy spread, underground and overhead utilities, soil conditions, and microclimates. The use of native plant materials is encouraged, and the use of plants considered invasive by VT Agency of Agriculture shall be prohibited.

No street trees are proposed in the ROW. See previous comment about allowable height of landscaping in proximity to a driveway.

Fences may be placed within the required setback along a property line, but shall be setback sufficiently to provide for the maintenance of both sides of the fence without entering onto the adjacent property and shall present a finished side to the adjoining property and public street. Fences placed within a clear sight triangle shall adhere to the standards of Sec. 5.2.6 (d). Styles, materials, and dimensions of the proposed fence shall be compatible with the context of the neighborhood and the use of the property.

There is an existing fence on the south and east property line.

N o retaining walls are proposed. **Affirmative finding.**



(n) Public Plazas and Open Space:

Not applicable.

(o)Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

The application includes recessed downlights (assumed to be for entrance porches), and wall sconces. All are residential in nature. Their specific installation locations shall be

identified on the site plan/building elevations as appropriate. **Affirmative finding as conditioned.**

(p) Integrate infrastructure into the design:

Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be place underground whenever practicable. Trash and recycling bins and dumpsters shall be located, within preferably, or behind buildings, enclosed on all four (4) sides to prevent blowing trash, and screened from public view.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

The site plan includes the location and number of condensing units; both of which are hidden by buildings. The location of mailboxes, trash and recycling containers, or any mechanical equipment shall be defined on building elevations or site plan as appropriate.

Electrical connection shall be undergrounded. **Affirmative finding as conditioned.**

Part 3: Architectural Design Standards
Sec. 6.3.2 Review Standards

(a)Relate development to its environment:

Proposed buildings and additions shall be appropriately scaled and proportioned for their function and with respect to the purpose of the zoning district. They should integrate harmoniously into the topography, and to the use, scale, and architectural details of existing buildings in the vicinity; however, such consideration shall not require building height to be more limited than otherwise allowed within an applicable zoning district or overlay zone per Article 4.

The following shall be considered:

1. Massing, Height and Scale:

While architectural styles or materials may vary within a streetscape, proposed development should maintain an overall scale similar to that of surrounding buildings, or provide a sensitive transition, where appropriate, to development of a dissimilar scale.

In low and medium residential districts, the height and massing of existing residential buildings should be carefully considered when evaluating the compatibility of

additions and infill development; however, no modifications by the DRB shall be made to projects which otherwise limit the allowable Principal Structure footprint, height, and number of units per building otherwise permitted by Tables 4.4.5-1 and 4.4.5-2.

The proposal includes a 2 ½ story principal structure, with a varying roof pitch that is duplicated on the rear building. In scale and arrangement, it is compatible with existing residential structures of the neighborhood.

Buildings should maintain consistent massing and perceived building height at the street level, regardless of the overall bulk or height of the building. Buildings should maintain a relationship to the human scale through the use of architectural elements, variations of proportions and materials, and surface articulations. Large expanses of undifferentiated building wall along the public street or sidewalk shall be avoided. The apparent mass and scale of buildings shall be broken into smaller parts by articulating separate volumes reflecting existing patterns in the streetscape, and should be proportioned to appear more vertical than horizontal in order to avoid monotonous repetition. (See also (d) Provide an active and inviting street edge below.)

The addition of an entry porch, paired with a recessed 2nd story porch provide a point/counterpoint to the overall arrangement. The shed roof of the porch repeats the angled roofline, energizing the overall scheme. **Affirmative finding.**

2. Roofs and Rooflines.

New buildings should incorporate predominant roof forms and pitches within the existing neighborhood and appropriate to the context. Large expanses of undifferentiated roof forms shall be avoided. This can be achieved by incorporating dormers or some variation in the roof form to lessen the impact of the massing against the sky. While flat roofs can be a reasonable architectural solution, pitched roof forms and architectural elements that enhance the city's skyline are strongly encouraged. Roof eaves, parapets, and cornices should be articulated as an architectural detail. Roof-top mechanicals shall be screened from view from the public street, and should be incorporated into and hidden within the roof structure whenever possible.

As noted, the off-set to the roof pitch provides a dynamism to the scheme, yet has a strong reference to neighboring structures with traditional pitched gable roofs. No roof-top mechanicals are included in the submission. Condensing units are placed behind each of the structures.

Solar panels, light colored ballast or roof membranes, split roof clerestories, planted or "green" roof technologies (with a clearly articulated maintenance plan) and "gray water" collection are encouraged. Active rooftop uses are also encouraged to add to the visual complexity and activity of the city's skyline, and afford public access to otherwise unseen views of the city and surrounding landscape.

The broad southern exposure of both roofs would readily avail themselves to a solar installation. **Affirmative finding.**

3. Building Openings

Principal entrances shall be clearly defined and readily identifiable from a public street whether by a door, a canopy, porch, or other prominent architectural or landscape features. People with physical challenges should be able to use the same entrance as everyone-else and shall be provided an "accessible route" to the building. Attention shall also be accorded to design features which provide protection from the affects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage.

The front entry porch clearly defines the building entrance. A canopy cover has been included at the entrance to the ADU.

Window openings shall maintain consistent patterns and proportions appropriate to the use. The window pattern should add variety and interest to the architecture, and be proportioned to appear more vertical than horizontal.

Window openings are arranged in a consistent pattern, and proportioned appropriately to the use. **Affirmative finding.**

(b) Protection of Important Architectural Resources:

Not applicable.

(c) Protection of Important Public Views:

There are no protected public views from or through this site. Not applicable.

(d) Provide an active and inviting street edge:

Building facades shall be varied along the street edge by the integration of architectural features, building materials, or physical step-backs of the façade along its length. Large expanses of undifferentiated building wall shall be avoided. This may be accomplished by incorporating fenestration patterns, bays, horizontal and vertical façade articulations, the rhythm of openings and prominent architectural features such as porches, patios, bays, articulated bases, stepping back an elevation relative to surrounding structures, and other street level details. The use of traditional facade components such as parapet caps, cornices, storefronts, awnings, canopies, transoms, kick plates, and recessed entries are highly encouraged.

The plan utilizes references to historic residential architecture with playful geometry to create a contemporary architectural language for these new dwellings. Simple yet pleasant, the façade both references other older homes on the street while inviting interaction with the "new kid". The recessed 2nd story porch, the extruded shed roof on the porch, and the change in roof plane are all successful techniques to vary wall planes and create interest. **Affirmative finding.**

(e) Quality of materials:

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts.

Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

The sheathing material is a fiber cement product, trim is Boral; windows are fiberglass and the roof shingles are asphalt. All are considered acceptable for new construction. **Affirmative finding.**

(f) Reduce energy utilization:

New structures should incorporate the best available technologies and materials in order to maximize energy efficient design. All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

New structures should take advantage of solar access where available, and shall undertake efforts to reduce the impacts of shadows cast on adjacent buildings where practicable, in order to provide opportunities for the use of active and passive solar utilization.

All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances. **Affirmative finding as conditioned.**

(g)Make advertising features complementary to the site:

Not applicable.

(h) Integrate infrastructure into the building design:

See Section 6.2.2 (p), above.

(i) Make spaces secure and safe:

Spaces shall be designed to facilitate building evacuation, accessibility by fire, police or other emergency personnel and equipment, and, to the extent feasible, provide for adequate and secure visibility for persons using and observing such spaces. Building entrances/entry points shall be visible and adequately lit, and intercom systems for multi-family housing should be incorporated where possible, to maximize personal safety.

Street number identification has been assigned by the Fire Marshal's office. **Affirmative finding.**

Article 8: Parking

Table 8.1.9 Maximum On-Site Parking Spaces
The east side of Lakeview Terrace is Multi-Modal Mixed Use Parking District. The maximum parking allowance for single family detached and duplex is 2 parking spaces. There are 2 bays in the garage.
Per Section **8.1.9 (a) 6**., parking for residential uses within driveways compliant with the standards of Section 8.1.12 (b) (Front Yard Parking) are exempt from Maximum Parking standards. **Affirmative finding**.

Part 2: Bicycle Parking
Long Term biking parking requirements are 1 bike parking space for every 2 bedrooms. The applicant shall define the location of 2 bike parking spaces prior to release of the zoning permit. **Affirmative finding as conditioned.**

II. Conditions of Approval

1. A curb cut permit will be required from the Department of Public Works.
2. This project is subject to Burlington's Thermal Heating Ordinance.
3. Plantings shall observe the Clear Site Triangle.
4. With 4 bedrooms proposed, the plan shall define the location of **2 long term bike parking** spaces. (1 / 2 bedrooms.)
5. The location of mailboxes, trash and recycling containers, any mechanical equipment and light fixtures shall be defined on building elevations or site plan as appropriate.
6. Any electrical connection shall be undergrounded, unless otherwise recommended by Burlington Electric Department.
7. **Impact fees may be due at least 7 days prior to issuance of a certificate of occupancy**, as determined by the Water Resources Division and the Technical Services Division of the Department of Public Works based on water and wastewater flows and peak hour vehicle trip ends, respectively.
8. All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.
9. Vermont Residential Building Energy Standards apply to this project. Compliance with the standards is the Owner's responsibility. Prior to requesting a Certificate of Occupancy, a copy of a completed Vermont Residential Building Energy Standards Certificate shall be submitted with a Certificate of Occupancy (final or temporary) request, and filed in the Land Records located at the Clerk/Treasurers office in City Hall (149 Church Street). For more information, see http://publicservice.vermont.gov/energy_efficiency
10. A letter of adequate water and sewer capacity shall be required by Burlington's Water Resource Division **prior to release of the zoning permit**.
11. An Erosion Prevention and Sediment Control Plan shall be provided for review and approval by the Stormwater Engineer **prior to release of the zoning permit**.
12. A state waste water permit is required; it is the applicant's obligation to secure.
13. 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.

OWNER/APPLICANT:

Krishna & Latha Mangipudi
86 Lakeview Terrace
Burlington, Vermont 05401

PROPERTY INFORMATION:

Adress: 86 Lakeview Terrace, Burlington, VT
Parcel ID: 043-3-034-000
Span:114-035-14258
Area: 0.11 Acres (5,000 s.f.)
Zoning: Residential - Medium Intensity (RM)

SETBACKS & COVERAGE:

FRONT YARD SETBACK: 5'6"

NORTH SIDE YARD SETBACK: 3'11"

SOUTH SIDE YARD SETBACK: 4'3'

REAR YARD SETBACK: 15'

MAX LOT COVERAGE: 55%

NOTE:
T.J. BOYLE ASSOCIATES DID NOT PERFORM A SURVEY ON THIS PROJECT. ALL LOCATIONS OF EXISTING INFRASTRUCTURE, TOPOGRAPHY, AND VEGETATION SHOWN ARE APPROXIMATE, AND WERE DERIVED FROM A COMBINATION OF OPEN GIS DATA, LiDAR, AND AERIAL IMAGERY.

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

REVISION	DATE
revised per staff comments	2/26/2026

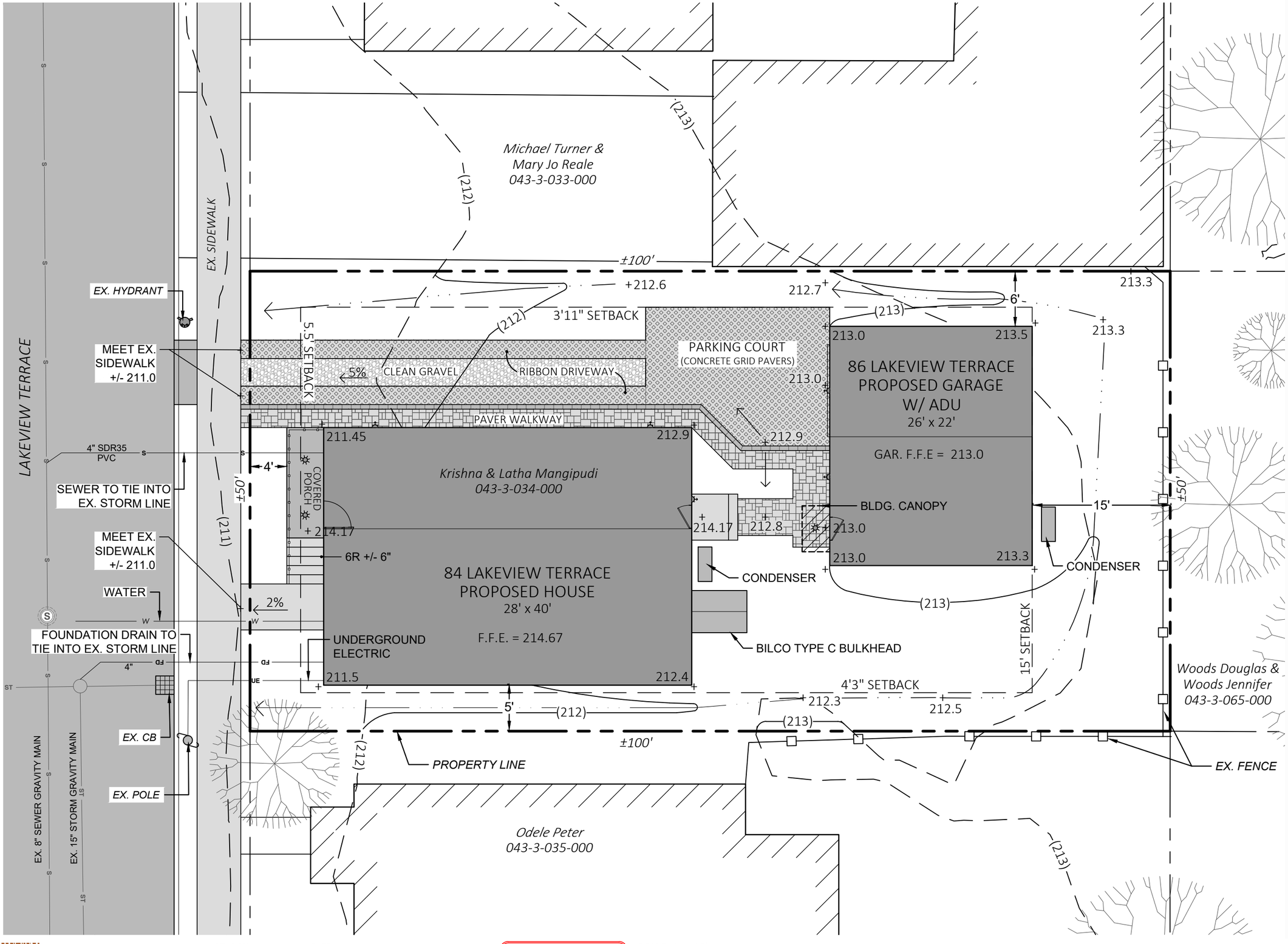
ISSUED FOR REVIEW
02/26/2026

SCALE: 1" = 10'
0 5' 10' 20'

2/17/2026
BURLINGTON, VERMONT

86 LAKEVIEW TERRACE
EXISTING CONDITIONS PLAN

L1.0



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COVERAGE CALCULATION

Existing:

Lot Size (50'x100')	5,000 sqft.	

Existing Coverage (0/5,000) x 100 = **0%**

Proposed:

House (28'x40')	1120	sqft.
Garage (26'x22')	572	sqft.
Bulkhead	28	sqft.
Condensers	12	sqft.
Parking Court	264	sqft.
Back Stairs	25	sqft.
Front Stairs	20	sqft.
Total	2021	sqft.

Proposed Coverage (2021/5000)x100 = **40.4%**

10% Lot Coverage Exemption:

Front Porch (4'x12')	48	sqft.
Driveway Ribbons	172	sqft.
Paver Walkway	220	sqft.
Front Walk	40	sqft.
Total	480	sqft.

Exempt Coverage (480/5,000) x 100 = **9.6%**

LIGHTING LEGEND

SYMBOL	QTY	TYPE
☼	(3)	CANOPY LIGHT
⏃	(5)	WALL LIGHT

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revised per staff comments	2/26/2026
revised per staff comments	3/26/2026

ISSUED FOR REVIEW
03/26/2026

SCALE: 1" = 10'
0 5' 10' 20'

2/17/2026
BURLINGTON, VERMONT

86 LAKEVIEW TERRACE
PROPOSED SITE PLAN

L1.1

Planting Schedule

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes
TREES & SHRUBS						
1	AL	AMELANCHIER leavis	Allegheny Serviceberry	1.5" cal.	B&B	multi-stemmed (Clump)
1	CS	CORNUS sericea 'Arctic Fire'	Arctic Fire Red-Osier Dogwood	24"	#5 Cont.	
3	TO	THUJA occidentalis 'Art Boe'	North Pole Arborvitae	5' Ht.	B&B	
PERRENIALS						
5	NF	NEPETA x faassenii 'Blue Wonder'	Blue Wonder Catmint	Clump	#2 Cont.	
5	PB	POLYGONATUM biflorum	Solomon's Seal	Clump	#2 Cont.	
7	RF	RUDBECKIA fulgida 'Goldstrum'	Black-Eyed Susan	Clump	#2 Cont.	
9	SS	SCHIZACHYRIUM scoparium 'Prarie Blues'	Little Bluestem	Clump	#2 Cont.	

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MAX LOT COVERAGE: 55%

LAKEVIEW TERRACE

EX. SIDEWALK

EX. HYDRANT

Michael Turner &
Mary Jo Reale
043-3-033-000

(213)

(212)

±100'

TO(3)

3'11" SETBACK

5.5' SETBACK

(212)

(213)

(214)

CLEAN GRAVEL

RIBBON DRIVEWAY

PARKING COURT
(CONCRETE GRID PAVERS)

86 LAKEVIEW TERRACE
PROPOSED GARAGE
W/ ADU
26' x 22'

PAVER WALKWAY

SS(9)

Krishna & Latha Mangipudi
043-3-034-000

±50'

(211)

COVERED PORCH

NF(5)

84 LAKEVIEW TERRACE
PROPOSED HOUSE
28' x 40'

LAWN

(213)

15' SETBACK

±50'

RF(7)

PB(5)

CS

4'3" SETBACK

Woods Douglas &
Woods Jennifer
043-3-065-000

AL

(212)

(213)

EX. CB

±100'

PROPERTY LINE

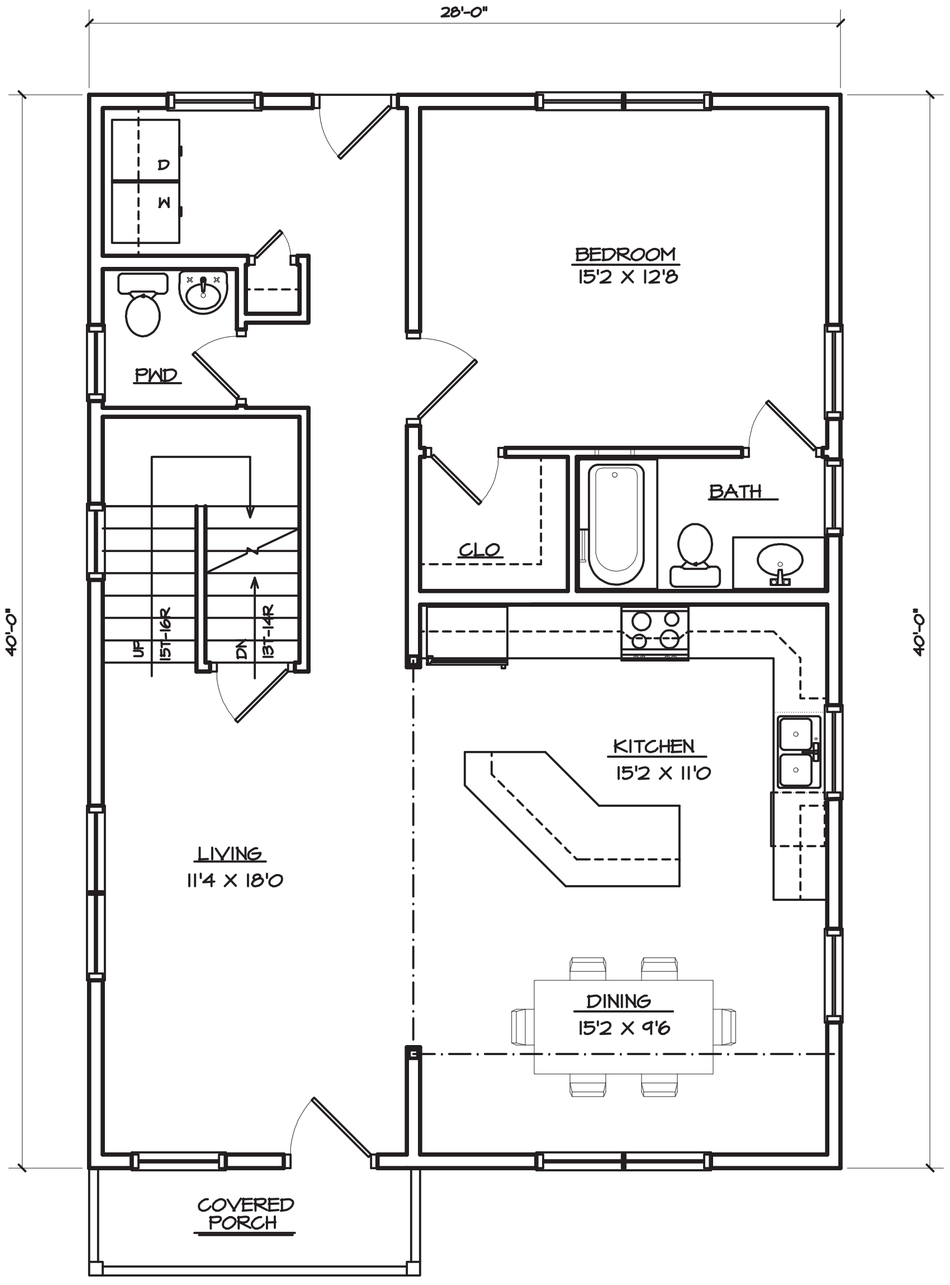
EX. FENCE

EX. POLE

Odele Peter
043-3-035-000

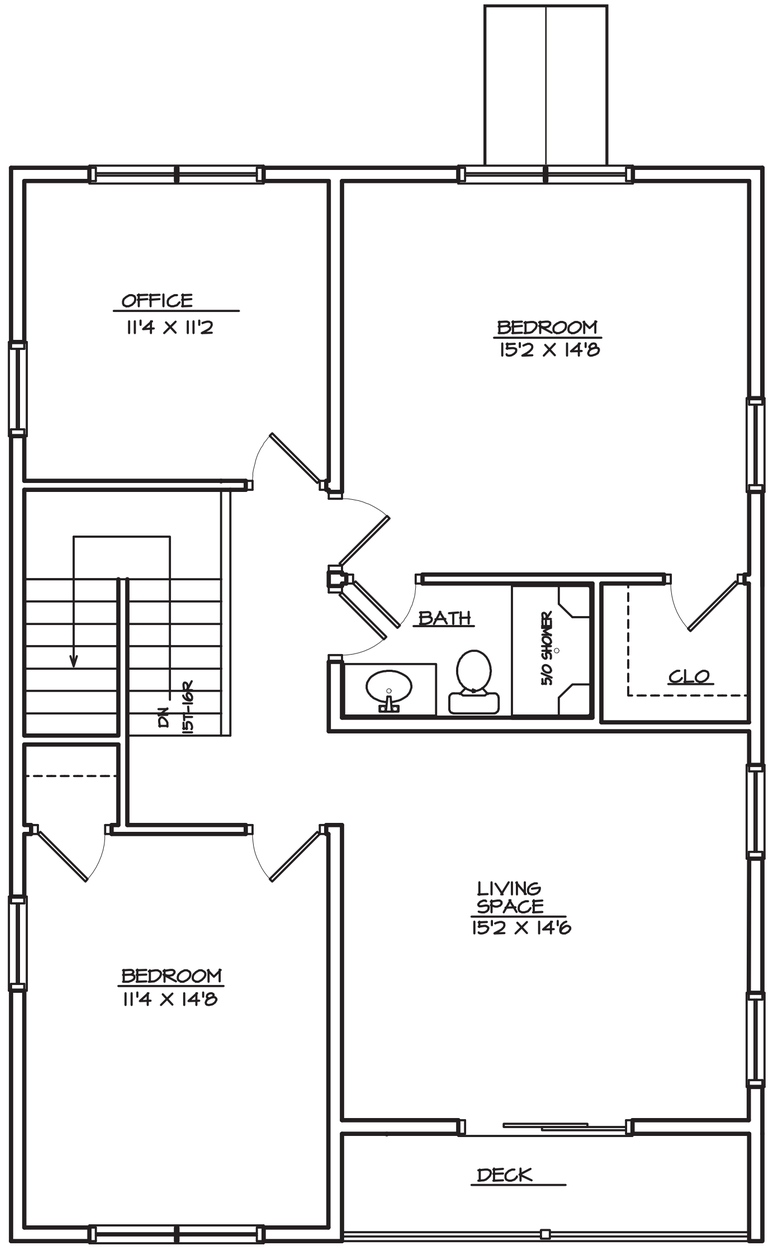
(213)

NOTE:
T.J. BOYLE ASSOCIATES DID NOT PERFORM A SURVEY ON THIS PROJECT. ALL LOCATIONS OF EXISTING INFRASTRUCTURE, TOPOGRAPHY, AND VEGETATION SHOWN ARE APPROXIMATE, AND WERE DERIVED FROM A COMBINATION OF OPEN GIS DATA, LiDAR, AND AERIAL IMAGERY.



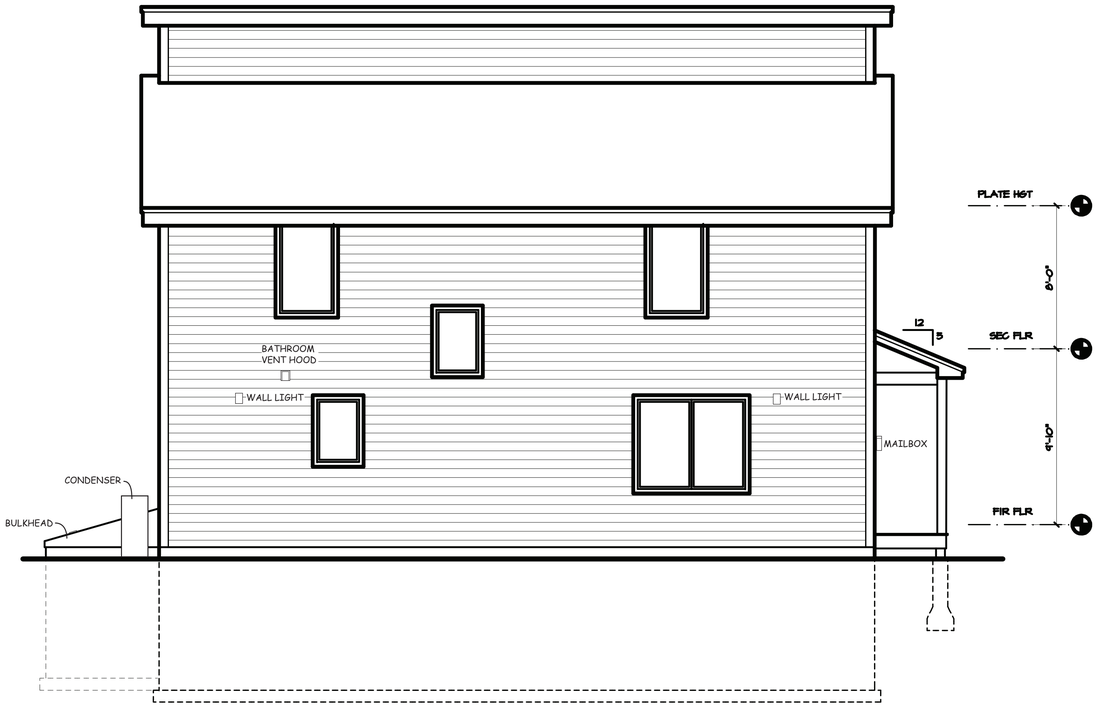
FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

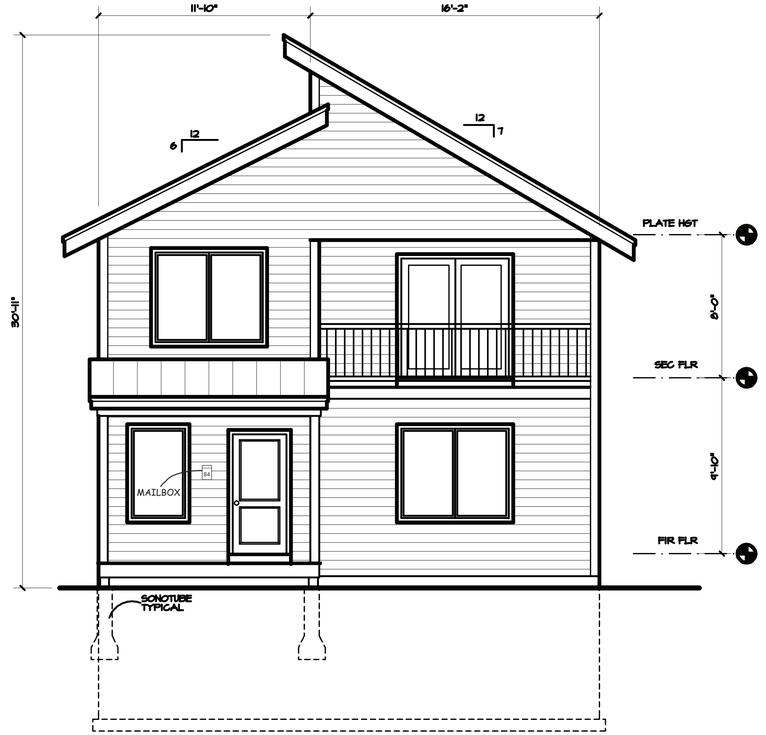


SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

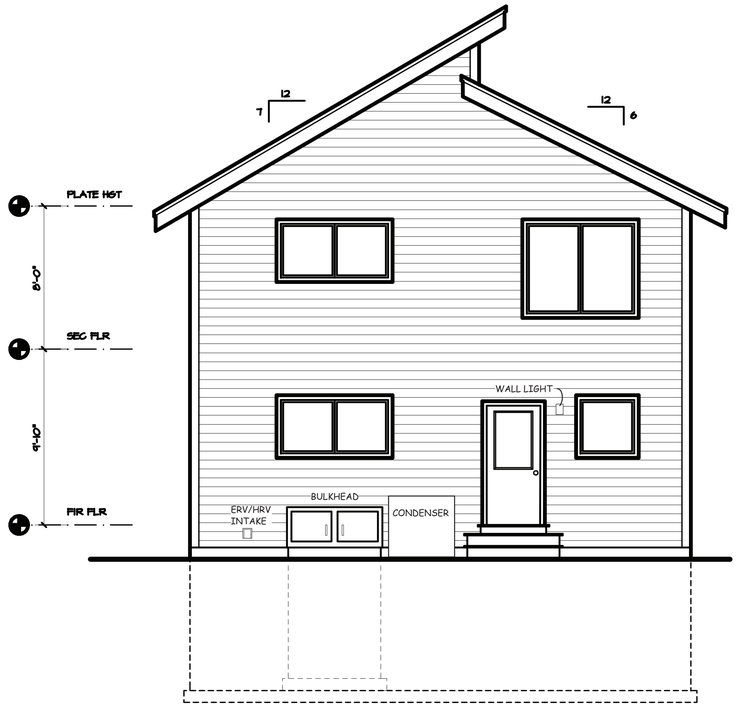


LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

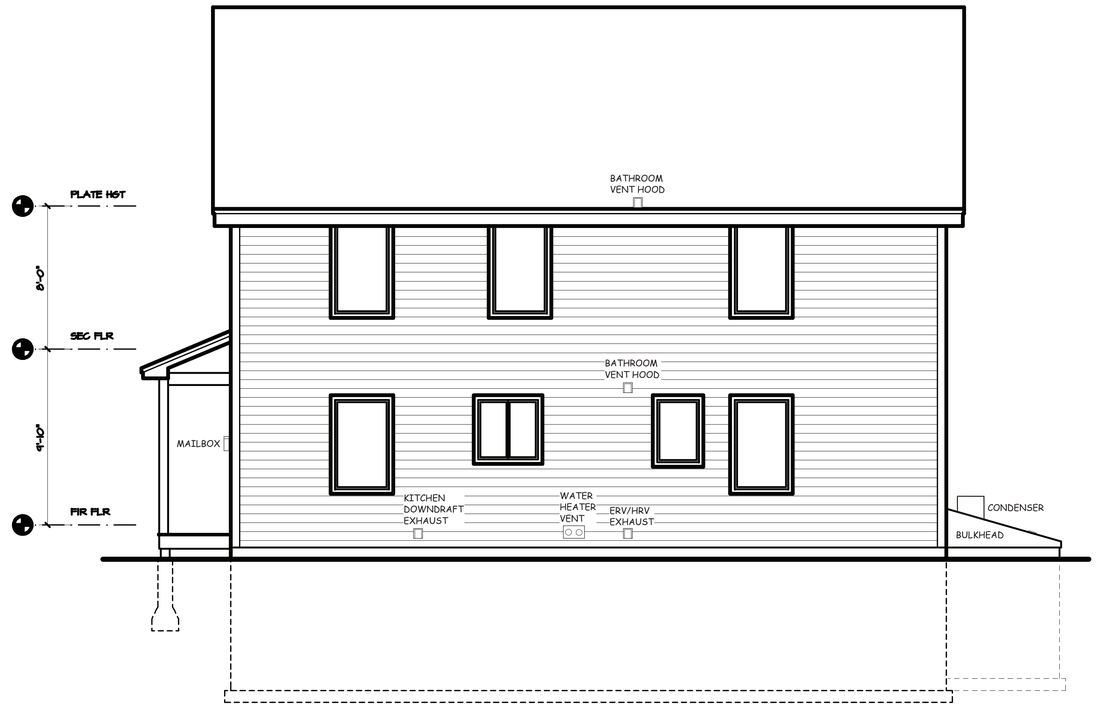


FRONT ELEVATION
SCALE: 1/4" = 1'-0"

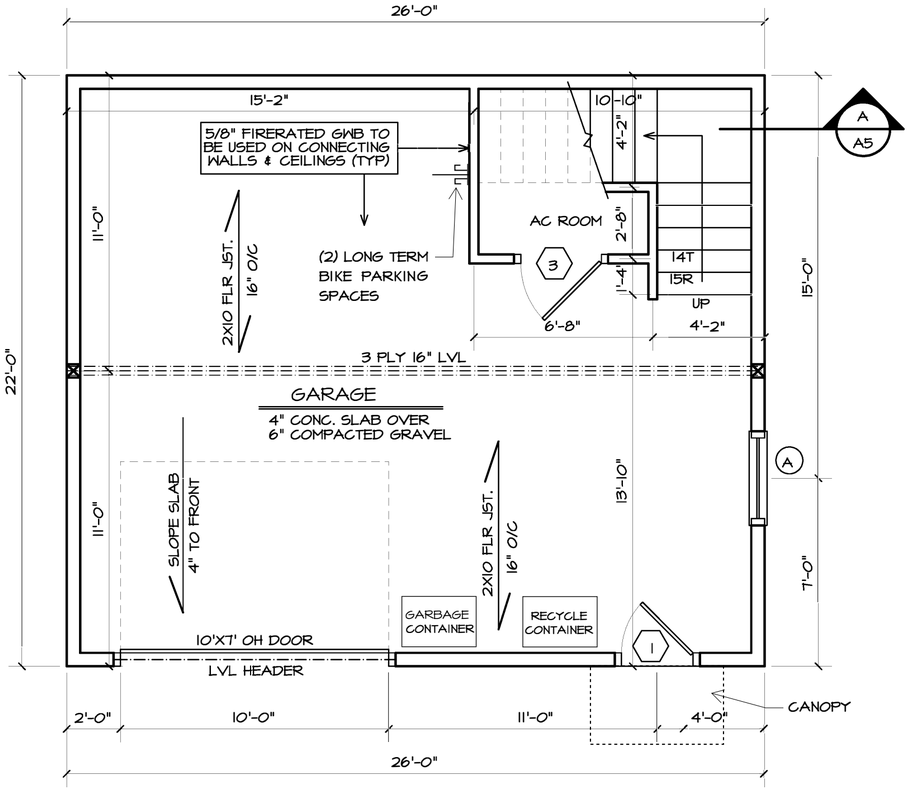
Alternative Designs Inc	FIRST FLOOR	1120 S.F.
	SECOND FLOOR	1056 S.F.
26-004	TOTAL	2176 S.F.



REAR ELEVATION
SCALE: 1/4" = 1'-0"

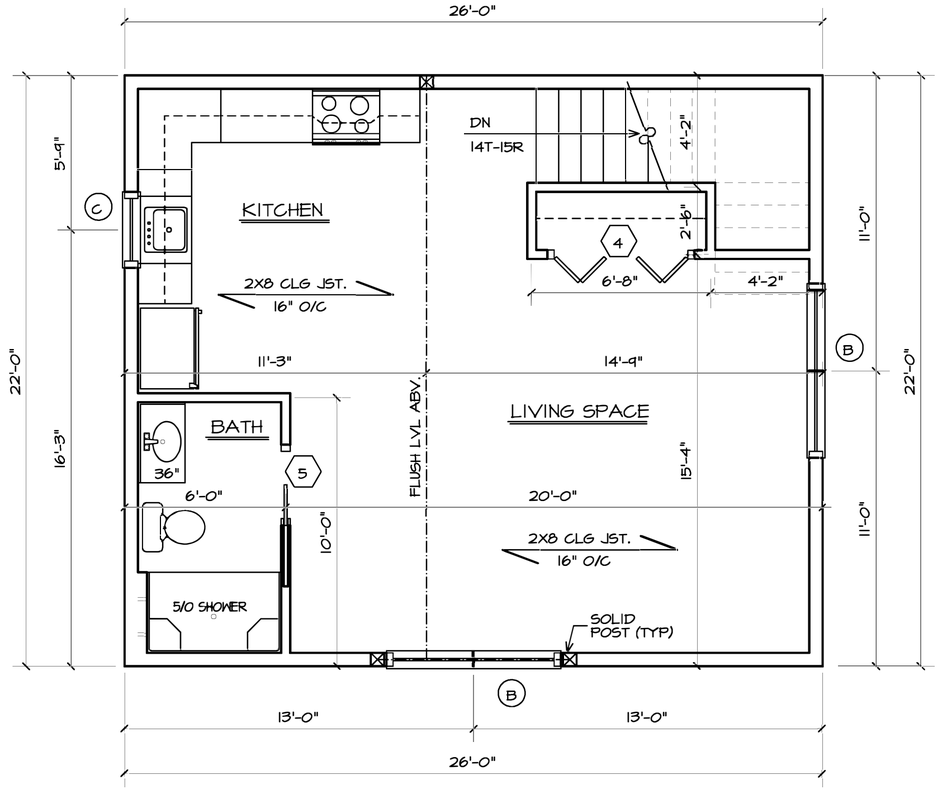


RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



1 / A4 FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"



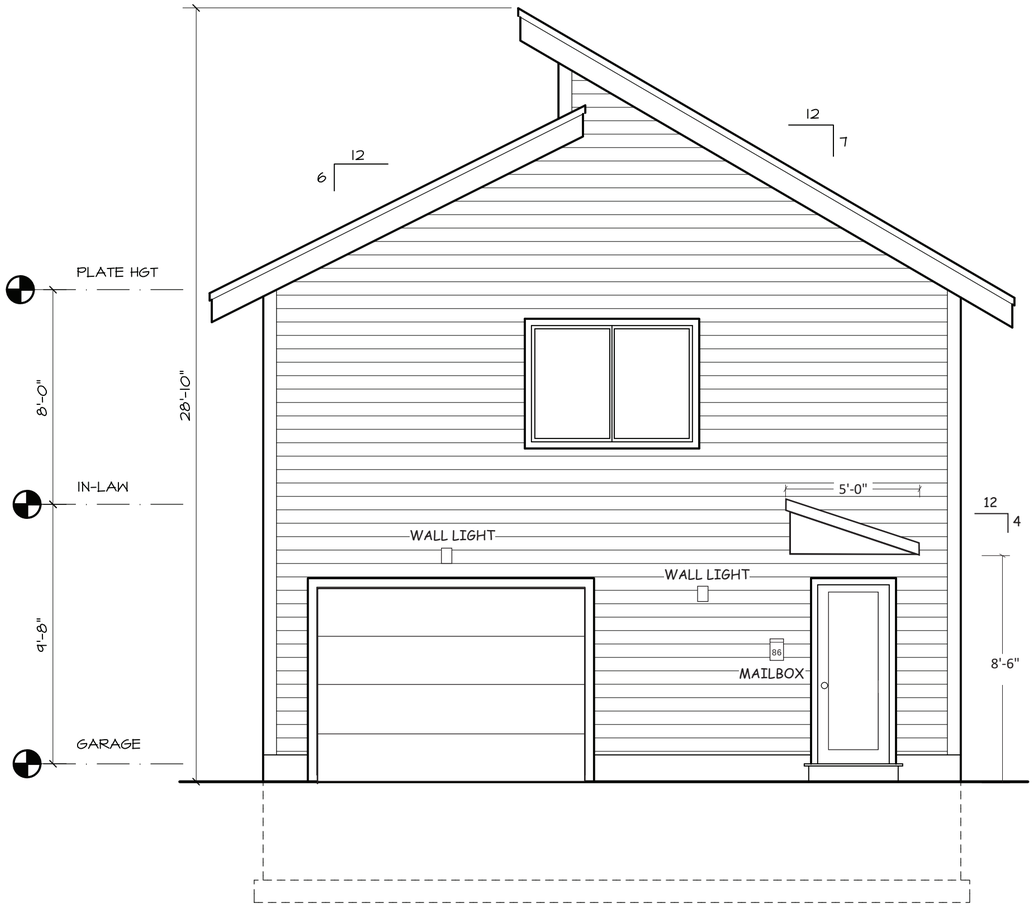
2 / A4 SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

Alternative Designs Inc.

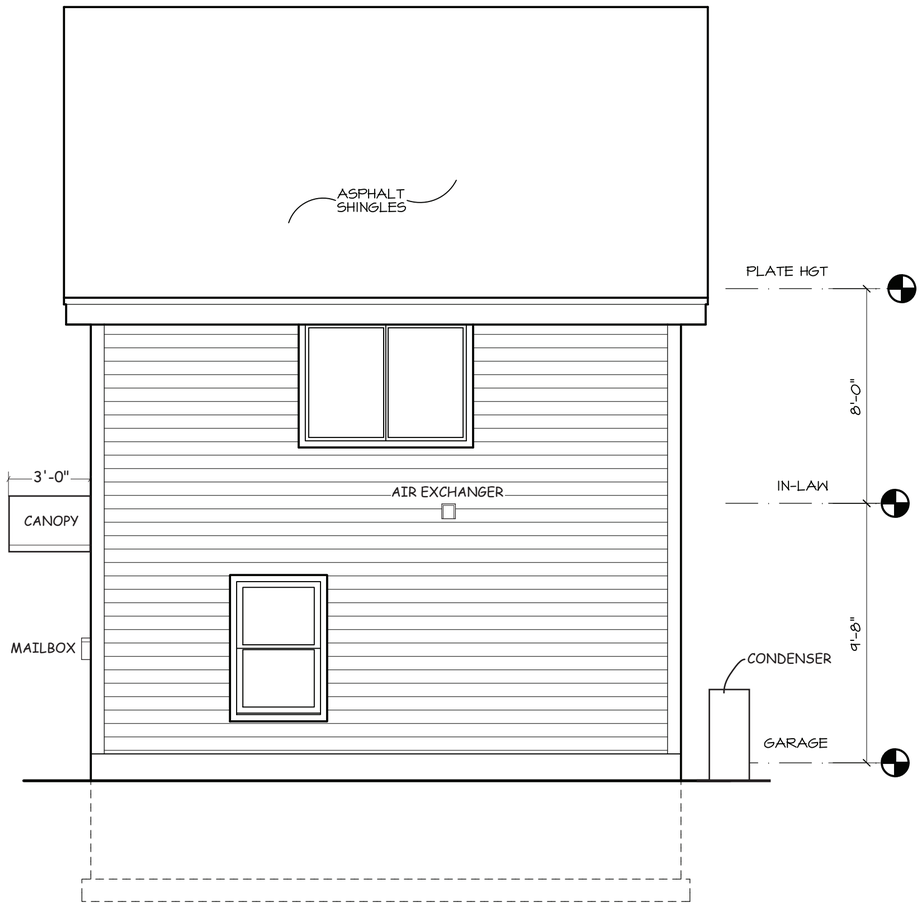
26-004-G

FIRST FLOOR (INCLUDING GARAGE)	572	S.F.
SECOND FLOOR	572	S.F.
TOTAL	1144	S.F.



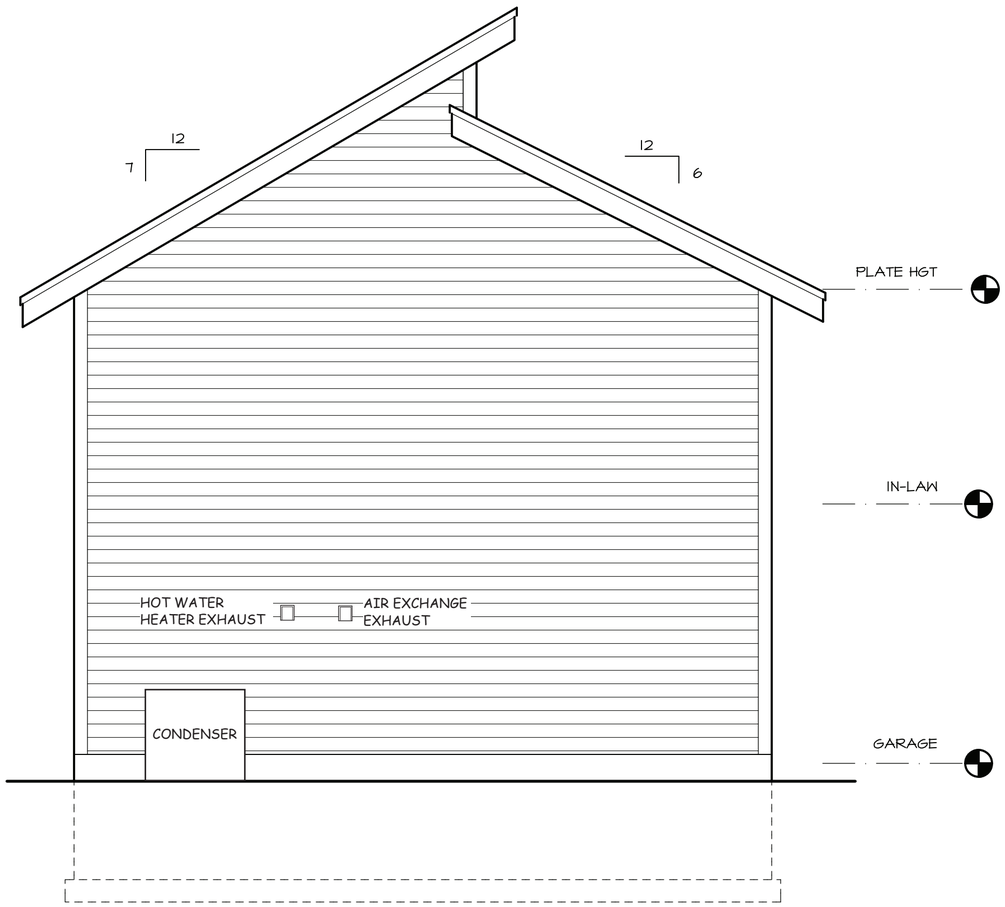
1 / A1 FRONT ELEVATION

SCALE: 1/4" = 1'-0"



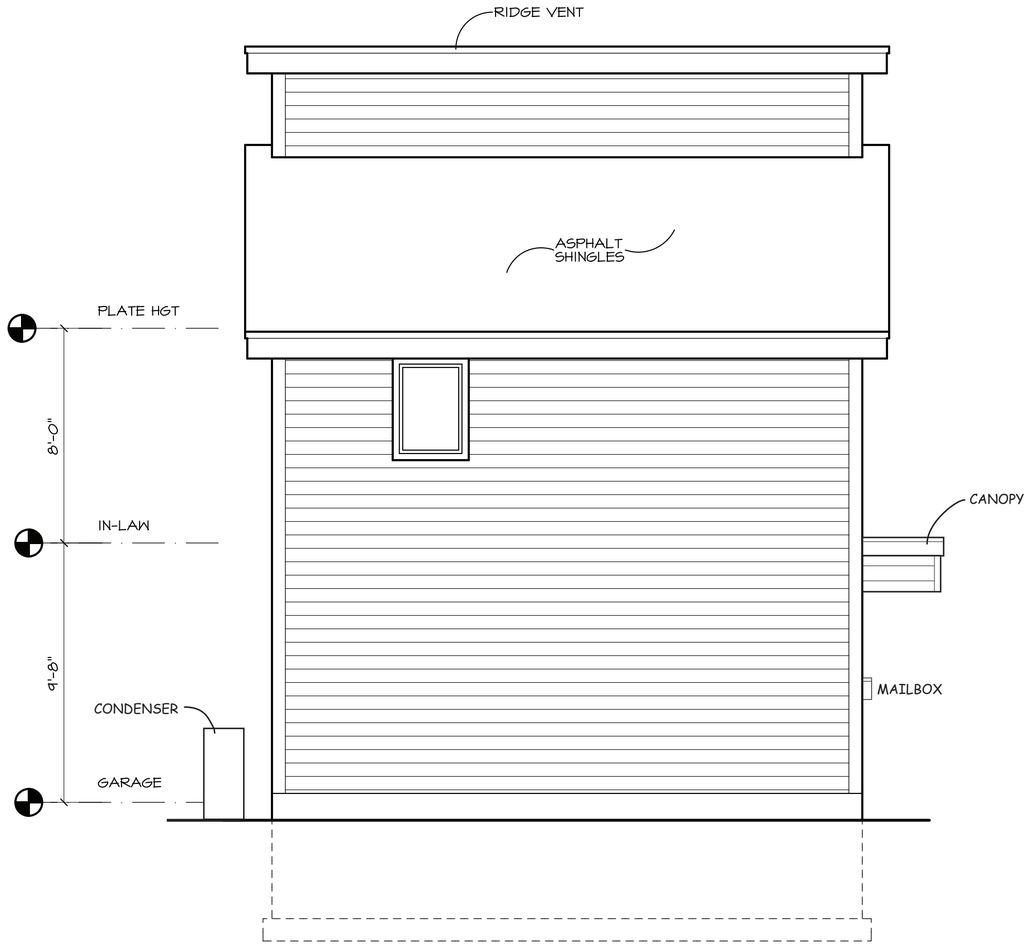
2 / A1 RIGHT SIDE ELEVATION

SCALE: 1/4" = 1'-0"



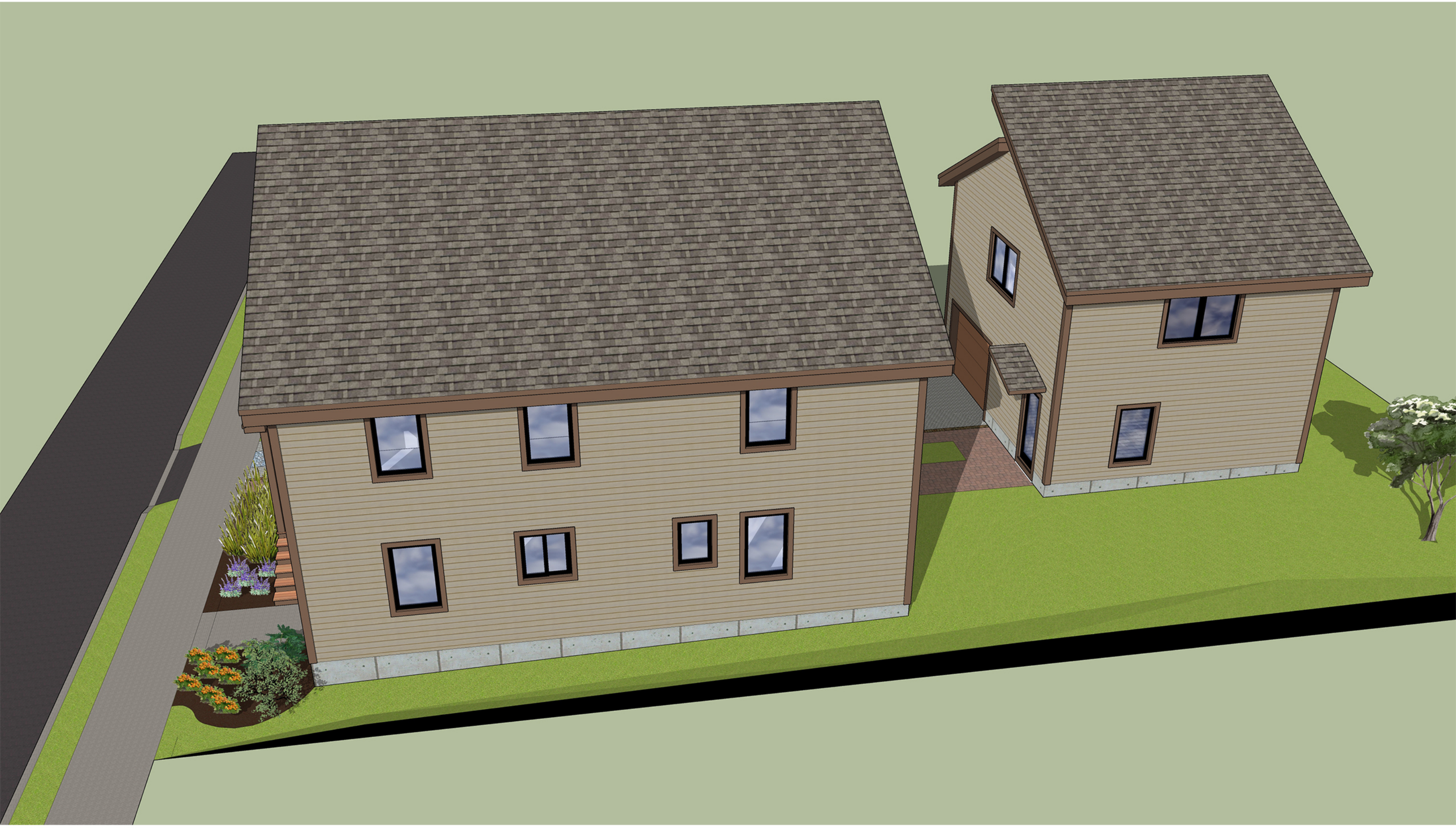
1 A3 REAR ELEVATION

SCALE: 1/4" = 1'-0"



2 A3 LEFT SIDE ELEVATION

SCALE: 1/4" = 1'-0"



MARVIN
ELEVATE®
COLLECTION

MARVIN®

BEAUTY MEETS DURABILITY

CATALOG

MARVIN
ELEVATE®
COLLECTION

The Perfect Balance of Beauty and Strength

Balancing beautiful design with superior strength, the Marvin Elevate collection delivers style in any climate. Elevate features warm wood interiors that can blend in or stand out with Ultrex® fiberglass exteriors for lasting durability. The collection offers a range of carefully selected features and options, making it as versatile as it is elegant.

LONG-LASTING STRENGTH + BEAUTY

DURABLE FINISHES

CURATED CHOICES

CASEMENT WINDOWS
Gunmetal

Ultrex Fiberglass Exteriors

Ultrex® fiberglass is a unique, proprietary material that significantly outlasts and outperforms vinyl and vinyl/wood composite materials while offering unmatched durability and timeless style. This state-of-the-art material was developed by Marvin and is featured on the exteriors of the Marvin Elevate® collection.

Marvin uses Ultrex fiberglass because the material you choose for your windows matters. Ultrex is strong, stable, has a durable acrylic finish, and is energy efficient.

Strength

The strength of Ultrex fiberglass translates into long-term ease of operation, minimal maintenance, and superior performance.

Stability

By expanding and contracting at nearly the same rate as glass, Marvin windows and doors made with Ultrex fiberglass are more resistant to leaks and seal failures.

Finish

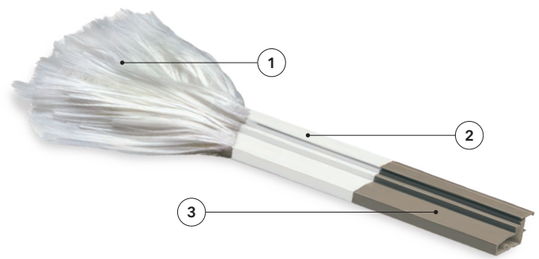
The proprietary acrylic finish is 3x thicker than competitive painted options, and resistant to chipping, chalking, or fading.

Energy Efficiency

Ultrex fiberglass combined with energy-efficient glass options can help manage the amount of light and heat entering and leaving your home.

How It's Made

Ultrex fiberglass is a composite material made of fine glass fibers woven into a cloth then bonded together with a formulated polyester resin. The continuous strands of fiberglass give Ultrex its strength in resisting breakage.



1

Raw Fiberglass Strands
Thin strands of strong glass cables are saturated with specifically compounded resins.

2

Pultruded Fiberglass
The strands are pulled through a heated die and cut with diamond-edged blades to form Ultrex fiberglass.

3

Proprietary Acrylic Finish
A proprietary acrylic finish is then applied; it's smoother and 3x thicker than other brands.

Strength Matters

Ultrex fiberglass is 8x stronger than vinyl and has a low thermal expansion rate. It is heat resistant, non-corrosive, and has low conductivity.

Ultrex fiberglass bends and flexes less than vinyl. This helps maintain the window seals and operation year after year.

The strength of Ultrex fiberglass allows for a reduced frame thickness that supports more visible glass, creating a larger view.

Durable material weathers better against everyday wear and stands the test of time.

ULTREX FIBERGLASS IS

8x
stronger than vinyl

3x
stronger than Fibrex®

More Glass, More Value

This resistance to bending means we can reduce the frame thickness without impacting the window's structural integrity. This allows for more glass, expansive views and daylight openings, and less window frame.

Ultrex fiberglass provides larger views

Thicker vinyl profiles can restrict views

Stability You Can Count On

Constant expansion and contraction can gradually break down windows and doors, causing leaky seals, poor operation, and loss of structural integrity.

Ultrex® fiberglass expands and contracts at virtually the same rate as glass, so Marvin Elevate® windows and doors stay tight and true over time, resisting air leaks, seal failures, and stress cracks that can compromise energy efficiency and long-term performance.

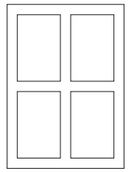
This low rate of expansion and contraction also allows windows and doors to open and close on demand without sticking or binding from swelling, warping, material distortion, or deformation from the heat.

ULTREX FIBERGLASS HAS

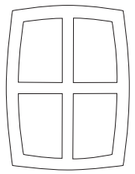
75%
less expansion than Fibrex®

87%
less expansion than vinyl

IN EXTREME WEATHER CONDITIONS



Ultrex fiberglass
stays true



Vinyl
can expand

A Long-Term Finish

Marvin Ultrex fiberglass finish is verified to the American Architectural Manufacturers Association (AAMA) 624 specification. Achieving AAMA 624 verification means that our finish has passed rigorous tests that simulate the harsh conditions encountered throughout the life of a window or door.

Ultrex fiberglass uses an acrylic finish that is paintable, fade resistant, and virtually maintenance free. With a finish that's 3x thicker than competitive painted options, it resists chipping, denting, and peeling.

Lasting Performance

Proprietary Ultrex fiberglass finish resists scratches, chalking, and fading—even in dark colors

Exteriors can be painted to match any home

Virtually maintenance free—no sanding, scraping, or painting care needed

Finish is 3x thicker than competitive painted options

Energy Efficiency

The low thermal conductivity and superior performance of Ultrex fiberglass combine with a selection of energy-efficient glazing (glass) options that help manage the amount of light and heat entering and leaving your home.

Top-Rated Efficiency

Windows and doors with low conductivity reduce heat loss in homes, which translates to lower energy bills.* Ultrex fiberglass provides an insulated barrier against extreme weather temperatures, keeping homes comfortable and reducing heating and cooling costs.

Energy Savings

Low-E glass coatings are designed to reflect heat, keeping homes cooler in the summer and warmer on winter nights while also blocking harmful UV rays and reducing energy costs.

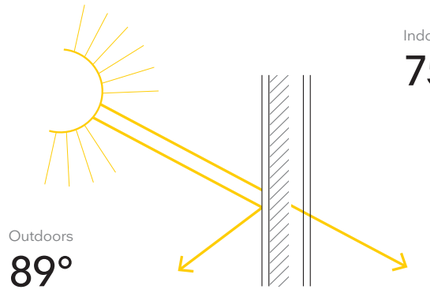
Low-E coatings have three main functions:

Insulation (energy efficiency)
By reflecting heat, the coating significantly reduces solar heat gain in summer and heat loss in winter, helping to maintain a stable indoor temperature.

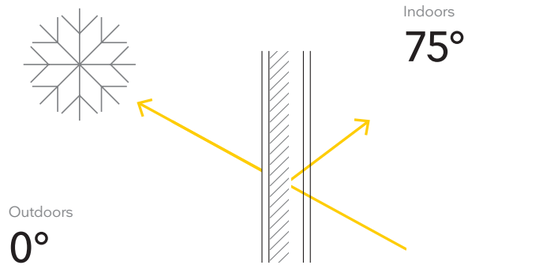
Solar Control (heat gain reduction)
In warm weather, the coating reflects short-wave infrared energy from the sun away from the building, which helps keep indoor spaces cooler by blocking solar heat gain.

UV Protection (reduces UV damage)
The coating reduces a significant percentage of harmful UV rays, helping prevent fading of furniture, rugs, and other interiors.

SUMMER DAY — LOW-E GLAZING



WINTER NIGHT — LOW-E GLAZING



* Replacing old windows with ENERGY STAR certified windows lowers household energy bills by an average of up to 13% nationwide when replacing single-pane windows. Lower energy consumption also reduces greenhouse gas emissions from power plants and homes.
https://www.energystar.gov/products/res_windows_doors_skylights

Casement

The Marvin Elevate® Casement window is side hinged and built for smooth operation with a concealed multi-point locking system. Casement windows create a tight seal on all four sides, meaning fewer opportunities for air leaks.

fig. 1 **CASEMENT WINDOWS**
Painted Designer Black

fig. 2 **INTERIOR VIEW**
Bare Pine

fig. 3 **EXTERIOR VIEW**
Gunmetal

fig. 4 **CASEMENT WINDOW**
Painted White

fig. 1

fig. 2

fig. 3

fig. 4

FEATURES

Offers traditional style and durability with a low-maintenance Ultrex® fiberglass exterior and warm wood interior

Available in standard and special sizes up to 3' wide by 6' high

Multi-point sequential locking system provides superior PG50 performance rating with single lever operation

Coordinating picture and transom windows also available

Narrow frame option with 3-¼" insert replacement frame, flat sill, and through-jamb installation

Folding handle neatly stows out of the way; stainless steel coastal hardware available

Interior screen features an aluminum surround and concealed pressure mounting points for ease of operation and enhanced aesthetics

Available with Hurricane Impact Zone 3 (IZ3) protection (excludes narrow frame option)

Glider

The Marvin Elevate® Glider window offers a space-saving alternative when a swinging sash won't fit. Dual and triple sash options create an easy-to-use, versatile window.

fig. 1 **GLIDER WINDOW**
Painted Designer Black

fig. 2 **INTERIOR VIEW**
Bare Pine

fig. 3 **EXTERIOR VIEW**
Gunmetal

fig. 4 **GLIDER WINDOW**
Painted White

fig. 1

fig. 2

fig. 3

fig. 4

FEATURES

Offers traditional style and durability with a low-maintenance Ultrex® fiberglass exterior and warm wood interior

Available in standard and special sizes up to 6' wide by 5' high for dual sash; 8' wide by 5' high for triple sash

Up to PG30 performance rating

Available in dual sash with left or right operating panel, as well as triple sash with fixed center panel and two operating end panels

Operating sash easily tilts and removes with no cords or strings to detach

Tilt latches are ergonomically designed and easy to operate, making tilting and cleaning effortless

Innovative screen design for easy installation and removal

Sliding French

The Marvin Elevate® Sliding French door combines the wider side stiles and top rails of a French door with the space-saving design of a sliding door.

fig. 1 **SLIDING FRENCH DOOR**
Painted Designer Black

fig. 2 **INTERIOR VIEW**
Bare Pine

fig. 3 **EXTERIOR VIEW**
Gunmetal

fig. 4 **SLIDING FRENCH DOOR**
Painted Designer Black

fig. 1

fig. 2

fig. 3

fig. 4

FEATURES

- Offers traditional style and durability with a low-maintenance Ultrex® fiberglass exterior and warm wood interior
- Wide stile and rail construction showcases the rich wood interior
- Configurations of two, three, or four panels, up to approximately 16' wide by 8' high
- Up to PG40 performance rating
- Optional PG50 performance rating on two- and three-panel configurations up to 9' wide by 8' high
- Dual ball bearing rollers for smooth operation
- Sill available in Beige or Bronze

MARVIN

ENDLESS POSSIBILITIES

CATALOG

Swinging French G2

The Marvin Ultimate™ Swinging French door G2, available in both inswing and outswing, delivers a traditional aesthetic with a 4-¾" stile and top rail and a 4-¾" or 8-⅛" bottom rail. Select sizes up to 14' wide and 10' high to maximize views and access to the outdoors. Choose up to four panels with an Ogee interior glazing profile.

fig. 1 **SWINGING FRENCH DOOR G2**
White

fig. 2 **INTERIOR VIEW**
Pine

fig. 3 **EXTERIOR VIEW**
Gunmetal

fig. 4 **SWINGING FRENCH DOOR G2**
Gunmetal

fig. 1

fig. 2

fig. 3

fig. 4

FEATURES

Select up to four panels, one or two operating panels, and unequal panel widths

A traditional aesthetic, with 4-¾" stile and top rail, an 8-⅛" bottom rail and optional 4-¾" bottom rail

Inswing or outswing motion meets design and weather constraints

Available up to 14' wide and 10' high

Ogee interior with simulated putty exterior glazing profiles. Optional square interior with simulated putty exterior glazing profiles.

Adjustable hinges for easy installation and years of smooth operation

Sliding French G2

For the classic elegance of the French door with smooth, space-saving operation, the Marvin Ultimate™ Sliding French door G2 is built to your specifications. With a rich, luxurious fit, feel, and finish, available in configurations up to 16' wide and standard heights up to 10', this door offers a grand entrance while conserving space for traffic flow or furniture. Available transom and stationary panels further enhance the view, flooding the room with daylight.

fig. 1 **SLIDING FRENCH DOOR G2**
Ebony

fig. 2 **INTERIOR VIEW**
Pine

fig. 3 **EXTERIOR VIEW**
Gunmetal

fig. 4 **SLIDING FRENCH DOOR G2**
Douglas Fir

fig. 1

fig. 2

fig. 3

fig. 4

FEATURES

A traditional aesthetic, with 4-¾" stile and top rail, an 8-⅛" bottom rail and optional 4-¾" bottom rail

Available with Impact Zone 3 (IZ3) coastal/hurricane certification

Available up to 20' wide and 10' high

Ogee interior with simulated putty exterior glazing profiles. Optional square interior with simulated putty exterior glazing profiles.

Robust stainless steel rollers and superior engineering for nearly effortless operation

NOW FEATURING:
Hardie® Architectural Panel, Hardie™ Architectural Metal Trim & Hardie® Artisan® Trim

Hardie® Plank

From Victorians to Colonials, Hardie® Plank is the perfect siding for your style, and has the durability and long lasting beauty that can transform your home's exterior. With a variety of colors, textures, and sizes, you'll discover a Hardie® Plank style that transforms your home's aesthetic.

Hardie® Plank
Smooth

Hardie® Plank
Select Cedarmill®

Hardie® Plank
Mountain Sage

Hardie® Plank
Beaded Smooth

Hardie® Plank
Beaded Select Cedarmill®

Hardie® Shingle

Restore the look of your grand Cape Cod home or add distinction to your handsome bungalow. Hardie® Shingle embodies the enchanting look of cedar shingles with lower maintenance. You can create your perfect exterior style using Hardie® Shingle around your entire home, or place it in accent areas for an added boost of charm you'll love.

Better than the real thing, Hardie® Shingle resists rotting, curling, warping and splitting.

Hardie® Shingle
Straight Edge Panel

Hardie® Shingle
Staggered Edge Panel

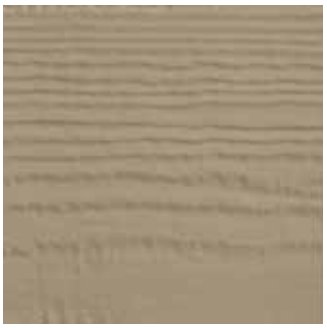
Hardie® Shingle Straight Edge Panel
Light Mist

Statement Collection® Color Availability

ARCTIC WHITE **1 | 2**

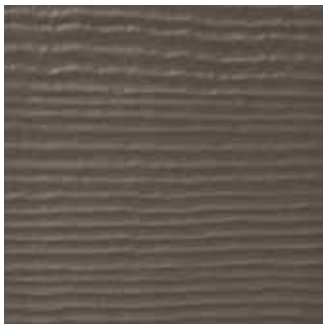
COBBLE STONE **1 | 2**

NAVAJO BEIGE **1**


KHAKI BROWN **1**

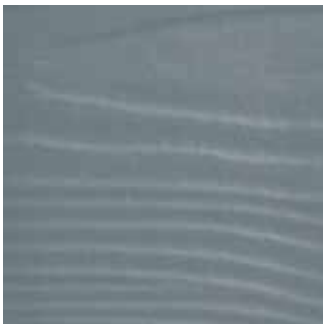
MONTEREY TAUPE **1**

TIMBER BARK **1 | 2**


RICH ESPRESSO **1**

MOUNTAIN SAGE **1**

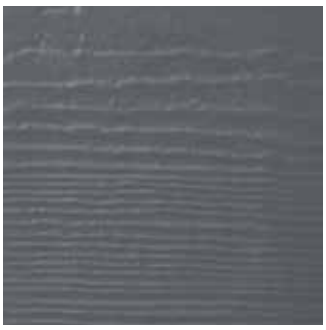
GRAY SLATE **1**

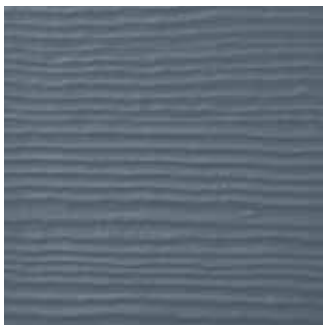

BOOTHBAY BLUE **1**

LIGHT MIST **1**

PEARL GRAY **1**

AGED PEWTER **1**

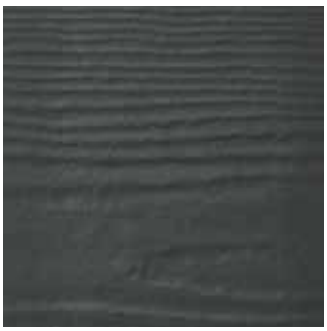

NIGHT GRAY **1**


EVENING BLUE **1**

DEEP OCEAN **1**

PRODUCT AVAILABILITY KEY

1	**Hardie® Siding** Hardie® Plank, Hardie® Shingle, Hardie® Panel, Hardie® Trim Batten
2	**Hardie® Trim**


IRON GRAY **1 | 2**

COUNTRYLANE RED **1**

MIDNIGHT BLACK **2**

(Only available in Hardie® Trim)

Colors shown are as accurate as printing methods will permit. Go to jameshardie.com to order a color sample.

Build with the best to protect the beauty of your home.

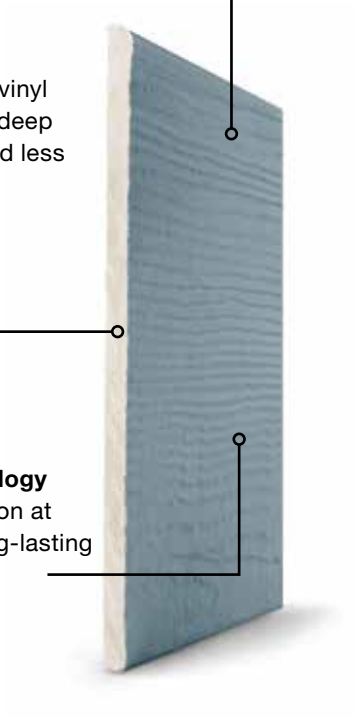
TRUSTED PROTECTION WITH HARDIE® FIBER CEMENT.

	HARDIE® SIDING	VINYL SIDING	WOOD-BASED SIDING
Will not burn; noncombustible**	✓	⊘	⊘
Will not melt	✓	⊘	✓
Does not appeal to pests	✓	✓	⊘
Hail and impact resistant	✓	⊘	✓
Resistant to warping, shrinking, and swelling	✓	⊘	⊘
Easily painted	✓	⊘	✓
Real wood look and feel	✓	⊘	✓

Warm woodgrain texture without the cost and high maintenance of real wood.

5x thicker than vinyl siding provides deep shadow lines and less visible seams.

ColorPlus® Technology finishes are baked on at the factory for a long-lasting consistent finish.



All Hardie® fiber cement products come with a transferable 30-year, non-prorated limited substrate warranty, meaning we stand 100% behind Hardie® fiber cement siding, trim and soffit products for 30 years.

ColorPlus® Technology finishes come with a 15-year limited warranty.

30-YEAR, NON-PRORATED SIDING, TRIM AND SOFFIT SUBSTRATE WARRANTY COVERAGE BY JAMES HARDIE

Scan to learn more about the lifetime value of Hardie® products.

Complete Exterior™ by James Hardie

ONE MATERIAL

Only Hardie® fiber cement products are **Engineered for Climate®**, resisting damage from fire, water, and insects and delivering optimal performance for your home's specific region.

ONE SOURCE

The #1 brand of siding in North America that is made in the U.S.A. With 11 manufacturing sites and nationwide distribution, your product is available when your contractor needs it.

ONE WARRANTY

Rest easy knowing that all your siding, trim and soffit is backed with a 30-year non-prorated warranty from a single trusted manufacturer. One manufacturer to contact makes your life easier, giving you more time to enjoy your home.

(from cover) * Based on Freedonia 2022 Global Siding (Cladding) demand estimates and James Hardie sales in North America.
** Hardie® fiber cement products are noncombustible and/or have a Class A fire rating when tested in accordance with ASTM E84. Fiber cement fire resistance does not extend to applied paints or coatings, which may be damaged or char when exposed to flames. The use of noncombustible siding, combined with other fire mitigation measures, may help harden a home against external fire.

Boral **TruExterior® Siding & Trim**

Product Guide

Trim

About Boral TruExterior® Trim

Designed to be used in non-load-bearing applications, Boral TruExterior® Trim is suitable for ground contact and moisture-prone areas, which makes it ideal for exterior trim applications such as fascia, door trim, soffits, rake boards and a variety of other exterior applications. Because of its high level of dimensional stability†, there is no need to prime ends or field cuts. Plus, it can be painted any color. Boral TruExterior® Trim accepts a wide variety of fasteners and can be installed using standard woodworking tools and methods.

All images below depict Boral TruExterior® Trim

5/8 Trim Sizes		1X Trim Sizes		5/4 Trim Sizes		2X Trim Sizes	
Nominal	Actual	Nominal	Actual	Nominal	Actual	Nominal	Actual
—	—	—	—	—	—	2 x 2	1 ½" x 1 ½"
—	—	1 x 3	¾" x 2 ½"	5/4 x 3	1" x 2 ½"	—	—
5/8 x 4	5/8" x 3 ½"	1 x 4	¾" x 3 ½"	5/4 x 4	1" x 3 ½"	2 x 4	1 ½" x 3 ½"
—	—	1 x 5	¾" x 4 ½"	5/4 x 5	1" x 4 ½"	—	—
5/8 x 6	5/8" x 5 ½"	1 x 6	¾" x 5 ½"	5/4 x 6	1" x 5 ½"	2 x 6	1 ½" x 5 ½"
5/8 x 8	5/8" x 7 ¼"	1 x 8	¾" x 7 ¼"	5/4 x 8	1" x 7 ¼"	2 x 8	1 ½" x 7 ¼"
5/8 x 10	5/8" x 9 ¼"	1 x 10	¾" x 9 ¼"	5/4 x 10	1" x 9 ¼"	2 x 10	1 ½" x 9 ¼"
5/8 x 12	5/8" x 11 ¼"	1 x 12	¾" x 11 ¼"	5/4 x 12	1" x 11 ¼"	2 x 12	1 ½" x 11 ¼"

Boral TruExterior® Trim is reversible with wood grain on one side and a smooth finish on the reverse. 16' lengths are available in all sizes with 12' and 20' lengths available in 4/4, 5/4 and 2x Trim.

Available Finishes: (Reversible)

smooth

wood grain

NORDIC™

Nordic is a laminated two-piece, polymer-modified-asphalt shingle, manufactured on a robust fiberglass reinforcement.

Fiberglass-Reinforced Asphalt Shingles

IKO Nordic performance shingles are among the top-performing asphalt shingles currently available. They're engineered for superior wind and impact resistance, and offer a Class 4 Impact Resistance rating[1]. Their fiberglass mat has an extra-thick coating of polymer-modified asphalt, embedded with algae-resistant granules. Available in a wide range of enhanced color blends, these shingles are made in IKO's special "Advantage" size for full square coverage.

Click here or scan this QR code for product literature, color swatches and color availability.

1 Features and Benefits

- Polymer-Modified Asphalt
- Full Square Coverage
- Blue-Green Algae Resistant
- ArmourZone Reinforcement
- Class 4 Impact Resistance[3]

2 General Information

Shingles/Bundle	20
Coverage/Bundle	33.3 ft.^{2} (3.1 m^2)
Coverage/Three Bundles	100 ft.^{2} (9.29 m^2)
Bundles/Pallet	56
Pallet Size	40 x 53 1/2 in. (102 x 136 cm)
Product Stock No. (U.S.)	4608XXX
Product Stock No. (Canada)	4609XXX

NOTE: *XXX refers to numerical product color code. Product color availability varies by region.*

3 Product Dimentions

Length	40 7/8 in. (1,038 mm)
Width	13 3/4 in. (349 mm)
Exposure	5 7/8 in. (149 mm)

Product dimensions shown are subject to normal manufacturing tolerances of +/- 1/4 in. (6 mm) on the shingle's length and +/- 1/8 in. (3 mm) width.

NORDIC™

4 Applicable Standards[1]

ASTM D3462 Product Standard

ASTM D3018 Product Standard

ASTM D3161 Class F Wind Resistance

ASTM D7158 Class H Wind Resistance

ASTM E108 / UL 790 Class A Fire Resistance[2]

CAN / ULC S107 Class A Fire Resistance (Canada)[2]

CSA A123.5 Product Standard (Canada)

FM 4473 / UL 2218 Class 4 Impact Resistance[3] **here**

Miami-Dade County Product Approval[4] **here**

Florida Building Code High-Velocity Hurricane Zone (HVHZ) Approval[4] **here**

Texas Department of Insurance Details **here**

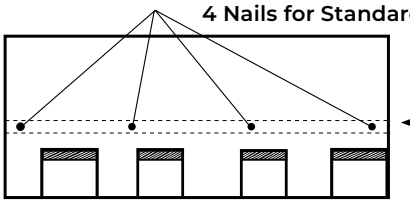
NOTE: *IKO Nordic asphalt shingles meet or exceed the requirements in the product standards referenced at the time of manufacture.*

5 Safety Information

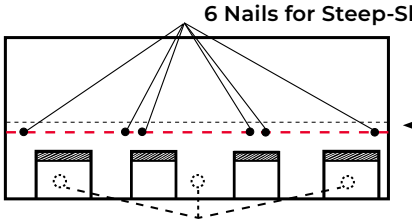
CAUTION: Working at heights on sloped-roof surfaces can be dangerous. Do not install until all appropriate safety precautions are followed. Always wear appropriate personal protective equipment (PPE), including appropriate fall protection equipment.

6 Shingle Installation

4 Nails for Standard Application



6 Nails for Steep-Slope Applications



Apply Roofing Cement CAUTION: Excessive Use of Roofing Cement Can Cause Shingles to Blister.

Shingles must be installed according to all of IKO's application instructions. Some select installation requirements are highlighted here.

1. The space beneath the roof deck (e.g., attic) should be thoroughly ventilated to minimum local building code requirements.
2. Shingles should be installed with 5 7/8-inch shingle exposure to the weather.
3. Offsets between courses are recommended to be 10 inches.
4. Open metal valleys are recommended for best roof system performance.
5. Never apply asphalt shingles to roof slopes less than 2:12. For slopes 2:12 to less than 4:12 (low slope), see special underlayment requirements outlined in the IKO application instructions.

This product's Safety Data Sheet (SDS) is available **here.**

Complete product installation details can be found **here.**

The information on this Technical Data Sheet is based upon data considered to be true and accurate at time of issue, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate. To confirm the most current product technical information and compliances, please contact IKO directly at: United States 1-888-IKO-ROOF (1-888-456-7663); Canada 1-855-IKO-ROOF (1-855-456-7663).

[1]Compliance with listed product standards is based on sampling and testing of products as manufactured. [2]When shingles are installed over an approved underlayment. [3]The Impact Resistance rating is solely for the purpose of enabling residential property owners to obtain a reduction in their residential insurance premium, if available. It is not to be construed as any type of express or implied warranty or guarantee of the impact performance of this shingle by the manufacturer, supplier or installer, and damage from hail is not covered under the Limited Warranty. For further details concerning the FM 4473 standard, visit the FM Approvals website. For the UL 2218 standard, visit the UL Solutions website. [4]M-D and FBC HVHZ approvals apply only to shingles available in the southeast U.S. market. For more information, please contact IKO at: 1-888-IKO-ROOF (1-888-456-7663).

DAIKIN

DAIKIN MXM SERIES

NEW R-32 MODELS

MULTI-ZONE
HEAT PUMP SYSTEMS
2, 3, OR 4 ZONES

UP TO 21 SEER2 / UP TO 10 HSPF2 / UP TO 12 EER2

Submittal Data Sheet
3.0-Ton Multi-Split Outdoor Unit
4MXS36WMVJU9

Model			**4MXS36WMVJU9**	
			Cooling	**Heating**
Power Supply		Phase	1φ	
		Hz, V	60 Hz, 208 - 230 V	
COP2		W/W	—	4.50 (Non-Ducted) 3.10 (Ducted)
EER2		Btu/W·h	9.2 (Non-Ducted) 8.0 (Ducted)	—
SEER2 / HSPF2			18.1 (Non-Ducted) 14.9 (Ducted)	9.4 (Non-Ducted) 7.8 (Ducted)
Casing Color			Ivory White	
Compressor	Type		Hermetically Sealed Swing Type	
	Model		2YC63AAXD	
	Motor Output	W	1,920	
Refrigerant Oil	Model		FVC50K	
	Charge	fl oz (L)	30.4 (0.9)	
Refrigerant	Type		R410A	
	Charge	lbs (kg)	6.17 (2.8)	
Airflow Rates	H	cfm	2,611	2,352
	M		2,438	2,209
	L		2,094	1,118
	H	m^3/min	73.9	66.6
	M		69.0	62.5
	L		59.3	31.6
Fan	Type		Propeller	
	Motor Output	W	89	
	Running Current (H / M / L)	A	0.49 / 0.41 / 0.27	0.37 / 0.31 / 0.05
	Power Consumption (H / M / L)	W	102.1 / 84.6 / 55.8	76.7 / 64.6 / 11.1
Starting Current		A	17.5	

(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications, and information in this data sheet without notice and without incurring any obligations)

Submittal Data Sheet
3.0-Ton Multi-Split Outdoor Unit
4MXS36WMVJU9

Dimensions (H × W × D)		in. (mm)	28-15/16 × 34-1/4 × 12-5/8 (735 × 870 × 320)	
Packaged Dimensions (H × W × D)		in. (mm)	31-7/8 × 41-3/8 × 17-1/2 (810 × 1,050 × 444)	
Weight (Mass)		lbs (kg)	144 (65)	
Gross Weight (Gross Mass)		lbs (kg)	154 (70)	
Sound Pressure Level		dB(A)	54	56
Piping Connection	Liquid	in. (mm)	φ 1/4 × 4 (φ 6.4 × 4)	
	Gas	in. (mm)	φ 3/8 × 1, φ 1/2 × 2, φ 5/8 × 1 (φ 9.5 × 1, φ 12.7 × 2, φ 15.9 × 1)	
	Drain	in. (mm)	I.D. φ 5/8 (φ 15.9)	
Heat Insulation			Both Liquid and Gas Pipes	
No. of Wiring Connections			3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring)	
Max. Interunit Piping Length		ft (m)	230 (70) (for Total of Each Room)	
		ft (m)	82 (25) (for One Room)	
Amount of Additional Charge		oz/ft (g/m)	0.21 (20) (131-1/4 ft (40 m) or more)	
Max. Installation Height Difference		ft (m)	49-1/4 (15) (Between Indoor Unit and Outdoor Unit)	
		ft (m)	24-5/8 (7.5) (Between Indoor Units)	
Conditions Based on			Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB)
			Piping length: 25 ft (7.5 m)	

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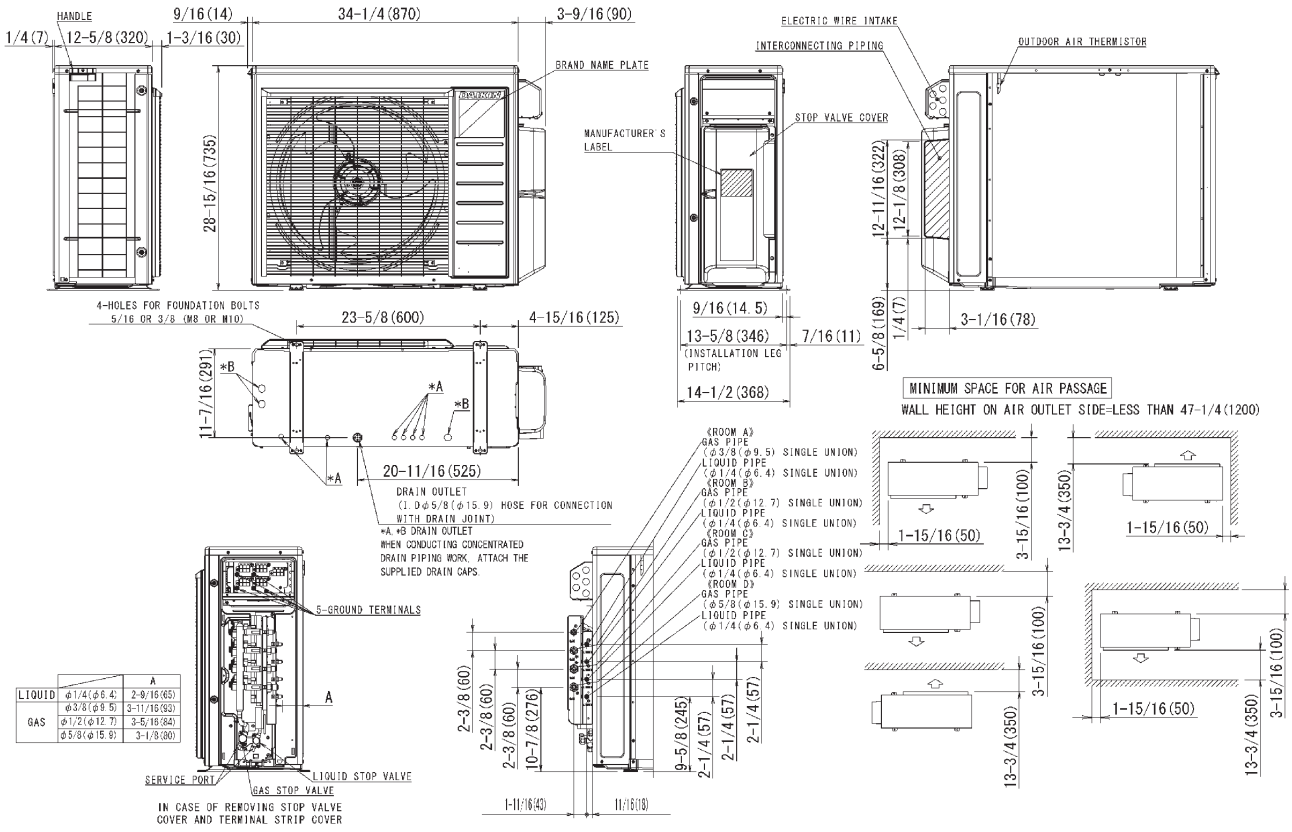

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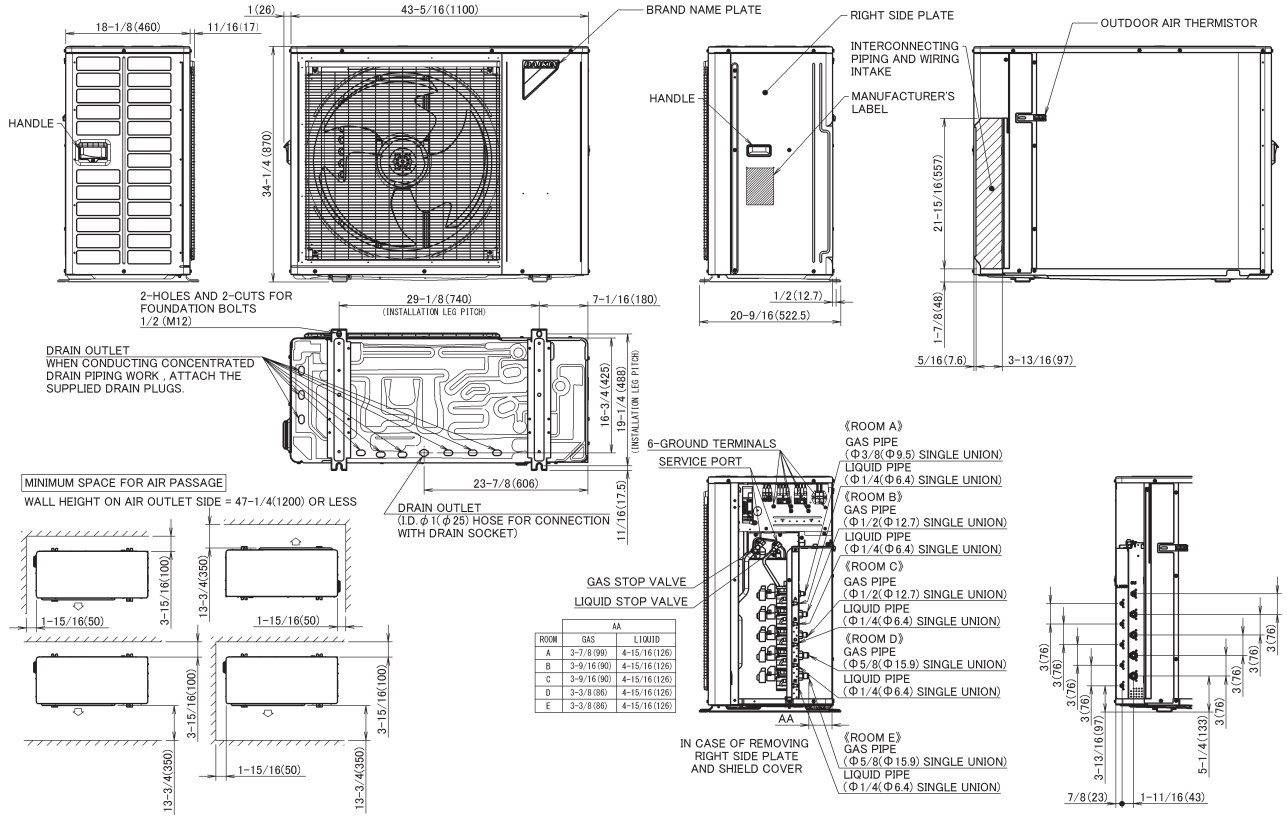

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PROGRESS LIGHTING
By 1STOPLighting

P5674-20/30K

Cylinder - Outdoor Light - 1 Light - in Modern style - 5 Inches wide by 7.25 Inches high

Specs

Family/Collection:	Cylinder
Length:	8"
Width/Diameter (in):	5"
Height:	7.25"
Depth/Extension:	8"
Back Plate Length:	4.5"
Back Plate Width:	4.5"
Height from Center:	2.5"
Weight:	2.2 lbs
Wire Length:	6"
Installation Sheet:	https://images.belamiecommerce.com/supplier/progress-lighting/specsheets/p5674_31_inst.pdf
Installation Sheet:	https://images.belamiecommerce.com/supplier/progress-lighting/specsheets/p5674_30_inst.pdf
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Installation Sheet:	https://images.belamiecommerce.com/supplier/progress-lighting/specsheets/p5674_20_30k_inst.pdf
# of Bulbs:	1
Standard Wattage:	16.4 Watts, 16.9 Watts, 17.3 Watts, 75 Watts
Bulb Type:	Halogen, LED
CRI:	90
Lamp Base Type:	PAR30, Integrated LED
Lumens:	484, 874
Color Temperature:	3000 Kelvin
Finish:	Antique Bronze, Black, Metallic Gray, White
Glass:	Grey
Product Design:	Armed
Shade Material:	Metal
Design Style:	Modern
Power Source:	Hardwire
Voltage Rating:	120 V
Material:	Aluminum, Porcelain
Warranty:	1 Year Limited
Made In:	China
Shade Included:	Yes

Style and Option 1

Style:

JUNO

Juno Wafer™ LED Downlight Series

4", 6" & 8" LED Ultra-Thin Wafer Switchable Downlight

5CCT Switchable White Downlight

Project:	
Fixture Type:	WF4 SWW5 90CRI MW
Location:	
Contact/Phone:	

WF4/WF6/WF8 SWW5 Series

Brushed Nickel

Oil Rubbed Bronze

Matte Black

Product Features

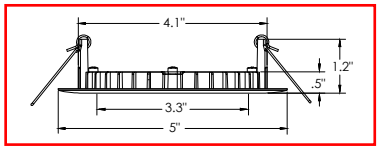
The 4",6"& 8" round smooth with 5CCT Switchable White technology provide high-quality light output and efficiency featuring a switch for easy color temperature adjustment to choose between 2700K, 3000K, 3500K, 4000K, or 5000K - while eliminating the need for recessed housings.

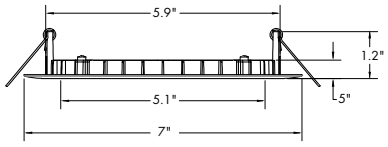
- Round smooth lens trim designed to distribute precise even illumination for general purpose areas
- Canless - no can required; equals easy to install and less labor
- 5 selectable color temperatures to choose with a switch ranging from warm (2700K) to daylight (5000K) allowing customization for endless applications

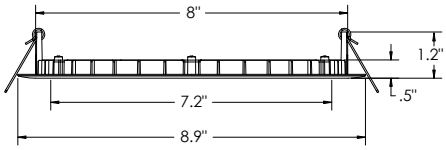
Applications

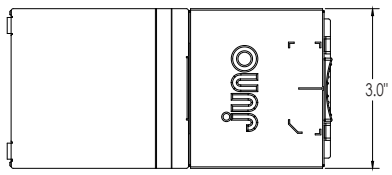
- Residential and light commercial applications including multi-family, hospitality, assisted living, dormitories and other multi-level construction
- Shallow slim profile allows for easy remodel or new construction insulated and drop ceiling installations
- Wet rated and airtight: perfect for showers, bathrooms, and outdoor soffits

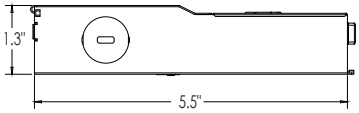
Dimensions











Performance

Delivered Lumens	670L (WF4), 970L (WF6) and 1640L (WF8) Nominal at 3000K
LED Color Temperature	Switchable White (27K, 30K, 35K, 40K, 50K) Default set at 3000K
CRI	90+
Voltage	Dedicated 120V
Dimming	Dimmable to 10% with triac (120v)

For a list of compatible dimmers see JUNO-WAFERS-DIM

Specifications

	WF4	WF6	WF8
Aperture:	3.3"	5.1"	7.2"
Ceiling Opening:	4.25"	6.25"	8.25"
Overlap Trim:	5"	7"	8.9"
Height:	1.2"	1.2"	1.2"

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JUNO

Juno Wafer™ LED Downlight Series

4", 6" & 8" LED Ultra-Thin Wafer Switchable Downlight

5CCT Switchable White Downlight

ORDERING INFORMATION

Downlight

Example: WF4 SWW5 90CRI MW M6

WF4		SWW5	90CRI	MW
Series	**Trim Style**	**Color Temperature**	**Rendering Index**	**Finish**
WF4 4" Wafer-Thin LED Downlight	**(BLANK)** Round	**SWW5** Switchable White (2700K, 3000K, 3500K, 4000K, 5000K)	**90CRI** 90+ CRI	**MW** Matte White
WF6 6" Wafer-Thin LED Downlight				**MB** Matte Black
WF8[1] 8" Wafer-Thin LED Downlight				**BN** Brushed Nickel
				ORB Oil Rubbed Bronze

1. WF8 only offered in a Matte White finish.

Accessories: Order as separate catalog number.

Series	
WF8643 PAN	Universal New Construction Pan
WF4 PAN R12	4" New construction pan, retail pack of 12
WF4GR MW JZ	4" Wafer Goof Ring 4.2" ID x 6.2" OD
WF6 PAN R12	6" New construction pan, retail pack of 12
WF6GR MW JZ	6" Wafer Goof Ring 6" ID x 8" OD
WF8GR MW JZ	8" Wafer Goof Ring 8.1" ID x 10.1 OD
WFJB U	Remodel Joist Bar
WFEXC6 SW3PIN FT4	3-Pin 6ft Cable
WFEXC10 SW3PIN FT4	3-Pin 10ft Cable
WFEXC20 SW3PIN FT4	3-Pin 20ft Cable

*Goof rings are made of 22 gauge steel and painted white.

WF8643 UNIVERSAL
New Construction Pan

WF4 PAN
4" New Construction Pan

Remodel Joist Bar

WFEXC_
3-Pin Extension
Cable

WF6 PAN
6" New Construction Pan

PERFORMANCE DATA

	WF4 SWW5	WF6 SWW5	WF8 SWW5
Input Voltage	120V	120V	120V
Input Power Typical	9W (+/-5%)	13W (+/-5%)	19W (+/-5%)
Frequency	60 Hz	60Hz	60Hz
EMI/RFI	FCC Title 47, Part 15 Class B (consumer)	FCC Title 47, Part 15 Class B (consumer)	FCC Title 47, Part 15 Class B (consumer)
Minimum Starting Temp	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C.

LIGHTING PERFORMANCE DATA
DONNÉES SUR LE RENDEMENT DE L'ÉCLAIRAGE

Light Appearance (CCT) Aspect de la lumière (CCT)	WF4 SWW5	WF6 SWW5	WF8 SWW5
2700K soft white | blanc doux	665 lumens | 74 lumens per watt	955 lumens | 73 lumens per watt	1615 lumens | 85 lumens per watt
3000K warm white | blanc chaud	670 lumens | 74 lumens per watt	970 lumens | 74 lumens per watt	1640 lumens | 86 lumens per watt
3500K neutral white | blanc neutre	680 lumens | 76 lumens per watt	990 lumens | 76 lumens per watt	1670 lumens | 88 lumens per watt
4000K cool white | blanc froid	685 lumens | 76 lumens per watt	1000 lumens | 76 lumens per watt	1690 lumens | 89 lumens per watt
5000K daylight | blanc neutre	690 lumens | 76 lumens per watt	1005 lumens | 77 lumens per watt	1700 lumens | 89 lumens per watt
Watts	9	13	19
Color Accuracy (CRI) Précision des couleurs (CRI)	90	90	90

JUNO

Juno Wafer™ LED Downlight Series

4", 6" & 8" LED Ultra-Thin Wafer Switchable Downlight

5CCT Switchable White Downlight

Specifications

Housing

Polycarbonate injection molded outer frame, with steel back plate. Non-conductive dead-front trim design suitable for a wide range of applications and codes requiring a non-conductive lens • FT4 3-pin plenum rated cable connector to connect from module to remote driver box • Steel spring clip for easy installation. 4", 6" or 8" cut out template is provided to ensure a correct sized hole is cut into ceiling for proper installation of the trim. Size of hole should not exceed 4-1/4" for the WF4, 6-1/4" for the WF6 and 8-1/4" for the WF8 • Can be installed from 3/8" to 1 ½" ceiling thickness • Can be removed from below the ceiling for service or replacement.

LED Light Engine

Switchable white color temperature from 2700K, 3000K, 3500K, 4000K, 5000K • 90 CRI minimum • Color accuracy within 4 step McAdams Ellipse at the end CCT (2700K and 5000K), within 6 step McAdams Ellipse in the middle CCT (3000K, 3500K, and 4000K) • Dimming 100% to 10% with most standard incandescent dimers (see list of approved dimmers).

Driver

Connect directly to 120V Class-2 (CAN ICES-005 (B) / NMB-005 (B)) LED driver • 120V 60 Hz constant current driver provides noise free operation • IC rated driver with convenience of a switch to choose between 5 selectable color temperature options ranging from 2700K (warm white), 3000K, 3500K, 4000K, or 5000K (daylight) • The isolated driver integrated inside steel remote box with four 7/8" knockouts with slots for pryout. Suitable for pulling wires with the 12 cubic-inch wiring compartment to accommodate up to (6) 14 gauge insulated conductor or (4) 12 gauge insulated conductors, making the Wafer LED Downlights much easier to wire in 2in/2out (plus ground) daisy-chain applications and contractor friendly • 2" plenum space required for the installation of the WF6 and WF8 driver boxes; 3"plenum space required for the installation of the WF4 driver box • Suitable for installation in t-grid and drop ceiling applications with universal new construction pan.

Optical System

Edge-lit LED technology uses light guided plate to distribute light • Polycarbonate lens provides even illumination throughout the space • Efficient system that can produce over 670 lumens while using 9W (WF4), 970 lumens while using 13W (WF6) and 1640 lumens while using 19W (WF8) • Replaces 65W incandescent (WF4), 75W incandescent (WF6) and 100W incandescent (WF8).

Life

Rated for 50,000 hours at 70% lumen maintenance.

Labels

CSA certified to US and Canadian safety standards • ENERGY STAR® certified product • Suitable for wet location, covered ceiling • Air-Loc certified in accordance with ASTM E283-2004 • NOM Certified • Can be used to comply with California Title 24 Part 6 High Efficacy LED light Source Requirements • U.S. Patent No. 10,681,784.

Testing

All reports are based on published industry procedures; field performance may differ from laboratory performance.

Warranty

3-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

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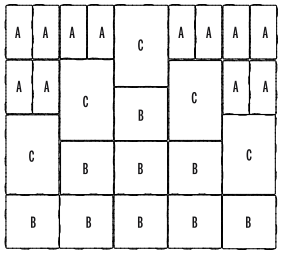
EVA

DESCRIPTION: Paver **TEXTURE:** Slate and Smooth

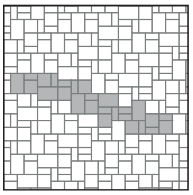
Specifications per pallet		Imperial	Metric
A 132 units / pallet	Product dimension (L × W × H) A	4 ⅜ × 8 ¾ × 2 ⅜	112 × 223 × 60
	Product dimension (L × W × H) B	8 ¾ × 8 ¾ × 2 ⅜	223 × 223 × 60
	Product dimension (L × W × H) C	13 ⅜₁₆ × 8 ¾ × 2 ⅜	335 × 223 × 60
B 99 units / pallet	Cubing	132.48 ft²	12.31 m²
	Approx. Weight	3 643 lbs	1 653 kg
	Number of rows	11	
C 55 units / pallet	Coverage per row	12.04 ft²	1.12 m²
	Lin. coverage per row	16.46 lin. ft	5.02 lin. m

Pallet Overview

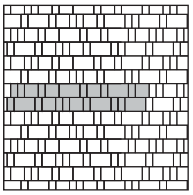


Laying Patterns Options

01 | Modular



02 | Linear



Patterns are for design inspiration only. The installer is responsible to calculate & purchase the correct amount of material.

NOTES

See page 6 for icons description.

See page 19 for more information about applications.

See page 56 to 58 for more technical information.

TURFSTONE
COLLECTION

PAVERS

Turfstone is a permeable paver produced with 5,000 psi concrete in a grid like design with voids. The openings can be filled with a variety of substances. Provides a firm “breathable” foundation, requires very little maintenance, combats soil erosion, an affordable alternative to traditional paving, and allows water to penetrate into the soil.

USES: *Driveways, Parking Areas, Walkways, Paths, & Driving Ranges*
COLOR: *Pewter*

H x W x D	WEIGHT	UNITS/PALLET
15 3/4” x 23 5/8” x 3 1/8”	60lbs each	32 per pallet

City of Burlington, Vermont

E911 Coordinator

3/25/2026

Michael Buscher
301 College St.
Burlington, VT 05401
Assr. Number- 4258

Pursuant to the requirements of Burlington City Code 27-104, this notice is to inform you of the pending address addition for the property currently addressed 86 Lakeview Terr, Burlington, VT.

The Additional Property Address will be:

84 Lakeview Terr, Burlington, VT 05401
84 will be the main house
86 will be the ADU
Effective Date of Change: April 8th, 2026

Should you have any questions or comments, please email me at the email address below. Decisions of the E911 Coordinator may be appealed within 14 days of this notice pursuant to City Code 27-108.

City Code 27-102 specifies that it is the duty of the property owner or occupant to affix Street Address Number sign(s) to their parcel, building, unit, or dwelling. Such signs do not require zoning permits if the sign:

- Is no larger than 2 square feet in size;
- Has characters between 3-10 inches in height; and
- Is not individually illuminated.

Condominium associations may post signs for condominium owners.

For more information, please see the City's E911 Coordinator site at:
https://www.burlingtonvt.gov/Fire/1012/E911-Addressing
Topics include:

- The E911 Coordinator's Powers and Duties (City Code Chapter 27),
- Street Address Number Sign Guidance,
- Who the Coordinator will notify concerning the address change, and
- Who the Property Owner or Tenant should notify.

Retain this letter so it may be used to document the address change for Insurance, Financial, and Legal interests.

Matthew Stone
City Fire Marshal / E911 Coordinator
132 North Avenue, Burlington, VT 05401
Email: BFDFireMarshal@BurlingtonVT.gov

92 Lakeview Ter
RSN 4254, Assr 4257
173 North Ave
RSN 4278, Assr
86 ADU
Land
86 Lakeview Ter
RSN 4255, Assr 4258
84 House
LAKEVIEW TER
82 Lakeview Ter
RSN 4256, Assr 4259
74 Lakeview Ter
RSN 4257, Assr 4260

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SURVEY NOTES

1. EXISTING PHYSICAL FEATURES AND TOPOGRAPHY SHOWN HERE ARE BASED ON A SURVEY PERFORMED BY LATITUDES LAND SURVEYING IN WINTER 2021/2022.
2. BOUNDARY LINES DEPICTED ARE APPROXIMATE. THIS IS NOT A BOUNDARY SURVEY.
3. UNDERGROUND UTILITIES SHOWN ARE BASED ON AVAILABLE PERMIT PLANS, PRIOR SURVEY WORK BY KREBS & LANSING, AND INFORMATION PROVIDED BY BURTON STAFF.
4. NORTH ORIENTATION IS REFERENCED TO APPROXIMATE VERMONT GRID NORTH.

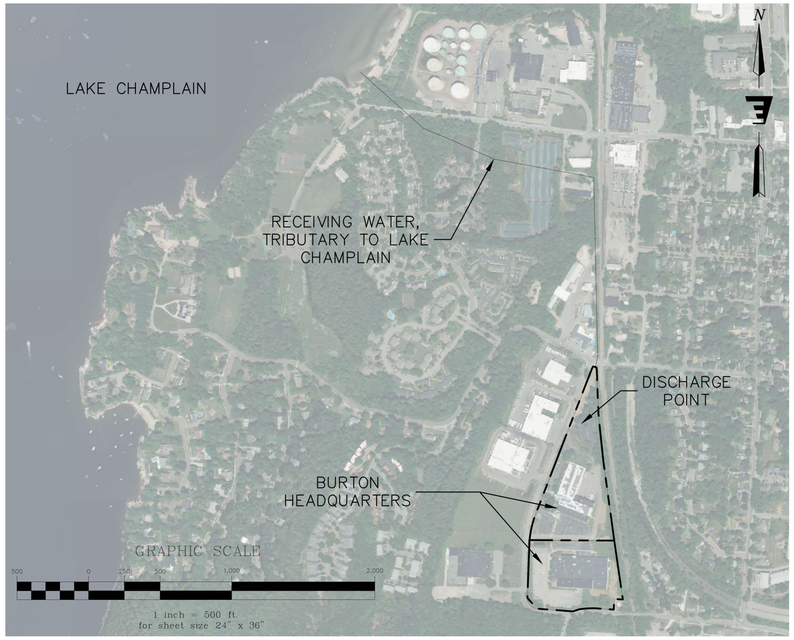
GENERAL NOTES

1. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATION UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES. ALL DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. SITE CONTRACTOR SHALL CALL UTILITY LOCATOR SERVICE AND UTILITY OWNERS 72 HOURS, EXCLUSIVE OF WEEKENDS AND HOLIDAYS, PRIOR TO ANY DIGGING, DRILLING, OR BLASTING.
   A. DIG SAFE (TEL: #811)
   B. NON DIG SAFE MEMBER FACILITY OPERATORS IF KNOWN. A LIST OF DIG SAFE MEMBERS BY STATE CAN BE FOUND ON THE DIG SAFE WEB SITE WWW.DIGSAFE.COM
2. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
3. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
4. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO EXISTING CONDITIONS OR BETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
6. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, AND CERTIFICATES UNLESS OTHERWISE INDICATED IN THE CONTRACT DOCUMENTS.
7. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A VERMONT STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
10. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AND TAKING PRECAUTIONARY STEPS TO AVOID ANY SEDIMENT TRANSFER TO NEIGHBORING SITES OR WATERS OF THE STATE.

DEMOLITION NOTES

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL CONVENE A MEETING WITH THE PROJECT OWNER, PROJECT ENGINEER, OWNER AND LESSEES, CONTRACTOR AND REPRESENTATIVES TO REVIEW LIMITS AND SCHEDULE OF DEMOLITION AND CONSTRUCTION AND TO ENSURE CONTINUED ACCESS AND UTILITY SERVICE TO ADJACENT RESIDENTS.
2. NO DEMOLITION SHALL COMMENCE UNTIL THE SITE IS PROPERLY PREPARED FOR CONSTRUCTION AS SHOWN ON THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN ON SHEET C102.
3. ALL DEMOLITION ITEMS FROM THE DEMOLITION, UNLESS NOTED BY THE OWNER TO BE STORED OR REUSED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. EXCESS OR UNSUITABLE SOIL SHALL BE REMOVED FROM THE SITE. PROJECT CONTRACTOR TO PROVIDE LIST FOR OWNER'S REVIEW FOR SALVAGED EQUIPMENT ETC. FOR OWNER TO RECLAIM.
4. ALL ADJACENT FACILITIES AND STRUCTURES NOT INDICATED AS INCLUDED IN THE SCOPE OF WORK SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ALL ADJACENT FACILITIES OR STRUCTURES DAMAGED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITION OR BETTER.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK AREA NOT ONLY DURING DEMOLITION PROCEDURES, BUT FOR THE DURATION OF CONSTRUCTION.
6. CARE SHALL BE TAKEN NOT TO DAMAGE OR DISTURB ANY TREES AND SITE LIGHTING NOT INDICATED FOR REMOVAL DURING CONSTRUCTION.
7. PROPOSED FEATURES ARE SHOWN ON THIS DRAWING FOR REFERENCE ONLY.
8. ALL EXISTING UTILITIES, FENCING AND SITE FEATURES SHOWN WITH CROSS HATCHING (-/-/-/-/-/-) ARE TO BE REMOVED (MH, CB, PIPE, ETC).
9. SEED AND MULCH ALL RESULTING DISTURBED AREAS IN ACCORDANCE WITH THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN WHERE NO WORK IS ANTICIPATED WITHIN 48 HOURS.
10. REFER TO DEMOLITION SPECIFICATIONS AND BID INSTRUCTIONS FOR SALVAGE AND ADDITIONAL WORK ITEMS. CONTRACTOR SHALL COORDINATE PHASING AND DEMOLITION OF THOSE ITEMS WITH OTHER TRADES.

SITE PLAN REVIEW
-FINAL-
02/23/2026



EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES.

TEMPORARY INLET PROTECTION – INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS ≤ 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT IF COLLECTED IN STRUCTURE AS SOON AS POSSIBLE.

STONE CHECK DAM
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL MATTING.
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE PAVED.

SEDIMENT TRAP
TEMPORARY SEDIMENT BASIN
THIS STRUCTURAL MEASURE INVOLVES EXCAVATING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER TREATMENT AREAS. THESE BASINS IMPOUND RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED SOIL MATERIALS. ONCE UP SLOPE AREAS HAVE BEEN FULLY STABILIZED, THE BASINS CAN BE CLEANED OUT AND THE PERMANENT STORMWATER TREATMENT SYSTEMS CONSTRUCTED.

STAGING AREA
TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON-SOIL, NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

SOIL STOCKPILE
TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

CF
CONSTRUCTION (CF) OR CHAIN LINK (o) FENCING
THIS STRUCTURAL MEASURE IS INSTALLED ALONG THE PERIMETER OF THE PROJECT AREA. IN MANY CASES THE LIMIT OF DISTURBANCE WILL COINCIDE WITH THE FENCING OR INDICATE BUFFER AREAS TO BE PROTECTED. THE FENCING IS EFFECTIVE WHEN USED TO SEPARATE THE PROJECT AREA FROM ADJACENT AREAS USED BY THE PUBLIC. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. CONFIRM LOCATION, EXTENTS AND GATES WITH OWNER. FENCE LOCATION AND GATES TO BE RE-ADJUSTED AS NECESSARY BASED ON OWNER REQUIREMENTS AND COORDINATION.

SF
TEMPORARY SILT FENCING (STRAW WATTLE)
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ONTO ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. STRAW WATTLE MAY BE USED IN PLACE OF SILT FENCE WITHIN PAVED AREAS.

LOD
LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

FLOW PATH
PREDEVELOPMENT FLOW PATH FOR SITE DRAINAGE.

SHEET INDEX

C100 LEGEND AND NOTES
C101 OVERALL CAMPUS EXISTING LAYOUT
C102A PRE CONSTRUCTION EROSION PREVENTION & SEDIMENT CONTROL PLAN
C102B CONSTRUCTION EROSION PREVENTION & SEDIMENT CONTROL PLAN
C102C STABILIZATION EROSION PREVENTION & SEDIMENT CONTROL PLAN
C103 DEMOLITION PLAN – NORTH CAMPUS
C104 DEMOLITION PLAN – CENTER CAMPUS
C105 DEMOLITION PLAN – SOUTH CAMPUS
C200 OVERALL CAMPUS PROPOSED LAYOUT
C201 LAYOUT PLAN – NORTH CAMPUS
C202 LAYOUT PLAN – CENTER CAMPUS
C203 LAYOUT PLAN – SOUTH CAMPUS
C204 UTILITY PLAN – NORTH CAMPUS
C205 UTILITY PLAN – CENTER CAMPUS
C206 UTILITY PLAN – SOUTH CAMPUS
C207 STORMWATER UTILITY PLAN – SOUTH CAMPUS
C208 POST CONSTRUCTION SOIL DEPTH AND QUALITY PLAN
C301 SITE DETAILS 1 OF 2
C302 SITE DETAILS 2 OF 2
C303 STORMWATER DETAILS
C304 GRAVEL WETLAND DETAILS
C305 SEWER DETAILS
C306 WATER DETAILS
C307A EPSC NOTES
C307B EPSC DETAILS
C308 BRIDGE DETAILS
C401 STORM PROFILE – 180 NORTH CAMPUS
C402 STORM PROFILE – CENTRAL CAMPUS 1 OF 2
C403 STORM PROFILE – CENTRAL CAMPUS 2 OF 2
C404 STORM PROFILE – GRAVEL WETLAND 2
C405 STORM PROFILE – CENTRAL CAMPUS GRAVEL WETLAND 1
C406 STORM PROFILE – 266 STORM SOUTH
C407 STORM PROFILE – 266 STORM WEST

LINETYPE & SYMBOL LEGEND

EXISTING FEATURES		PROPOSED FEATURES
C/O	CLEAN OUT	C/O
MH	MANHOLE	MH
CB	CATCH BASIN	CB
DMH	STORM MANHOLE	DMH
WV	TAPPING SLEEVE AND VALVE	WV
	CULVERT	
	BOLLARD	
	CONCRETE HEADWALL	
	FLARED END SECTION	
GV	GATE VALVE	GV
	HYDRANT	
	WATER SHUT OFF	
W	WELL	W
	LIGHT POLE	
	UTILITY POWER POLE	
TP1	SOIL BORING	SB 1
TP1	TEST PIT	TP 1
	SIGN	
	SPOT ELEVATION	+100.5
	TREE	
	SURVEY POINT	
	HANDICAP SYMBOL	
	TREELINE	
X	FENCE	X
	CONTOUR	100
	SWALE	
	STONE WALL	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
S	SANITARY SEWER LINE	S
	STORM LINE	SD
W	WATER LINE	W
UE	UNDERGROUND ELECTRIC	UE
OHE	OVERHEAD ELECTRIC	OHE
UT	UNDERGROUND TELEPHONE	UT
G	GAS LINE	G
UD	UNDER DRAIN	UD
	RIGHT-OF-WAY LINE	
	SETBACK	

STATE OF VERMONT
PARK M. ROISMAN
NO. 9016
2/23/2026
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-205-9141
www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Legend and Notes
Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C100

S:\PROJECTS\X-2024\2437\1 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C101X - EXISTING CONDITIONS & EPSC.DWG

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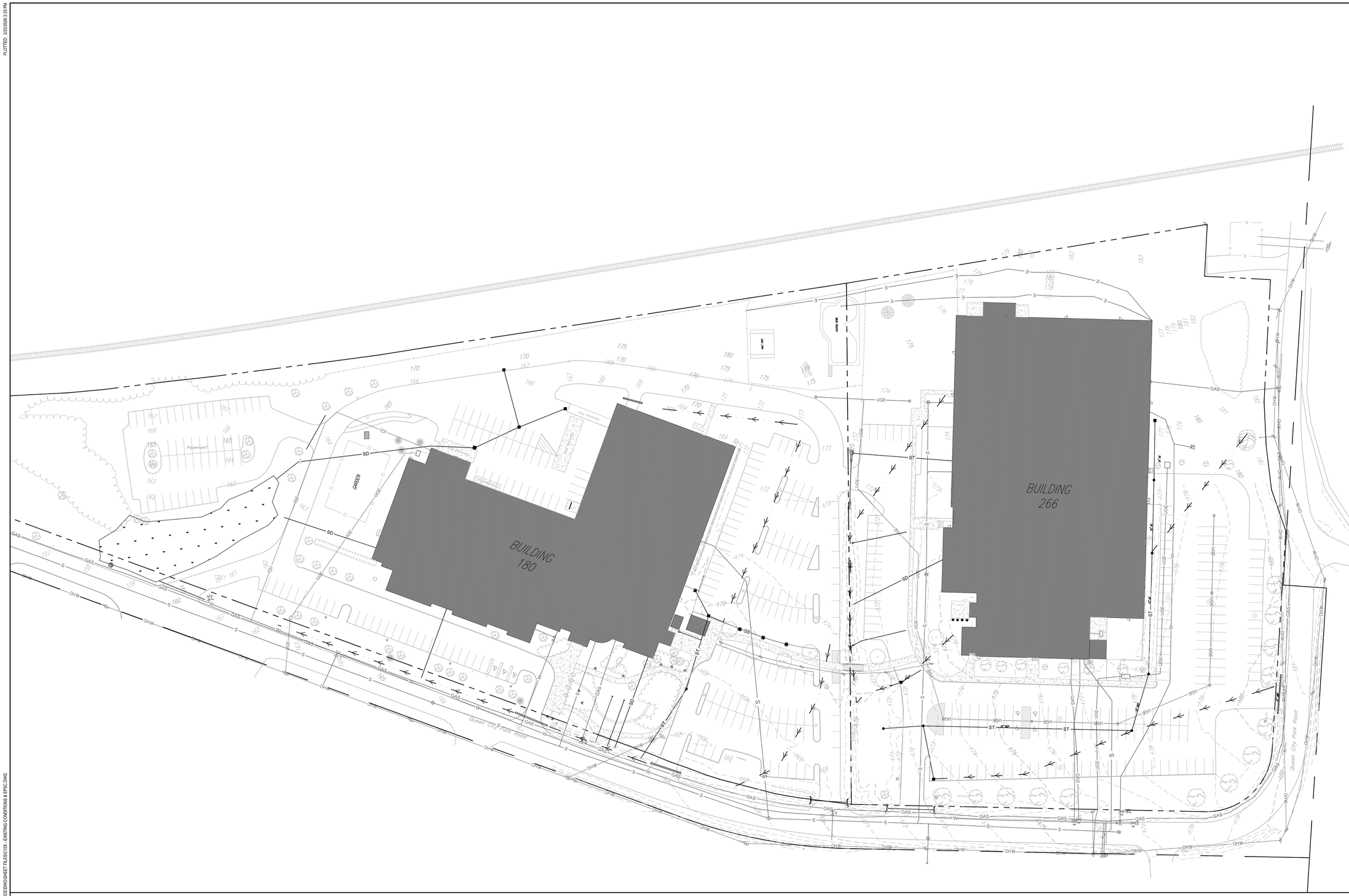
BUILDING 180
BUILDING 266
Queen City Park Road
Pavement
GARDEN
UGE
SD
ST
GAS
OHW
S
W
UGE
GAS
OHW
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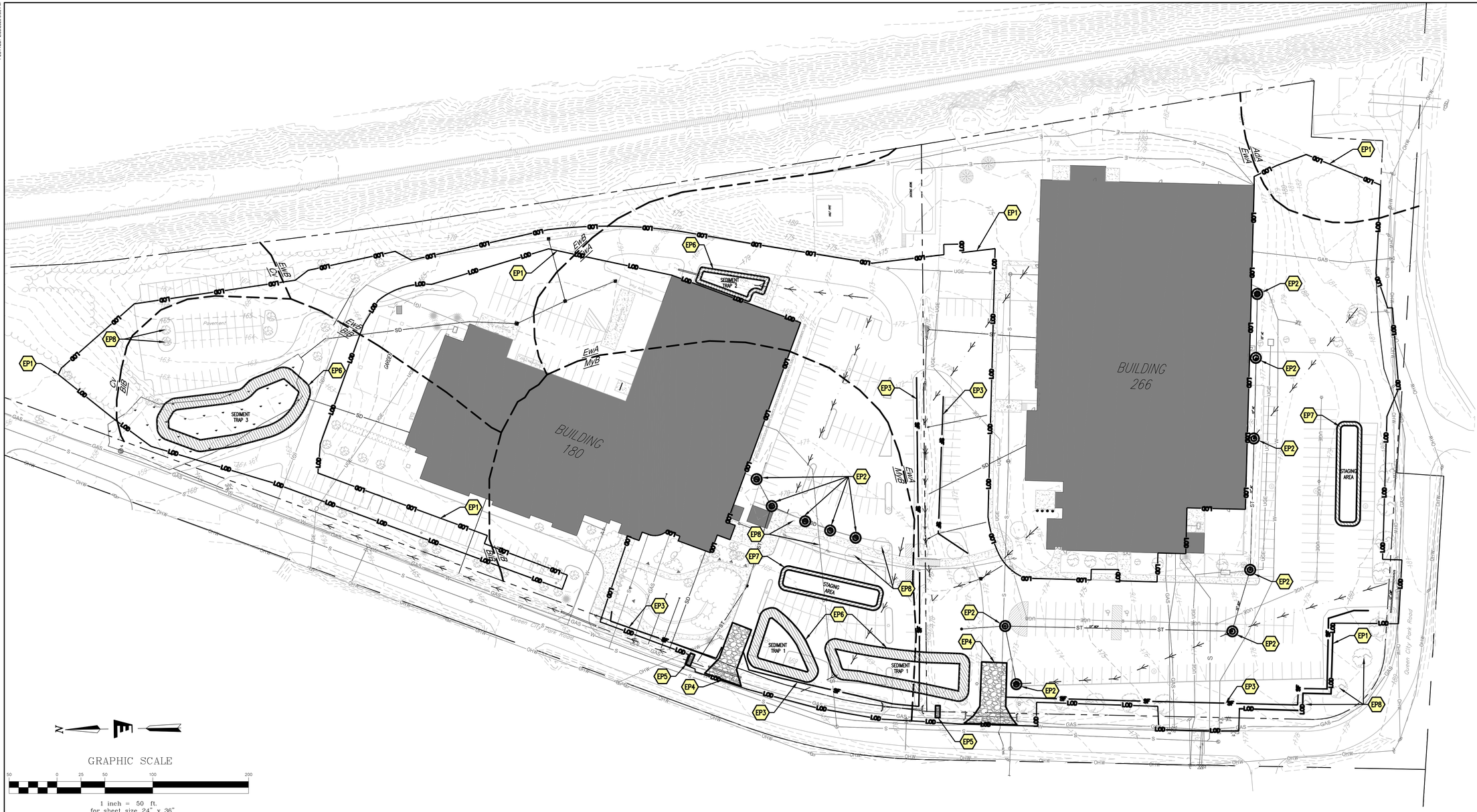

EPSC SCHEDULE

- EP1 LIMIT OF DISTURBANCE (7.47 AC.)
- EP2 INLET PROTECTION (TYP.)
- EP3 SILT FENCE (TYP.)
- EP4 STABILIZED CONSTRUCTION ENTRANCE
- EP5 STONE CHECK DAM
- EP6 SEDIMENT TRAP
- EP7 STAGING AREA.
- EP8 TREE PROTECTION FENCING (TYP.)

SITE PLAN REVIEW
–FINAL–
02/23/2026

S:\PROJECTS\24375\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C102 - EXISTING CONDITIONS & EPSC.DWG

STATE OF VERMONT
PAUL W. BOISVERT
NO. 9016
2/23/26
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-205-9141
www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Pre Construction Erosion Prevention & Sediment Control Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C102A

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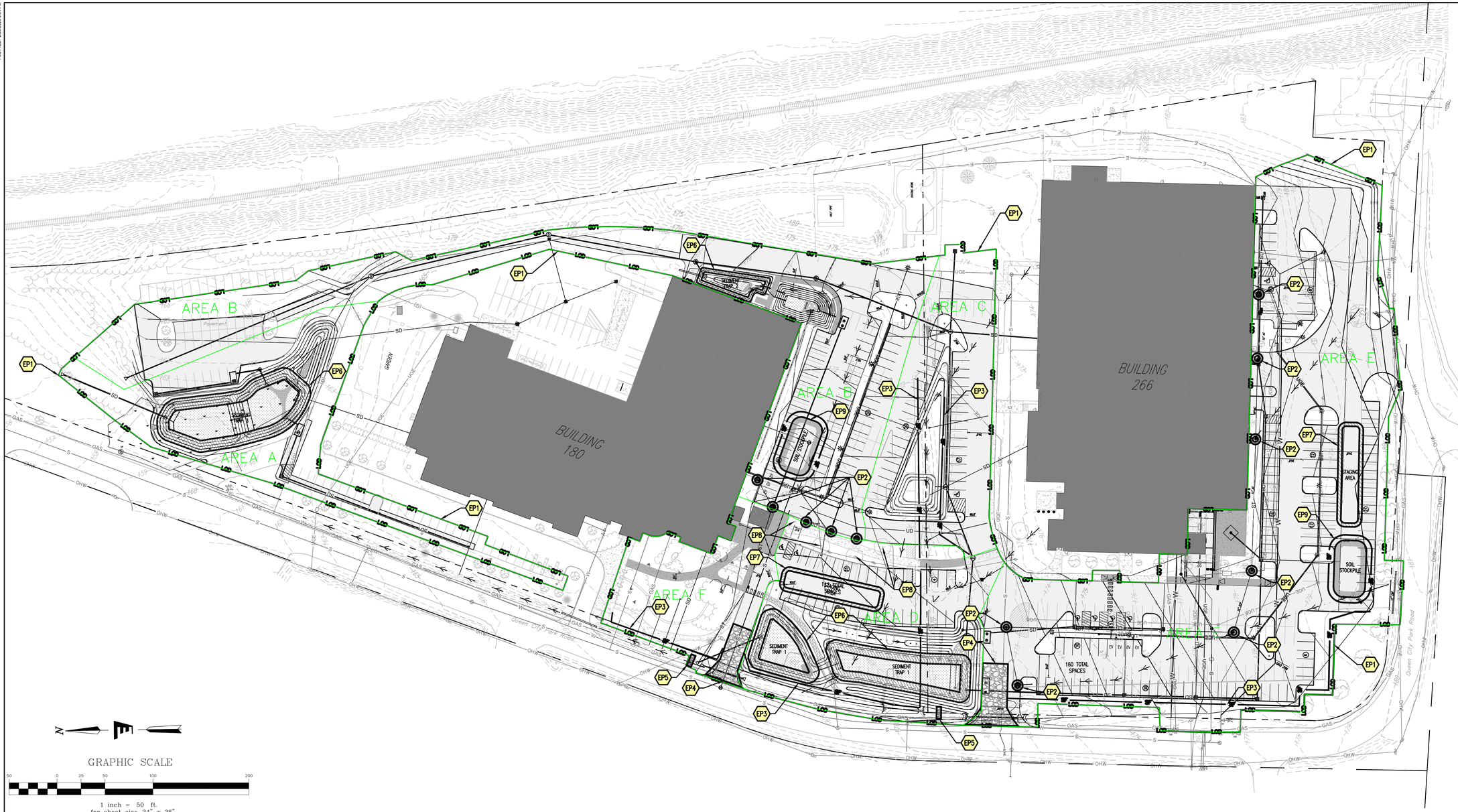

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GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.
for sheet size 24" x 36"

EPSC SCHEDULE

- EP1 LIMIT OF DISTURBANCE (7.47 AC.)
- EP2 INLET PROTECTION (TYP.)
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- EP5 STONE CHECK DAM
- EP6 SEDIMENT TRAP
- EP7 STAGING AREA.
- EP8 TREE PROTECTION FENCING (TYP.)
- EP9 SOIL STOCKPILE.

RECEIVING WATER NOTE:
THE PROJECT SITE ULTIMATELY DRAINS TO LAKE CHAMPLAIN, LOCATED APPROXIMATELY 0.6 MILES TO THE WEST OF THE PROJECT SITE.

STORMWATER RUNOFF NOTE:
THE PROJECT SITE AREA CONSISTS OF STORMWATER RUNOFF FLOWING OVERLAND FROM PAVED PARKING AREAS, SIDEWALKS, AND THE EXISTING BUILDINGS, TO A SERIES OF CATCH BASINS AND STORM SEWERS. A COMBINATION OF EXISTING AND NEW STORM SEWER PIPES WILL CONVEY RUNOFF COLLECTED FROM THE PROJECT AREA TO VARIOUS GRAVEL WETLANDS WITH PRETREATMENT SEDIMENT FOREBAYS AND DISCHARGES THROUGH AN OUTLET STRUCTURES. THE OUTLET STRUCTURE DISCHARGE FLOWS TO AN EXISTING UNNAMED TRIBUTARY TO LAKE CHAMPLAIN.

DEWATERING NOTE:
IF DEWATERING IS REQUIRED, A GEOTEXTILE FILTER BAG SHALL BE USED. DUE TO THE LARGE AMOUNT OF SURROUNDING IMPERVIOUS AREAS ON SITE, THE GEOTEXTILE FILTER BAG SHOULD BE LOCATED CLOSE TO AN EXISTING OR NEW CATCH BASIN, WITH INLET PROTECTION PROVIDED. REFER TO DEWATERING NOTES AND PUMPED SEDIMENT CONTROL SYSTEM DETAIL ON SHEET C307B.

WINTER CONSTRUCTION NOTE:
REFER TO WINTER EROSION CONTROL NOTES ON SHEET C307A.

CONSTRUCTION EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL PERFORM CONSTRUCTION SITE INSPECTIONS EVERY SEVEN (7) DAYS AND AFTER ALL RAINFALL EVENTS RESULTING IN RUNOFF FROM THE SITE. ALL WRITTEN SITE INSPECTION REPORTS SHALL BE MAINTAINED ON SITE AND MADE AVAILABLE UPON REQUEST.
2. CONTROL OF DUST REMAINS AN ONGOING RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED.
3. THE CONTRACTOR RETAINS RESISTIBILITY FOR EROSION PREVENTION AND SEDIMENT CONTROL ON THE PROJECT SITE UNTIL THE SITE HAS BEEN FULLY STABILIZED.
4. MAXIMUM SITE DISTURBANCE = 7.47-ACRES.
5. THE PROJECT WILL HAVE A MAXIMUM OF 14 CONSECUTIVE DAYS OF DISTURBED EARTH EXPOSURE IN ANY LOCATION BEFORE TEMPORARY STABILIZATION IS IMPLEMENTED.
6. IN ANTICIPATION OF A SIGNIFICANT RAIN EVENT, ALL EXISTING BMP'S SHALL BE OBSERVED BY THE ON-SITE COORDINATOR AND MODIFIED AS NECESSARY TO AVOID ANY EROSION OR DISCHARGES.
7. ALL TEMPORARY EROSION CONTROL MEASURES RELYING ON VEGETATION GROWTH SHALL BE INSTALLED PRIOR TO OCTOBER 1.
8. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED WITHIN 48 HOURS TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.
9. DEWATERING DISCHARGE IS TO BE PUMPED THROUGH A FILTER BAG AND ALLOWED TO INFILTRATE EXISTING GROUND SURFACES UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SITE PLAN REVIEW
-FINAL-
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
2/23/26
LICENSED PROFESSIONAL ENGINEER
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414 Union Street, Schenectady, NY 12305 • 518-205-9141
www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Construction Erosion Prevention & Sediment Control Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C102B

S:\PROJECTS\24-JZ\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C102 - EXISTING CONDITIONS & EPSC.DWG

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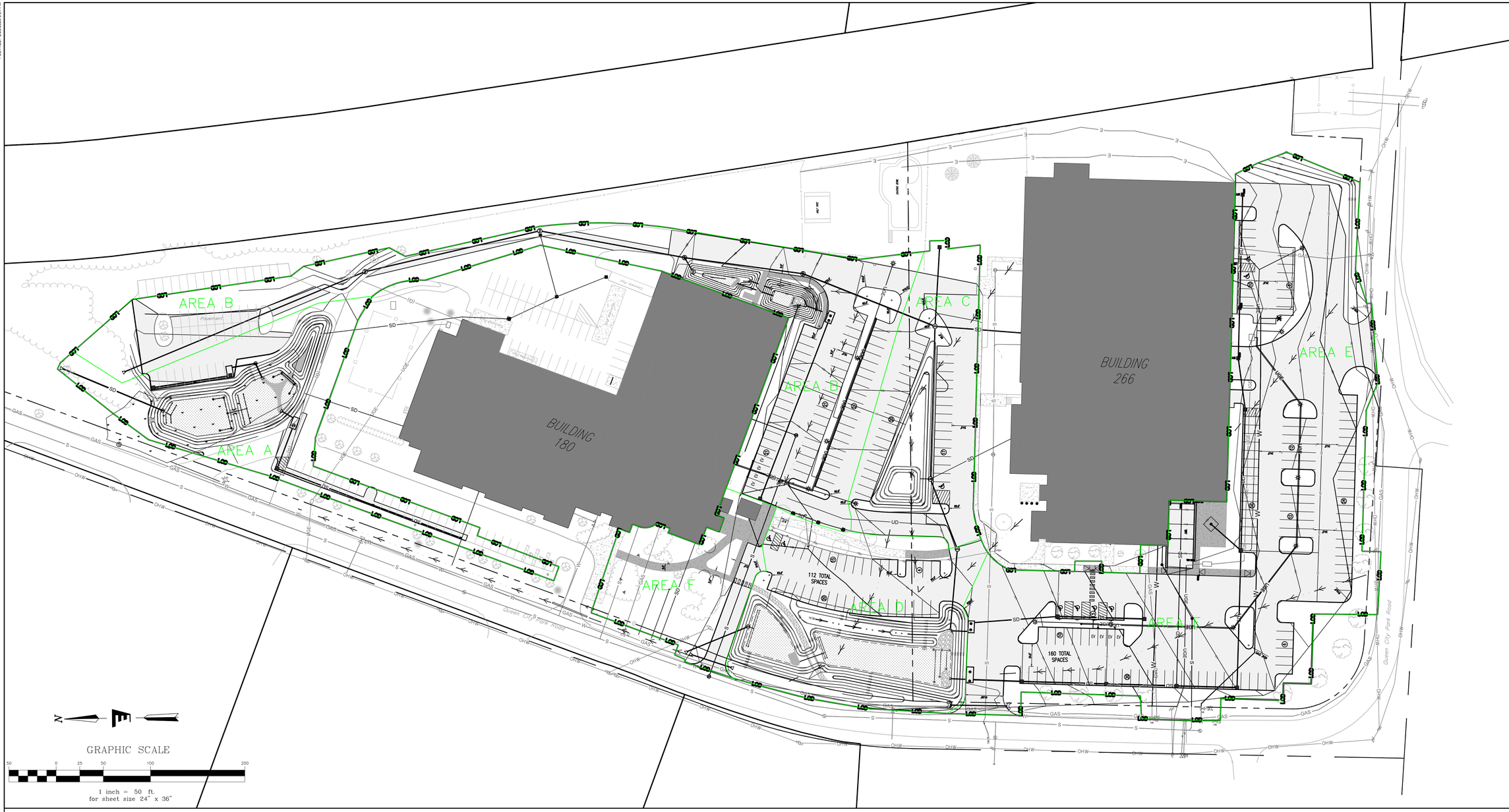

STABILIZATION LEGEND

EACH AREA SHALL COMPLETELY STABILIZED BEFORE BEGINNING WORK IN THE NEXT. STABILIZATION OF OPERATIONAL STORMWATER TREATMENT PRACTICES SHALL BE COMPLETE BEFORE DIRECTING RUNOFF TO THEM.

SEEDED AND MULCHED.
THESE AREAS ARE TO BE PERMANENTLY STABILIZED WITH VEGETATION BY APPLICATION OF SEED AND MULCH. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING MULCH COVER, WATERING, AND OTHER MAINTENANCE UNTIL THESE AREAS HAVE BEEN PERMANENTLY STABILIZED WITH VEGETATION. THESE AREAS ARE ALSO SUBJECT TO THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY STANDARDS OUTLINED ABOVE.

PERMANENT EROSION CONTROL MATTING.
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE MATTING IS TYPICALLY INSTALLED AFTER APPLYING TOPSOIL AND GRASS SEED. MATTING MUST BE STAPLED PER THE MANUFACTURER RECOMMENDATIONS.THESE WILL BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

STABILIZATION NOTES

1. ALL SEEDING FOR VEGETATIVE STABILIZATION IS TO TAKE PLACE BETWEEN APRIL 15TH AND SEPTEMBER 15TH UNLESS OTHERWISE APPROVED.
2. TO BE CONSIDERED PERMANENTLY STABILIZED, ALL DISTURBED AREAS MUST BE PROTECTED BY ONE OF THE FOLLOWING: PAVEMENT, GRAVEL, MULCH BEDS, OR VEGETATION (70% MINIMUM COVERAGE). THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL SEDIMENT CONTROL MEASURES (SILT FENCE, DISTURBANCE LIMIT MARKERS, INLET PROTECTION, ETC.) AND FOR RESTORATION OF ALL STAGING AND SOIL STOCKPILE AREAS BEFORE FILING NOTICE OF TERMINATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A MINIMUM OF 75% COVER IN VEGETATED AREAS, FOR A MINIMUM OF ONE YEAR FOLLOWING ACCEPTANCE OF THE VEGETATED AREA AS STABLE BY THE ENGINEER. THIS REPRESENTS A MINIMUM OF RESPONSIBILITY, WHICH MAY BE SUPERCEDED BY RELEVANT LANDSCAPE SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT STORMWATER INFRASTRUCTURE FROM SEDIMENT. ANY SEDIMENT FOUND AT THE CLOSE OF CONSTRUCTION IS TO BE REMOVED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
5. GRAVEL WETLAND TREATMENT SYSTEMS TO BE INSTALLED ONLY AFTER UPSLOPE EARTH DISTURBANCE HAS BEEN COMPLETED AND STABILIZED. SEDIMENT IS TO BE REMOVED FROM ALL STORMWATER INFRASTRUCTURE AND PAVEMENT AREAS AT THE CLOSE OF CONSTRUCTION AT THE CONTRACTOR'S EXPENSE
6. CONFIRM REMOVAL OF ALL SILT FENCE, LIMIT OF DISTURBANCE MARKINGS, STONE CHECK DAMS AND OTHER TEMPORARY EPSC MEASURE AND CLEAN CATCH BASINS AND PRE-TREATMENT TANKS FOLLOWING PERMANENT STABILIZATION OF UPSLOPE AREAS.

SITE PLAN REVIEW
-FINAL-
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
REGISTERED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Road
Burlington, VT 05401

Sheet Title: Stabilization Erosion Prevention & Sediment Control Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C102C

S:\PROJECTS\24XXX\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C102 - EXISTING CONDITIONS & EPSC.DWG

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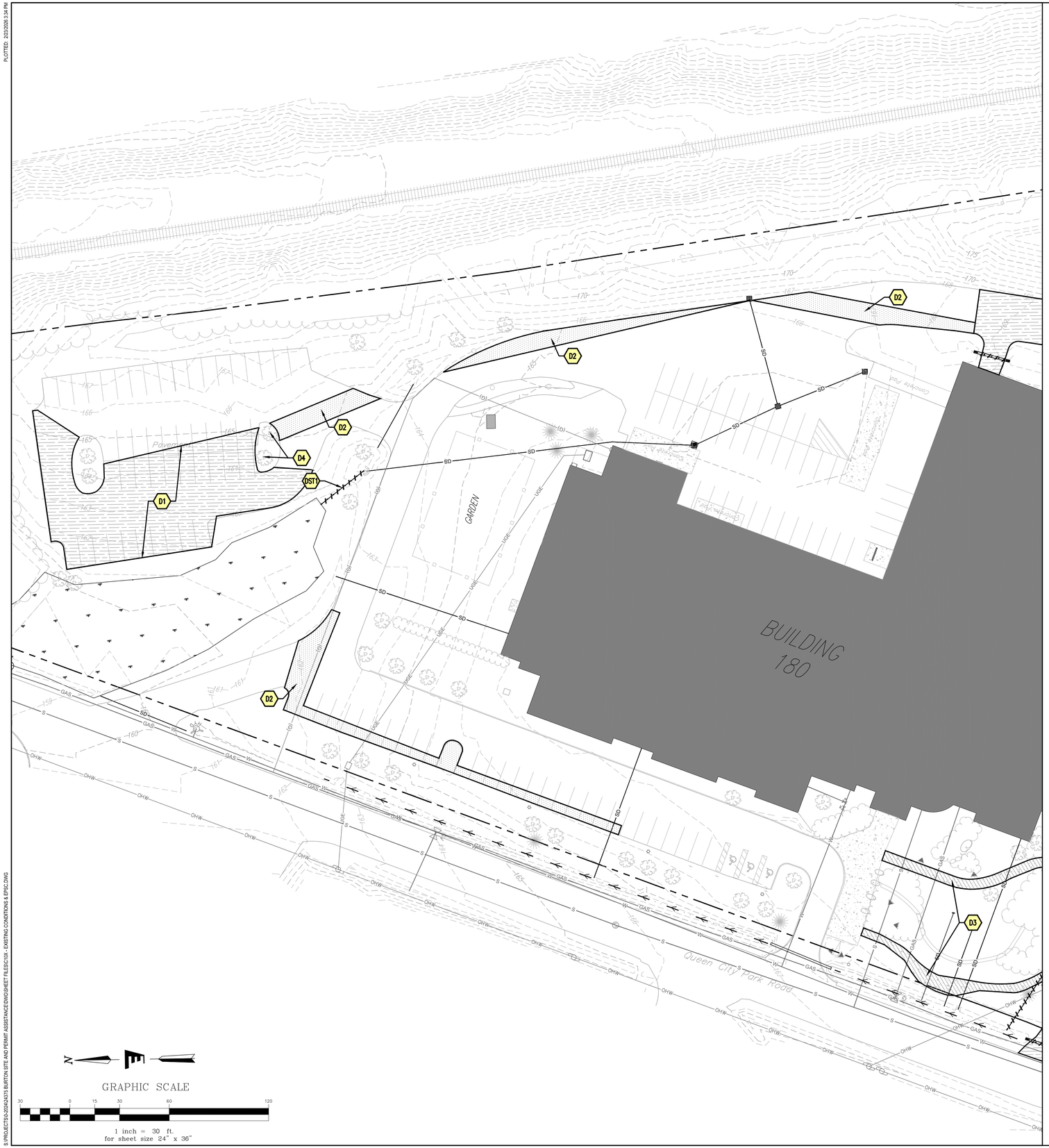

SITE DEMOLITION SCHEDULE

- D1 — APPROXIMATE LIMITS OF REMOVAL FOR FULL DEPTH PAVEMENT, SUBBASE MATERIAL, AND ADJACENT CURBING
- D2 — APPROXIMATE LIMITS OF PAVEMENT REMOVAL FOR UTILITY TRENCHING
- D3 — APPROXIMATE LIMITS OF REMOVAL FOR CONCRETE SIDEWALK AND SUBBASE MATERIAL
- D4 — REMOVE EXISTING TREE AND STUMP

UTILITY DEMOLITION SCHEDULE

- DST1 — DEMOLISH AND REMOVE EXISTING STORMWATER PIPING

N E

GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
PROFESSIONAL ENGINEER
Stamp

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Demolition Plan - North Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C103

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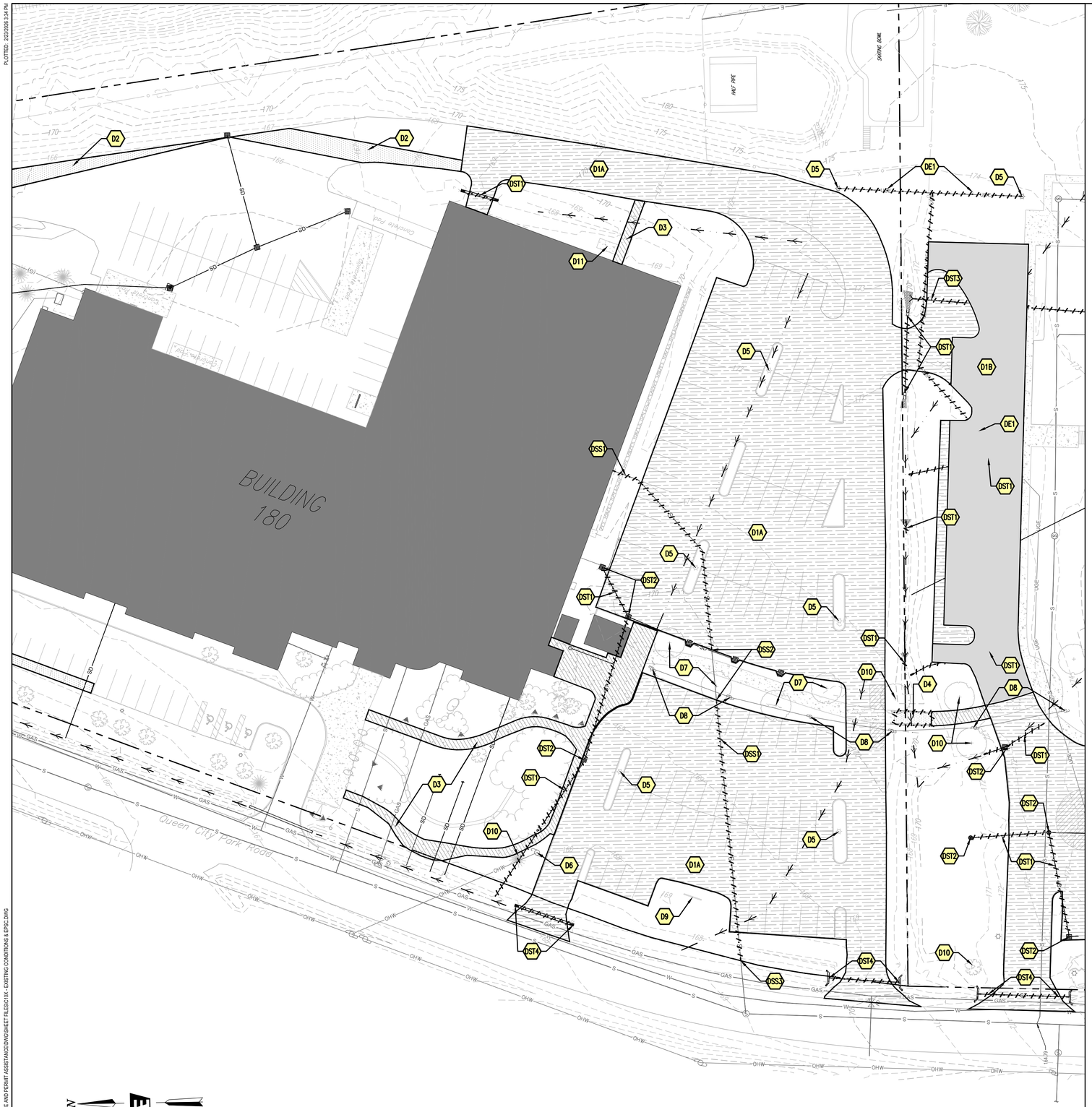

SITE DEMOLITION SCHEDULE

- D1A — APPROXIMATE LIMITS OF REMOVAL: 1.42 ACRES FULL DEPTH PAVEMENT AND SUBBASE MATERIAL FOR THE 180 PROPERTY 500 LF OF ADJACENT CONCRETE CURBING THROUGHOUT THE PARKING AREA
- D1B — APPROXIMATE LIMITS OF REMOVAL: MILL 0.25 ACRES OF SURFACE PAVEMENT MATERIAL AT ASSUMED 1.5" DEPTH
- D2 — APPROXIMATE LIMITS OF PAVEMENT REMOVAL FOR UTILITY TRENCHING (NONE THIS SHEET)
- D3 — APPROXIMATE LIMITS OF REMOVAL FOR 3,900 SF CONCRETE SIDEWALK AND SUBBASE MATERIAL ON 180 PROPERTY
- D4 — EXISTING BRIDGE STRUCTURE TO BE REMOVED AND TEMPORARY RELOCATED ON SITE AT DIRECTION OF OWNER DEMOLISH EXISTING CONCRETE FOUNDATION AND ABUTMENTS
- D5 — REMOVE EXISTING LIGHT POLES
- D6 — EXISTING POWER POLE TO BE PROTECTED DURING CONSTRUCTION COORDINATE WITH ELECTRIC UTILITY FOR TEMPORARY POWER POLE SUPPORT OR RELOCATION DURING EXCAVATION OF STORMWATER OUTLET PIPE FOR GRAVEL WETLAND
- D7 — EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION
- D8 — TEMPORARILY RELOCATE EXISTING ARCHITECTURAL CHAIRLIFT SUPPORT POLES AND INTERCONNECTING CABLE DURING CONSTRUCTION AND REPLACE UPON COMPLETION
- D9 — DEMOLISH AND REMOVE EXISTING SIGN
- D10 — REMOVE EXISTING TREE AND STUMP
- D11 — GENERATOR TO BE PROTECTED AND TO REMAIN DURING CONSTRUCTION

UTILITY DEMOLITION SCHEDULE

- DST1 — DEMOLISH AND REMOVE EXISTING STORMWATER PIPING
- DST2 — DEMOLISH AND REMOVE EXISTING CATCH BASINS
- DST3 — DEMOLISH AND REMOVE EXISTING 15" ROOF DRAIN PIPE
- DST4 — DEMOLISH AND REMOVE EXISTING CULVERTS AND HEADWALLS
- DSS1 — DEMOLISH EXISTING SEWER LINE
- DSS2 — CUT LINE ON BOTH SIDES OF EXISTING CURBED GREEN SPACE, FILL EXISTING LINE WITH CONCRETE, AND CAP AT BOTH ENDS
- DSS3 — CAP EXISTING SEWER LINE END AT PROPERTY LINE
- DE1 — REMOVE EXISTING ELECTRICAL CONDUIT TERMINATE WIRE IN JUNCTION BOX AT CUT LOCATION

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PETER M. BOISVERT
NO. 9018
02/23/26
LICENSED PROFESSIONAL ENGINEER
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www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Demolition Plan - Center Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C104

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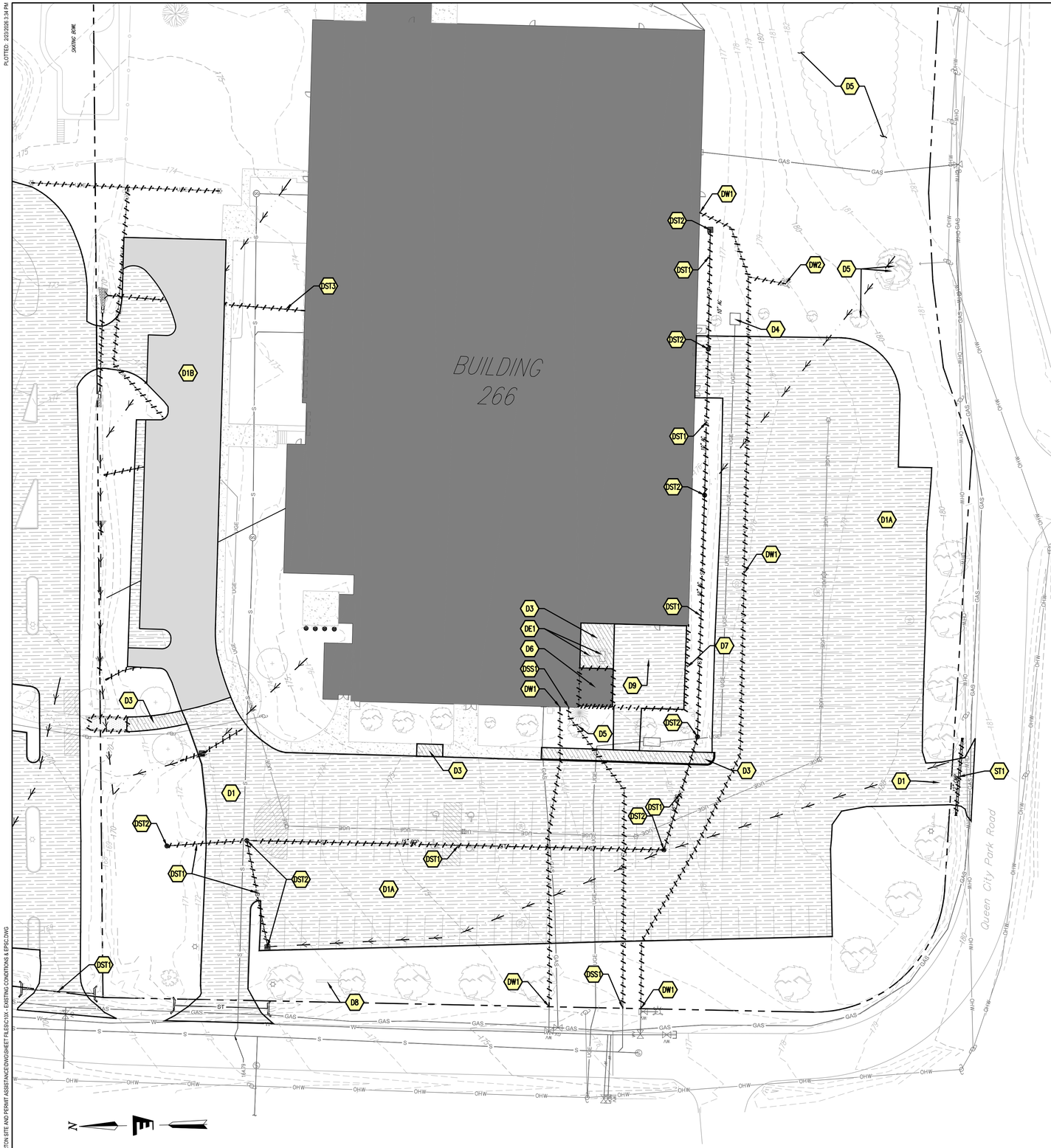

GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

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SITE DEMOLITION SCHEDULE

EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH CARE IN EXECUTING ANY WORK AND TO CALL DIG SAFE 48 HOURS PRIOR TO DIGGING, DRILLING OR BLASTING.

- D1A — APPROXIMATE LIMITS OF REMOVAL: 1.70 ACRES FULL DEPTH PAVEMENT AND SUBBASE MATERIAL FOR THE 266 PROPERTY 500 LF OF ADJACENT CONCRETE CURBING THROUGHOUT THE PARKING AREA
- D1B — APPROXIMATE LIMITS OF REMOVAL: MILL 0.25 ACRES OF SURFACE PAVEMENT MATERIAL AT ASSUMED 1.5" DEPTH
- D2 — APPROXIMATE LIMITS OF PAVEMENT REMOVAL FOR UTILITY TRENCHING (NONE THIS SHEET)
- D3 — APPROXIMATE LIMITS OF REMOVAL FOR 1,000 SF CONCRETE AND SUBBASE MATERIAL ON 266 PROPERTY
- D4 — EXISTING TRANSFORMER TO BE PROTECTED DURING CONSTRUCTION
- D5 — REMOVE EXISTING TREES AND STUMPS
- D6 — REMOVE EXISTING SHED
- D7 — REMOVE EXISTING WOOD PANEL FENCE
- D8 — REMOVE EXISTING SIGN AND DISPOSE PER OWNER DISCRETION
- D9 — REMOVE EXISTING MONITORING WELL AND CAST IRON COVER

UTILITY DEMOLITION SCHEDULE

- DST1 — DEMOLISH AND REMOVE EXISTING STORMWATER PIPING
- DST2 — DEMOLISH AND REMOVE EXISTING CATCH BASINS
- DST3 — DEMOLISH AND REMOVE EXISTING 15" ROOF DRAIN PIPE
- DSS1 — DEMOLISH EXISTING SEWER LINE CAP END AT PROPERTY LINE
- DW1 — REMOVE EXISTING WATERLINE TO PROPERTY LINE MAINTAIN FLOW THROUGH EXISTING WATER LINE UNTIL CONNECTION OF NEW PIPING
- DW2 — REMOVE EXISTING HYDRANT
- DE1 — REMOVE EXISTING GENERATOR, PAD, AND CONDUIT. ELECTRICAL CABLE TO BUILDING REMOVED BY OTHERS

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER

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414 Union Street, Schenectady, NY 12305 • 518-205-9141
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Demolition Plan - South Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C105

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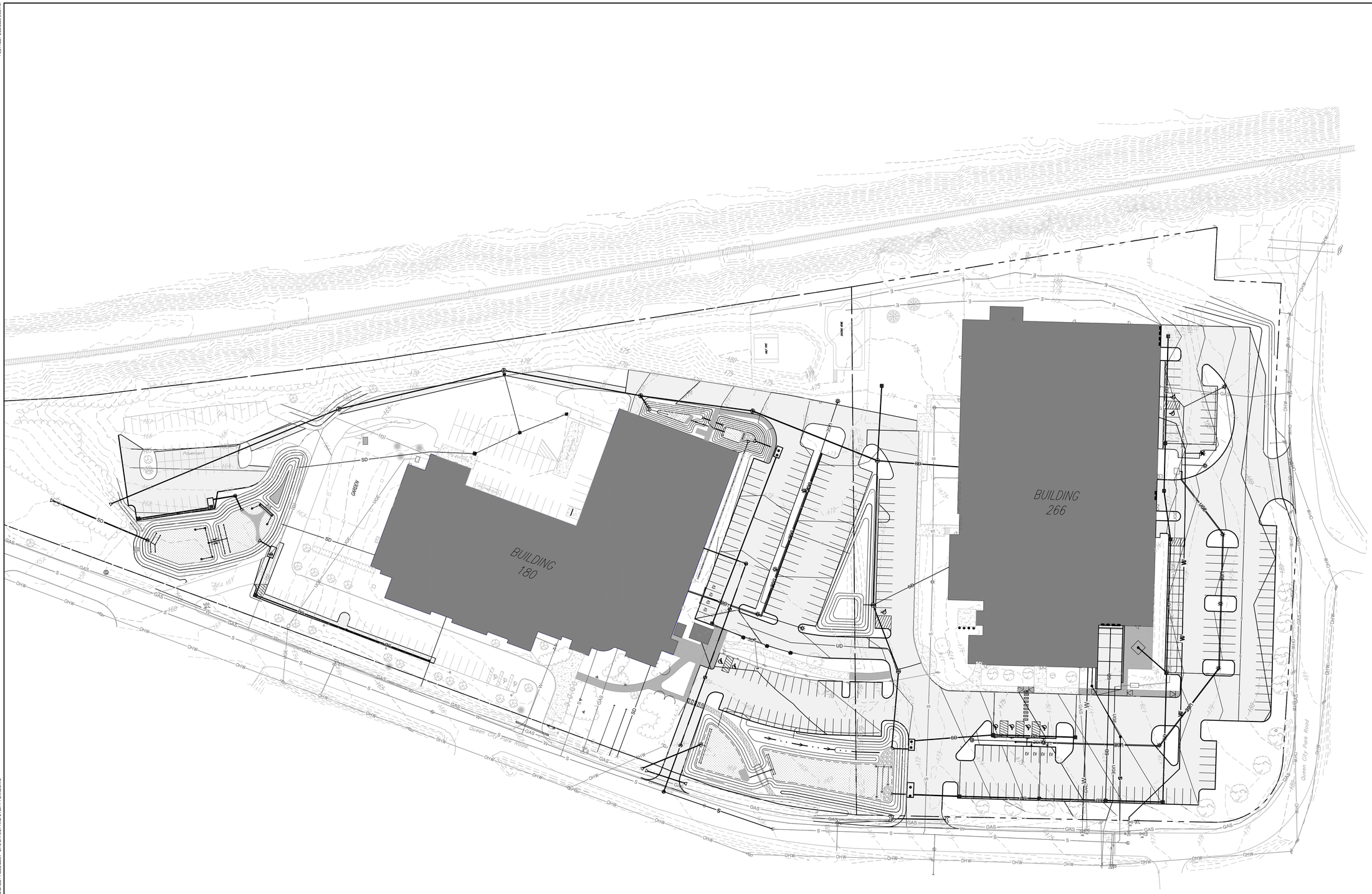

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.
for sheet size 24" x 36"

OVERALL CAMPUS VIEW

SHEET INCLUDED TO SHOW EXTENT OF PROPOSED CAMPUS

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
DEREK M. BOISVERT
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Overall Campus Proposed Layout

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C200

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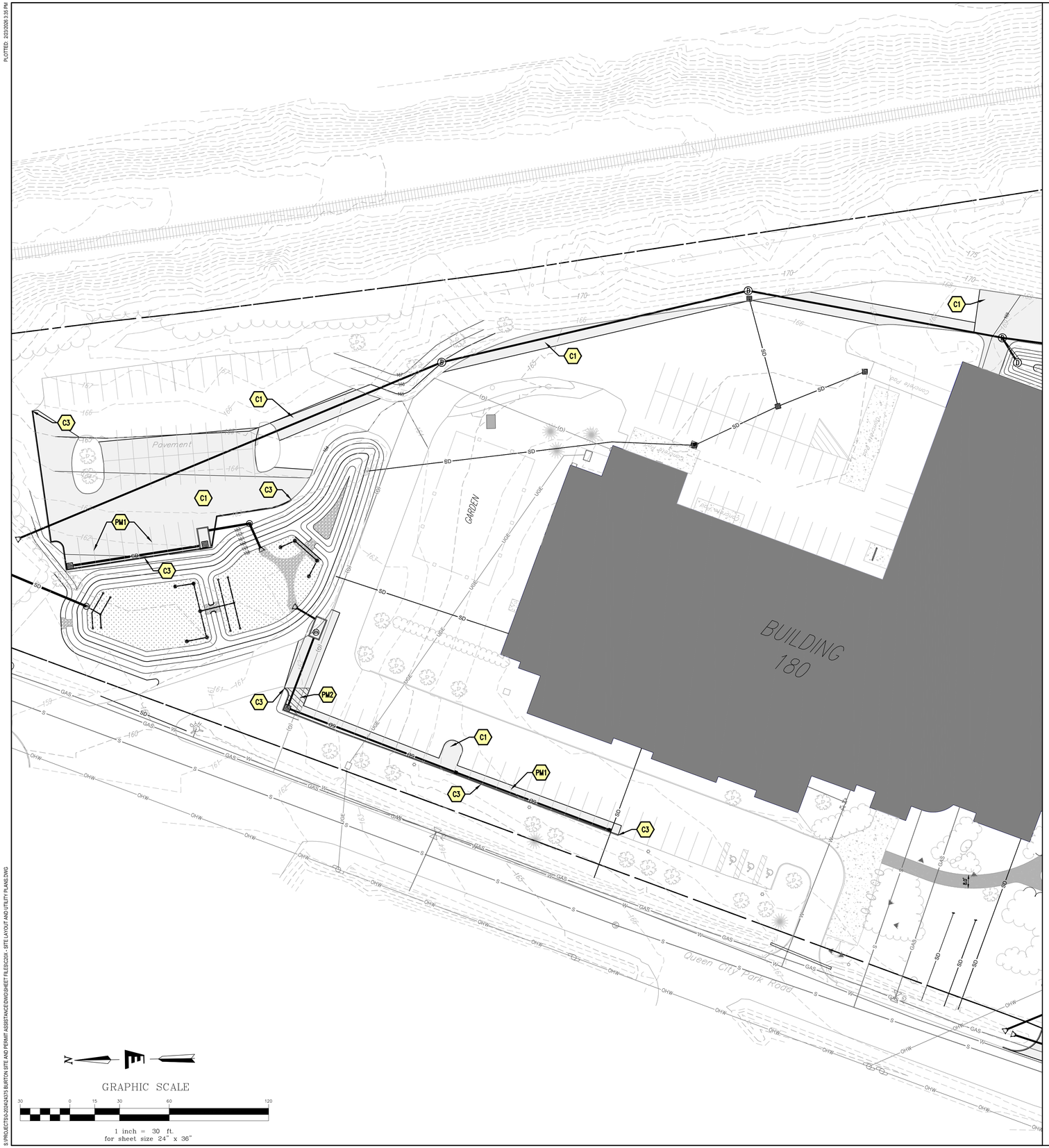

SITE LAYOUT SCHEDULE

- C1 — NEW PAVEMENT SEE DETAIL 1 SHEET C301
- C2 — NEW CONCRETE SIDEWALK SEE DETAIL 5 SHEET C301
- C3 — CONCRETE CURBING SEE DETAIL 4 SHEET C301
- C4 — ADA ACCESSIBLE SIDEWALK TIP-DOWN

PAVEMENT MARKINGS

- PM1 — 4" WIDE PARKING STALL STRIPING (TYP)
- PM2 — 4" WIDE DIAGONAL HATCH STRIPING
- PM3 — ADA WHEELCHAIR SYMBOL FOR ACCESSIBLE PARKING STALLS, TYP. ALL ADA PARKING SPACES SHALL HAVE AN ADA PARKING SIGN INCLUDED PER DETAIL 6 SHEET C301
- PM4 — CROSSWALK MARKING

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
DEREK M. BOISVERT
NO. 9016
02/23/26
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Layout Plan - North Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C201

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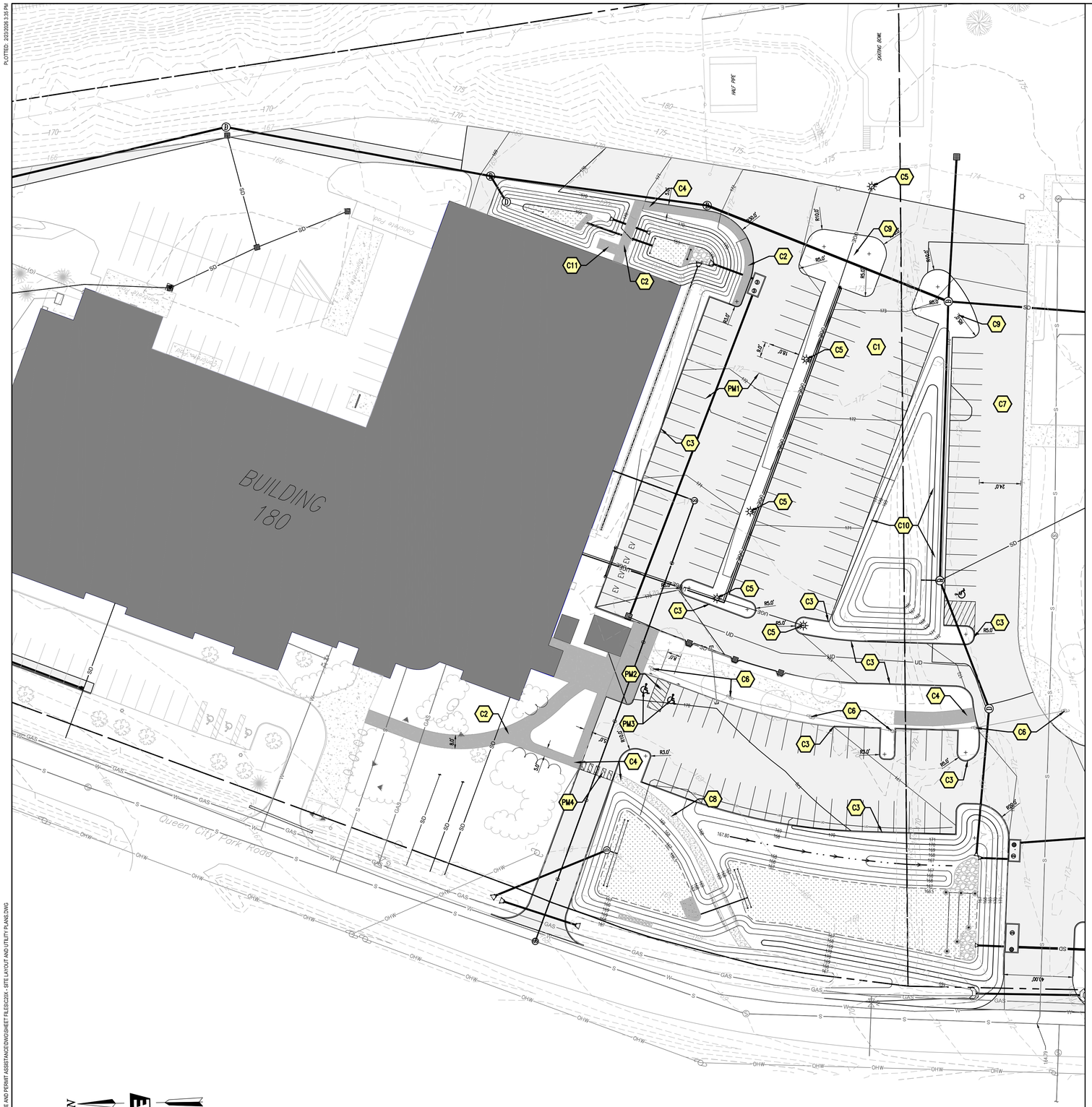

SITE LAYOUT SCHEDULE

- C1 — NEW PAVEMENT SEE DETAIL 1 SHEET C301 APPROXIMATELY 1.28 ACRES FOR 180 PROPERTY
- C2 — NEW CONCRETE SIDEWALK SEE DETAIL 5 SHEET C301 APPROXIMATELY 4,000 SF FOR 180 PROPERTY
- C3 — CONCRETE CURBING SEE DETAIL 4 SHEET C301
- C4 — ADA ACCESSIBLE SIDEWALK TIP-DOWN
- C5 — LIGHT POLES WITH NEW ELECTRICAL CONDUIT ROUTING SEE DETAILS 7 AND 8 SHEET C301
- C6 — RESET EXISTING ARCHITECTURAL CHAIRLIFT SUPPORTS ON EXISTING BASES
- C7 — 1.5" PAVEMENT OVERLAID ON MILLED AREA
- C8 — GRAVEL WALKWAY SEE DETAIL 4 SHEET C302
- C9 — GRASSED PARKING ISLAND
- C10 — MINIMUM OF 21 2.5"-4" CAL. TREES TO BE PLANTED ON 180 PROPERTY PROVIDE MIX OF HONEY LOCUST, MAPLE, AND OAK FINAL LANDSCAPE DESIGN TO BE COMPLETED BY OTHERS
- C11 — GENERATOR AND PAD TO REMAIN IN PLACE THROUGH CONSTRUCTION

PAVEMENT MARKINGS

- PM1 — 4" WIDE PARKING STALL STRIPING (TYP)
- PM2 — 4" WIDE DIAGONAL HATCH STRIPING
- PM3 — ADA WHEELCHAIR SYMBOL FOR ACCESSIBLE PARKING STALLS, TYP. ALL ADA PARKING SPACES SHALL HAVE AN ADA PARKING SIGN INCLUDED PER DETAIL 6 SHEET C301
- PM4 — CROSSWALK MARKING

GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
LICENSED
PROFESSIONAL ENGINEER
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Layout Plan - Center Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C202

S:\PROJECTS\X-2024\24375 BURTON SITE AND PERMIT ASSISTANCE\EWS\SHEET FILES\C202X - SITE LAYOUT AND UTILITY PLANS.DWG

SITE LAYOUT SCHEDULE

- C1 — NEW PAVEMENT AND SUBBASE SEE DETAIL 1 SHEET C301
  APPROXIMATELY 2.21 ACRES FOR 266 PROPERTY
- C2 — NEW CONCRETE SIDEWALK SEE DETAIL 5 SHEET C301
  APPROXIMATELY 550 SF FOR 266 PROPERTY
- C3 — CONCRETE CURBING SEE DETAIL 4 SHEET C301
- C4 — ADA ACCESSIBLE SIDEWALK TIP-DOWN
- C5 — CURBED AND GRASSED PARKING ISLAND
- C6 — REINFORCED SLOPED CURBING AND CONCRETE PAD WITHIN PARKING ISLAND
  SEE DETAILS 1 AND 2 SHEET C302
- C7 — MINIMUM OF 53 2.5"-4" CAL. TREES TO BE PLANTED ON 266 PROPERTY
  PROVIDE MIX OF HONEY LOCUST, MAPLE, AND OAK
  FINAL LANDSCAPE DESIGN TO BE COMPLETED BY OTHERS
- C8 — NEW AT-GRADE OVERHEAD ACCESS DOOR
  BUILDING MODIFICATIONS BY OTHERS
- C9 — PAVED DEPRESSED LOADING DOCK AREA,
  BUILDING MODIFICATIONS BY OTHERS
- C10 — CONCRETE RETAINING WALL TO BE DESIGNED BY OTHERS

PAVEMENT MARKINGS

- PM1 — 4" WIDE PARKING STALL STRIPING (TYP)
- PM2 — 4" WIDE DIAGONAL HATCH STRIPING
- PM3 — ADA WHEELCHAIR SYMBOL FOR ACCESSIBLE PARKING STALLS, TYP.
  ALL ADA PARKING SPACES SHALL HAVE AN ADA PARKING SIGN
  INCLUDED PER DETAIL 6 SHEET C301
- PM4 — CROSSWALK MARKING

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
LICENSED
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414 Union Street, Schenectady, NY 12305 • 518-205-9141
www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Layout Plan - South Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C203

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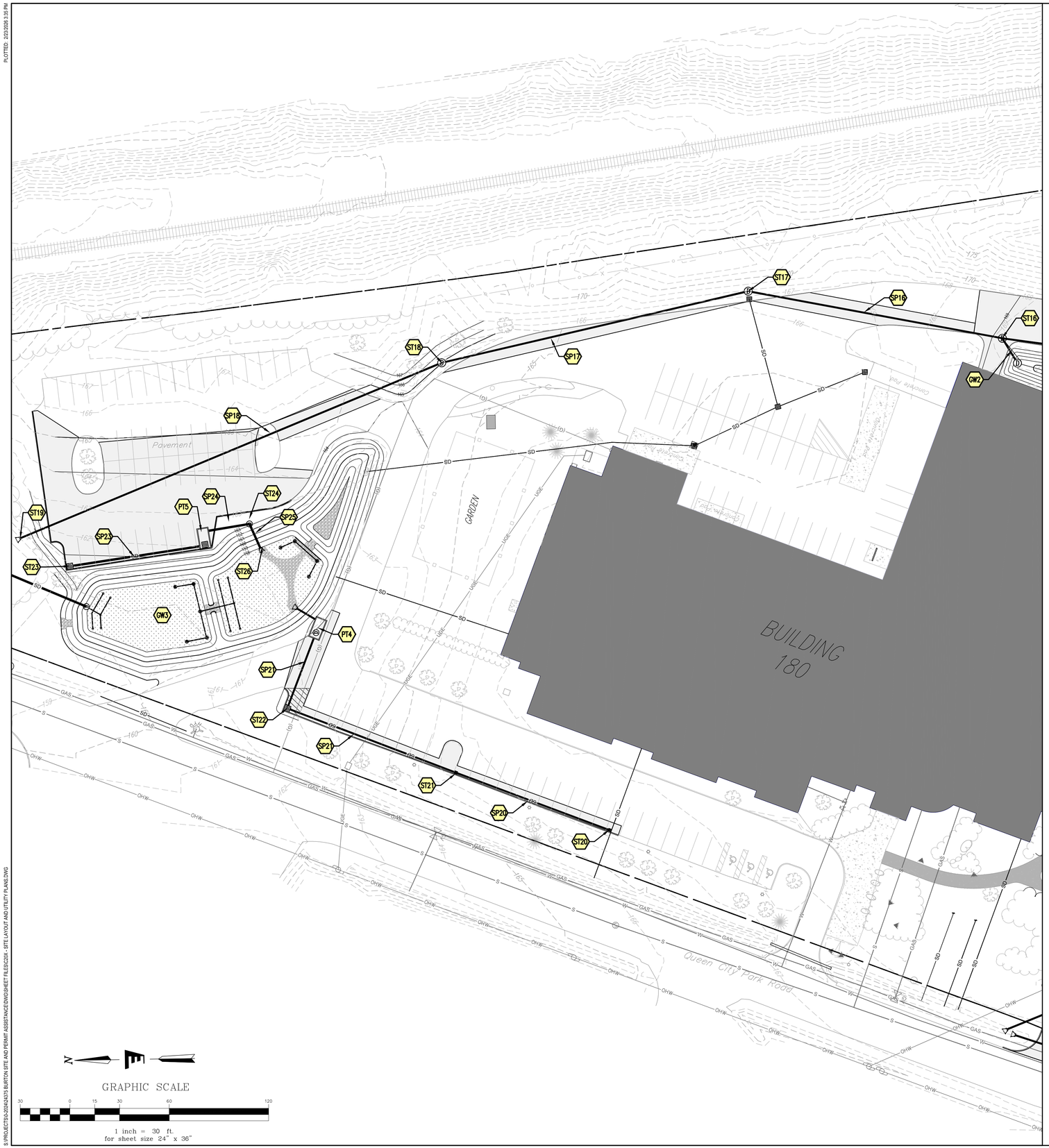

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STORMWATER STRUCTURE AND PIPE SCHEDULE

ST20
4' I.D. PRECAST MH
RIM: 167.33
INV. OUT: 164.33 (12" HDPE)
SUMP: 162.33

ST21
4' I.D. PRECAST MH
RIM: 166.68
INV. IN: 163.68 (12" HDPE)
INV. OUT: 163.58 (12" HDPE)
SUMP: 161.58

ST22
4' I.D. PRECAST MH
RIM: 162.00
INV. IN: 158.51 (12" HDPE)
INV. OUT: 159.00 (12" HDPE)
SUMP: 156.51

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP20	12"	99.23'	0.66%	Corrugated HDPE Pipe
SP21	12"	109.08'	4.65%	Corrugated HDPE Pipe
SP22	12"	45.27'	0.50%	Corrugated HDPE Pipe

PT4
6'X12' INTERNAL DIMENSION PRECAST CONCRETE PRETREATMENT TANK
MINIMUM TANK SIZE 1,000 GALLONS
12" HDPE INVERT IN (SP21): 158.77
12" HDPE INVERT OUT (TO GW3): 158.67

ST16
5' I.D. PRECAST MH
RIM: 168.99
INV. IN: 163.15 (15" HDPE)
INV. IN: 163.15 (12" HDPE)
INV. OUT: 163.05 (15" HDPE)
SUMP: 161.05

ST17
4' I.D. PRECAST MH
RIM: 167.82
INV. IN: 162.27 (15" HDPE)
INV. OUT: 162.17 (15" HDPE)
SUMP: 160.17

ST18
4' I.D. PRECAST MH
RIM: 165.04
INV. IN: 161.22 (15" HDPE)
INV. OUT: 161.12 (15" HDPE)
SUMP: 159.12

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP16	15"	156.06'	0.50%	Corrugated HDPE Pipe
SP17	15"	190.08'	0.50%	Corrugated HDPE Pipe
SP18	15"	275.68'	0.50%	Corrugated HDPE Pipe
GW2 OUT	12"	18.27'	0.50%	Corrugated HDPE Pipe

ST23
4' I.D. PRECAST MH
RIM: 162.92
INV. OUT: 159.12 (12" HDPE)
SUMP: 157.12

ST24
4' I.D. PRECAST MH
RIM: 163.19
INV. IN: 158.60 (12" HDPE)
INV. OUT: 158.50 (12" HDPE)
SUMP: 156.50

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP23	12"	79.13'	0.51%	Corrugated HDPE Pipe
SP24	12"	25.01'	0.49%	Corrugated HDPE Pipe
SP25	12"	15.83'	0.60%	Corrugated HDPE Pipe

PT5
6'X12' INTERNAL DIMENSION PRECAST CONCRETE PRETREATMENT TANK
MINIMUM TANK SIZE 1,000 GALLONS
12" HDPE INVERT IN (SP23): 158.72
12" HDPE INVERT OUT (SP24): 158.72

GW3
GRAVEL WETLAND 1
SEE DETAIL 5 SHEET C303

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
2/23/26
LICENSED
PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
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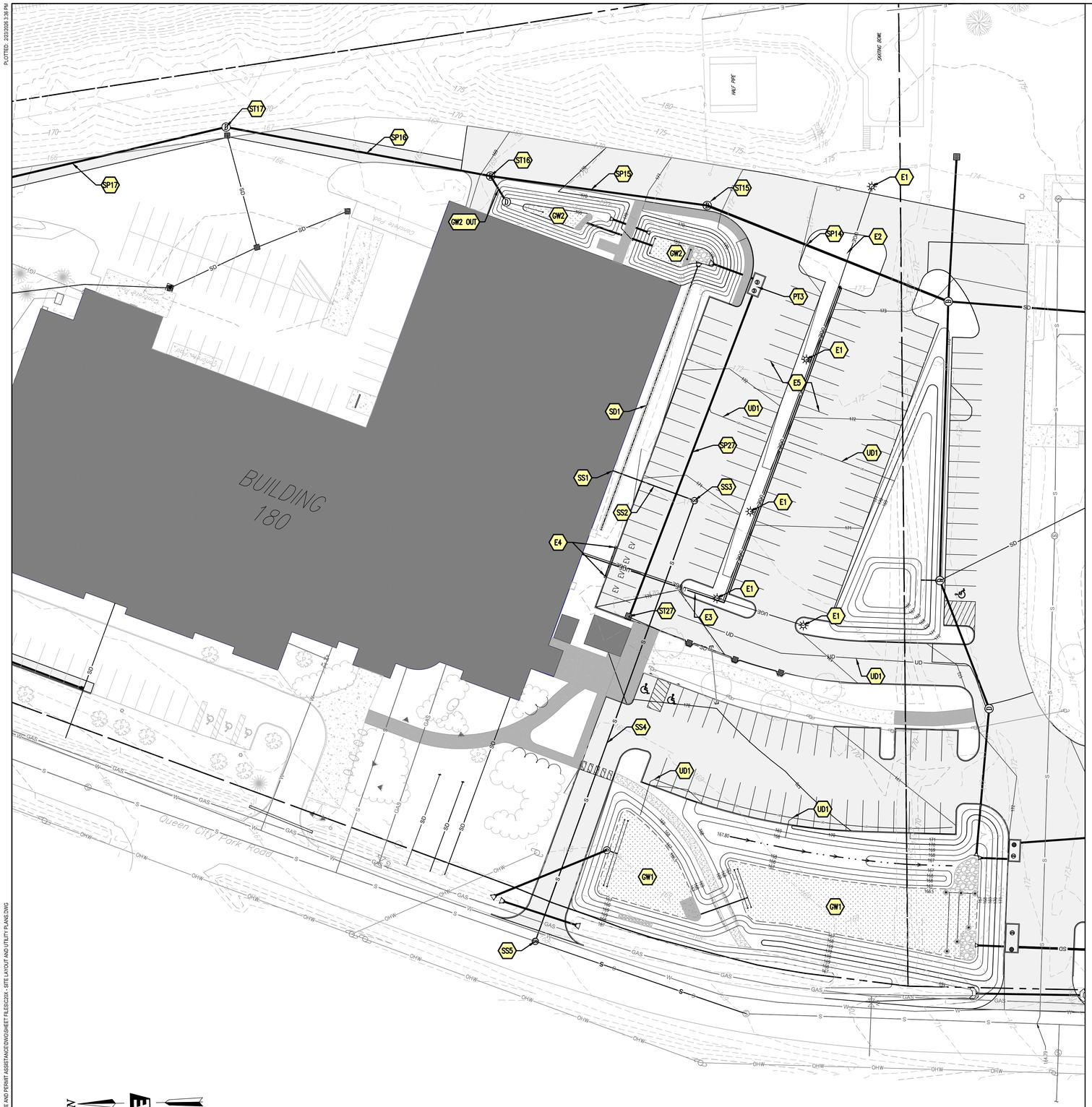
The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Utility Plan - North Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C204



STORMWATER STRUCTURE AND PIPE SCHEDULE

GW1 GRAVEL WETLAND 1
SEE DETAIL 1 SHEET C303

GW2 GRAVEL WETLAND 2
SEE DETAIL 3 SHEET C303

UD1 6" PVC PERFORATED UNDERDRAIN INSTALLED IN PAVEMENT SUBBASE
PROVIDE WYE CONNECTION TO STORM DRAINS, DIRECTLY CONNECT TO CATCH BASIN, OR DAYLIGHT TO TREATMENT AREAS AS SHOWN
SEE DETAIL 9 SHEET C301

SD1 6" PERFORATED SURFACE DRAIN PIPE
SEE DETAIL 5 SHEET C303

ST15 4' I.D. PRECAST MH
RIM: 171.61
INV. IN: 168.25 (15" HDPE)
INV. OUT: 168.15 (15" HDPE)
SUMP: 166.15

ST16 5' I.D. PRECAST MH
RIM: 168.99
INV. IN: 163.15 (15" HDPE)
INV. IN: 163.15 (12" HDPE)
INV. OUT: 163.05 (15" HDPE)
SUMP: 161.05

ST17 4' I.D. PRECAST MH
RIM: 167.82
INV. IN: 162.27 (15" HDPE)
INV. OUT: 162.17 (15" HDPE)
SUMP: 160.17

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP14	15"	150.57'	0.50%	Corrugated HDPE Pipe
SP15	15"	126.78'	3.94%	Corrugated HDPE Pipe
SP16	15"	156.06'	0.50%	Corrugated HDPE Pipe
SP17	15"	190.08'	0.50%	Corrugated HDPE Pipe
SP18	15"	275.68'	0.50%	Corrugated HDPE Pipe
GW2 OUT	12"	18.27'	0.50%	Corrugated HDPE Pipe

ST27 4' I.D. PRECAST MH
RIM: 169.82
INV. IN: 167.10 (12" HDPE)
INV. OUT: 167.00 (12" HDPE)
SUMP: 165.00

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP27	12"	199.78'	0.50%	Corrugated HDPE Pipe

PT3 6'X12' INTERNAL DIMENSION PRECAST CONCRETE PRETREATMENT TANK
MINIMUM TANK SIZE 1,000 GALLONS
12" HDPE INVERT IN (SP27): 166.00
12" HDPE INVERT OUT (TO GW2): 165.90

SEWER STRUCTURE AND PIPE SCHEDULE

SS1 6" PVC SEWER LINE TO REPLACE EXISTING BUILDING SEWER LINE TO FOUNDATION WALL
ASSUMED INVERT: 173.22

SS3 4' I.D. PRECAST MH
RIM: 170.99
INV. IN: 163.23 (6" PVC)
INV. OUT: 163.13 (6" PVC)

SS5 4' I.D. PRECAST MH
RIM: 167.91
INV. IN: 160.41 (6" PVC)

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SS2	6"	50.40'	2.00%	PVC
SS4	6"	271.92'	1.00%	PVC

ELECTRIC UTILITY SCHEDULE

EV CHARGING REQUIREMENTS ARE BASED ON A TOTAL OF 122 TOTAL PARKING SPACES FOR THE 180 PROPERTY
A MINIMUM OF (3) EV CHARGING STATIONS ARE REQUIRED
A MINIMUM OF (25) EV CAPABLE PARKING SPACES ARE REQUIRED

E1 LIGHT POLE
FINAL LIGHTING DESIGN BY OTHERS

E2 APPROXIMATE CONDUIT ROUTING FOR SITE LIGHTING

E3 CONCEPTUAL EV CHARGING POWER SUPPLY TO BE PLACED IN CONDUIT TRENCH WITH SITE LIGHTING CONDUIT
FINAL ROUTING AND POWER SUPPLY REQUIREMENTS TO BE DESIGNED BY OTHERS

E4 (2) EXISTING DUAL-PORT EV CHARGING STATIONS TO BE RESET DURING CONSTRUCTION TO MEET THE MINIMUM REQUIREMENT

E5 PARKING SPACES SHOWN ALONG THE ROUTE OF EV CHARGING POWER SUPPLY CONDUIT COUNT AS EV CAPABLE SPACES FOR A TOTAL OF (42)

SITE PLAN REVIEW
-FINAL-
02/23/2026

STATE OF VERMONT
DEAN M. ROISTACHER
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Utility Plan - Center Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C205

PLOTTED: 2/23/2026 3:38 PM

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SEWER STRUCTURE AND PIPE SCHEDULE

SS6 6" PVC SEWER LINE TO REPLACE EXISTING BUILDING SEWER LINE TO FOUNDATION WALL
ASSUMED INVERT: 173.22

SS7 4' I.D. PRECAST MH
RIM: 176.76
INV. IN: 173.85 (6" PVC)
INV. OUT: 173.75 (6" PVC)

SS8 4' I.D. PRECAST MH
RIM: 176.96
INV. IN: 173.10 (6" PVC)
INV. OUT: 173.00 (6" PVC)

SS10 6" PVC SEWER LINE TO REPLACE EXISTING SEWER LINE TO PROPERTY LINE
ASSUMED INVERT AT PROPERTY LINE: 170.75

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SS8	6"	65.35'	1.00%	PVC
SS10	6"	93.66'	1.00%	PVC
SS6	6"	20.41'	2.00%	PVC

WATER UTILITY SCHEDULE

MAINTAIN FLOW THROUGH EXISTING WATER LINE UNTIL MOMENT OF CONNECTION OF NEW PIPING

W1 CONNECT NEW 8" D.I. WATER LINE TO EXISTING LINE AT PROPERTY LINE

W2 THRUST BLOCK RESTRAINT AT BENDS

W3 454 LF 8" D.I. WATER LINE

W4 8"x8"x6" TEE CONNECTION FOR EXISTING HYDRANT

W5 8"x4" REDUCER FITTING

W6 52 LF 4" D.I. WATER LINE TO EXISTING BUILDING SERVICE ENTRANCE

W7 170 LF D.I. WATER LINE TO EXISTING BUILDING SERVICE ENTRANCE
SIZE TO BE CONFIRMED

W8 FIRE HYDRANT

ELECTRIC UTILITY SCHEDULE

EV CHARGING REQUIREMENTS ARE BASED ON A TOTAL OF 174 TOTAL PARKING SPACES FOR THE 266 PROPERTY
A MINIMUM OF (4) EV CHARGING STATIONS ARE REQUIRED
A MINIMUM OF (35) EV CAPABLE PARKING SPACES ARE REQUIRED

CONTRACTOR TO INSTALL CONDUIT, PULL BOXES, AND POLE BASES PER ELECTRICAL PLANS BY OTHERS.
BURTON CONTRACTOR TO WITNESS CONDUIT INSTALLATION, PULL WIRES, AND PROVIDE MOUNTING BOLT PATTERN FOR LIGHT POLES.

E1 LIGHT POLE
FINAL LIGHTING DESIGN BY OTHERS

E2 APPROXIMATE CONDUIT ROUTING FOR SITE LIGHTING

E3 CONCEPTUAL EV CHARGING POWER SUPPLY TO BE PLACED IN CONDUIT TRENCH WITH SITE LIGHTING CONDUIT
FINAL ROUTING AND POWER SUPPLY REQUIREMENTS TO BE DESIGNED BY OTHERS

E4 (2) DUAL-PORT EV CHARGING STATIONS TO MEET THE MINIMUM REQUIREMENT

E5 PARKING SPACES SHOWN ALONG THE ROUTE OF EV CHARGING POWER SUPPLY CONDUIT COUNT AS EV CAPABLE SPACES FOR A TOTAL OF (48)

SITE PLAN REVIEW
-FINAL-
02/23/2026

STATE OF VERMONT
DEREK M. BOISVERT
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER
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No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Utility Plan - South Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C206

S:\PROJECTS\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C206 - SITE LAYOUT AND UTILITY PLANS.DWG

STORMWATER STRUCTURE AND PIPE SCHEDULE

ST1 4' I.D. PRECAST MH
RIM: 176.91
INV. OUT: 173.09 (12 inch Corrugated HDPE Pipe)
SUMP: 171.09

ST2 4' I.D. PRECAST MH
RIM: 176.90
INV. IN: 172.49 (12 inch Corrugated HDPE Pipe)
INV. IN: 174.00 (6" PVC)
INV. OUT: 172.39 (12 inch Corrugated HDPE Pipe)
SUMP: 170.39

ST3 4' I.D. PRECAST MH
RIM: 176.92
INV. IN: 172.12 (12 inch Corrugated HDPE Pipe)
INV. OUT: 172.02 (12 inch Corrugated HDPE Pipe)
SUMP: 170.02

ST4 4' I.D. PRECAST MH
RIM: 177.56
INV. IN: 171.75 (12 inch Corrugated HDPE Pipe)
INV. OUT: 171.65 (12 inch Corrugated HDPE Pipe)
SUMP: 169.65

ST5 5' I.D. PRECAST MH
RIM: 177.54
INV. IN: 170.90 (12 inch Corrugated HDPE Pipe)
INV. IN: 170.90 (6" PVC)
INV. IN: 174.74 (6" PVC)
INV. OUT: 170.80 (15 inch Corrugated HDPE Pipe)
SUMP: 168.80

ST6 5' I.D. PRECAST MH
RIM: 177.03
INV. IN: 170.07 (15 inch Corrugated HDPE Pipe)
INV. OUT: 169.97 (15 inch Corrugated HDPE Pipe)
SUMP: 167.97

ST7 4' I.D. PRECAST MH
RIM: 175.99
INV. IN: 169.65 (15 inch Corrugated HDPE Pipe)
INV. IN: 169.65 (6 inch PVC Pipe)
INV. OUT: 169.55 (15 inch Corrugated HDPE Pipe)
SUMP: 167.55

ST8 4' I.D. PRECAST MH
RIM: 174.39
INV. IN: 169.18 (15 inch Corrugated HDPE Pipe)
INV. IN: 169.18 (6" PVC)
INV. OUT: 169.08 (15 inch Corrugated HDPE Pipe)
SUMP: 167.08

ST9 4' I.D. PRECAST MH
RIM: 172.83
INV. IN: 168.63 (15 inch Corrugated HDPE Pipe)
INV. IN: 169.80 (6" PVC)
INV. OUT: 168.53 (15 inch Corrugated HDPE Pipe)
SUMP: 166.53

PT1 7'x16' INTERNAL DIMENSION PRECAST CONCRETE PRETREATMENT TANK
MINIMUM TANK SIZE 3,000 GALLONS
15" HDPE INVERT IN (SP9): 168.32
15" HDPE INVERT OUT: 168.22

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP1	12"	120.20'	0.50%	Corrugated HDPE Pipe
SP2	12"	53.32'	0.50%	Corrugated HDPE Pipe
SP3	12"	54.86'	0.50%	Corrugated HDPE Pipe
SP4	12"	149.44'	0.50%	Corrugated HDPE Pipe
SP6	15"	64.23'	0.50%	Corrugated HDPE Pipe
SP9	15"	51.28'	0.52%	Corrugated HDPE Pipe
SP7	15"	74.48'	0.50%	Corrugated HDPE Pipe
TD2	6"	193.45'	1.00%	PVC Pipe
SP5	15"	145.53'	0.50%	Corrugated HDPE Pipe
SP8	15"	89.50'	0.50%	Corrugated HDPE Pipe
YD2	6"	42.27'	1.00%	PVC Pipe
UD8	6"	57.16'	4.02%	PVC Pipe
UD2	6"	56.98'	3.51%	PVC Pipe
UD5	6"	82.18'	3.36%	PVC Pipe
UD9	6"	39.16'	1.79%	PVC Pipe

ST10 4' I.D. PRECAST MH
RIM: 174.01
INV. OUT: 169.42 (12" HDPE)
SUMP: 165.42

ST11 5' I.D. PRECAST MH
RIM: 172.60
INV. IN: 169.00 (12" HDPE)
INV. IN: 169.00 (12" HDPE)
INV. OUT: 168.40 (15" HDPE)
INV. OUT: 169.25 (15" HDPE)
SUMP: 166.40

ST12 5' I.D. PRECAST MH
RIM: 171.64
INV. IN: 167.59 (15" HDPE)
INV. IN: 167.59 (12" HDPE)
INV. IN: 167.59 (6" PVC)
INV. OUT: 167.49 (15" HDPE)
SUMP: 165.49

ST13 5' I.D. PRECAST MH
RIM: 172.20
INV. IN: 167.09 (15" HDPE)
INV. OUT: 166.99 (15" HDPE)
SUMP: 164.99

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP10	12"	84.08'	0.50%	Corrugated HDPE Pipe
SP11	15"	161.99'	0.50%	Corrugated HDPE Pipe
SP12	15"	79.61'	0.50%	Corrugated HDPE Pipe
SP13	15"	87.31'	0.50%	Corrugated HDPE Pipe
RD1	12"	91.51'	0.50%	Corrugated HDPE Pipe

ST28 4' I.D. PRECAST MH
RIM: 175.77
INV. IN: 172.95 (6" PVC)
INV. OUT: 170.15 (12" HDPE)
SUMP: 168.15

ST29 4' I.D. PRECAST MH
RIM: 173.99
INV. IN: 169.23 (12" HDPE)
INV. IN: 171.20 (6" PVC)
INV. OUT: 169.13 (12" HDPE)
SUMP: 167.13

ST30 15" HDPE CULVERT TO REPLACE EXISTING TO BE INSTALLED WITH CONCRETE HEADWALLS

PT2 6'X12' INTERNAL DIMENSION PRECAST CONCRETE PRETREATMENT TANK
MINIMUM TANK SIZE 1,000 GALLONS
12" HDPE INVERT IN (SP29): 168.26
12" HDPE INVERT OUT: 168.16

UD1 6" PVC PERFORATED UNDERDRAIN INSTALLED IN PAVEMENT SUBBASE
PROVIDE WYE CONNECTION TO STORM DRAINS, DIRECTLY CONNECT TO CATCH BASIN, OR DAYLIGHT TO TREATMENT AREAS AS SHOWN
SEE DETAIL 9 SHEET C301

TD1 TRENCH DRAIN FOR LOADING DOCK AREA
6" PVC INV OUT: 171.58

YD1 6" PVC AREA DRAIN

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SP28	12"	92.06'	1.00%	Corrugated HDPE Pipe
SP29	12"	88.05'	1.00%	Corrugated HDPE Pipe
UD28	6"	47.12'	2.76%	PVC Pipe
UD29	6"	47.16'	2.23%	PVC Pipe
SP30	12"	12.07'	0.50%	Corrugated HDPE Pipe

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Utility Plan South Campus

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C207

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SOILS MANAGEMENT NOTES

FOLLOWING ROUGH SITE GRADING, INSTALLATION OF UTILITIES AND INFRASTRUCTURE; AND PRIOR TO PLANNING OF VEGETATIVE COVER, CONTRACTOR SHALL RESTORE SOIL QUALITY TO DISTURBED SOILS THAT WILL NOT BE COVERED BY IMPERVIOUS SURFACES, INCORPORATED INTO STRUCTURAL STORMWATER TREATMENT PRACTICES, ATHLETIC FIELDS, OR ENGINEERED STRUCTURAL FILL USING ONE OF THE FOLLOWING METHODS. CONTRACTOR SHALL PROVIDE NOTICE TO ENGINEER/OWNER PRIOR TO CONSTRUCTION OF SELECTED METHOD.

AREAS EXEMPT FROM THIS STANDARD INCLUDE UNDISTURBED AREAS, SLOPES GREATER THAN 33%, IMPERVIOUS AREAS AND PROPOSED STANDARD TREATMENT PRACTICES.

OPTION 1: AMEND EXISTING SITE TOPSOIL OR SUBSOIL IN PLACE

- SCARIFY OR TILL SUBSOILS TO 4-INCH DEPTH OR TO DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 8-INCHES OF UNCOMPACTED SOIL AFTER CALCULATED AMOUNT OF AMENDMENT IS ADDED. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
- AMEND SOIL TO MEET ORGANIC CONTENT REQUIREMENT:
  - PRE APPROVED RATE: PLACE 1-INCH OF COMPOSTED MATERIAL WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 60% AND ROTOTILL INTO 3-INCHES OR SOIL, OR
  - CALCULATED RATE: PLACE CALCULATED AMOUNT OF COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AND ROTOTILL INTO DEPTH OF SOIL NEEDED TO ACHIEVE 4-INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT.
- RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2-INCHES IN DIAMETER
- WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY

OPTION 2: REMOVE AND STOCKPILE EXISTING TOPSOIL DURING GRADING.

- STOCKPILE SOIL ON SITE IN A DESIGNATED CONTROLLED AREA, AT LEAST 50-FEET FROM SURFACE WATER, WETLANDS, FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS.
- SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4-INCHES. EXCEPT FOR WITHIN THE DROP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
- STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS:
  - PRE APPROVED RATE: COMPOST SHALL BE INCORPORATED WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 1:3, OR
  - CALCULATED RATE: INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4-INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT
- REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING
- RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2-INCHES IN DIAMETER.

OPTION 3: IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.

- SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4-INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION
- PLACE 4-INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA SOILS CLASSIFICATION SYSTEM.
- RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2-INCHES IN DIAMETER.
- WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

SOILS MANAGEMENT TESTING

ONCE SOIL QUALITY HAS BEEN RESTORED IN ACCORDANCE WITH THE SOIL RESTORATION METHODS OUTLINED, AND PRIOR TO PLANTING THE CONTRACTOR SHALL PERFORM FIELD TESTING OF RESTORED SOIL QUALITY. TESTING SHALL BE IN LOCATIONS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. A MINIMUM OF SEVEN TEST HOLES PER ACRE SHALL BE DUG TO A DEPTH OF 8-INCHES AND SHALL BE AT LEAST 50-FEET APART. TESTING SHALL BE PERFORMED USING SPADE SHOVEL DRIVEN USING SOLELY BY THE WEIGHT OF THE INSPECTOR. CONTRACTOR SHALL PREPARE REPORTING FORM THAT INCLUDES THE FOLLOWING INFORMATION:

- DATE/TIME OF TEST
- PERSONS PERFORMING AND WITNESSING TESTING
- LOCATION OF TEST
- OBSERVATIONS SHALL NOTE: EASE OF DRIVING SPADE (DIFFICULT, MODERATE, EASY), VERIFICATION OF SOIL AMENDMENTS, NOTE OF MATERIAL THICKNESS, TEXTURE AND OTHER NOTABLE SOIL FEATURES.

TESTS THAT INDICATE DIFFICULTY IN DRIVING A SPADE, LACK OF SOILS AMENDMENTS, AND TEXTURES NOT CONSISTENT WITH RESTORATION PRACTICE OPTIONS NOTED ABOVE SHALL HAVE AN ADDITIONAL TEST PERFORMED WITHIN 50-FEET OF THE TEST SHOWING 'POOR' RESULTS. IF THREE CONSECUTIVE TESTS SHOWING POOR RESULTS ARE OBTAINED THE AREA TESTED SHALL BE SUBJECT TO REWORK IN ACCORDANCE WITH RESTORATION PRACTICES NOTED AND SUBSEQUENTLY RETESTED.

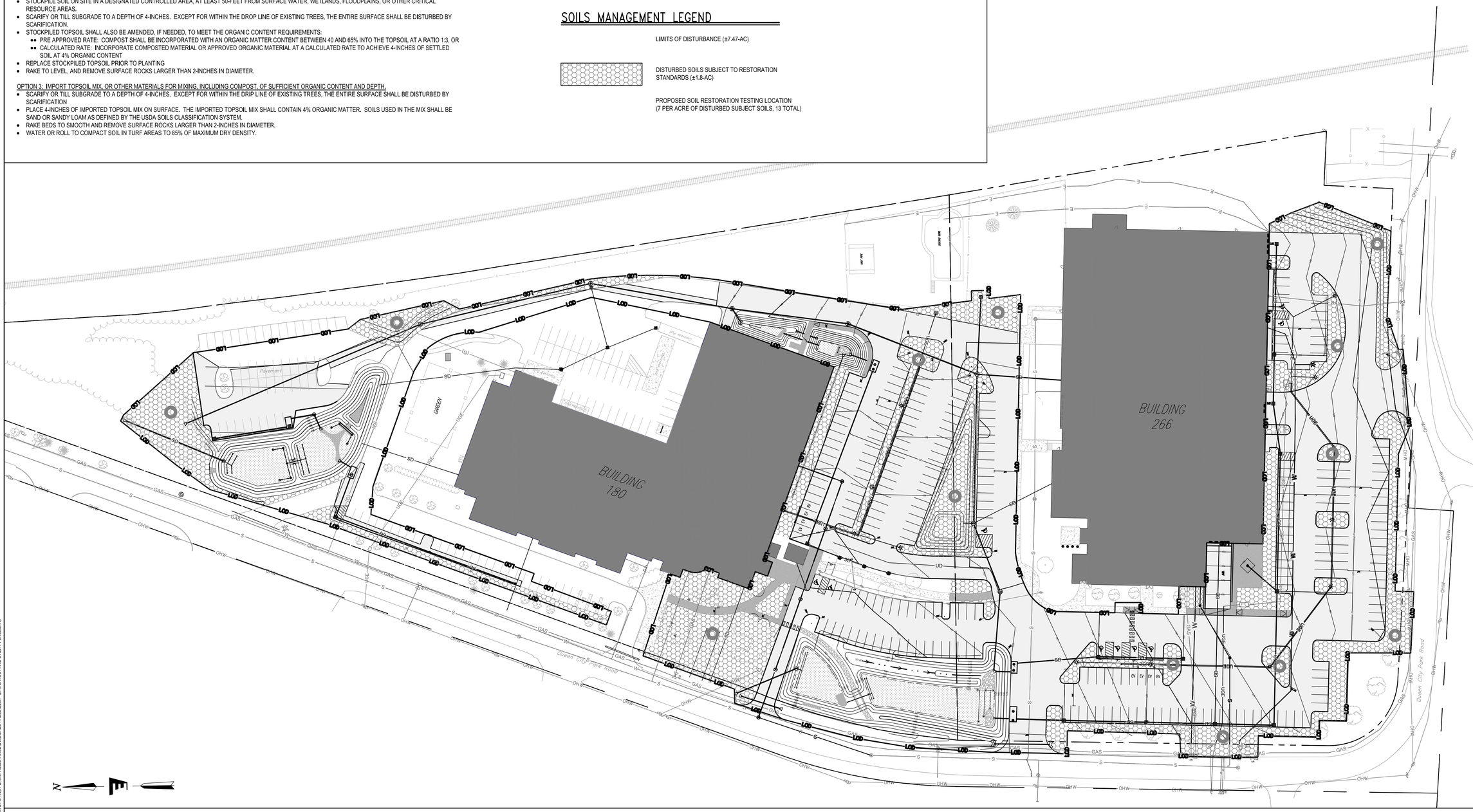
UPON COMPLETION OF SUCCESSFUL TESTING, SURFACES SHALL BE PLANTED WITH SEED AND STABILIZED IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS.

SOILS MANAGEMENT LEGEND

LIMITS OF DISTURBANCE (±7.47-AC)

DISTURBED SOILS SUBJECT TO RESTORATION STANDARDS (±1.8-AC)

PROPOSED SOIL RESTORATION TESTING LOCATION
(7 PER ACRE OF DISTURBED SUBJECT SOILS, 13 TOTAL)



SITE PLAN REVIEW
–FINAL–
02/23/2026

C208

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No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Post-Construction Soil Depth and Quality Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

S:\PROJECTS\24375\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C208 - SITE LAYOUT AND UTILITY PLANS.DWG

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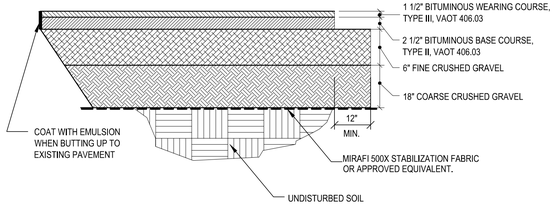
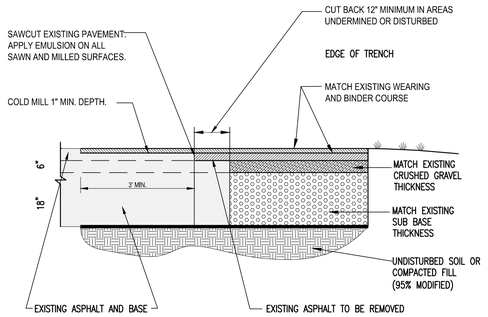


PAVEMENT PATCHING NOTES:

1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

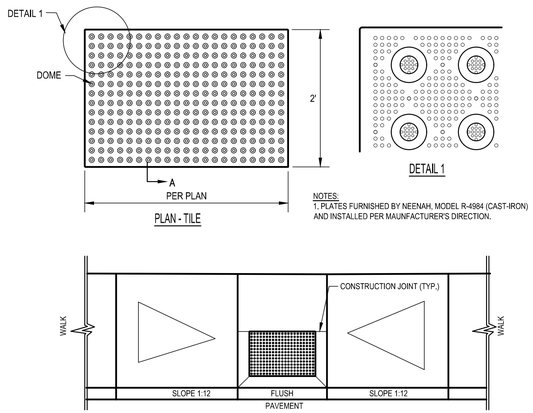
TYPICAL PAVEMENT DETAIL

SCALE: NONE (1)



ASPHALT PAVEMENT TRENCH PATCH DETAIL

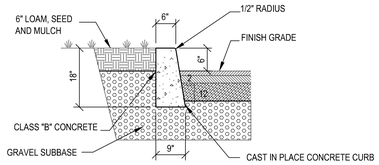
SCALE: NONE (2)



NOTES:
1. PLATES FURNISHED BY NEENAH, MODEL R-4984 (CAST-IRON) AND INSTALLED PER MAUNFACTURER'S DIRECTION.

ACCESSIBLE RAMP DETECTABLE WARNING PLATES

SCALE: NONE (3)

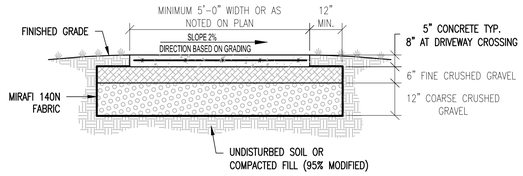


CONCRETE CURB NOTES:

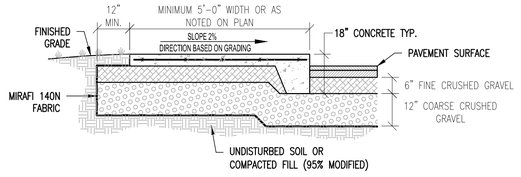
1. CONSTRUCT CURBING IN 10'-0" SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
2. EXPANSION JOINTS @ 20'-0 O.C., MAX
3. CONCRETE CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VAOT 616.06.

CONCRETE CURB DETAIL

SCALE: NONE (4)



SIDEWALK DETAIL



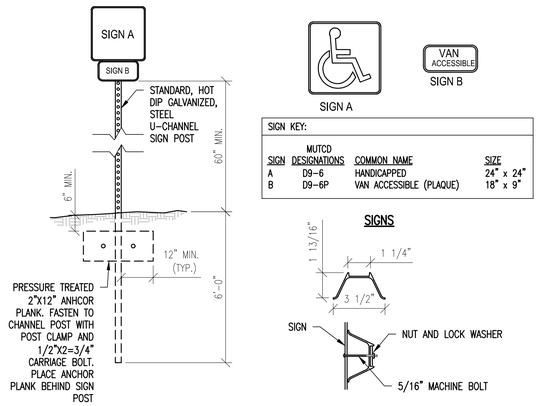
THICKENED EDGE SIDEWALK DEATIL

NOTES:

1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH, TYPICALLY AT INTERVALS MATCHING THE SIDEWALK WIDTH, OR AS NOTED ON PLANS (NOT TO EXCEED 10'-0").
2. PLACE EXPANSION JOINT AS INDICATED ON PLANS, NOT TO EXCEED 20'-0" MAX.
3. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
4. CAST-IN-PLACE CONCRETE TO BE 4000 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH 6x6-W4.0xW4.0 REINFORCING CENTERED IN SIDEWALK.
5. WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
6. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.

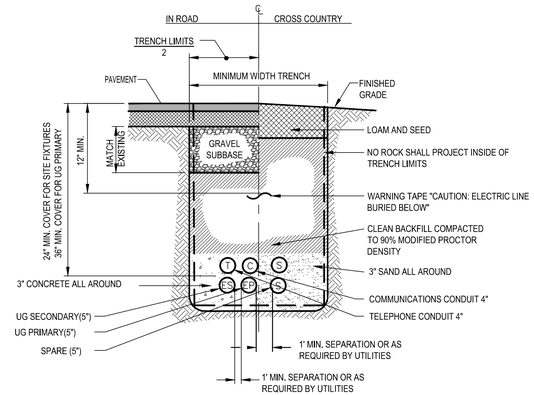
CONCRETE SIDEWALK DETAIL

SCALE: NONE (5)



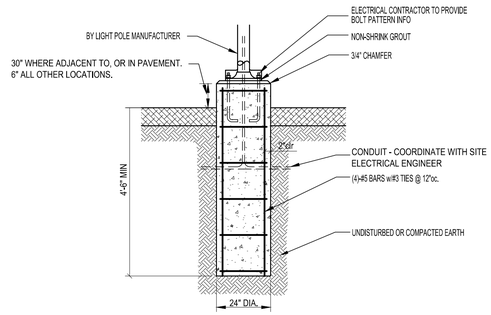
ADA SIGN AND POST DETAILS

SCALE: NONE (6)



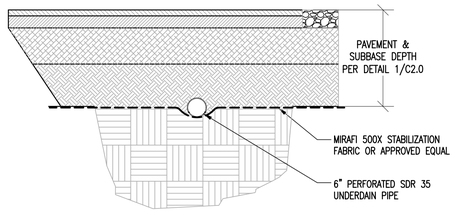
UNDERGROUND CONDUIT TRENCH

SCALE: NONE (7)



LIGHT POLE BASE DETAIL

SCALE: NONE (8)



UNDERDRAIN NOTES:

1. SET UNDERDRAIN INVERT 3" BELOW ADJACENT SUBGRADE.
2. PLACE GRAVEL MATERIALS IN 6" MAXIMUM LIFTS AND COMPACT TO 95% OPTIMIMUM DENSITY (STANDARD PROCTOR).

TYPICAL PAVEMENT UNDERDRAIN DETAIL

SCALE: NONE (9)

S:\PROJECTS\24375\24375 BURTON SITE AND PERMIT ASSISTANCE\DWG\SHEET FILES\C301 - DETAILS.DWG

STATE OF VERMONT — PAUL M. BOISVERT — NO. 9010 — 02/23/26 — LICENSED PROFESSIONAL ENGINEER

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No.	Description	Date

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85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-205-9141
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Site Details 1 of 2

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

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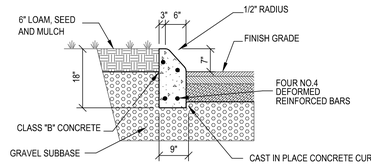
SITE PLAN REVIEW
—FINAL—
02/23/2026

C301

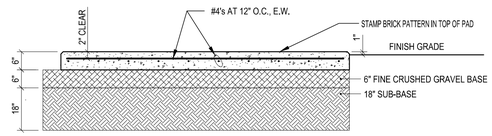


CONCRETE CURB NOTES:

1. CONSTRUCT CURBING IN 10'-0" SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
2. EXPANSION JOINTS @ 20'-0 O.C., MAX
3. CONCRETE CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VAOT 616.06.

REINFORCED SLOPED CONCRETE CURB DETAIL

SCALE: NONE (1)

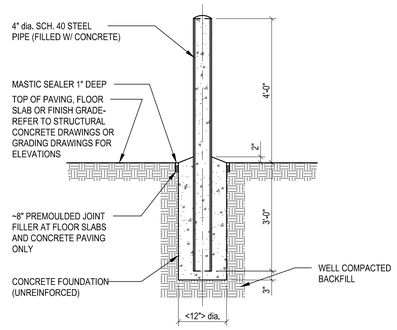


NOTES:

1. CONCRETE TO BE 4000psi WITH 4-6% AIR ENTRAINMENT.
2. SURFACE TO BE BROOM FINISHED.

MOUNTABLE CONCRETE PAD DETAIL

SCALE: NONE (2)

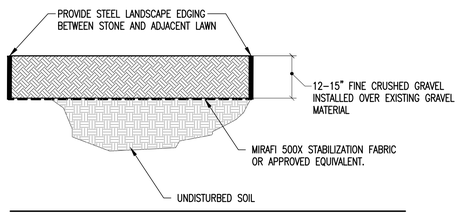


NOTES:

1. REFER TO PLAN FOR LOCATIONS.
2. CONTRACTOR TO COORDINATE PLANS WITH CONCRETE DRAWINGS TO INSURE NO CONFLICT BETWEEN BOLLARDS AND OTHER CONCRETE WORK.
3. BOLLARD SHALL BE PAINTED WITH AN EXTERIOR GRADE PAINT. (COORDINATE COLOR WITH ARCHITECT/OWNER)

BOLLARD DETAIL

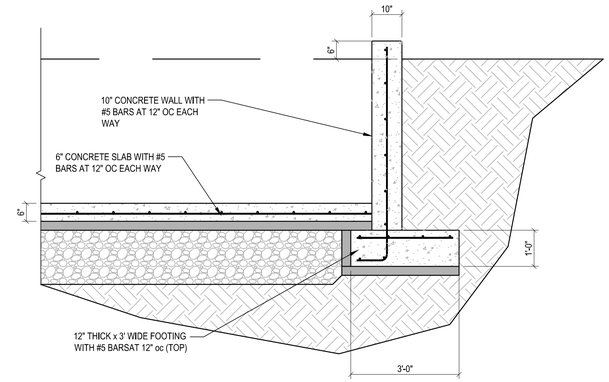
SCALE: NONE (3)



1. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
2. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

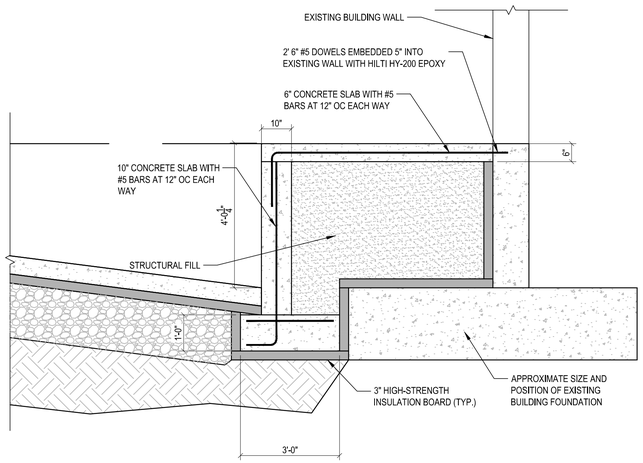
GRAVEL WALKWAY DETAIL

SCALE: NONE (4)



LOADING DOCK RETAINING WALL DETAIL

SCALE: NONE (5)



LOADING DOCK NOTES:

1. WALL AND FOOTING DESIGN SHOWN IS CONCEPTUAL AND NOT FOR CONSTRUCTION
2. ASSUME 30' OF 2" PIPE RAILING ALONG BOTH SIDES OF DOCK RAMP
3. ASSUME RAMP LENGTH SHOWN ON SITE PLAN IN ADDITION TO FROST PROTECTION EXTENSION AT BUILDING
4. FULL DESIGN WILL REQUIRE TEST PIT FOR MEASUREMENTS OF EXISTING FOOTING

LOADING DOCK SECTION AT BUILDING

SCALE: NONE (6)

EARTHWORK NOTES

1. DISPOSAL OF EXCESS SOILS GENERATED BY THE PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. DISPOSAL MUST BE AT A LOCATION MEETING VT DEC STANDARDS.

2. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, OWNER, PROJECT ENGINEER AND TOWN DPW TO REVIEW PROCEDURES AND IDENTIFY RESPONSIBILITIES. 4 WEEKS NOTICE SHALL BE GIVEN TO THE TOWN PRIOR TO START OF CONSTRUCTION. UNLESS STATED OTHERWISE STATED, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE VTRANS SPECIFICATIONS.

3. CLEARING AND GRUBBING- SITE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.

4. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL NOT BE LESS THAN THE REQUIRED AMOUNT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.

5. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 2500 SQUARE FEET OF AREA.

6. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VTRANS.

7. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.

8. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.

9. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.

10. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL, REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 - 100
1/2 INCH	70 - 100
NO. 4	60 - 100
NO. 100	0 - 20
NO. 200	0 - 8

B. 3/4" CRUSHED STONE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCHES	90 - 100
3/8 INCH	20 - 55
NO. 4	0 - 10
NO. 8	0 - 5

C. 1 1/2" CRUSHED STONE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 3/4 INCH	100
1 1/2 INCH	90 - 100
1 INCH	20 - 55
3/4 INCH	0 - 15
3/8 INCH	0 - 5

D. COARSE CRUSHED GRAVEL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCHES	95 - 100
NO. 4	25 - 50
NO. 100	0 - 12
NO. 200	0 - 6

E. FINE CRUSHED GRAVEL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1~8 INCHES	90 - 100
NO. 4	30 - 60
NO. 100	0 - 12
NO. 200	0 - 6

F. GRANULAR BACKFILL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCHES	100
2 1/2 INCHES	90 - 100
NO. 4	45 - 75
NO. 100	0 - 12
NO. 200	0 - 6

G. TYPE I STONE FOR STONE FILL

THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL

THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:

1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
3. GRADATION:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1 INCH	85 - 100
1/4 INCH	65 - 100
NO. 200	20 - 80

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHODS TO MEET THE ABOVE SPECIFICATIONS.

J. DRAINAGE AGGREGATE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCH	90 - 100
3/8 INCH	20 - 55
NO. 4	60 - 100
NO. 100	0 - 10
NO. 200	0 -5

K. AGGREGATE FOR EROSION PREVENTION AND SEDIMENT CONTROL

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCH	80 - 100
3 INCH	40 - 60
2 INCH	0 - 20

L. DENSE GRADED CRUSHED STONE FOR SUBBASE

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 1/2 INCH	100
3 INCH	90 - 100
2 INCH	75 - 100
1 INCH	50 - 80
1/2" INCH	30 - 60
NO. 4	15 - 40
NO. 200	0 - 6

M. 2" CRUSHED STONE

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCH	100
2 INCH	75 - 100
1 INCH	0 - 10
1/4" INCH	0 - 5

GRAVEL WETLAND SOIL SPECIFICATION

1. WETLAND SOIL SHALL BE FINE-GRAINED, WORKABLE SOIL, FREE OF REFUSE, ROOTS, STONES, BRUSH, WEEDS, HAZARDOUS WASTES, OR OTHER MATERIAL THAT WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF PLANT GROWTH. THIS MATERIAL IS TO BE BLENDED FROM GRANULAR AND ORGANIC MATERIALS AS INDICATED BELOW. WETLAND SOIL SHALL MEET THE REQUIREMENTS AS INDICATED BELOW. ANY BLENDED MATERIAL THAT IS STOCKPILED ON SITE SHALL BE LOCATED HIGH AND DRY, PROTECTED FROM PRECIPITATION, AND PREVENTED FROM MINGLING WITH STORMWATER RUNOFF. THE PROPOSED PARTICLE SIZE DISTRIBUTION (PSD) FOR WETLAND SOIL IS PROVIDED BELOW AND REFLECTS A POORLY DRAINED SOIL WITH A MEDIAN PARTICLE SIZE (D50) OF 0.15 MM AND IS A CLAY OR SILT LOAM IN THE USDA SOIL TEXTURAL TRIANGLE. THIS WILL ALLOW FOR POTENTIAL TO EMPLOY APPROPRIATE ONSITE EXCAVATED MATERIALS INTO SELECT SOIL MIXES. ONSITE MATERIALS SHOULD BE EVALUATED BY THE ENGINEER TO ENSURE APPLICABILITY.
2. THE PLACEMENT OF WETLAND SOIL SHALL OCCUR SUCH THAT THE WETLAND PLANTINGS CAN BE INSTALLED IMMEDIATELY THEREAFTER, OR AS SOON AS PRACTICABLE, AS APPROVED BY THE ENGINEER AND LANDSCAPE ARCHITECT.
3. WETLAND SOIL IN AN UNWORKABLE CONDITION DUE TO EXCESSIVE MOISTURE, FROST OR OTHER CONDITIONS SHALL NOT BE PLACED UNTIL IT IS SUITABLE FOR SPREADING. WETLAND SOIL SHALL BE PLACED ON THE DESIGNATED AREA AND SPREAD TO THE SPECIFIED THICKNESS. AFTER THE WETLAND SOIL IS SPREAD, ALL LARGE STIFF CLODS, ROCKS, ROOTS AND OTHER FOREIGN MATTER SHALL BE CLEARED AND DISPOSED OF BY THE CONTRACTOR SO THAT THE FINISHED SURFACE IS READY FOR PLANTING.

A. GRANULAR SOIL SHALL BE GUARANTEED CLEAN FILL MATERIAL OBTAINED FROM A COMMERCIAL SAND AND GRAVEL PIT, NOT ORIGINATING FROM RECONSTITUTED OR RECYCLED PAVEMENT MATERIALS. THE GRANULAR SOIL PORTION SHALL CONSTITUTE 80% - 85% OF THE MIXTURE BY VOLUME, AND SHALL HAVE THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING BY WEIGHT
0.5	100 ±10.0
NO. 10	90-75 ±5.0
NO. 100	40-50 ±5.0
NO. 200	25-35 ±5.0

B. THE ORGANIC PORTION SHALL CONSTITUTE 15%-20% OF THE MIXTURE, AND BE COMPRISED OF WELL PULVERIZED AND COMPOSTED LEAF MULCH.
C. THE SURFACE INFILTRATION RATES OF THE GRAVEL WETLAND SOIL SHOULD BE SIMILAR TO A LOW HYDRAULIC CONDUCTIVITY WETLAND SOIL (0.1-0.01 FT/DAY = 3.5x10-5 CM/SEC TO 3.5x10-6 CM/SEC)
D. SALINITY (ELECTRICAL CONDUCTIVITY) SHALL BE LESS THAN 0.1 S/m AS DETERMINED BY A 1:2 (BY VOLUME) SOIL TO WATER MIX. SALINITY TEST SAMPLES SHALL NOT BE OVEN DRIED.
E. THE pH OF THE WETLAND SOIL SHALL BE NOT LESS THAN 6.0 OR GREATER THAN 7.0.

GRAVEL WETLAND SOIL PHOSPHORUS TESTING REQUIREMENTS

1. WETLAND MUCK FINAL MIXES MUST HAVE A PHOSPHORUS SATURATION RATIO (PSR) LESS THAN OR EQUAL TO 0.10. PSR IS TO BE DETERMINED USING THE FOLLOWING PROTOCOL:
   1.1. SAMPLES ARE TO BE AIR DRIED AND SIEVED THROUGH 2 MM PRIOR TO TESTING
   1.2. AIR-DRIED, SIEVED SOIL SAMPLES ARE TO THEN BE EXTRACTED WITH THE MEHLICH-3 SOLUTION (0.2M CH3COOH + 0.25 M NH4NO3 + 0.015 M NH4F + 0.013 M HNO3 + 0.001 M EDTA) BY SHAKING A SOIL-SOLUTION SUSPENSION FOR 5 MINUTES AT A 1:10 RATIO (SOIL MASS IN GRAMS: SOLUTION VOLUME IN ML), FOLLOWED BY FILTERING TO REMOVE PARTICLES (PORE SIZE OF 2 MM IS RECOMMENDED, MAX PORE SIZE = 8 MM).
   1.3. EXTRACTS FROM THE MEHLICH-3 PROCEDURE ARE TO BE ANALYZED FOR P, FE, AND AL BY ICP-OES. THE PHOSPHORUS SATURATION RATIO (PSR) IS THEN CALCULATED AS FOLLOWS:

$$PSR = (P_{M3}/31) / [(Fe_{M3}/56)+(Al_{M3}/27)] \quad \text{WHERE,}$$

P_{M3} = MEHLICH-3 P IN MG P PER KG DRY SOIL
Fe_{M3} = MEHLICH-3 Fe IN MG FE PER KG DRY SOIL
Al_{M3} = MEHLICH-3 Al IN MG AL PER KG DRY SOIL

2. MEHLICH-3 EXTRACTIONS FOLLOW THE ABOVE PROTOCOL (FOR MORE DETAILS, SEE WOLF AND BEEGLE, 2009).
3. OTHER SOIL TEST EXTRACTIONS, INCLUDING MODIFIED MORGAN TESTS, OXALATE EXTRACTIONS, WATER EXTRACTIONS, OR EXTRACTIONS USED TO QUANTIFY TOTAL ELEMENTS, ARE NOT ACCEPTABLE.
4. IN CASES WHERE INGREDIENT MIXING HAS NOT YET OCCURRED, INGREDIENTS CAN BE MIXED AT THE INTENDED VOLUMETRIC PROPORTIONS IN A SMALL BATCH (AT LEAST ONE QUART IN VOLUME) FOR TESTING PURPOSES. IF THIS SMALL BATCH TESTING APPROACH IS TAKEN, THE FINAL MATERIAL TO BE USED DURING INSTALLATION MUST BE RE-TESTED TO CONFIRM ACCEPTABLE PSR.

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PHILIP M BOISVERT
NO. 9010
02/23/26
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
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Sheet Title: Site Details 2 of 2

Project Title: Burton Headquarters Campus Upgrades Burlington, VT

EV Project #	24375
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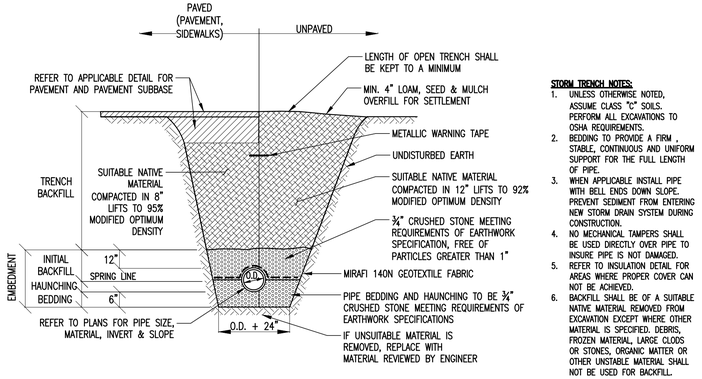
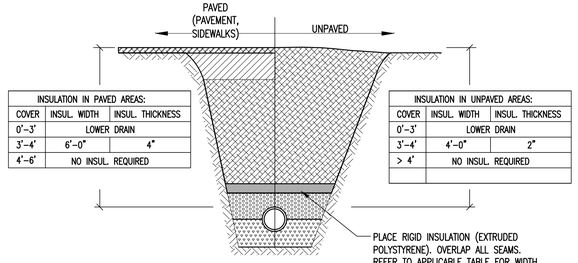


STORM TRENCH NOTES:
1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM , STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW STORM DRAIN SYSTEM DURING CONSTRUCTION.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. REFER TO INSULATION DETAIL FOR AREAS WHERE PROPER COVER CAN NOT BE ACHIEVED.
6. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.

TYPICAL STORM DRAIN TRENCH

SCALE: NONE — 1



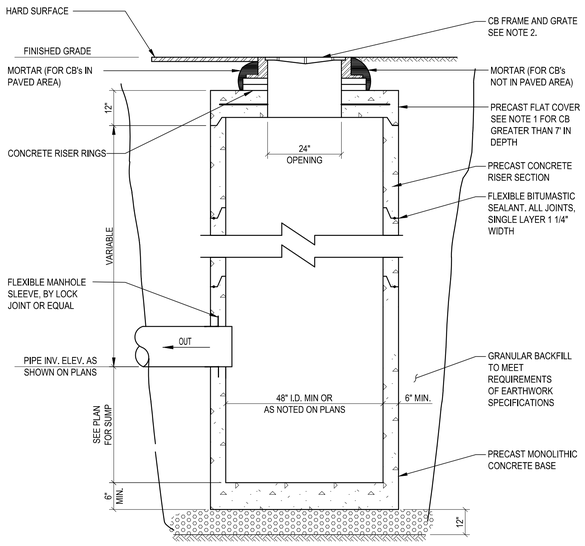
INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'–3'	LOWER DRAIN	
3'–4'	6'–0"	4"
4'–6'	NO INSUL. REQUIRED	

INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'–3'	LOWER DRAIN	
3'–4'	4'–0"	2"
> 4'	NO INSUL. REQUIRED	

STORM DRAIN INSULATION NOTES:
1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW DRAIN DETAIL

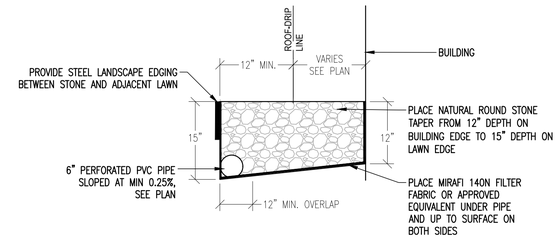
SCALE: NONE — 2



CATCH BASIN NOTES
1. IF DEPTH OF CATCH BASIN IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF CATCH BASIN FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP WILL BE INSTALLED.
2. PROVIDE A LEBARON 24"x24" TYPE E OR APPROVED EQUIVALENT, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS.
3. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.
4. CATCH BASIN SHALL BE PRECAST CONCRETE AS MANUFACTURED BY S.T. GRISWOLD & CO., INC. OR APPROVED EQUIVALENT.

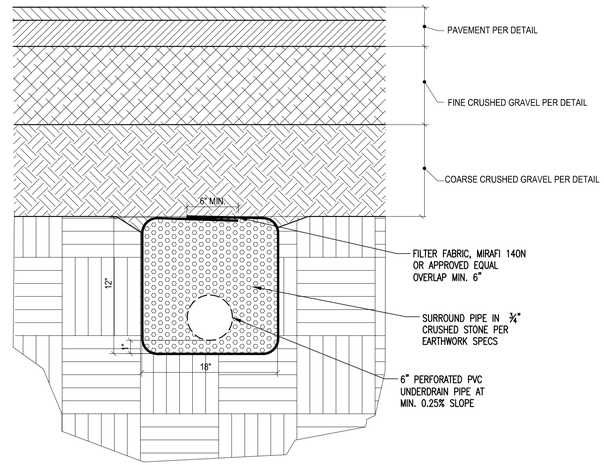
STORM CATCH BASIN DETAIL

SCALE: NONE — 3



TYPICAL DRIP EDGE DETAIL

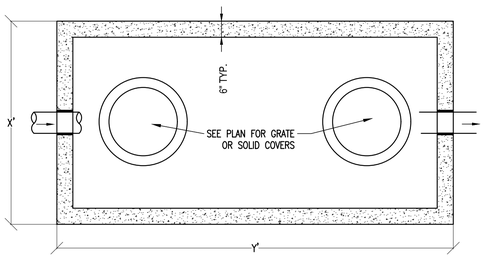
SCALE: NONE — 5



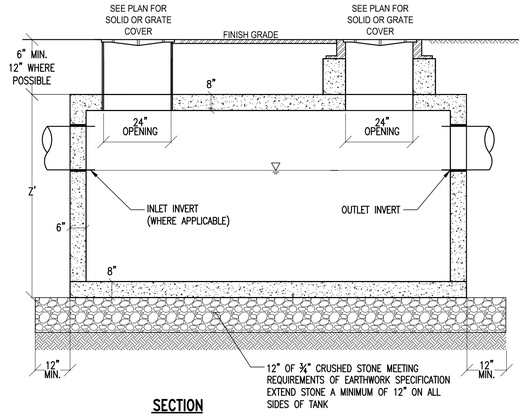
UNDERDRAIN NOTES:
1. REFER TO SITE PLAN FOR INVERT ELEVATIONS & OUTLET LOCATIONS.
2. PLACE IN MAXIMUM 6" LIFTS AND COMPACT TO 95% STANDARD OPTIMUM DENSITY.

TYPICAL PAVEMENT UNDERDRAIN DETAIL

SCALE: NONE — 6



PLAN



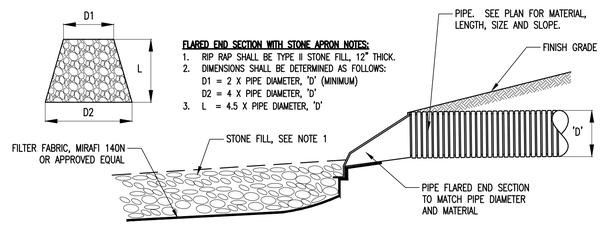
SECTION

	PRETREATMENT TANK #1	PRETREATMENT TANK #2	PRETREATMENT TANK #3	PRETREATMENT TANK #4	PRETREATMENT TANK #5
DIMENSION X	8'	7'	7'	7'	7'
DIMENSION Y	17'	13'	13'	13'	13'
DIMENSION Z	88"	53"	53"	53"	53"
STORAGE CAPACITY (GAL)	3,000	1,000	1,000	1,000	1,000

PRETREATMENT TANK NOTES:
1. PRECAST TANK SHALL BE RATED FOR H-20 LOADING.
2. TANK SHALL BE CAMP PRECAST HEAVY DUTY TANK OR APPROVED EQUAL

PRETREATMENT TANK DETAIL

SCALE: NONE — 4



FLARED END SECTION WITH STONE APRON NOTES:
1. RIP RAP SHALL BE TYPE II STONE FILL, 12" THICK.
2. DIMENSIONS SHALL BE DETERMINED AS FOLLOWS:
   D1 = 2 X PIPE DIAMETER, 'D' (MINIMUM)
   D2 = 4 X PIPE DIAMETER, 'D'
3. L = 4.5 X PIPE DIAMETER, 'D'

FLARED END SECTION DETAIL

SCALE: NONE — 7

STATE OF VERMONT — BRIAN M. BOISVERT — NO. 9016 — 2/23/26 — LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-5225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-205-9141
www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

SITE PLAN REVIEW
–FINAL–
02/23/2026

C303

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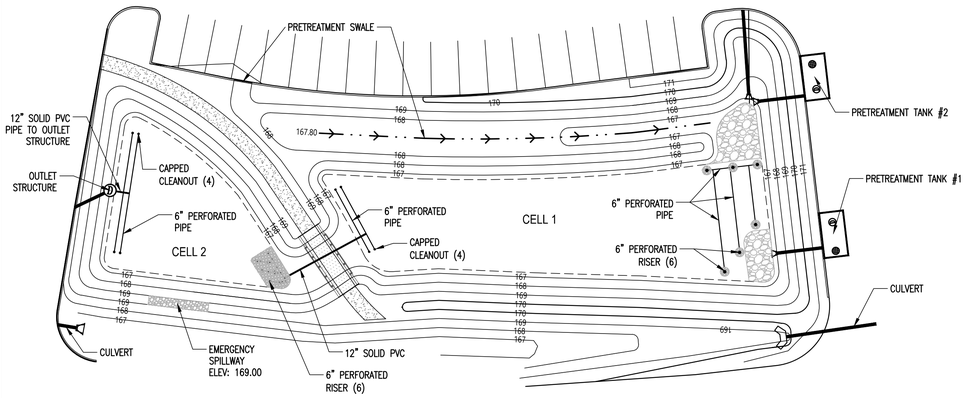
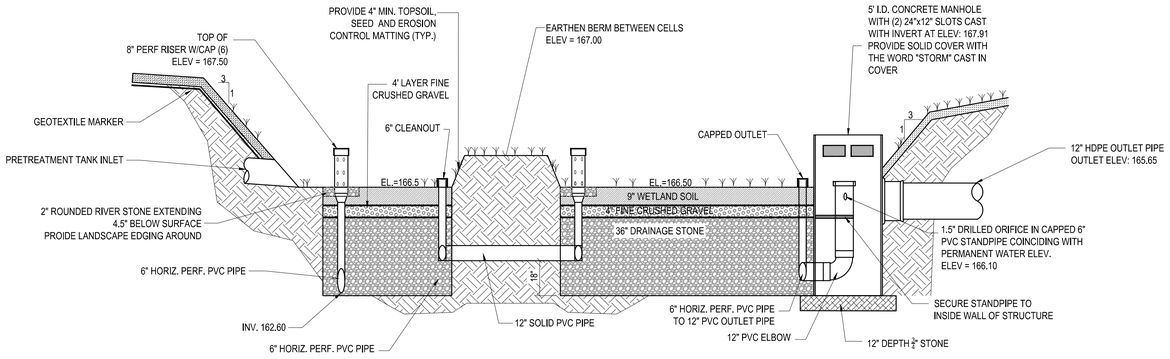


GRAVEL WETLAND 1 PLAN DETAIL

SCALE: NONE

1



GRAVEL WETLAND ST1A SECTION DETAIL

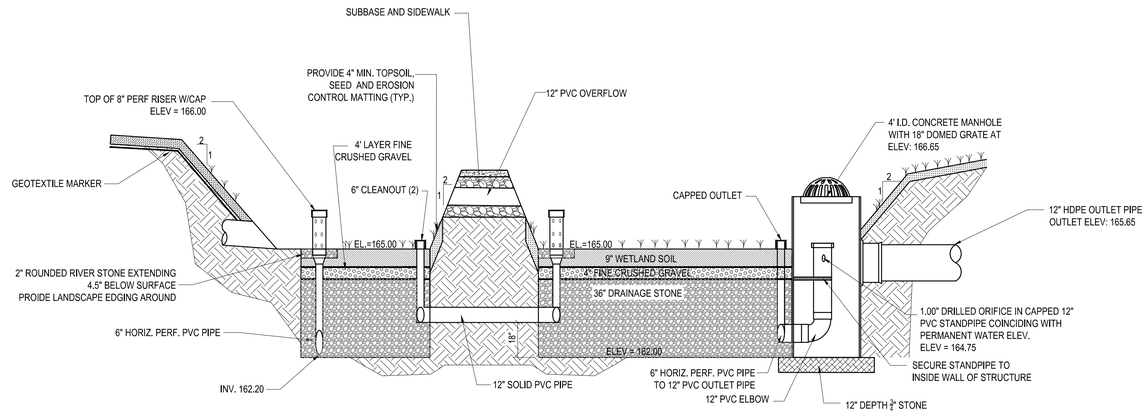
SCALE: NONE

2

GRAVEL WETLAND 2 PLAN DETAIL

SCALE: NONE

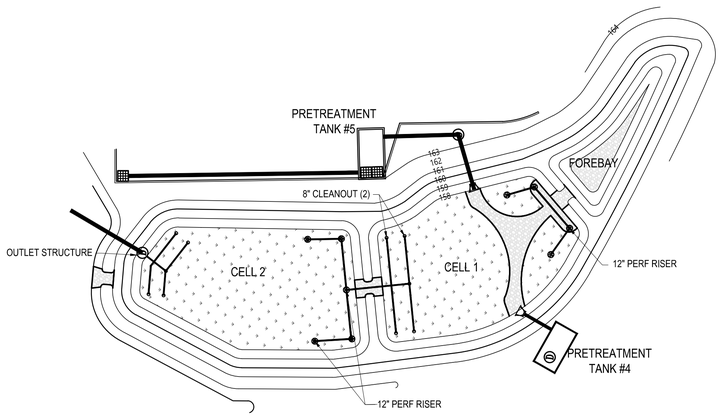
3



GRAVEL WETLAND 2 SECTION DETAIL

SCALE: NONE

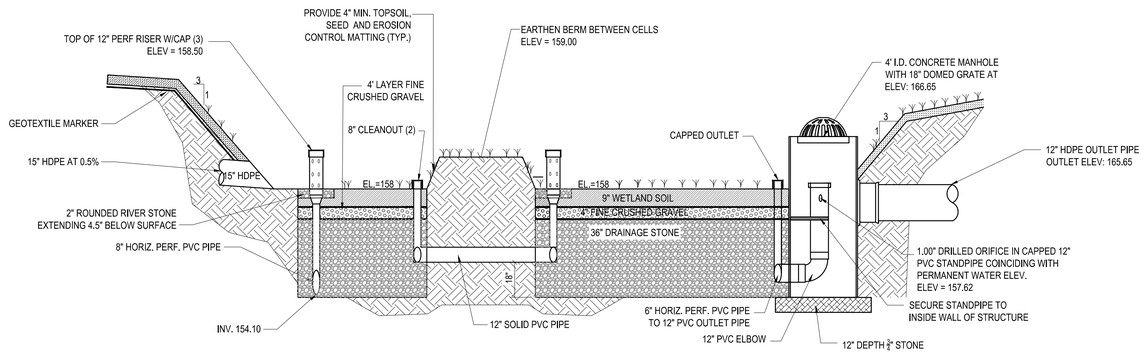
4



GRAVEL WETLAND 3 PLAN DETAIL

SCALE: NONE

3



GRAVEL WETLAND 3 SECTION DETAIL

SCALE: NONE

6

GRAVEL WETLAND SOIL NOTES:
REFER TO SHEET C302 FOR GRAVEL WETLAND SOIL SPECIFICATIONS AND PHOSPHORUS TESTING REQUIREMENTS

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
02/23/26
LICENSED PROFESSIONAL ENGINEER

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
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www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Gravel Wetland Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C304

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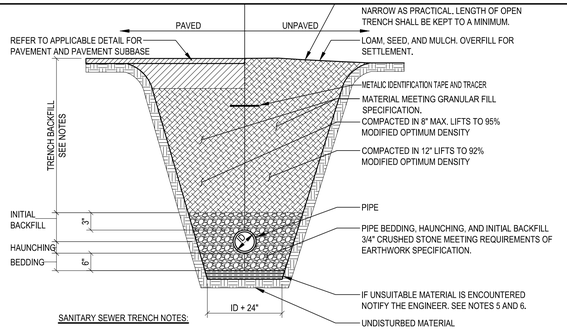
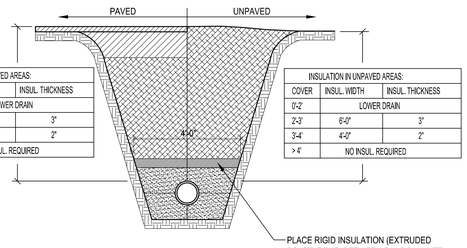


SANITARY SEWER TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
3. FOR BUILDING SEWERS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 4'-0", WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH LESS THAN 3'-0" UNDER DRIVEWAYS, EXTRA HEAVY CAST IRON OR OTHER HIGH STRENGTH PIPE SHALL BE USED. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
4. FOR SEWER COLLECTION SYSTEMS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 5'-0", THIS DEPTH SHALL BE INCREASED TO 6'-0" IN AREAS TO BE PLOWED DURING THE WINTER MONTHS. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
5. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.
6. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
7. SEWERS ON 20 PERCENT SLOPES OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS OR EQUIVALENT, SPACED AS FOLLOWS:
   A. NOT OVER 36 FEET CENTER TO CENTER ON GRADES 20 PERCENT AND UP TO 35 PERCENT
   B. NOT OVER 24 FEET CENTER TO CENTER ON GRADES 35 PERCENT AND UP TO 50 PERCENT
   C. NOT OVER 16 FEET CENTER TO CENTER ON GRADES 50 PERCENT AND OVER

SANITARY SEWER TRENCH DETAIL

SCALE: NONE (1)



INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3'	LOWER DRAIN	
3'-4'	6'-0"	3"
4'-5'	4'-0"	2"
> 5'	NO INSUL. REQUIRED	

INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-2'	LOWER DRAIN	
2'-3'	6'-0"	3"
3'-4'	4'-0"	2"
> 4'	NO INSUL. REQUIRED	

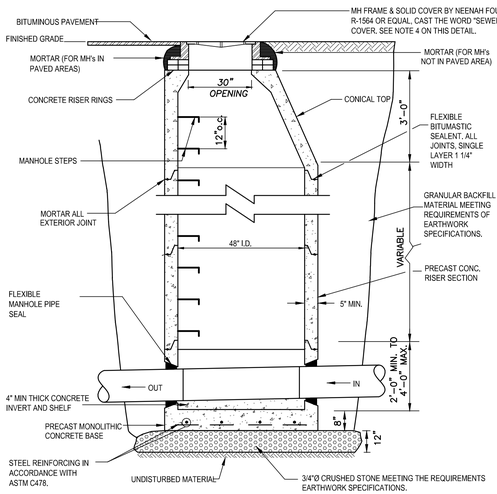
TRENCH NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.

2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 - STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW SEWER LINE DETAIL

SCALE: NONE (2)



MANHOLE NOTES

1. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.

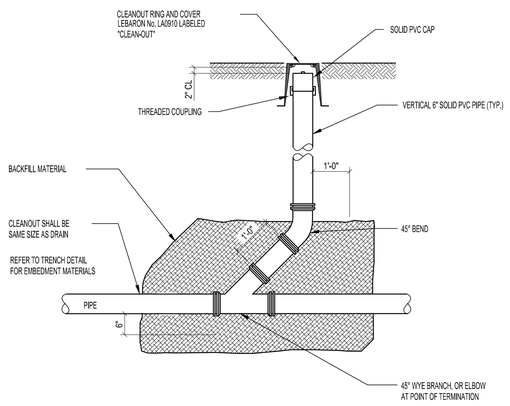
2. IF DEPTH OF MANHOLE IS 7 ft. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 ft., THEN A CONICAL TOP WILL BE INSTALLED.

3. MANHOLE AND COVER SHALL BE DESIGNED FOR H20 LOADING.

4. FOR MANHOLES THAT ARE NOTED ON THE PLAN AS HAVING A BOLTABLE COVER PROVIDE A COVER THAT IS BOLTS TO THE FRAME WITH A MINIMUM OF (2) - 3/8" STAINLESS STEEL BOLTS.

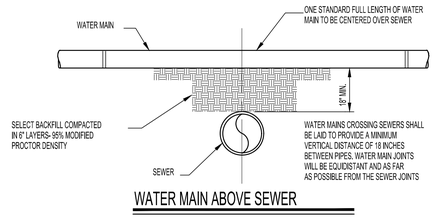
MANHOLE DETAIL

SCALE: NONE (3)



SEWER CLEANOUT DETAIL

SCALE: NONE (4)



WATER MAIN ABOVE SEWER

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH THE 'ENVIRONMENTAL PROTECTION RULES, CHAPTER 21, WATER SUPPLY RULE (VWSR), SECTIONS 8.5 AND 8.6'

2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN; 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS.

TYPICAL SEWER/WATER SEPARATION DETAIL

SCALE: NONE (5)

SEWER NOTES

CONTRACTOR SHALL CONFORM TO GUIDELINES DETAILED IN THE VERMONT STATE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR READING AND FOLLOWING THE FULL COMPLETE EDITION PROVIDED BY THE STATE.

A. THE BUILDING SEWER SHALL BE CONSTRUCTED IN A MANNER WHICH WILL PREVENT LEAKING, BREAKING OR CLOGGING.

B. SIZING AND SLOPE: MINIMUM BUILDING SEWER SIZE IS 4 INCHES (UNLESS SHOWN ON THE PLAN) AND A MINIMUM SLOPE IS 1/8" PER FOOT.

C. CLEANOUTS: CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL CHANGE IN DIRECTION OF THE BUILDING SEWER GREATER THAN 45 DEGREES AND WHERE INDICATED ON THE DESIGN DRAWINGS. BUILDING SEWER CHANGES IN DIRECTION WHICH EXCEED 45 DEGREES SHOULD BE MADE WITH TWO 45 DEGREE ELLS OR LONG SWEEP FITTINGS. MANHOLES ARE ACCEPTABLE IN LIEU OF CLEANOUTS. WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH OF LESS THAN 3 FEET UNDER DRIVEWAYS ARE ANTICIPATED, EXTRA HEAVY CAST IRON PIPE SHALL BE USED.

D. LEAKAGE: BUILDING SEWERS SHALL MEET THE LEAKAGE STANDARDS PRESCRIBED IN THE STATE OF VERMONT SPECIFICATIONS (EPR- CHAPTER 1). SEE BELOW FOR MORE DETAIL.

E. SLOPE, VELOCITY: ALL GRAVITY SEWER LINES SHALL BE INSTALLED WITH NOT LESS THAN THE SLOPES SHOWN BELOW:

PIPE SIZE (INCHES)	SLOPE (FEET/100 FEET)
4"	2%
6"	1%
8"	0.4%

F. CHANGES IN PIPE SIZE: WHEN A SMALLER SEWER JOINS A LARGE ONE, THE INVERT OF THE LARGER SEWER SHALL BE LOWERED SUFFICIENTLY TO MAINTAIN THE SAME ENERGY GRADIENT.

G. MATERIAL: PVC SDR 35, ASTM D3034, WITH PUSH-ON GASKETED JOINTS, GASKETS SHALL CONFORM TO ASTM D3212. SEWER JOINTS SHALL BE CONSTRUCTED TO MINIMIZE INFILTRATION AND TO PREVENT THE ENTRANCE OF ROOTS INTO THE SYSTEM.

H. TRENCHING: LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.

I. BEDDING: SEE TRENCH DETAIL DRAWING FOR MATERIALS. TRENCH BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL FREE FROM DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS.

J. LEAKAGE TESTS: UPON COMPLETION OF SEWER LINE CONSTRUCTION, THE SEWER LINE SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF VERMONT SPECIFICATIONS (EPR - CHAPTER 1, APPENDIX "A").

LEAKAGE TESTS FOR GRAVITY SEWERS

PERFORM A PRESSURIZED AIR TEST ON THE GRAVITY LINE IN ACCORDANCE WITH THE VERMONT ENVIRONMENTAL PROTECTION RULES ON EACH SECTION OF THE GRAVITY SEWER. THE ENGINEER SHALL BE GIVEN 72 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.

PLUG ALL OPENINGS IN THE TEST SECTION. ADD AIR UNTIL THE INTERNAL PRESSURE OF THE LINE IS RAISED TO APPROXIMATELY 4.0 POUNDS/SQUARE INCH (PSI) GREATER THAN THE AVERAGE PRESSURE OF ANY GROUND WATER. AFTER THIS PRESSURE IS REACHED, ALLOW THE PRESSURE TO STABILIZE, THE PRESSURE WILL NORMALLY DROP AS THE AIR TEMPERATURE STABILIZES. THIS USUALLY TAKES 2 TO 5 MINUTES DEPENDING ON THE PIPE SIZE, THE PRESSURE MAY BE REDUCED TO 3.5 PSI BEFORE STARTING THE TEST.

WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE THE STARTING TEST PRESSURE OF 3.5 PSI ABOVE THE PIPE, START THE TEST. IF THE PRESSURE DROPS MORE THAN 1.0 PSI DURING THE TEST TIME, THE LINE IS PRESUMED TO HAVE FAILED THE TEST. IF A 1.0 PSI DROP DOES NOT OCCUR WITHIN THE TEST TIME, THE LINE HAS PASSED THE TEST. THE TEST TIME SHALL BE DERIVED FROM THE FOLLOWING TABLE. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO ARRIVE AT THE TOTAL TEST TIME FOR THE SECTION.

PIPE SIZE (IN)	T (TIME) (MIN./100FT)
3	0.2
4	0.3
6	0.7
8	1.2

K. INSTALLATION: PIPE SHALL BE LAID WITH BELL ENDS FACING UPGRADE AND LAYING SHALL START AT THE DOWNGRADE END.

L. WATER LINE SEPARATION

a. HORIZONTAL SEPARATION: SEWERS SHALL BE LAID FLAT AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.

WHERE IMPOSSIBLE OR IMPRACTICABLE TO MAINTAIN THE TEN FOOT SEWER/WATER PIPE HORIZONTAL SEPARATION, (DUE TO LEDGE, BOULDERS OR OTHER UNUSUAL CONDITIONS) THE WATER LINE MAY BE IN A SEPARATE TRENCH OR ON AN EARTH SHELF IN THE SEWER TRENCH PROVIDED THAT THE BOTTOM OF THE WATER LINE IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, WHEREVER IMPOSSIBLE OR IMPRACTICAL TO MAINTAIN THE 18 INCH VERTICAL SEPARATION, THE SEWER LINE SHALL BE CONSTRUCTED USING PRESSURE PIPE TO NORMAL WATER LINE STANDARDS AND PRESSURE TESTED TO 50 PSI FOR 15 MINUTE PRIOR TO BACKFILLING.

b. CROSSINGS: SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18 INCH VERTICAL SEPARATION;

1.) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AWAY AS POSSIBLE FROM WATER JOINTS;
2.) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER;
3.) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS;
4.) WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

M. MANHOLES

a. DIAMETER: THE MINIMUM DIAMETER OF MANHOLES SHALL BE 48 INCHES; LARGE DIAMETERS ARE PREFERRED FOR CONNECTION TO LARGE DIAMETER SEWERS, A MINIMUM ACCESS DIAMETER OF 24 INCHES SHALL BE PROVIDED.
b. FLOW CHANNEL: FLOW CHANNELS SHALL BE PROVIDED IN THE BASE OF ALL MANHOLES AND THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE MADE TO CONFORM IN SHAPE AND SLOPE TO THAT OF THE SEWERS.
c. MANHOLES SHALL BE OF THE PRE-CAST CONCRETE OR POUR-IN PLACE CONCRETE TYPE. MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR.
d. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A RUBBER-GASKETED FLEXIBLE WATERTIGHT CONNECTION THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL TO TAKE PLACE.
e. ALL MANHOLES TO BE VACUUM TESTED FOR LEAKAGE IN ACCORDANCE WITH STATE OF VERMONT REGULATIONS. WATER EXFILTRATION TESTING MAY BE USED IF APPROVED IN ADVANCE BY THE ENGINEER.

AFTER THE MANHOLE HAS BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED WITH AND POINTED WITH AN APPROVED NON-SHRINKING MORTAR. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED AND THE PLUGS PLACED TO PREVENT BLOWOUT.

FOR EXFILTRATION TESTING, EACH MANHOLE SHALL BE CHECKED FOR LEAKAGE BY FILLING WITH WATER TO THE TOP OF THE CONE SECTION. A STABILIZATION PERIOD OF ONE HOUR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, IF NECESSARY, AND THE MEASURING TIME OF AT LEAST SIX HOURS BEGUN, AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE MEASURING THE VOLUME OF WATER ADDED. THIS AMOUNT SHALL BE CONVERTED TO A 24 HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF DEPTH. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE GALLON PER VERTICAL FOOT FOR A 24 HOUR PERIOD FOR EXFILTRATION AND THERE SHALL BE NO VISIBLE INFILTRATION. IF AN AIR TEST IF PERFORMED ON THE MANHOLE, INSTEAD OF THE WATER TEST, THE MANHOLE SHALL REMAIN UN-BACKFILLED DOWN TO THE SEWER LINE INVERTS DURING THE AIR TEST.

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL W. BOISVERT
NO. 9016
REGISTERED
PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Sewer Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C305

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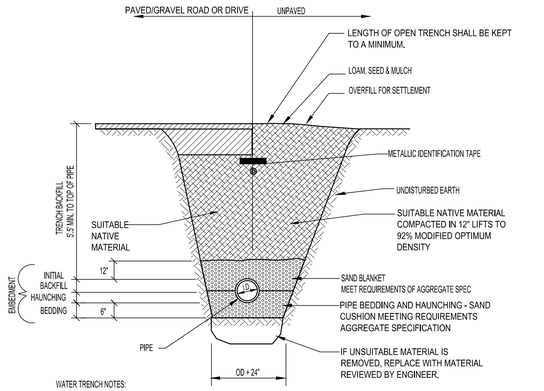
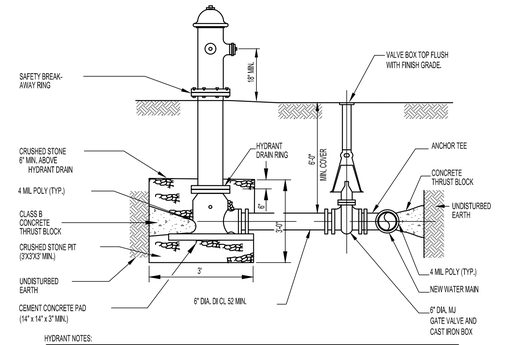


WATER TRENCH NOTES:

1. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
2. PROVIDE 6' MINIMUM COVER OVER WATER PIPE.
3. INSTALL WATER PIPE IN ACCORDANCE WITH AWWA STANDARD C600.
4. COMPACT SOILS IN ACCORDANCE WITH SPECIFICATION
5. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.

TYPICAL WATER TRENCH DETAIL

SCALE: NONE — 1

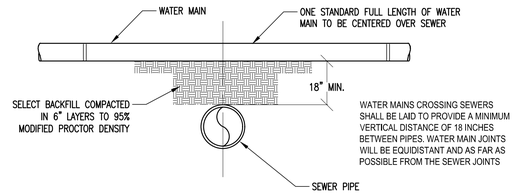


HYDRANT NOTES:

1. HYDRANTS WHICH ARE INSTALLED WHERE THE NATURAL GROUND WATER TABLE IS ABOVE THE HYDRANT WASTE ORIFICE AND WHERE HYDRANTS ARE LOCATED WITHIN 10' OF SEWER LINES SHALL HAVE THE ORIFICE PLUGGED. HYDRANTS WITH PLUGGED ORIFICES SHALL BE LABELED "ND" FOR NON-DRAINING IN 3" HIGH ORANGE PAINTED LETTERS ON THE BONNET FACING THE ROAD.

FIRE HYDRANT DETAIL

SCALE: NONE — 4



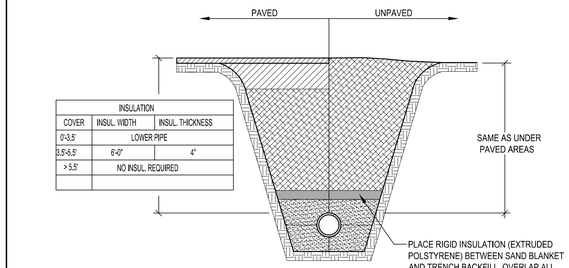
WATER MAIN ABOVE SEWER

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS.
2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN; 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS; 2) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICH EVER IS GREATER; 3) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 psi FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.

SANITARY SEWER/WATER LINE CROSSING

SCALE: NONE — 5



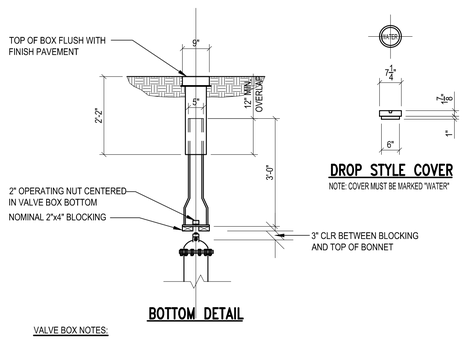
INSULATION		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3.5'	LOWER PIPE	
3.5'-5.5'	6'-0"	4"
> 5.5'	NO INSUL. REQUIRED	

TRENCH NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.

INSULATION OVER SHALLOW WATER LINE DETAIL

SCALE: NONE — 2



DROP STYLE COVER

NOTE: COVER MUST BE MARKED "WATER"

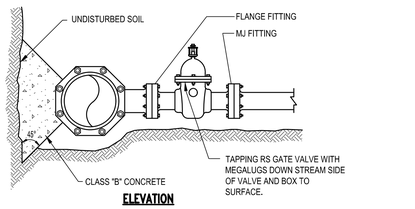
BOTTOM DETAIL

VALVE BOX NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.
2. ALL PIPES SHOULD HAVE A MINIMUM DEPTH OF 5.5' FROM TOP OF PIPE TO FINISH GRADE.
3. ALL GATE VALVES SHALL BE OPEN RIGHT.

TYPICAL VALVE BOX DETAIL

SCALE: NONE — 6



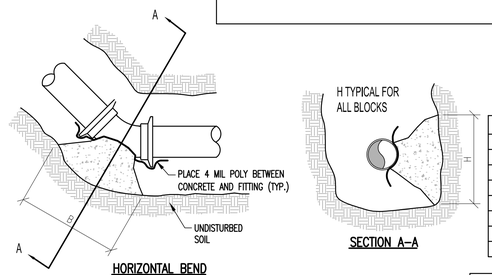
ELEVATION

NOTE:

1. SEE GATE VALVE DETAIL FOR ADDITIONAL REQUIREMENTS
2. AREA OF BEARING AGAINST UNDISTURBED SOIL SHALL BE THE SAME AS FOR 1/4" BEND (90°) THRUST BLOCK

TAPPING SLEEVE AND VALVE

SCALE: NONE — 3



HORIZONTAL BEND

SECTION A–A

NOTES:

1. PERFORM HYDROSTATIC AND LEAKAGE TEST PRESSURE PER SPECIFICATIONS.
2. PLACE 4 MIL POLYETHYLENE BETWEEN FITTINGS AND THRUST BLOCKS.
3. CONCRETE SHALL BE CLASS B.
4. ON ALL THRUST BLOCKS, B SHALL BE THE GREATER DIMENSION, USE 1.5:1 TO 2:1 FOR B:H.

TABLE 1 - BEARING STRENGTH OF UNDISTURBED SOIL	
SOIL TYPE	BEARING STRENGTH
PEAT, ETC.	0 lb/ft²
SOFT CLAY	500 lb/ft²
SAND	1000 lb/ft²
SAND AND GRAVEL	1500 lb/ft²
SAND AND GRAVEL WITH CLAY	2000 lb/ft²
SAND AND GRAVEL CEMENTED WITH CLAY	4000 lb/ft²
HARD PAN	5000 lb/ft²

DETERMINING MINIMUM BEARING FACE AREA:

THE AREA (ft-@) SHALL BE CALCULATED BY DETERMINING THE TOTAL THRUST GENERATED AT THE FITTING.

DIVIDE THE THRUST DEVELOPED (lbs force) (FROM TABLE 2) BY THE BEARING STRENGTH OF THE SOIL (FROM TABLE 1). THE RESULT IS THE AREA OF THE SOIL REQUIRED TO RESIST THE THRUST (A).

THE AREA CALCULATED WILL BE FOR THE AREA OF CONCRETE UP AGAINST THE TRENCH WALL (i.e. THE BACK SIDE OF THE BLOCK). USE THE TEST PRESSURE TO DETERMINE THE TOTAL THRUST.

AREA = THRUST DEVELOPED (lbs force) / BEARING STRENGTH OF SOIL

TABLE 2 - THRUST DEVELOPED PER 100psi PRESSURE (lbs force)					
PIPE DIAMETER IN.	VALVES AND DEAD ENDS, TEES	90° BENDS	45° BENDS	22½° BENDS	11¼° BENDS
4	1810	2560	1390	635	320

TYPICAL BEARING THRUST BLOCK DETAIL

SCALE: NONE — 7

WATER NOTES

EXISTING UTILITIES

1. LOCATION OF UTILITY INSTALLATIONS AND UNDERGROUND STRUCTURES ARE SHOWN AS APPROXIMATE ON THE CONTRACT DOCUMENTS SOME UTILITIES MAY NOT BE SHOWN.
2. ALL UTILITIES SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
3. EXISTING UTILITIES SHALL BE PROTECTED AND SUPPORTED DURING CONSTRUCTION.
4. ALL WATER, GAS, CABLE, TELEPHONE, ELECTRIC, SEWER, AND OTHER UTILITIES FOUND TO INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED IN A MANNER ACCEPTABLE TO THE ENGINEER, PRIOR TO COMMENCING DEMOLITION.

LEAKAGE AND PRESSURE TESTING

WATER SERVICE LINES AND WATER SERVICE PIPES SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA C600 OT C605 (DEPENDING ON MATERIAL).

PIPE BEDDING

1. SAND BLANKET/BEDDING SHALL MEET REQUIREMENTS OF EARTHWORK SPECIFICATIONS
2. TRENCH FINAL BACKFILL MATERIAL - MATERIAL WILL EXCLUDE PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT, CLAY, LARGE ROCKS(GREATER THAN 12" DIMENSION), OR ANY MATERIAL DETERMINED BY THE ENGINEER THAT WILL NOT BE SUITABLE.

PIPE TRENCH BACKFILL

1. MEET EARTHWORK SPECIFICATIONS FOR PLACEMENT AND COMPACTION.

DUCTILE IRON PIPE (WATER)

1. D.I. PIPE CONFORM TO AWWA/ANSI C151.
2. LININGS AND LINING REPAIR TO AWWA/ANSI C104.
3. JOINTS CONFORM TO AWWA/ANSI C 111 AND C115.
4. FITTINGS CONFORM TO AWWA/ANSI C110, C153, C105.
5. KEEP INSIDE OF PIPE CLEAN AND FREE OF DEBRIS.
6. REJECT ANY PIPE WHICH IS DROPPED DURING HANDLING.
7. MECHANICAL JOINT GLANDS SHALL BE "MEGA-LUG" RETAINER GLANDS.
8. DUCTILE IRON FITTINGS: ANSI A21.10, 350 PSI PRESSURE RATING.
9. JOINTS: MECHANICAL, PUSH-ON, AND FLANGED:
   A. RUBBER GASKET JOINT, ANSI A21.11
10. GASKETS:
    A: MECHANICAL AND PUSH-ON JOINTS: ANSI A21.11
    B. FLANGED JOINT: 1/8" THICK RING OR FULL FACED RUBBER, ANSI A21.15.
11. BOLTS/NUTS
    A. MECHANICAL JOINT: ANSI A21.11
    B. FLANGED JOINT: ANSI A21.15
12. LININGS:
    A. INTERIOR- CEMENT LINED, DOUBLE THICKNESS BITUMINOUS SEAL
    B. EXTERIOR-BITUMINOUS COATING APPROX. 1 MIL THICK, ANSI A21.51, ANSI A21.15, AND ANSI A21.10.
    C. FLANGE MACHINED FACE COATING: ANSI A21.15,
13. LAYING PIPE
    A. PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING.
    B. WHERE PIPE IS LAID ON A SLOPE OF 5% OR MORE, THE LAYING SHALL START AT THE LOW END AND PROCEED UPHILL, WITH THE BELL ENDS UPGRADE.
    C. A WATERTIGHT PLUG SHALL BE PLACED IN THE OPEN ENDS OF INSTALLED PIPE WHEN PIPE LAYING IS NOT IN PROGRESS.
    D. MAX. PERMISSIBLE DEFLECTION IS 75% OF AWWA SPEC. C600.

DISINFECTION

(A) A POTABLE WATER SUPPLY SHALL BE DISINFECTED PURSUANT TO THE REQUIREMENTS OF SUBSECTION (B), (C), AND (D) PRIOR TO PLACING THE POTABLE WATER SUPPLY INTO SERVICE AND AFTER ANY SERVICING OR REPAIR OF THE POTABLE WATER SUPPLY, SUCH AS INSTALLATION OF NEW PIPES, WIRES, CASING, OR PUMPS.

(B) DISINFECTION OF THE POTABLE WATER SOURCE SHALL BE COMPLETED PURSUANT TO THE RECOMMENDATIONS BY THE VERMONT DEPARTMENT OF HEALTH FOR DISINFECTING A WATER SYSTEM, OR THE FOLLOWING METHOD:

(1) FLUSH THE POTABLE WATER SUPPLY UNTIL THE WATER RUNS CLEAR;

(2) PROVIDE AN INITIAL DOSAGE OF AT LEAST 100 MG/L OF CHLORINE IN THE POTABLE WATER SOURCE;

(3) CIRCULATE THE WATER IN THE POTABLE WATER SOURCE; AND

(4) ALLOW THE WATER TO REST IN THE POTABLE WATER SOURCE FOR A MINIMUM OF 12 TO 24 HOURS BEFORE DISPOSING OF THE CHLORINATED WATER.

(C) DISINFECTION OF WATER SERVICE LINES AND WATER SERVICE PIPES SHALL BE COMPLETED PURSUANT TO THE REQUIREMENTS OF THE VERMONT PLUMBING RULES OR THE FOLLOWING METHOD:

(1) FILL THE WATER SERVICE LINE OR WATER SERVICE PIPE WITH A WATER/CHLORINE SOLUTION OF 100 MG/L; AND

(2) ALLOW THE CHLORINATED WATER TO REST IN THE WATER SERVICE LINE OR WATER SERVICE PIPE FOR A MINIMUM OF 24 HOURS BEFORE DISPOSING OF THE CHLORINATED WATER.

(D) DISINFECTION OF WATER STORAGE TANKS SHALL BE COMPLETED PURSUANT TO AWWA STANDARD C652.

(E) CHLORINATED WATER USED TO DISINFECT OR RESULTING FROM DISINFECTION OF POTABLE WATER SUPPLIES SHALL NOT BE DISCHARGED TO A WASTEWATER SYSTEM OR TO SURFACE WATER. PROPER DISPOSAL OF THE CHLORINATED WATER IS TO THE GROUND SURFACE THROUGH SHEET FLOW THAT INFILTRATES INTO THE SOIL OR DISPOSAL TO A WASTEWATER TREATMENT FACILITY, IF AUTHORIZED BY THE WASTEWATER TREATMENT FACILITY.

GATE VALVES

1. RESILIENT SEAT GATE VALVES BY KENNEDY "KEN-SEAL" OR EQUAL.
2. IRON BODY GATE VALVES TO MEET AWWA C-509-87.
3. STEM CONSTRUCTION: NON-RISING.
4. STEM SEALS: DOUBLE O-RING.
5. GATE: CAST IRON RESILIENT WEDGE WITH SYNTHETIC ELASTOMER COATING, AND SHALL BE EPOXY COATED (FUSION BONDED) INSIDE AND OUT.
6. BONNET HARDWARE SHALL MEET ASTM A307, CADMIUM PLATED.
7. OUTLET CONNECTION: STANDARD MECHANICAL JOINT

(A) OPERATION: OPEN COUNTERCLOCKWISE.

TAPPING SLEEVES AND VALVES

TAPPING VALVES

1. TAPPING VALVES TO MEET ANSI/AWWA C509-87, STANDARD FOR RESILIENT SEATED GATE VALVES.
2. VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI.
3. VALVES SHALL OPEN CLOCKWISE.
4. INLET FLANGES SHALL BE CLASS 125, ANSI B16.1, OR ANSI/AWWA C110/A21.10.
5. OUTLET CONNECTION: STANDARDIZED MECHANICAL JOINT.
6. STEM SEALS: O RING.
7. STEM CONSTRUCTION: NON-RISING.
8. SEATING: PARALLEL SEAT
9. END CONNECTIONS: MECHANICAL ON RUN, FLANGED ON BRANCH.
10. BURIED TAPPING VALVES SHALL BE PROVIDED WITH A 2 INCH SQUARE WRENCH NUT AND CAST IRON VALVE BOX. IF DEPTH FROM GRADE TO TOP OF VALVE OPERATING NUT IS GREATER THAN 6'-0 , A VALVE STEM RISER MADE OF HIGH STRENGTH STEEL SHALL BE PROVIDED. DEPTH FROM VALVE STEM RISER NUT TO GRADE WILL BE 4 TO 6 FEET.

TAPPING SLEEVES

1. AWWA C509, LATEST REVISION.
2. AWWA C207, CLASS D, MAX. WORKING PRESSURE OF 150 PSI.
3. SLEEVES: SPLIT SLEEVES OF CAST IRON OR DUCTILE IRON.
4. MECHANICAL JOINT ENDS WITH END AND GASKET SEALS.
5. BOLTS AND NUTS, MECHANICAL JOINTS: HIGH STRENGTH CAST IRON OR HIGH STRENGTH LOW ALLOY STEEL, ANSI/AWWA C111/A21.11-90.
6. BOLTS AND NUTS, FLANGED JOINTS: HIGH STRENGTH, LOW CARBON STEEL CONFORMING TO ANSI/AWWA C110/A21.10-87, APPENDIX
7. COAT ALL NUTS AND BOLTS WITH A RUST RESISTANT LUBRICANT.
8. ALL BOLTS AND NUTS USED WITH PIPE SLEEVES SHALL BE BRUSH COATED HEAVILY AFTER FINAL TIGHTENING WITH BITUMASTIC COLD-APPLIED MATERIAL TO THOROUGHLY COVER ALL EXPOSED SURFACES OF BOLTS AND NUTS.

VALVE BOXES

1. ACCEPTABLE MANUFACTURER'S: MUELLER, CLOW, OR EQUAL.
2. CLOW F-2452 SLIDING TYPE, TWO PIECE, OR EQUAL.
3. 5¼ INCH SHAFT.
4. SIZE 664-A (40-60 INCH OVERALL LENGTH).
5. CAST IRON.
6. CLOW F-2490 LIDS OR EQUAL.
7. THE WORD "WATER" TO BE CAST INTO TOP OF COVERS, AND ARROW SHOWING DIRECTION OF OPENING.

CONCRETE

1. CONCRETE SHALL HAVE:
   A. MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS
   B. AIR ENTRAINMENT OF 4% TO 6% BY VOLUME.
   C. WATER CEMENT RATIO OF 0.49 LBS. WATER/CEMENT.
   D. SLUMP OF 2 TO 4 INCHES.
2. CONCRETE SHALL NOT BE PLACED WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT OR MORE THAN 90 DEGREES FAHRENHEIT.
3. CONCRETE SHALL NOT BE DROPPED MORE THAN SIX FEET INSIDE A FORM.
4. MAINTAIN TEMPERATURE OF CONCRETE SURFACE AT MINIMUM 50 DEGREES FAHRENHEIT FOR 72 HOURS AFTER PLACING CONCRETE. PREHEAT ALL ENCLOSURES FOR A MINIMUM OF 2 HOURS TO PROVIDE A MIN. SURFACE TEMPERATURE OF 45 DEGREES FAHRENHEIT.
5. ALLOW TO SET AND CURE ALL THRUST BLOCKS, CONCRETE SUPPORTS, AND ANCHORS A MINIMUM OF 24 HOURS BEFORE BACKFILLING.
6. COMPLETELY CURE AND SET CONCRETE BEFORE ANY HYDROSTATIC OR LEAKAGE TESTING OF PIPELINE SYSTEMS.
7. NONSHRINK GROUT SHALL BE HALCO TRADEMARK, AS MANUFACTURED BY LEHN & FINK INDUSTRIAL PRODUCTS.
8. DO NOT PLACE ANY MORTAR OR GROUT WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT.
9. MORTAR FOR MANHOLES SHALL CONSIST OF THE FOLLOWING:
   A. CEMENT-TYPE II, ASTM C150.
   B. HYDRATED LIME-TYPE N, ASTM C207,
   C. SAND- ASTM C 33, FINE AGGREGATES FOR CONCRETE.
   D. WATER-CLEAN, SUITABLE FOR DRINKING,
10. MIX(BY VOLUME): 1 PART CEMENT, ¼ PART LIME, 4½ PARTS SAND.

GENERAL

1. CONTRACTOR SHALL NOTIFY BURLINGTON DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS BEFORE BEGINNING WATER LINE WORK..
2. "AS BUILT" DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AT THE TIME OF COMPLETION OF THE SYSTEM.

WATER MAIN TRACER WIRE

1. TRACER WIRE IS TO BE INSTALLED ALONG ALL WATER MAIN AND SERVICE LINES.
2. ALL TRACER WIRE COMPONENTS AND INSTALLATION DETAILS TO BE APPROVED IN ADVANCE BY THE WINOOSKI WATER DEPARTMENT, CHAMPLAIN WATER DISTRCIT AND ENGINEER.
3. TRACER WIRE TO BE #12 COPPER CLAD STEEL WITH A MINIMUM BREAK LOAD OF 450 LB.
4. WIRE TO BE PROTECTED BY MINIMUM 30 MIL HDPE CASING RATED FOR DIRECT BURY AND COLORED PER APWA CODE.
5. ALL CONNECTORS TO BE LOCKABLE AND SPECIFICALLY DESIGNED FOR DIRECT BURIAL, DIELECTRIC SILICONE GEL FILLED, DESIGNED TO PREVENT UNINSULATED WIRE EXPOSURE AND WATER INTRUSION.
6. INSTALLATION
   A. INSTALL TRACER WIRE ALONG THE PIPE ABOVE OR TO THE SIDE OF THE PIPE. CONTACT WITH THE PIPE IS ALLOWED BUT SHALL BE MINIMIZED. RECOMMENDED 2" - 6" SEPARATION.
   B. INSTALL TRACER WIRE AS A SINGLE CONTINUOUS WIRE, SPLICING OF WIRE, IF NECESSARY, SHALL BE DONE IN SUCH A WAY TO PRODUCE AN ELECTRICALLY AND MECHANICALLY SOUND JOINT.
   C. TRACER WIRE SHALL NOT BE WRAPPED AROUND PIPE.
   D. DAMAGE TO THE WIRE OCCURRING DURING INSTALLATION SHALL BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE WITH APPROVED CONNECTORS.
   E. A TRACER WIRE MUST BE PROPERLY GROUNDED AT ALL DEAD ENDS/STUBS BY USE OF A 1.5 POUND, DRIVE-IN MAGNESIUM GROUNDING ANODE ROD WITH A MINIMUM OF 20 FEET OF LEAD WIRE.
   F. NON-LOCKING FRICTION FIT, WIRE NUT, SPRAY-ON WATERPROOFING OR TAPED CONNECTORS SHALL NOT BE USED.
   G. TERMINAL ACCESS BOXES SHALL BE PROVIDED A ENDS AND JUNCTION POINTS PER RECOMMENDATIONS OF MANUFACTURER.
7. TESTING
   A. TRACER WIRE FUNCTION SHALL BE VERIFIED AFTER BACKFILL AND PRIOR TO ACCEPTANCE USING LOW FREQUENCY LINE LOCATING EQUIPMENT.
   B. CONTINUITY TESTING WILL NOT BE ACCEPTED.
   C. THE CITY OF WINOOSKI WATER DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 BUSINESS HOURS IN ADVANCE OF TRACER WIRE TESTING AND BE PRESENT FOR THE TEST.

SITE PLAN REVIEW
–FINAL–
02/23/2026

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No.	Description	Date
1	REVISIONS FOR WW PERMITTING 10-1520	PB

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Water Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C306

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EPSC NOTES

1.0 GENERAL REQUIREMENTS

1.0A THE CONTRACTOR SHALL DESIGNATE AN ON-SITE PLAN COORDINATOR (OSPC) WHO SHALL BE DIRECTLY RESPONSIBLE FOR IMPLEMENTATION OF THE EPSC PLAN.

1.0.B THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT, UNTIL ALL DISTURBED SURFACES HAVE BEEN PERMANENTLY STABILIZED. WATER APPLICATION FOR CONTROL OF DUST IS TO BE COMPLETED AT THE DISCRETION OF THE ENGINEER AND OWNER.

1.0.C NOTICE OF AUTHORIZATION UNDER VERMONT GENERAL CONSTRUCTION PERMIT FOR MODERATE RISK SITES, SHALL REMAIN POSTED IN A PUBLICLY-VISIBLE LOCATION THROUGHOUT CONSTRUCTION.

1.0.D THE OSPC IS RESPONSIBLE FOR MAINTAINING A COPY OF THE EPSC PLAN, WITH ALL AMENDMENTS AND ASSOCIATED REPORTS, ON SITE DURING CONSTRUCTION. THESE DOCUMENTS SHALL BE MADE AVAILABLE TO REPRESENTATIVES OF THE STATE OF VERMONT UPON REQUEST.

1.0.E ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL (MOST RECENT EDITION) AND THE PROJECT'S SITE-SPECIFIC EPSC PLAN SET.

1.0.F THE PERIOD BETWEEN OCTOBER 15TH AND APRIL 15TH IS CONSIDERED THE 'WINTER CONSTRUCTION PERIOD'.

1.0.G THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING WORK SCHEDULES AND PROCEDURES IN RESPONSE TO SITE CONDITIONS AND FORECAST WEATHER EVENTS.

1.1 PROJECT DESCRIPTION

THIS PROJECT FOR THE BURTON CORPERATION HEADQUARTERS INCLUDES RECONFIGURED PARKING AREAS, SEWER, WATER, AND STORMWATER TREATMENT IMPROVEMENTS. THE TOTAL PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 7.47 ACRES, AS SHOWN ON THE EPSC PLAN SHEETS.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE PROJECT AREA IS SITUATED AT THE CITY OF BURLINGTON'S SOUTHERN BOUNDARY WITH THE TOWN OF SOUTH BURLINGTON. THE SITE IS BOUND TO THE EAST BY RAILROAD AND TO THE WEST AND SOUTH BY QUEEN CITY PARK ROAD.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE SITE IS ADJACENT TO A CLASS III WETLAND AREA, LOCATED NORTHWEST OF 180 QUEEN CITY PARK ROAD. AN APPARENT STORMWATER BASIN EXISTS ON THE NEIGHBORING PROPERTY WEST OF 180 QUEEN CITY PARK ROAD. A SECOND STORMWATER TREATMENT AREA EXISTS TO THE NEIGHBORING PROPERTY WEST OF THE NORTHWEST CORNER TO THE PROPERTY.

1.2.3 VEGETATION

THE EXISTING SITE INCLUDES PREVIOUSLY DEVELOPED LANDS, SIGNIFICANT CLEARING OF VEGETATION IS NOT PROPOSED AS PART OF THE PROJECT.

1.2.4 SOILS

SOILS UNDERLYING THE PROJECT AREA ARE LARGELY MAPPED AS ENOSBURG AND WHATELY SOILS (HSG C/D, K=0.24) WITH AN AREA OF MUNSON AND RAYNHAM SILT LOAMS (HSG C/D, K=0.49) TO THE WEST. MAPPING INDICATES ADAMS AND WINDSOR LOAMY SANDS (HSG A, K=0.10) IN THE SOUTHEAST CORNER OF THE PROJECT, BELGRADE AND ELDRIDGE SOILS (HSG C/D, K=0.32) NORTHWEST OF BUILDING 180 QUEEN CITY PARK ROAD AND COVINGTON SILTY CLAY (HSG D, K=0.49) IN THE NORTHERN AREA OF THE PROJECT.

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR MODERATE RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

AS PART OF THE RISK ASSESSMENT OF THIS PROJECT, NO MORE THAN 5 ACRES OF EARTH MAY BE DISTURBED AT A GIVEN TIME.

DEWATERING NOTES

DEWATERING REQUIREMENTS:

1. ROUTE DEWATERING WATER THROUGH A SEDIMENT CONTROL (E.G., SEDIMENT TRAP OR BASIN, PUMPED WATER FILTER BAG) DESIGNED TO PREVENT DISCHARGES WITH VISUAL TURBIDITY;
2. DO NOT DISCHARGE VISIBLE FLOATING SOLIDS OR FOAM;
3. THE DISCHARGE MUST NOT CAUSE THE FORMATION OF A VISIBLE SHEEN ON THE WATER SURFACE, OR VISIBLE OILY DEPOSITS ON THE BOTTOM OR SHORELINE OF THE RECEIVING WATER. USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (SUCH AS A CARTRIDGE FILTER) DESIGNED TO REMOVE OIL, GREASE, OR OTHER PRODUCTS IF DEWATERING WATER IS FOUND TO OR EXPECTED TO CONTAIN THESE MATERIALS;
4. TO THE EXTENT FEASIBLE, USE WELL-VEGETATED (E.G., GRASSY OR WOODED), UPLAND AREAS OF THE SITE TO INFILTRATE DEWATERING WATER BEFORE DISCHARGE. YOU ARE PROHIBITED FROM USING RECEIVING WATERS AS PART OF THE TREATMENT AREA;
5. TO PREVENT DEWATERING-RELATED EROSION AND RELATED SEDIMENT DISCHARGES:
   a. USE STABLE, EROSION-RESISTANT SURFACES (E.G., WELL-VEGETATED GRASSY AREAS, CLEAN FILTER STONE, GEOTEXTILE UNDERLAYMENT) TO DISCHARGE FROM DEWATERING CONTROLS;
   b. DO NOT PLACE DEWATERING CONTROLS, SUCH AS PUMPED WATER FILTER BAGS, ON SLOPES 3:1 OR GREATER; AND
6. REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN THE PRESSURE DIFFERENTIAL EQUALS OR EXCEEDS THE MANUFACTURER'S SPECIFICATIONS; AND
7. COMPLY WITH DEWATERING-SPECIFIC INSPECTION REQUIREMENTS AS OUTLINED IN SECTION 6.3 OF THE VERMONT NPDES GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL PLAN

THE EROSION CONTROL PLANS DEPICT "BEST MANAGEMENT PRACTICES" (BMP's) DESIGNED TO MINIMIZE SOIL EROSION AND TO CONTROL SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE APPLY THROUGHOUT CONSTRUCTION WORK AND UNTIL ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, AND ARE INTENDED TO PREVENT SEDIMENT DISCHARGE TO WATERS OF THE STATE. THESE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE VERMONT EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES
SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED. CONSTRUCTION FENCING, RIBBON OR CHAIN LINK FENCING SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES ALONG THE INDICATED LIMITS OF DISTURBANCE. REFER TO LIMIT OF DISTURBANCE ON PLAN SHEETS C102A-C102C. DISTURBANCE LIMITS ARE TO REMAIN MARKED THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS.

1.4.2 LIMIT DISTURBANCE AREA
PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. PRIOR TO THE START OF EARTH DISTURBANCE IN EACH PHASE, THE CONTRACTOR SHALL INSTALL TEMPORARY EPSC MEASURES AS OUTLINED IN 1.4.1 THROUGH 1.4.6 IN THIS NARRATIVE.

MAINTAINING VEGETATED BUFFERS (TO THE MAXIMUM EXTENT POSSIBLE) ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION
TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS, AND TO CONTROL DUST. INSTALLATION OF A STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE PRIOR TO THE START OF EARTHWORK.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES. THE (2) PROPOSED STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT.

1.4.4 INSTALL SEDIMENT BARRIERS
SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE DISTURBANCE.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. WIRE REINFORCED SILT FENCE SHALL BE USED WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS. THE CONTRACTOR SHALL INSTALL NEW SILT FENCE AS SHOWN ON THE PLANS AND MAINTAIN PER SPECIFICATIONS FOR THE DURATION OF THE PROJECT.

DROP INLET PROTECTION SHALL BE PROVIDED AROUND ALL EXISTING AND PROPOSED CATCH BASINS. PROTECTION SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM DROP INLET PROTECTION WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN IT NO LONGER DRAINS PROPERLY.

1.4.5 DIVERT UPLAND RUNOFF
OFFSITE RUNOFF IS LARGELY DIVERTED BY AN EXISTING DRAINAGE DITCH AT THE NORTHERN EDGE OF THE PROPERTY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW.

STONE CHECK DAMS WILL BE INSTALLED AS INDICATED ON THE PLANS

1.4.7 CONSTRUCT PERMANENT CONTROLS
PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS. TREATMENT DEVICES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION
ALL DISTURBED AREAS ARE TO BE STABILIZED (TEMPORARY OR FINAL) WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE WITHIN THIS WORK AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:

STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD.
WORK IS OCCURRING WITHIN A SELF-CONTAINED EXCAVATION (I.E. NO OUTLET), WITH A DEPTH OF 2 FEET OR GREATER (E.G. BUILDING FOUNDATION EXCAVATION, UTILITY TRENCHES).

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 3:1, AND WHERE INDICATED ON THE PLANS.

1.4.9 WINTER CONSTRUCTION/STABILIZATION

ALL STABILIZATION INVOLVING SEEDING IS TO BE COMPLETED AFTER APRIL 15TH AND BEFORE SEPTEMBER 15TH. VARIOUS MEASURES SPECIFIC TO WINTER CONSTRUCTION MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). DUE TO THE LARGE PROJECT SCOPE AND PROJECT SCHEDULE, SITE WORK IS EXPECTED TO CONTINUE INTO THE WINTER CONSTRUCTION PERIOD (BETWEEN OCTOBER 15TH AND APRIL 15TH). THE FOLLOWING ADDITIONAL WINTER EPSC MEASURES SHOULD BE TAKEN PRIOR TO THE START OF CONSTRUCTION DURING THE WINTER MONTHS:

1.4.9.A THE LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
1.4.9.B ALL DRAINAGE STRUCTURES SHALL BE KEPT FREE OF SNOW AND ICE DAMS. OSPC TO INSPECT DRAINAGE STRUCTURES AND CHANNELS FOR SNOW AND ICE BLOCKAGE PRIOR TO RAINFALL AND MELT EVENTS.
1.4.9.C SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE SHALL BE INSTALLED AHEAD OF GROUND FREEZING OR THE START OF THE WINTER CONSTRUCTION SEASON, WHICHEVER COMES FIRST.
1.4.9.D MAINTAIN A 25' BUFFER FROM SILT FENCE TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
1.4.9.E WHERE MULCH IS THE SELECTED STABILIZATION MEASURE, IT SHALL BE APPLIED AT THE END OF EACH WORKDAY DOUBLE THE STANDARD RATE OF MULCH SHALL BE APPLIED.
1.4.9.F EROSION CONTROL NETTING SHALL BE INSTALLED TO ANCHOR MULCH TO PREVENT REMOVAL BY WIND.
1.4.9.G TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
1. IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
2. DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS FOUNDATIONS OR OPEN UTILITY TRENCHES.
1.4.9.H SNOW OR ICE SHALL BE REMOVED TO LESS THAN 1" THICKNESS PRIOR TO STABILIZATION.
1.4.9.I 10-20 FT WIDE STONE STABILIZATION SHALL BE INSTALLED WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED, SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION.
1.4.9.J DURING WINTER CONSTRUCTION, INSPECTIONS BY THE ON-SITE PLAN COORDINATOR SHALL OCCUR DAILY WHEN AREAS ARE UN-STABLE, AND WEEKLY PRIOR TO ANY FORECASTED RAIN, THAW OR SPRING MELT WHEN TEMPORARY STABILIZATION IS IN PLACE.
1.4.9.K FOR PROJECTS OR AREAS OF A SITE THAT WILL HAVE COMPLETED EARTH DISTURBANCE ACTIVITIES PRIOR TO THE START OF THE WINTER CONSTRUCTION SEASON (OCTOBER 15TH), THE FOLLOWING REQUIREMENTS MUST BE ADHERED TO:
(1) FOR AREAS TO BE STABILIZED FOR THE WINTER THROUGH THE ESTABLISHMENT OF VEGETATION, SEEDING AND MULCHING SHALL BE COMPLETED NO LATER THAN SEPTEMBER 15TH TO ENSURE ADEQUATE GROWTH AND COVER BEFORE THE START OF THE WINTER PERIOD.
(2) IF SEEDING IS NOT COMPLETED BY SEPTEMBER 15TH, ADDITIONAL NON-VEGETATIVE PROTECTION MUST BE USED TO STABILIZE THE SITE FOR THE WINTER PERIOD. AREAS OF DISTURBANCE NOT SEEDED AND MULCHED BY SEPTEMBER 15TH ARE REQUIRED TO TEMPORARILY STABILIZE BY ONE OF THE FOLLOWING METHODS:
- INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs) OVER THE AREAS OF EARTH DISTURBANCE; OR,
- APPLYING A 2-INCH MULCH LAYER TO AREAS OF EARTH DISTURBANCE (EQUIVALENT TO DOUBLE THE STANDARD RATE). MULCH SHOULD BE TRACKED IN OPEN AREAS VULNERABLE TO WIND. ADDITIONALLY, SEEDING WITH WINTER RYE IS RECOMMENDED TO ALLOW FOR EARLY GERMINATION DURING WET SPRING CONDITIONS.

1.4.9.L ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING, SHALL BE INSTALLED.
1.4.9.M IN AREAS OF DISTURBANCE WITHIN 100 FT OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
1.4.9.N ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE BY OCTOBER 15, OR IF NOT POSSIBLE, THEN PRIOR TO GROUND FREEZE.

1.4.10 STABILIZE SOIL AT FINAL GRADE
EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.
SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES 3:1 OR STEEPER, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDUROUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE-SEEDED IN THE MANNER PREVIOUSLY SPECIFIED, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL DISTURBED ARES, INCLUDING WATERING, UNTIL THE AREA IS INSPECTED AND ACCEPTED BY THE OWNER OR ENGINEER.
AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

1.4.11 DE-WATERING ACTIVITIES
ALL DEWATERING DISCHARGE IS TO BE FILTERED THROUGH A FILTER BAG AND INFILTRATE THROUGH SOILS ON SITE. OTHER METHODS ARE TO BE APPROVED IN ADVANCE BY THE ENGINEER AND VT ANR STAFF.

1.4.12 SITE INSPECTIONS
THE OSPC IS RESPONSIBLE FOR INSPECTING ALL WORK AREAS AT LEAST ONCE EVERY 7 CALENDAR DAYS AND AS SOON AS POSSIBLE DURING OR AFTER ANY RAINFALL OR MELT EVENT THAT PRODUCES RUNOFF FROM THE CONSTRUCTION SITE.

1.4.13 TURBIDITY MONITORING
AS SOON AS POSSIBLE, DURING OR AFTER EVERY RAINFALL EVENT RESULTING IN RUNOFF FROM THE CONSTRUCTION SITE, THE OSPC MUST INSPECT SITE RUNOFF FOR VISUAL DISCOLORATION. IF ANY DISCOLORATION IS NOTED, ALL EPSC PRACTICES UPSLOPE ARE TO BE INSPECTED AND REPAIRED WHERE NECESSARY. IF VISIBLY DISCOLORED WATER DISCHARGE TO WATERS OF THE STATE CONTINUES, THE OSPC MUST CONTACT THE ENGINEER AND INSTALL SUPPLEMENTAL BMP'S TO REDUCE SEDIMENT DISCHARGE. IF SUPPLEMENTAL MEASURES DO NOT STOP DISCHARGE OF DISCOLORED WATER, THE DISCHARGE MUST BE SAMPLED. TURBIDITY ABOVE 25 NTU, AS DETERMINED IN ACCORDANCE WITH EPA STANDARD 108.1, REQUIRES FILING A REPORT TO THE VERMONT DEC WITHIN 48 HOURS, AND EVALUATION OF ADDITIONAL MEASURES THAT COULD BE IMPLEMENTED TO PREVENT FUTURE DISCHARGES OF SEDIMENT-LADEN WATER.

1.5 ADDITIONAL NOTES

1.5.1 ALL PREVIOUSLY INSTALLED EROSION CONTROL MEASURES ARE TO BE INSPECTED AND MAINTAINED BY THE CONTRACTOR FOR ALL PHASES OF THE PROJECT. ALL EPSC MEASURES, WHETHER INSTALLED AS DIFFERENT PHASES OF THE WORK, SHALL BE REMOVED AND SEDIMENT PROPERLY DISPOSED OF AFTER FINAL STABILIZATION.

1.5.2 FAILURE OR REPORTED FAILURES OR EPSC MEASURES INSTALLED AS PART OF THE PROJECT, AND FOLLOWING ANY LARGE RUNOFF EVENT, ARE TO BE REPORTED TO THE OWNER, ENGINEER, AND VERMONT AGENCY OF NATURAL RESOURCES WITHIN 12 HOURS OF FIRST INDICATION.

1.5.3 DISCHARGE OF SEDIMENT FROM THE SITE INTO WATERS OF THE STATE CAUSED BY NON-COMPLIANCE WITH THE REQUIREMENTS OUTLINED ABOVE, VT CONSTRUCTION GENERAL PERMIT 3-9020, AND THE APPENDIX A DEVELOPED FOR THIS PROJECT IS A VIOLATION OF STATE LAW.

EPSC NOTES

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.

2. THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24-HOURS PRIOR TO ANY EARTH DISTURBING ACTIVITIES AND SUBMIT THE NAME AND CONTACT INFORMATION (CELL PHONE AND EMAIL) OF THE ON-SITE EROSION CONTROL COORDINATOR FOR THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR POSTING THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN NOTICE IN A VISIBLE LOCATION AT ALL TIMES DURING EARTH DISTURBANCE.

3. DISTURBANCE LIMITS ARE TO BE MARKED, AND THE FOLLOWING MANAGEMENT PRACTICES INSTALLED, PRIOR TO BEGINNING EARTHWORK IN ANY GIVEN AREA; SILT FENCE, CONSTRUCTION ENTRANCE, INLET PROTECTION & TREE PROTECTION FENCING.

4. COMPLY WITH VERMONT STATE CONSTRUCTION PERMIT CONDITIONS. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE "VERMONT DEC LOW RISK SITE HANDBOOK FOR EROSION PREVENTION & SEDIMENT CONTROL", DATED 2006.

5. DURING THE NON-WINTER CONSTRUCTION SEASON, ALL DISTURBED AREAS ARE TO BE STABILIZED (TEMPORARY OR FINAL) WITHIN 7-DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE WITHIN THIS WORK AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
   A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD
   B. WORK IS OCCURRING WITHIN A SELF-CONTAINED EXCAVATION, 2-FEET OR MORE IN DEPTH.

6. THE PERIOD BETWEEN NOVEMBER 1ST AND APRIL 15TH IS CONSIDERED THE 'WINTER CONSTRUCTION PERIOD'. IF SOILS WILL BE EXPOSED AFTER NOVEMBER 1ST, A PLAN FOR WINTER CONSTRUCTION MUST BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER ON OR BEFORE OCTOBER 1ST. THE CONTRACTOR SHALL ENSURE SEDIMENT CONTROL IS INSTALLED PRIOR TO THE SOIL FREEZING. AN INSPECTION WILL BE REQUIRED IF THE PROJECT IS COMPLETED DURING THE WINTER MONTHS TO ENSURE THE SITE IS SECURED FOR THE REMAINDER OF THE SEASON.

7. DURING THE WINTER CONSTRUCTION SEASON, ANY NEW DISTURBANCE MUST BE STABILIZED (TEMPORARY OR FINAL) AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
   A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD
   B. WORK IS OCCURRING WITHIN A SELF-CONTAINED EXCAVATION, 2-FEET OR MORE IN DEPTH.

7. IN NO CASE SHALL SOIL BE EXPOSED FOR MORE THAN 7 DAYS WITHOUT BEING STABILIZED.

8. ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED WITHIN 48 HOURS OF FINAL GRADING.

9. THE PERIMETER OF THE SITE AND ALL BMPS SHALL BE INSPECTED AT THE END OF EACH WORK DAY TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE. IF SEDIMENT HAS TRAVELED BEYOND THE PROJECT LIMITS, IT SHALL BE RELOCATED IN AN UPGRADIENT AREA ON SITE AT THE END OF EACH WORK DAY.

10. ALL STABILIZATION INVOLVING SEEDING IS TO BE COMPLETED BY SEPTEMBER 15TH.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION OF THE ADJACENT ROADWAYS FOR OFF-SITE TRACKING OF SOIL MATERIALS. SOIL, STONE, AND DEBRIS FOUND LEAVING THE SITE ARE TO BE REMOVED (WHEN FOUND) BY SWEEPING AT THE END OF EACH CONSTRUCTION DAY, OR MORE FREQUENTLY WHEN NEEDED TO PREVENT IMPACTS TO ADJACENT ROADS AND SIDEWALKS.

12. IF DEWATERING IS REQUIRED FOR CONSTRUCTION, THE CONTRACTOR MUST UTILIZE SEDIMENT FILTER BAGS (OR ALTERNATE APPROVED BY THE ENGINEER) TO PREVENT DISCHARGE OF SEDIMENT-LADEN WATER OFF SITE.

13. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE PLACED ONSITE IN A LOCATION TO BE APPROVED OF BY THE OWNER AND/OR THE ENGINEER OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.

14. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.

15. SLOPES GREATER THAN 3:1 SHALL HAVE EROSION CONTROL NETTING INSTALLED TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. NETTING SHALL BE BIODEGRADABLE WITH A 12 MONTH LONGEVITY, S150BN AS MANUFACTURED OR APPROVED EQUIVALENT. INSTALL NETTING OVER MULCHED SLOPES SO THAT ALL PARTS ARE IN CONTACT WITH THE SOIL AND MULCH. PIN NETTING WITH WIRE STAPLES 3 FEET O.C. TO ENSURE FULL BONDING WITH SOIL SURFACE. THE SLOPE SURFACES SHOULD BE LEFT SLIGHTLY ROUGHENED AND NOT SMOOTH. IF LARGE AMOUNTS OF OFFSITE WATER WILL DRAIN OVER THESE SLOPES, TEMPORARY DIVERSION SWALES SHALL BE INSTALLED UP SLOPE UNTIL THE SLOPE VEGETATION STABILIZES.

16. THE OWNER SHALL BE NOTIFIED WHEN SITE WORK IS COMPLETED AND THE SITE IS STABILIZED.

BURLINGTON EPSC NOTES

1. PREVENT EROSION AND THE TRANSPORT OF SEDIMENT OFF LOT, ONTO THE PUBLIC STREETS AND SIDEWALKS, INTO THE MUNICIPAL STORMWATER SYSTEM, AND/OR WATERS OF THE STATE. EARTHEN MATERIAL HAULED OFFSITE BY WAY OF A DUMP TRUCK OR SIMILAR METHOD DOES NOT CONSTITUTE EROSION OR SEDIMENTATION;
2. PREVENT PARKING OF ANY CONSTRUCTION OR CONSTRUCTION RELATED VEHICLES ON CITY OWNED GREEN SPACE. DAMAGE TO GREEN SPACE SHALL BE IMMEDIATELY ADDRESSED;
3. TAKE ANY AND ALL STEPS NECESSARY TO ABATE EROSION AND TO CLEAN UP ALL RESULTING SEDIMENT DEPOSITED, DISCHARGED OR FOUND TO EXIST OFF LOT, ON CITY STREETS AND SIDEWALKS, AND/OR IN THE CITY STORMWATER SYSTEM;
4. MAINTAIN PROJECT EROSION PREVENTION AND SEDIMENT CONTROL DEVICES/MEASURES AND PERFORM REQUISITE CLEANUP OF RESULTING SEDIMENTATION. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, DAILY SWEEPING OF STREETS AND SIDEWALKS AND CLEANING CITY STORMWATER CATCH BASINS;
5. ANY AREA OF REVEGETATION MUST EXHIBIT SURVIVAL OF A MINIMUM OF SEVENTY-FIVE (75) PERCENT OF THE COVER CROP THROUGHOUT THE YEAR IMMEDIATELY FOLLOWING REVEGETATION. REVEGETATION MUST BE REPEATED IN SUCCESSIVE YEARS UNTIL THE MINIMUM SEVENTY-FIVE (75) PERCENT SURVIVAL FOR ONE (1) YEAR IS ACHIEVED.

SITE PLAN REVIEW
-FINAL-
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9018
02/23/2026
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: EPSC Notes

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C307A

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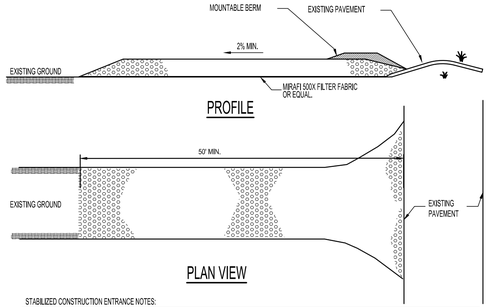
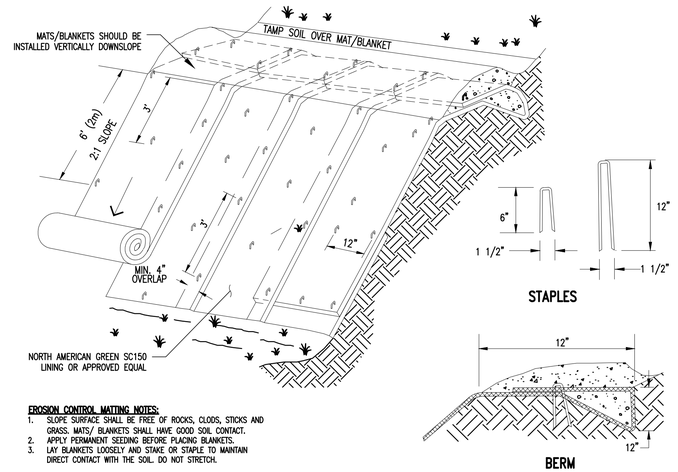


STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE 4" - 6" CRUSHED STONE (VTRANS 704.17A).
2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONSTRUCTION ENTRANCE DETAIL

1



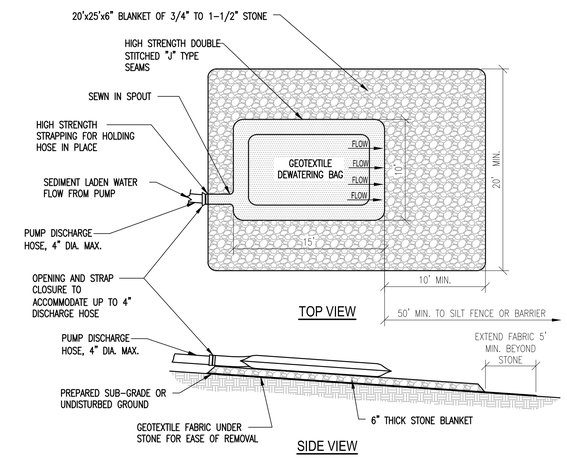
EROSION CONTROL MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

EROSION CONTROL MATTING DETAIL

SCALE: NONE

4



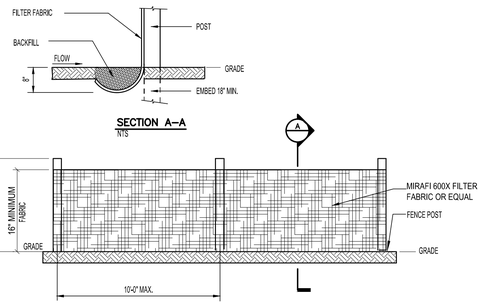
NOTES:

1. ALL PROJECT DEWATERING PUMPS SHALL DISCHARGE INTO A PUMPED SEDIMENT CONTROL DEVICE.
2. GEOTEXTILE BAG MATERIAL BASED ON PARTICLE SIZE IN PUMPED WATER, I.E., FOR COARSE PARTICLES A WOVEN MATERIAL, FOR SILTS/CLAYS A NON-WOVEN MATERIAL.
3. LIFTING STRAPS SHALL BE INCLUDED WITH THE PUMPED SEDIMENT CONTROL DEVICE FOR REMOVAL WHEN FULL.
4. DO NOT OVER PRESSURIZED BAG OR USE BEYOND CAPACITY.
5. LOCATE DISCHARGE SITE ON FLAT UPLAND AREAS AS FAR AWAY AS POSSIBLE FROM STREAMS, WETLANDS, OTHER RESOURCES AND POINTS OF CONCENTRATED FLOW.
6. DOWGRADIENT FROM RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE FROM EROSION, E.G., FOREST FLOOR, GRASS LAWN OR COARSE GRAVEL/STONE.
7. DISCHARGE LOCATION SHALL MEET ALL REGULATORY SETBACKS FROM WETLANDS AND OTHER WATER COURSES.
8. HEAVY EQUIPMENT ACCESS TO THE THE PUMPED SEDIMENT CONTROL DEVICE SITE SHALL BE MAINTAINED FOR REPLACEMENT AND DISPOSAL.
9. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION, CLEANING AND REMOVAL.

PUMPED SEDIMENT CONTROL SYSTEM

SCALE: NONE

7



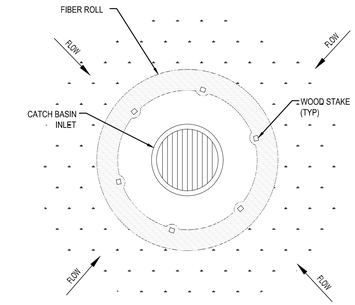
SILT FENCE NOTES:

1.) SILT FENCE SHALL BE PREFABRICATED EROSION CONTROL FENCE BY MIRAFI OR EQUAL, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
2.) WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
3.) INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

SILT FENCE DETAIL

NOT TO SCALE

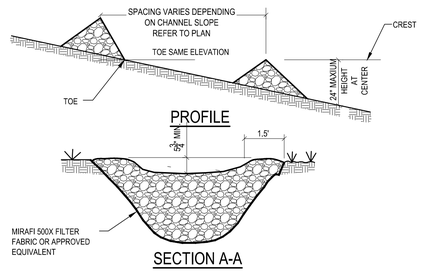
2



FIBER ROLL INLET PROTECTION DETAIL

SCALE: NONE

5



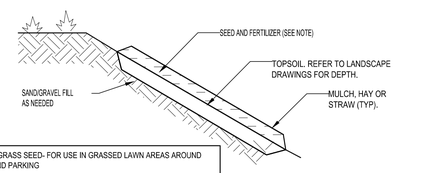
NOTES:

1. TYPE I STONE FILL WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT THE GRADES AND LOCATIONS AS DESCRIBED HEREIN, AND TO MEET THE ABOVE DETAIL IN AREAS SHOWN ON PLANS
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM FOR A MINIMUM OF 100' DOWNSTREAM OF DISTRUBED EARTH.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED WEEKLY (EVERY 7 DAYS) AND WITHIN 24 HOURS AFTER EACH RAIN.
6. REMOVE SEDIMENT COLLECTED BEHIND EACH DAM WHEN DEPTH OF SEDIMENT IS ONE HALF THE HEIGHT OF THE DAM.

STONE CHECK DAM DETAIL

SCALE: NONE

8



URBAN MIX GRASS SEED- FOR USE IN GRASSED LAWN AREAS AROUND BUILDING AND PARKING		
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED
44.44	20.0	CREEPING RED FESCUE
44.44	20.0	KENTUCKY BLUEGRASS
11.11	5.0	RYEGRASS
100	45.0 # LIVE SEED/ ACRE	

CONSERVATION MIX GRASS SEED- FOR USE IN ALL OTHER AREAS		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
50	15.0	SMOOTH BROMEGRASS
16.67	5.0	RYEGRASS
33.33	10.0	BIRDSFOOT TREFOIL
100	30.0 # LIVE SEED/ACRE	

FERTILIZER- 40 LBS. PER 1000S.F.
USE STANDARD 10-20-20 WHEN NO SOIL TEST DATA IS AVAILABLE
SPRING SEEDING
FALL SEEDING

LIME- 100 LBS. PER 1000S.F.
DOLOMITIC GROUND LIMESTONE
NOT LESS THAN 85% OF THE TOTAL CARBONATE

TOP SOIL
6" MINIMUM TOPSOIL

HAY OR STRAW MULCH- 90-100LBS PER 1000S.F.
APPLY BINDER OR NETTING AS NEEDED

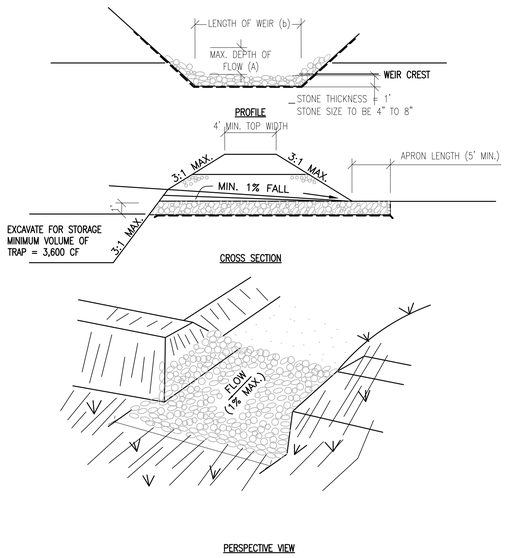
NOTES FOR SEEDED AND MULCHED AREAS

1. ALL DISTURBED SURFACES SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED WITHIN 7 DAYS OF DISTURBANCE.
2. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.
3. MULCH: TYPICALLY HAY OR STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 90-100 LBS/1,000 SF. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
4. SEED: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO GROUND FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
5. COVER SEED WITH ¼ INCH SOIL UNLESS A HYDROSEEDER IS USED.
6. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
7. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.

SEEDED AND MULCHED AREAS DETAIL

SCALE: NONE

3



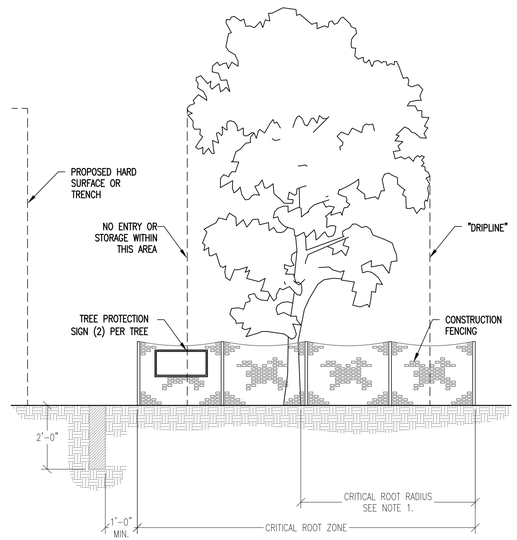
NOTES:

1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE;
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN 5 ACRES;
3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA;
4. THE SIDE SLOPES OF THE TRAP SHALL BE 3:1 OR FLATTER, AND SHALL BE STABILIZED IMMEDIATELY AFTER THEIR
5. CONSTRUCTION;
6. THE OUTLET OF THE TRAP SHALL BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP AND SHALL DISCHARGE TO A STABILIZED AREA;
7. THE TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED;
8. AND THE MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
9. THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
10. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.
11. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF EMBANKMENT.
12. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.
13. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIPRAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
14. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.
15. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
16. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SEDIMENT TRAP DETAIL

SCALE: NONE

6



NOTES:

1. TO CALCULATE THE CRITICAL ROOT RADIUS, ESTIMATE THE TREE'S HEIGHT AND MULTIPLY BY 40 PERCENT (0.40). THE RESULT IS THE APPROXIMATE DISTANCE FROM THE TREE TRUNK TO THE EDGE OF THE CONSTRUCTION FENCING.
2. FENCE SPECIMEN TREES AND GROUPS OF TREES. WHERE ROOT LOSS WILL OCCUR, PRUNE ROOT ONE FOOT BEYOND THE CONSTRUCTION FENCE USING A VIBRATING KNIFE OR NARROW TRENCHER – ALWAYS WITH SHARP BLADES TO MAKE CLEAN CUTS. BACKFILL IMMEDIATELY AND COVER WITH 3 INCHES OF MULCH.
3. INSTALL SILT FENCE ON THE INTERIOR OF THE CONSTRUCTION FENCING TO KEEP SOIL FROM DISTURBED AREAS OUT OF THE ROOT ZONES OF TREES TO BE SAVED.
4. FERTILIZE, WATER, AERATE AND OTHERWISE AID TREE HEALTH.
5. COORDINATE THE FINAL LOCATION OF THE CONSTRUCTION FENCING AND ROOT PRUNING WITH THE OWNER.

TREE PROTECTION

SCALE: NONE

9

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL B. BOISVERT
NO. 9018
02/23/2026
LICENSED PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: EPSC Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C307B

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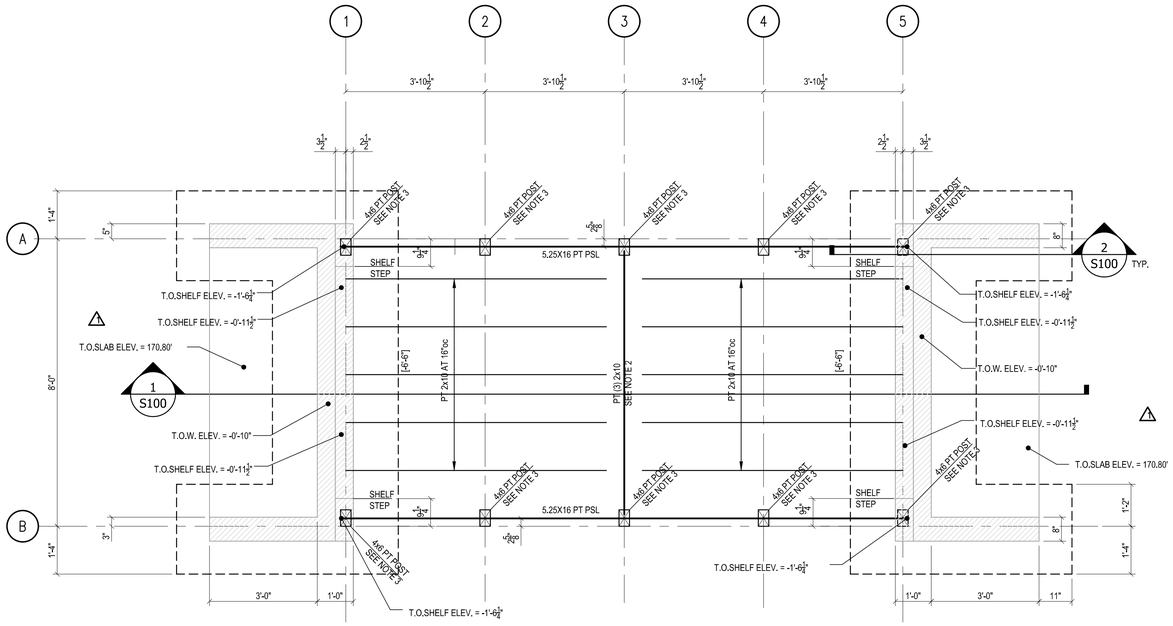
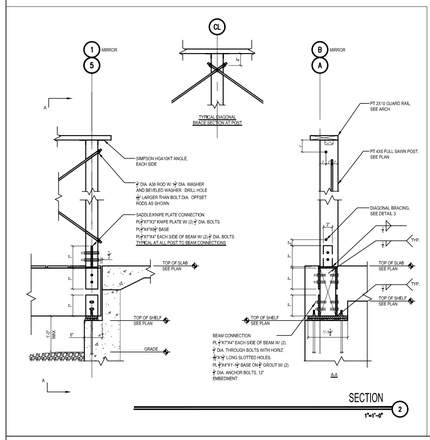
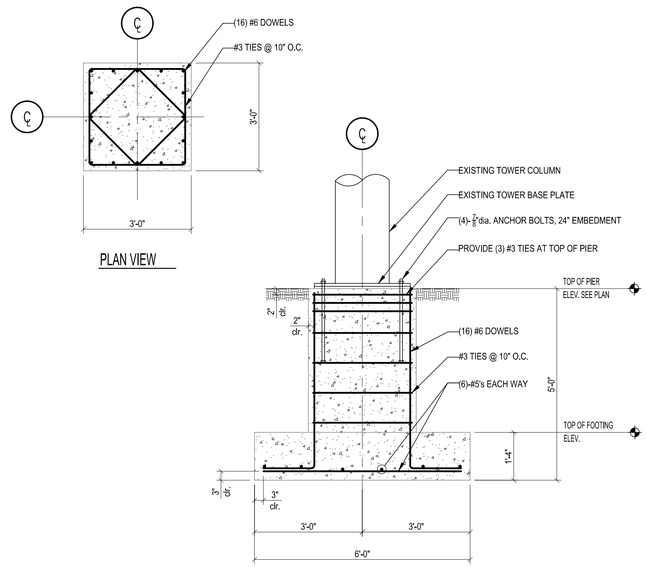


PLAN

1/2"=1'-0"

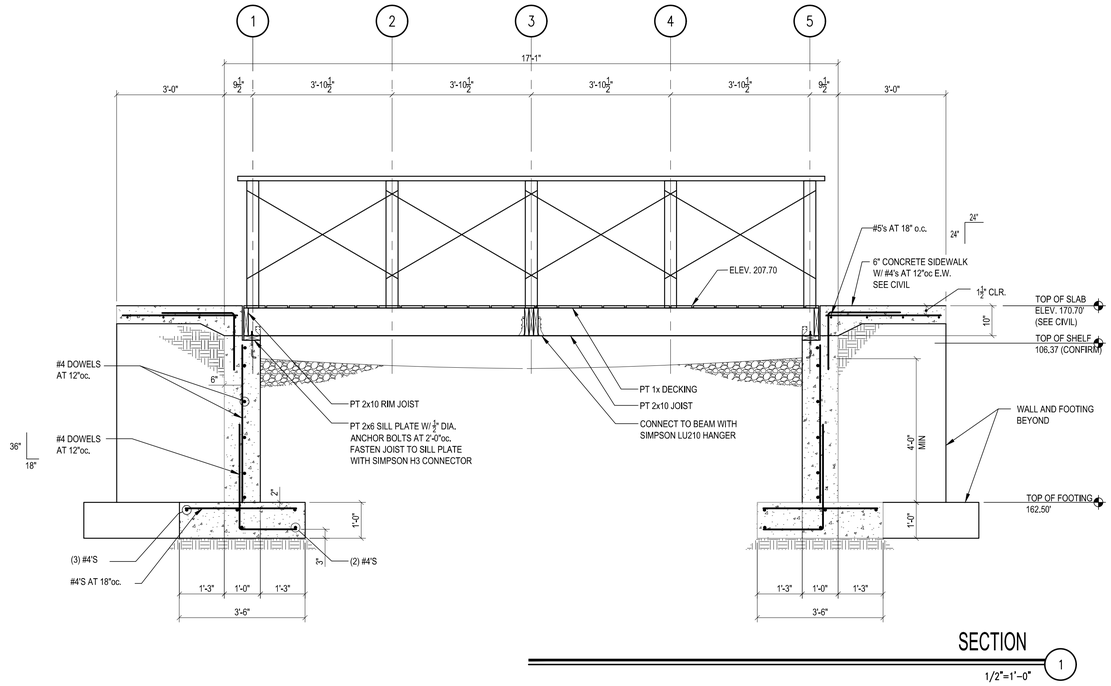
NOTE:
1. TOP OF WALLS AND FOOTINGS REFERENCED FROM SLAB LEVEL 170.80' BY [±X'-XX"].
2. CONNECT BUILT UP 2X MEMBER TO PSL WITH SIMPSON HUS210-3 HANGER.
3. PT POST TO BE FULL SAWN, 4" X 6".





NEW PIER AND FOOTING FOR EXISTING SKI LIFT TOWER

½"=1'-0" 3



SECTION

1/2"=1'-0" 1

NOTES FOR BIDDERS:

1. BRIDGE STRUCTURE SHOWN FOR REFERENCE. REMOVE AND REINSTALL CURRENT BRIDGE IN NEW LOCATION ON NEW ABUTMENTS.
2. ASSUME 6' LONG WINGWALLS AT ALL 4 CORNERS OF BRIDGE.
3. GRADING AROUND BRIDGE MAY CHANGE.

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PETER M. BOISVERT
NO. 9010
02/23/26
LICENSED PROFESSIONAL ENGINEER
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No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Bridge Details

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C308

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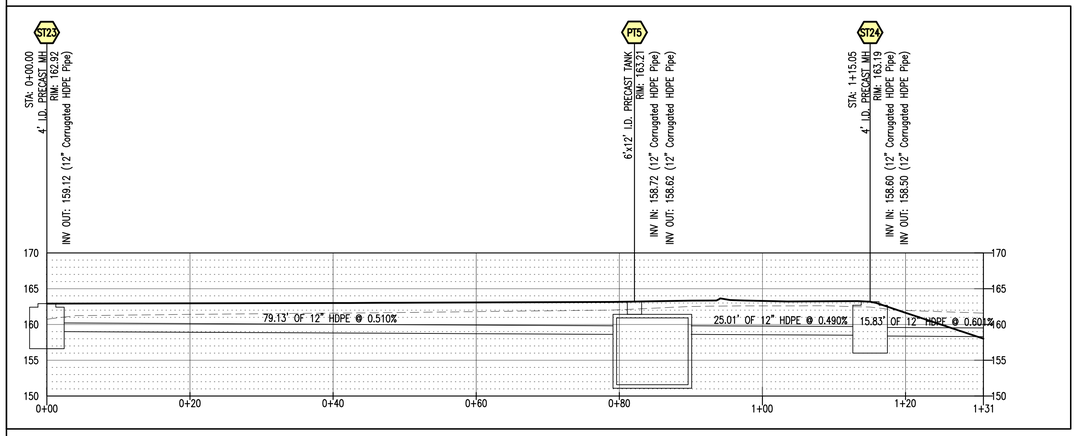
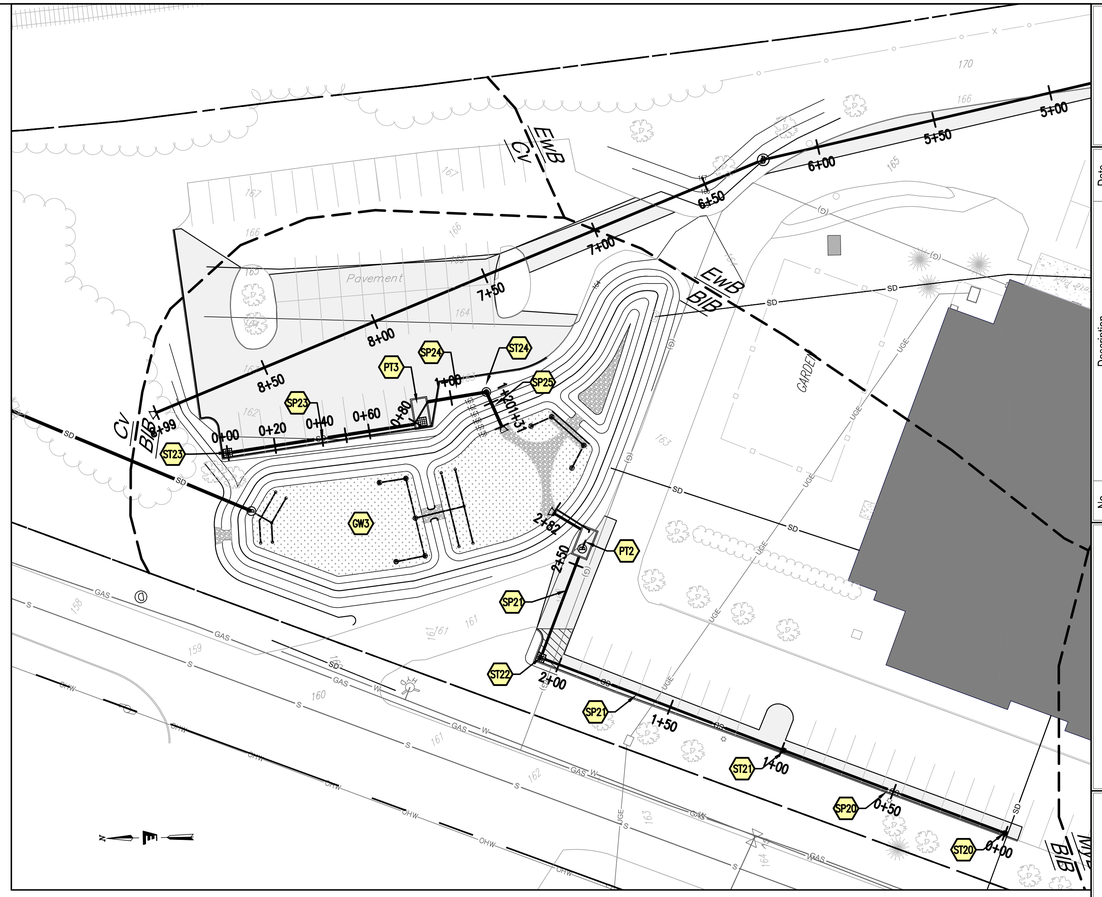


PROFILE SCALE

GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 24" x 36"



PLAN VIEW SCALE

GRAPHIC SCALE

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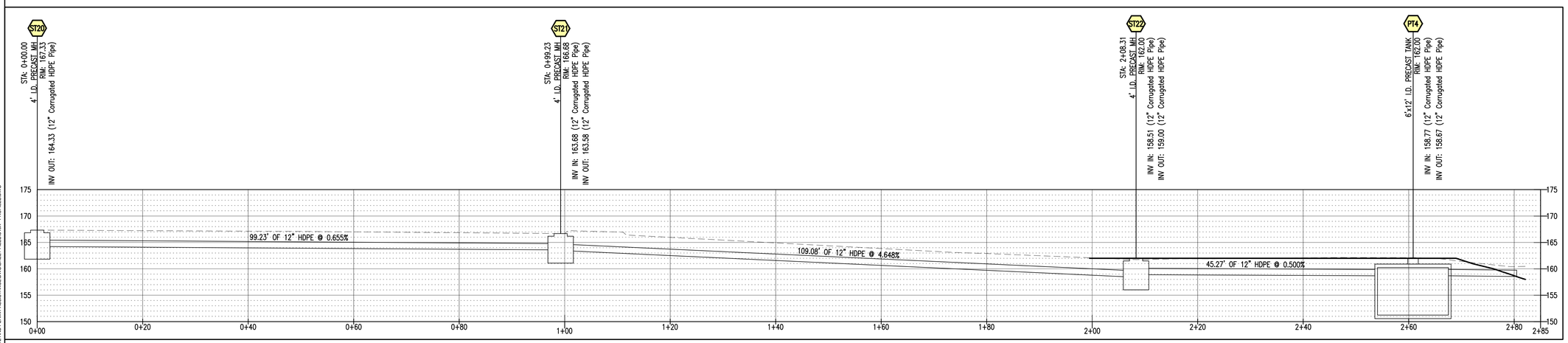
1 inch = 30 ft.
for sheet size 24" x 36"



SITE PLAN REVIEW
–FINAL–
02/23/2026

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PAUL M. BOISVERT
NO. 9016
02/23/26
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
180 North Campus

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C401

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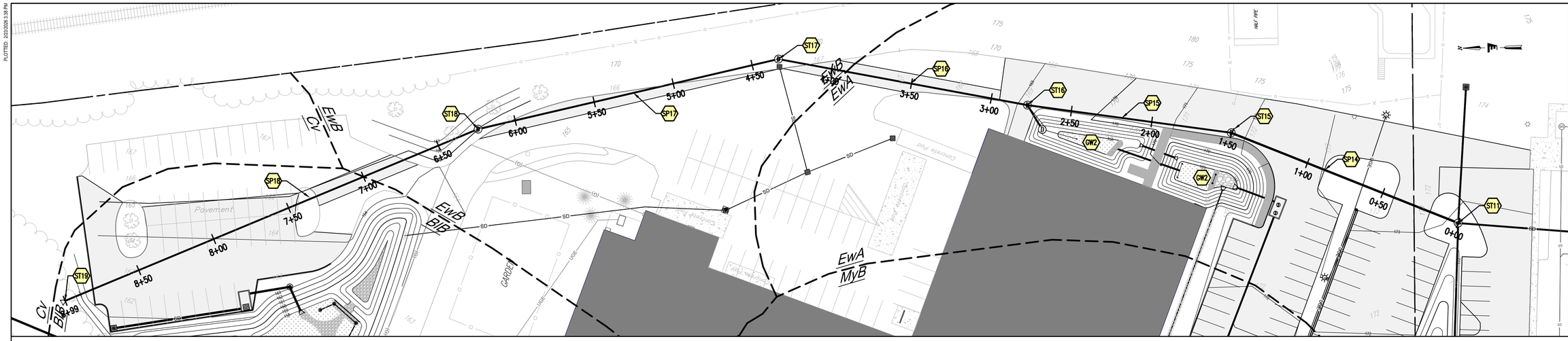

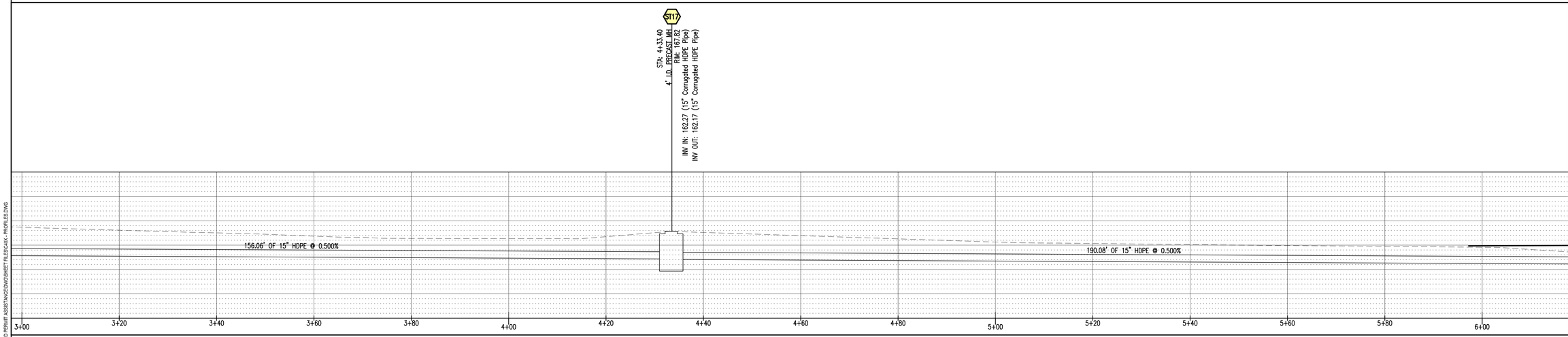

Plan View Scale

GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

Profile View Scale

GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
DEREK W. BOISHKER
NO. 9016
2/23/26
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
Central Campus Outlet 1 of 2

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C402

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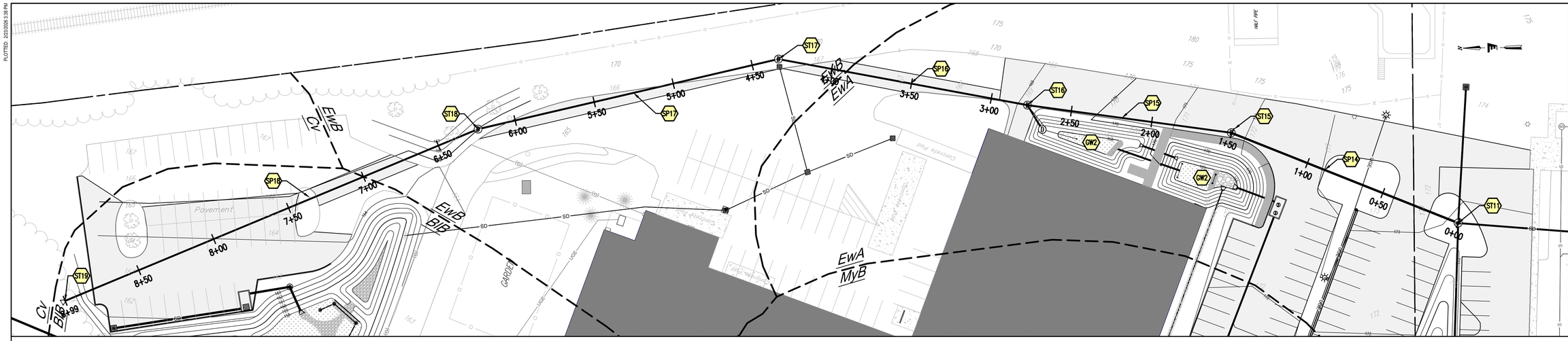

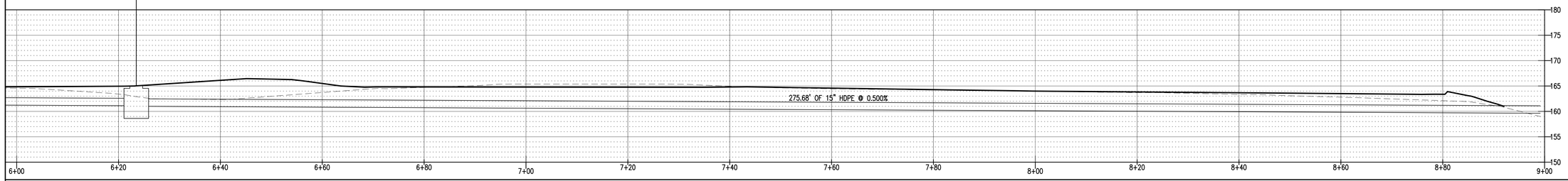

Plan View Scale

GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

Profile View Scale

GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PETER M. BOISVERT
NO. 9016
2/23/26
LICENSED
PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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414 Union Street, Schenectady, NY 12305 • 518-205-9141
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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
Central Campus Outlet 2 of 2

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C403

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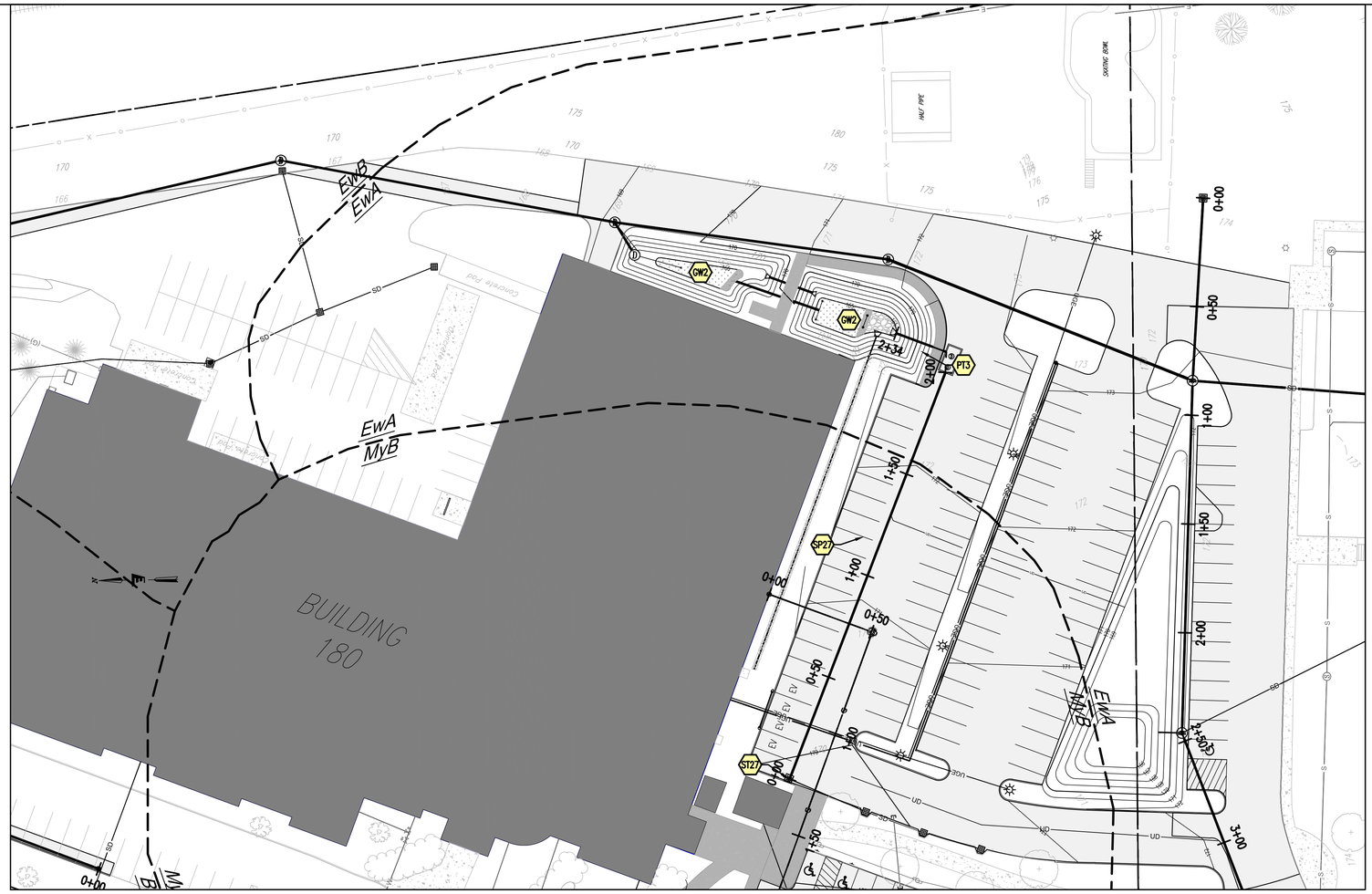
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180
EwB
EwA
EwA
MyB
EwA
MyB
GW2
GW2
PT3
SP27
ST27
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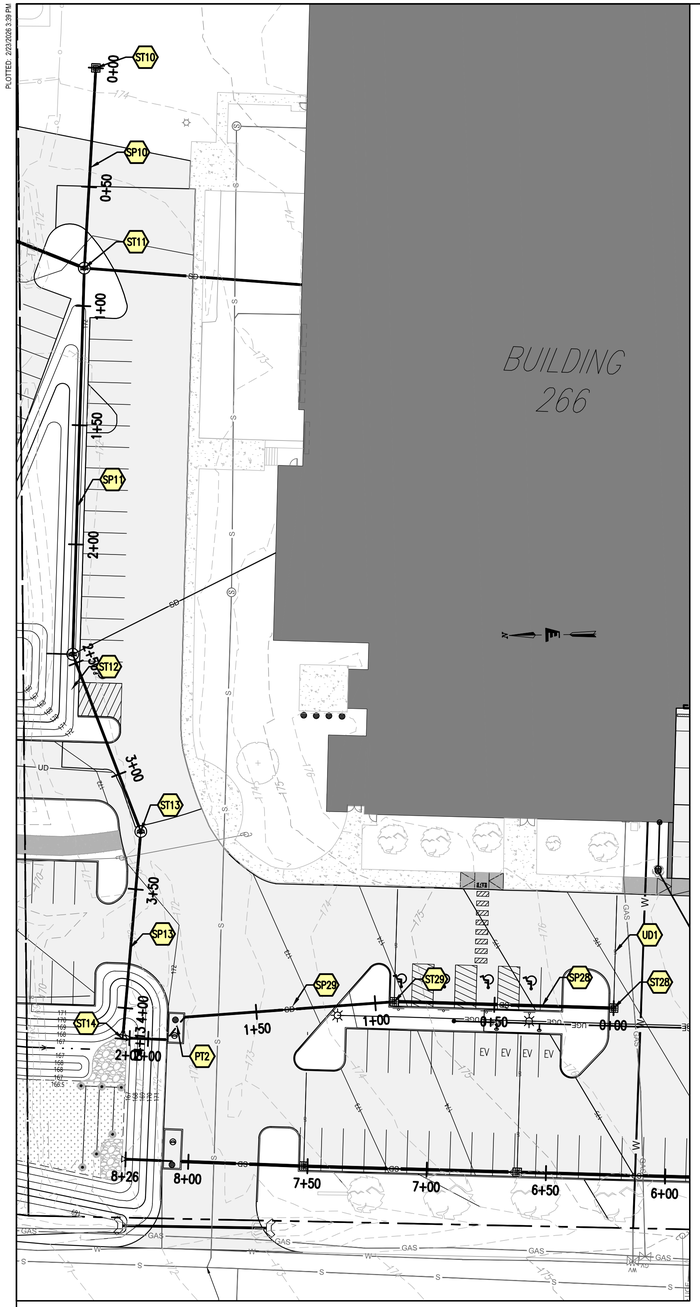

PLAN VIEW SCALE

GRAPHIC SCALE

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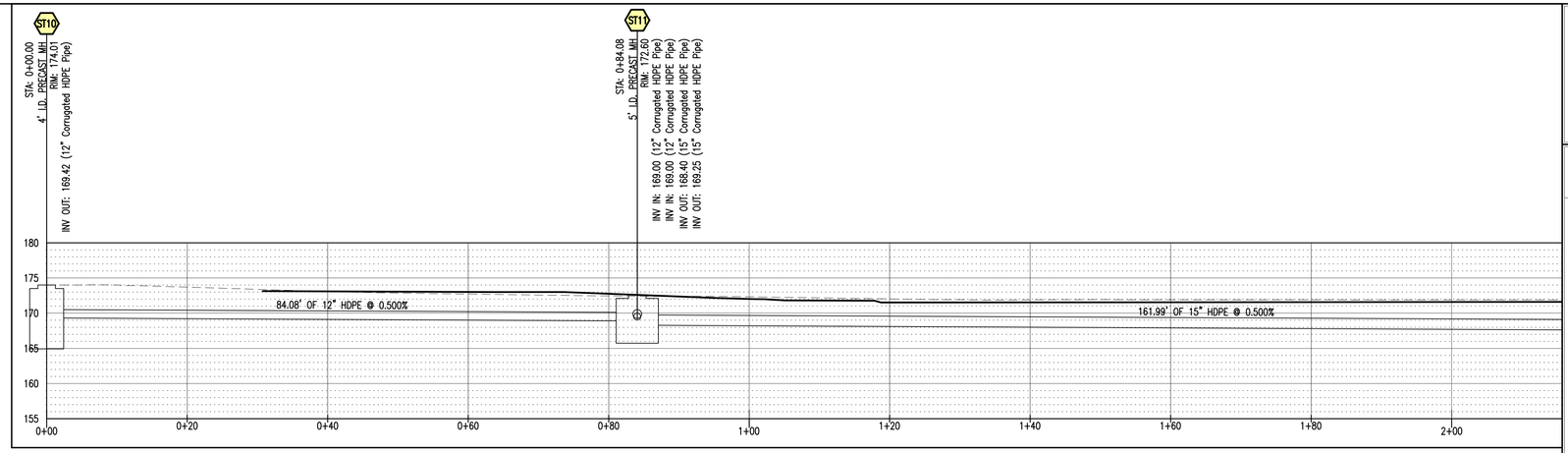
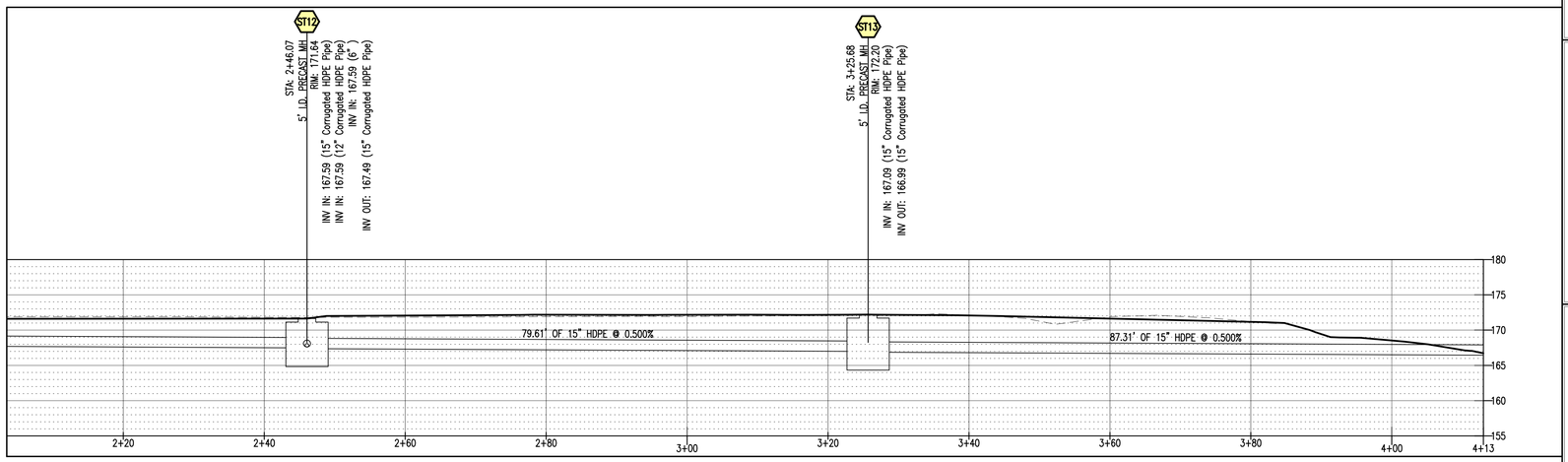
1 inch = 30 ft.
for sheet size 24" x 36"





PROFILE SCALE

GRAPHIC SCALE

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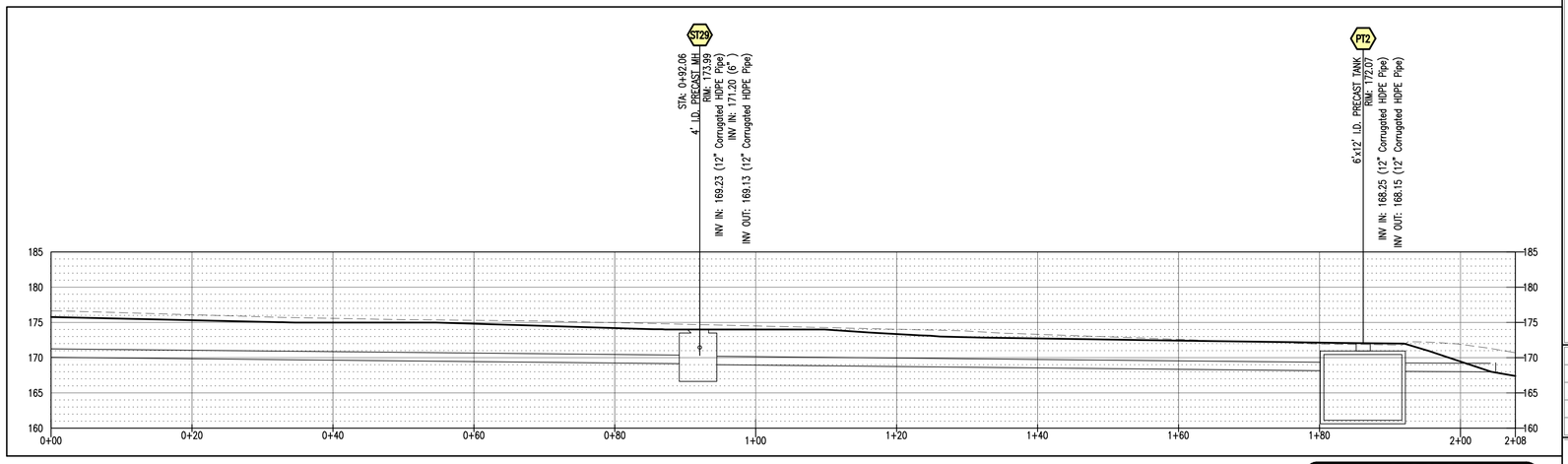
1 inch = 10 ft.
for sheet size 24" x 36"



SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9019
02/23/26
LICENSED
PROFESSIONAL ENGINEER
Stamp

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
Central Campus Gravel Wetland 1

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C405

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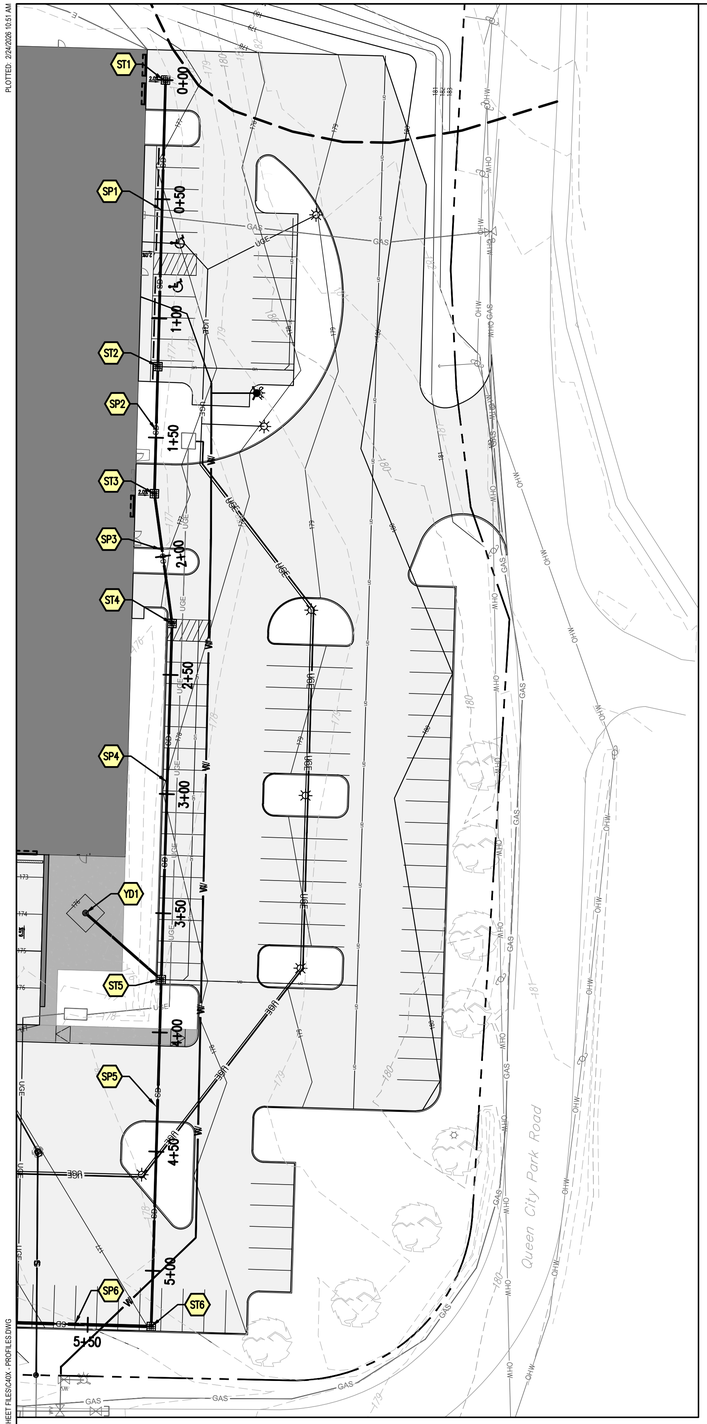

PLAN VIEW SCALE

GRAPHIC SCALE

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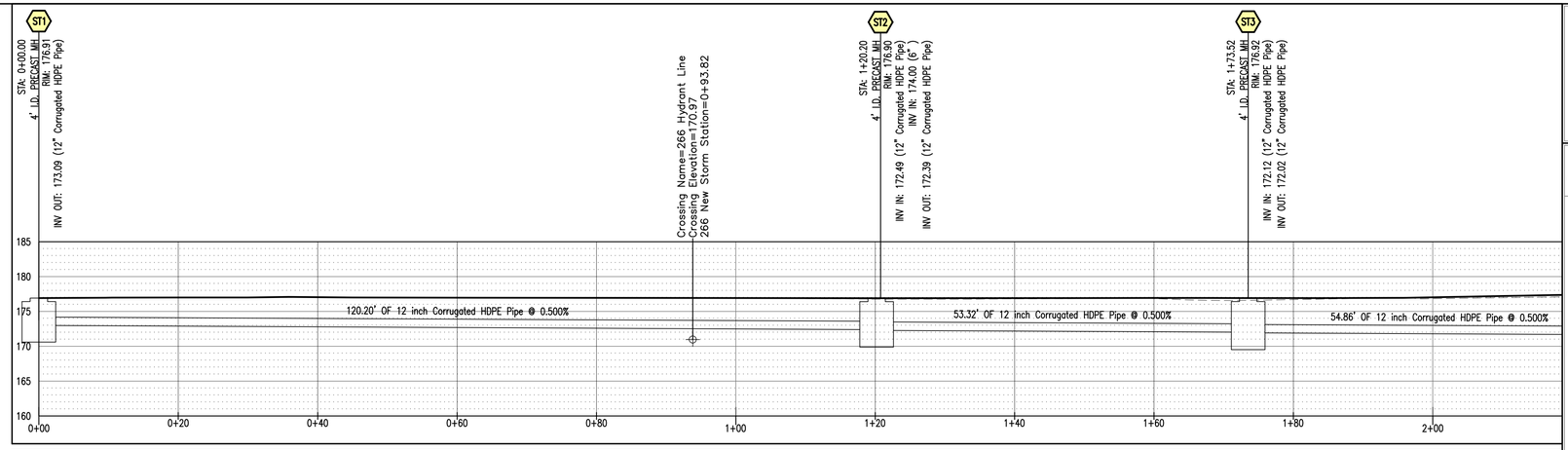
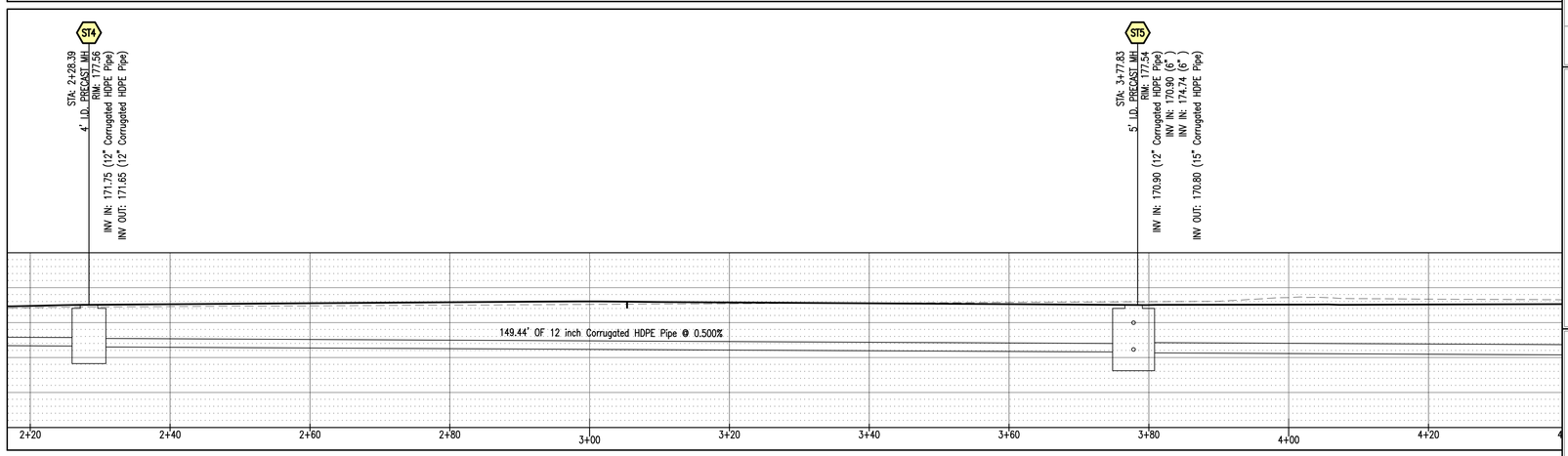
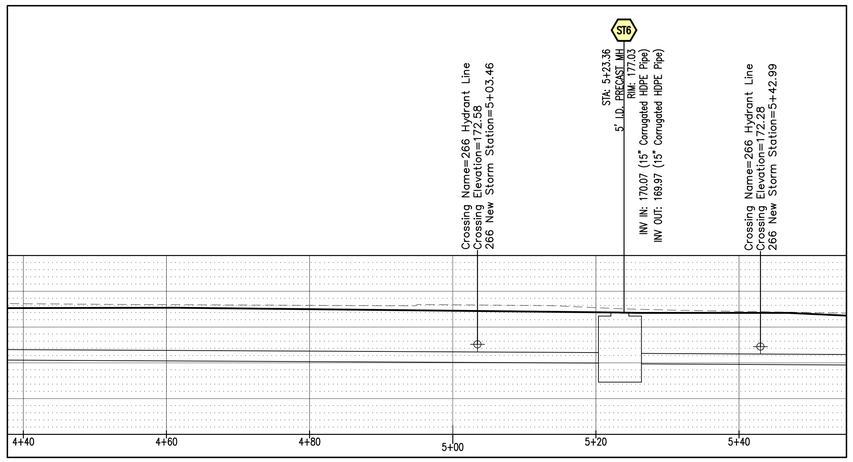
1 inch = 30 ft.
for sheet size 24" x 36"







PROFILE SCALE

GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PAUL M. BOISVERT
NO. 9016
LICENSED
PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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www.engineeringventures.com

The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
266 Storm South

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C406

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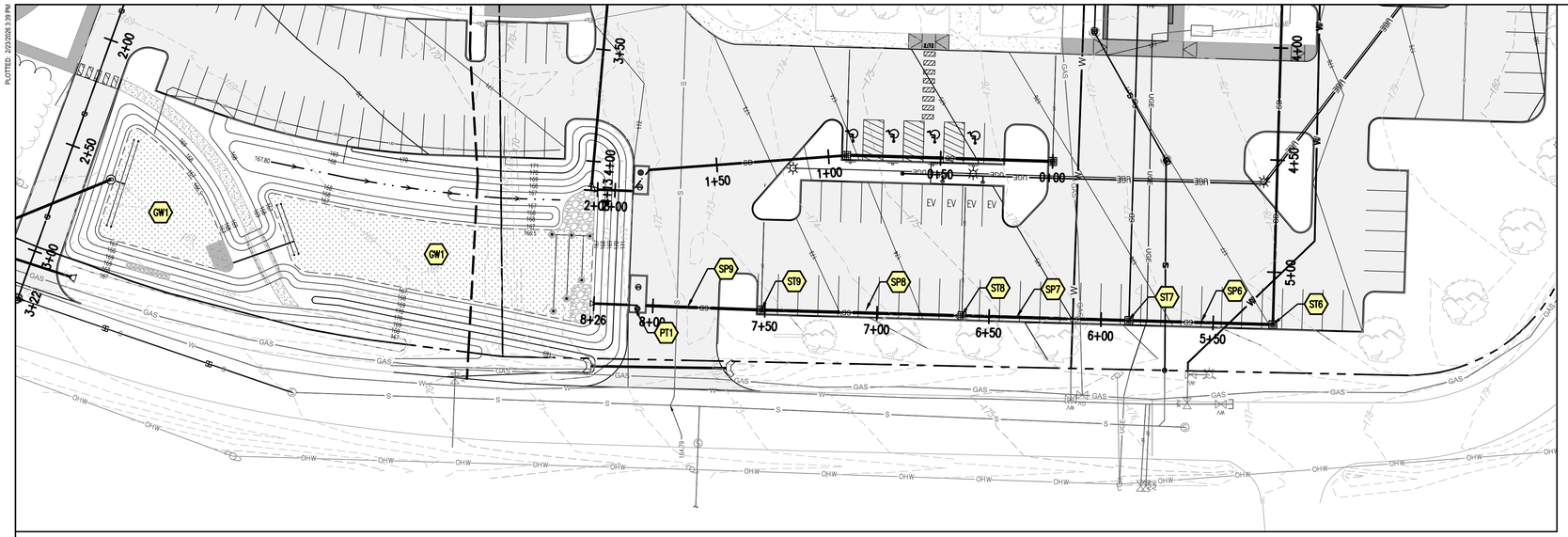

PLAN VIEW SCALE

GRAPHIC SCALE

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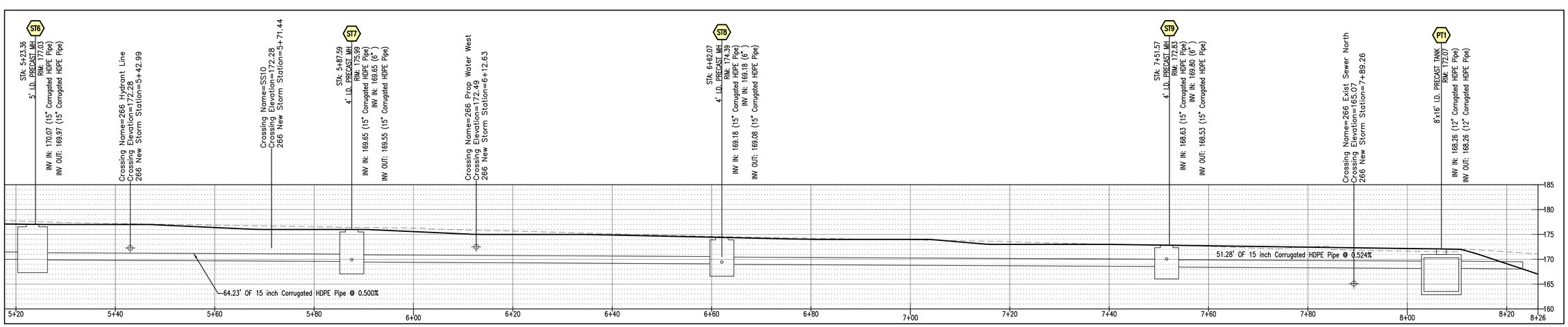
1 inch = 30 ft.
for sheet size 24" x 36"



PROFILE SCALE

GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

STATE OF VERMONT
PETER M. ROISMAN
NO. 9018
02/23/26
REGISTERED
PROFESSIONAL ENGINEER
Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Stormwater Profiles
266 Storm West

Project Title: Burton Headquarters
Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

C407

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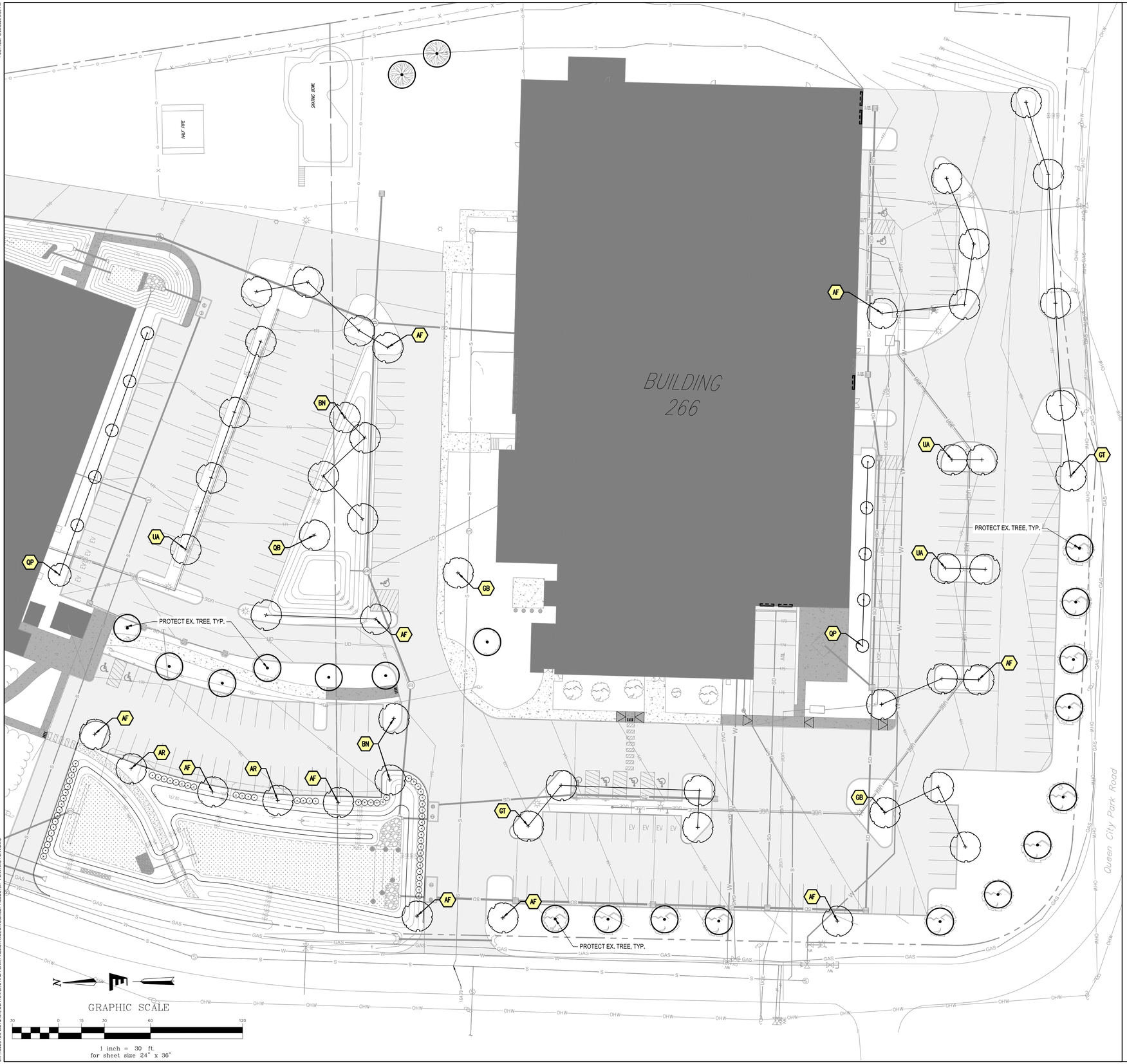

PLANTING SCHEDULE

Trees

	QTY	Scientific Name	Common Name	Size	Spacing
AF	19	Acer x freemani 'Autumn Blaze'	Autumn Blaze Maple	2.5"-3" Cal	As Shown
AR	2	Acer rubrum	Red Maple	2.5"-3" Cal	As Shown
BN	6	Betula nigra 'Heritage'	Heritage River Birch	3"-3.5" Cal	As Shown
GB	4	Gingko Biloba	Autumn Gold Ginkgo	3"-3.5" Cal	As Shown
GT	9	Gleditsia tricanthos 'Street Keeper'	Street Keeper Honey Locust	3"-3.5" Cal	As Shown
QB	1	Quercus Bicolor	Swamp White Oak	2.5"-3" Cal	As Shown
QP	11	Quercus palustris 'Green Pillar'	Columnar Pin Oak	2.5"-3" Cal	As Shown
UA	8	Ulmus davidiana var. japonica 'Morton'	Accolade Elm	2.5"-3" Cal	As Shown

SITE PLAN REVIEW
–FINAL–
02/23/2026

Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Tree Planting Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

L101

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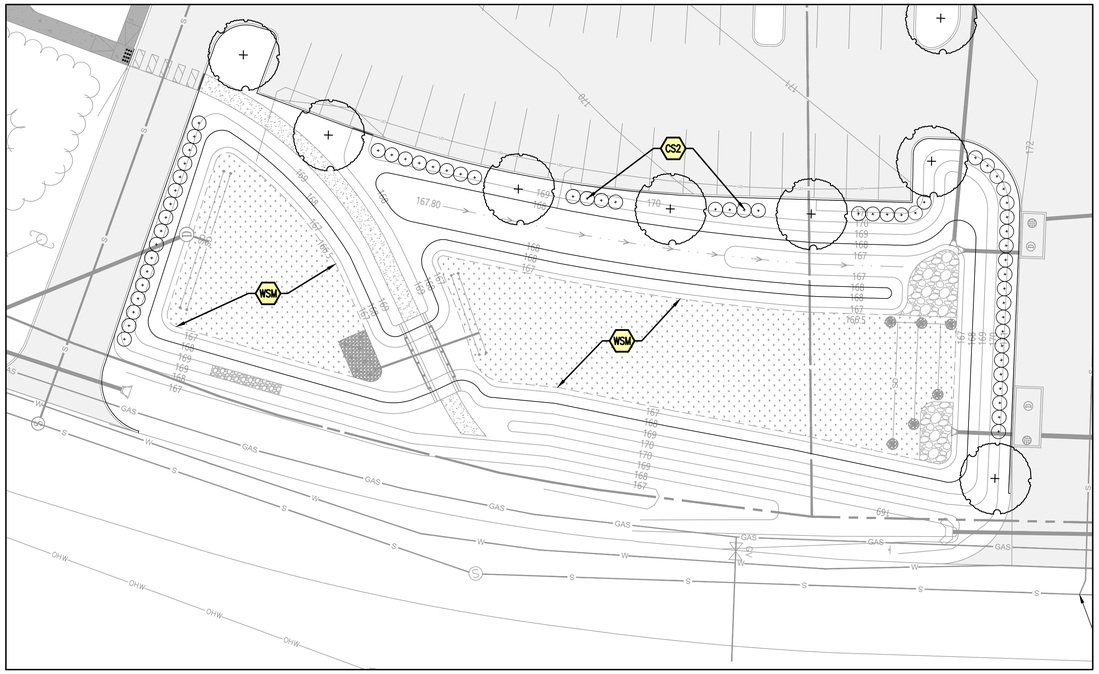

GRAVEL WETLAND 1

GRAVEL WETLAND 2

GRAVEL WETLAND 3

PLANTING SCHEDULE

Gravel Wetland (Shrubs and Perennials)					
CS2	60	Cornus stolenifera 'Compacta'	Red Twig Dogwood	3 Gal	4' O.C.
GW1	(sf)				
WSM	6,490	Wetland Seed Mix (Mainly grasses)	Fox Sedge Seed	-	As Shown
GW2					
WSM	530	Wetland Seed Mix (Mainly grasses)	Fox Sedge Seed	-	As Shown
GW3					
WSM	4,660	Wetland Seed Mix (Mainly grasses)	Fox Sedge Seed	-	As Shown

* **WSM - WETLAND SEED MIX** - 33% Fox Sedge, 20% Fowl Bluegrass, 16% Virginia Wildrye, 12% Blunt Broomsedge, 7% Deertongue, 5% Lurid Sedge, 5% Autumn Bentgrass, 2% Hop Sedge
Apply this mix at 20 lbs/acre with a cover crop.
For a cover crop use one of the following: grain rye (30 lbs/acre; 1 Sep to 30 Apr) or Japanese millet (10 lbs/acre; 1 May to 31 Aug). If Japanese millet is not available, Barnyard Grass may be used at the same rate for the same time window.

N

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW
–FINAL–
02/23/2026

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Stamp

No.	Description	Date

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The Burton Corporation
180 Queen City Park Rd
Burlington, VT 05401

Sheet Title: Gravel Wetland Planting Plan

Project Title: Burton Headquarters Campus Upgrades
Burlington, VT

EV Project #	24375
Drawn By:	TB/WBF
Checked By:	PB
Scale:	As Noted
Date:	02/23/2026

L102

4C
3C
6B
5B
4B
3B
2B

POOL WORLD

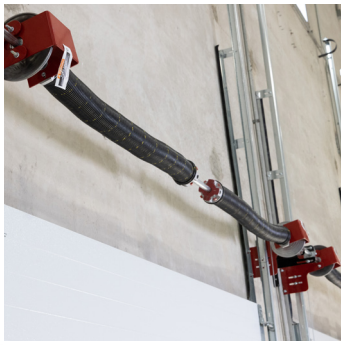
4C
3C
5B
4B
3B
2B

5B
4B
3B
2B

RAYNOR GARAGE DOORS

QUICKDOCK™ SOLUTION

From installation to maintenance and security, Raynor's new patent pending QuickDock door reimagines dock doors with the customer in mind. Raynor has engineered a solution to make the entire process **safer**, **faster** and **easier** while also providing **security** and **reduced air infiltration**. This industry leading design makes QuickDock the new dock door standard.



AVAILABILITY

Models	**QuickDock is an option that can be added to any of the below models.**	
	SP20 SP24 SP24C	EC200 EC224 TM200
Door Sizes	**Width**	**Height**
	8'-2" 8'-4" 9'-2" 9'-4"	8' 9' 10'
Colors	White	
Track	2" and 3" options	
Springs	Standard: up to 10,000 cycles Optional: 25,000 cycles	
Quantity	36 door minimum order	
Warranty	10 years (Rust-through & delamination)	
Pairing Options	Operators, Coil Cords, Sensing Devices	

INCREASED SAFETY

A counterbalance assembly mounted 16" above the header, and a one-piece track system anchored at a reduced height, increase safety by eliminating the need to lift the assembly 22 feet in the air.

DECREASED DOWNTIME

The sections, counterbalance assembly and track all come pre-assembled and palletized with QuickDock. This, as well as fewer parts overall, allows for faster and easier installation, maintenance and service, meaning less downtime for the customer.

DECREASED AIR INFILTRATION

A newly designed interior lock secures the door in place while Raynor's innovative windlock cleat keeps the door tight to the jamb for reduced air infiltration.

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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
Kirk Dressing, Associate Planner
Joseph Cava, Planning Technician
Collin Naheedy, Code Compliance Officer

TO: Development Review Board
FROM: Kirk Dressing
DATE: April 7, 2026
RE: ZP-26-67; 180 Queen City Park Road
ZP-26-68; 266 Queen City Park Road

==========

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: E-LM Ward: 5

Owner/Applicant: Burton Corporation / Will Feltus

Request: Proposed installation, conveyance, and treatment of stormwater improvements across 180 Queen City Park Rd. and 266 Queen City Park Rd. with associated site and utility improvements.

Applicable Regulations:
Article 2 (Administrative Mechanisms), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines)

Background Information:
The applicant is seeking approval for the installation, conveyance, and treatment of stormwater improvements across 180 Queen City Park Road and 266 Queen City Park Road with associated site and utility improvements.

This project is a result of three acre stormwater requirements of the state and will include stormwater conveyance and treatment improvements, parking lot reconstruction, and water and sewer service replacements. This project will occur simultaneously across both 180 and 266 Queen City Park Road. The entirety of parking areas and walkways on the 266 (southern) parcel will be reconstructed while reconstruction of the 180 (northern) parcel will be focused on the southern parking areas and walkway area on the southwestern side of the building. A new overhead door and loading dock will is also proposed for 266 Queen City Park Road. Stormwater management for the reconfigured site will include underground pretreatment tanks, sediment forebays, a pretreatment swale, and gravel wetland treatment areas designed to meet water quality treatment standards and flow mitigation targets. The majority of site work and utility improvements were previously approved in 2020 but not constructed. This project does not propose a change in the existing use of either building. This project is expected to begin in June 2026 and end approximately in December of 2027.

Previous zoning actions for this property are noted below:

180 Queen City Park Road-

ZP-24-174	After-The-Fact installation of single exterior window.	7/10/2024	Approved
ZP-23-523	Proposed installation of three skylights in office space.	11/22/2023	Approved
ZP-19-749	Remove overhead garage doors and infill with fixed/openable windows and exterior walls.	10/21/2019	Approved
ZP-19-818	Stormwater enhancements and parking layout revisions.	6/25/2021	Approved
ZP-17-850	Interior renovation of office space. Window installation on the south elevation. Install steel plate awning over exterior door on the east elevation.	12/18/2017	Approved
ZP-17-526	Replace metal stake and wire fence with two rail cedar post and rail fence for raised garden beds on north side of property.	8/4/2017	Approved
ZP-16-438	Remove and replace roof top units #15 and #16 and curb adapter. Remove ballasted section of roof and replace with rubber membrane.	6/24/2016	Approved
ZP-15-670	Install skylight 5x5 ft in hardgoods office space.	9/3/2015	Approved
ZP-16-579	Install electrical vehicle charging station bollard mounted.	8/5/2016	Approved
ZP-15-789	Remove rusty ball sculpture, install gondola structure on front lawn.	10/13/2015	Approved
ZP-14-603	Replace thirteen existing wood double hung 6/6 windows with new wood clad double hung 6/6 windows.	8/18/2014	Approved
ZP-13-322	Replace two window units at rear with overhead doors with metal railings to block access.	5/14/2013	Approved
ZP-13-386	Replace existing freestanding sign and lighting with new freestanding sign and replacement lighting.	6/7/2013	Approved
ZP-12-668	Construct roof and walls over existing footbridge.	9/20/2012	Approved
ZP-12-428	Construct new bike shelter building beside existing parking lot.	6/25/2012	Approved
ZP-12-68	Parking lot reconfiguration and associated landscaping improvements.	3/7/2012	Approved
ZP-10-9	Replace existing rooftop HVAC unit with two smaller units, and two additional air handling units.	1/8/2010	Approved

ZP-11-397	Remove five existing wooden windows and replace with five clad wooden windows.	6/27/2011	Approved
ZP-11-205	Replace thirty eight windows and repair stucco as needed.	4/22/2011	Approved
ZP-08-233	Remove 52 existing wood windows and replace with wood clad matching existing size and window pattern, simulated divided lights permanently adhered interior and exterior.	5/16/2008	Approved
ZP-00-514	Installation of 49 space parking lot and reconfiguration of interior space: +26,550 sq. Ft. Office; -17,600 sq.Ft. Manufacturing; -11,150 sq. Ft. Warehouse; And +2,200 sq. Ft. Retail.	10/17/2000	Approved
ZP-07-696	Extension of permit 07-520CA for temporary overflow storage in three temporary trailers.	11/16/2007	Approved
ZP-07-96	Three temporary overflow storage trailers in the rear of the building. (Trailers to be removed by 12/31/07.)	4/3/2007	Approved
ZP-05-193	Conversion of 3000 sq ft of warehouse space to office.	5/25/2005	Approved
ZP-1998-600	Amend previously approved landscaping plan to add skateboard component.	11/2/1998	Approved
ZP-1998-71	New entry with extensive landscaping and parking improvements to the front and rear of the burton snowboard site.	3/26/1998	Approved
ZP-1994-139	Facade renovations to previously approved expansion for burton snowboards to include a stair tower on the south side. See coa 92-067 (28026sf).	5/6/1994	Approved
ZP-1992-27	Installation of dust collection system on grade on existing pavement, Behind existing manufacturing building, With installation of roof top mechanical units on main structure. No change to use, Site circulation or footprint.	2/12/1992	Approved
ZP-1991-426	Change of use from accessory office space (6000sf) To accessary retail space (6000sf) For existing manufacturing facility (48,000sf). No change to mass or site.	12/19/1991	Approved

ZP-1992-326	Installation of two signs, Freestanding to measure 2'X 3'X 8'X 10' And 6' High, And parallel over the door of burton snowboards to measure 7' In diameter. Proposal includes sculpture by front door.	8/26/1992	Approved
ZP-1995-43	Front facade office expansion to the existing burton snowboard facility. (Includes a one space waiver, Plus a previous 15 space waiver for a total of 16 spaces.)	3/23/1995	Approved
ZP-1996-424	Installation of a storage shed, 8'X 12', For the storage of lawn and related maintenance equipment for burton snowboards.	8/13/1996	Approved
ZP-1994-384	Substitution of 5 previously approved light poles with former ski lift poles (35' High) With 250 watt mh down lights mounted at 20' High in the burton snowboard parking lot.	9/22/1994	Approved
ZP-1992-50	Construction of 14,105 sf addition for accessory office usage to existing manufacturing complex. Parking to be expanded with some reconfiguration of access drives.	4/9/1992	Approved
ZP-1992-47	Extensive facade and fenestration changes to existing entry of manufacturing building. Associated landscaping improvements included. No change to mass, Use or parking.	3/26/1992	Approved
ZP-1993-446	Four warehouse and office additions (East, West and south sides) Totaling 28,026 sf to existing burton snowboards.	12/16/1993	Approved

266 Queen City Park Road-

ZP-20-218	Conditional use application to create 11,560 SF Performing Arts Center use within an existing 85,000+ SF structure; proposed façade improvements to existing building exterior	7/12/2024	Approved
ZP-19-836	Stormwater enhancements and parking layout revisions.	6/25/2021	Approved
ZP-19-191	Change of use from storage to indoor recreation(health club); no exterior renovation or site changes	5/10/2019	Approved
ZP-16-533	Install 3 signs; one of which will occupy an existing freestanding sign.	7/21/2016	Approved

ZP-15-828	Remove 'Rusty Ball' sculpture from 80 Industrial Pkwy and place on lawn of 152 Industrial Pkwy. No excavation.	11/3/2015	Approved
ZP-11-99	Install exhaust stack on roof at rear of building.	3/18/2011	Approved
ZP-14-274	Install a five ton HVAC on center roof of building.	5/16/2014	Approved
ZP-12-717	Construct walls and roof over existing foot bridge between 80 and 152 Industrial Parkway.	9/26/2012	Approved
ZP-12-69	Parking lot reconfiguration and associated landscaping improvements.	3/7/2012	Approved
ZP-11-574	Change use of portion of building to wholesale showroom. Construct new entry canopy at front of building. New wood siding over panel areas.	8/25/2011	Approved
ZP-10-724	Facade and entryway alterations and associated site work.	10/29/2010	Approved
ZP-10-354	New side entry, new windows, doors, stairs, ramp and 4 HVAC rooftop units.	6/7/2010	Approved
ZP-1998-270	Installation of a temporary trailer (For offices) In the parking lot of the industrial site.	6/11/1998	Approved
ZP-01-421	Add two new egress doors and replace one existing door, Add new canvas awning on west elevation, Add new gate into sw service yard, Demo existing 20' X 20' Garage with concrete slab to remain and add 330 sf asphalt.	11/2/2001	Approved
ZP-1998-396	Increase height of exhaust stack (Chimney) From 28 to 55'.	8/13/1998	Approved
ZP-1993-465	Installation of a non-illuminated freestanding sign, Measuring 12'X 7'6(90 sf), For the existing martin marietta plant.	11/2/1993	Approved

Recommendation: **Initial review and deferral** to allow the applicant additional time to address the outstanding items below.

I. Findings

Article 2: Administrative Mechanisms
Sec. 2.7.8 Withhold Permit
The administrative office is authorized to deny all zoning permit or certificates of occupancy for any property with:

- ***An uncorrected zoning violation (i.e. notice of zoning violation and/or municipal complaint ticket has been issued and is not under appeal);***
- ***An expired zoning permit without a final certificate of occupancy; or***
- ***An uncorrected violation of Chapter 18, Housing, Art. II, Minimum Standards, of the Burlington Code of Ordinances, as identified on the property's most recent rental inspection report (i.e. a notice of violation has been issued and is not under appeal).***

There are several expired permits lacking the required certificate of occupancy for both properties. Additionally, there are expired permits for each property that had the "withhold permit" condition requiring closure of the prior expired permits before closure of them. At this point, no further permits should be issued until the expired permits are closed out with certificates of occupancy or otherwise as appropriate. **(Adverse finding)**.

Article 4: Maps & Districts
Sec. 4.4.3, Enterprise Districts:
(a) Purpose
(1) Light Manufacturing (E-LM)
The subject property is located in the E-LM zone which is intended as the primary commercial/industrial center of Burlington. Burton's primary industrial use is consistent with this intent. No change in use is proposed. **(Affirmative finding)**

(b) Dimensional Standards & Density
Lot coverage calculations have not been provided. Final proposed lot coverage calculations will need to be submitted for staff review and approval. It does not appear any minimum setbacks will be changing. No changes to the buildings are proposed.
(No finding yet possible)

(c) Permitted & Conditional Uses
No change is use is proposed. Not applicable.

(d) District Specific Regulations
Not applicable.

Article 5: Citywide General Regulations
Sec. 5.2.3, Lot Coverage Requirements
See Sec. 4.4.3 (b) above.

Sec. 5.2.4, Buildable Area Calculation
Not applicable.

Sec. 5.2.5, Setbacks
See Sec. 4.4.3 (b) above.

Sec. 5.2.6, Building Height Limits
See Sec. 4.4.3 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations
See Sec. 4.4.3 (b) above.

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

Sec. 5.5.2, Outdoor Lighting
The plans indicate new light pole fixtures are proposed. No details are provided. Fixture cut sheets and illumination levels are needed. If any other outdoor lighting is proposed, the same details are needed for those fixtures as well. **(No finding yet possible)**

Sec. 5.5.3, Stormwater and Erosion Control
An EPSC plan has been submitted as part of the application materials. Review and approval by the city's Water Resources Division is required. **(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
The site contains no significant natural areas as identified in the Open Space Protection Plan. A planting schedule has been included in the application materials. The plan is robust and will serve to bolster the existing landscaping. **(Affirmative finding)**

(b) Topographical alterations
The proposal is for a stormwater management infrastructure which will result in minor topographical alterations. **(Affirmative finding)**

(c) Protection of important public views
There are no protected public views that will be impacted by this proposed work. Not Applicable.

(d) Protection of important cultural resources
Not applicable.

(e) Supporting the use of alternative energy
Not applicable.

(f) Brownfield sites
Not applicable.

(g) Provide for nature's events
See Sec. 5.5.3

(h) Building location and orientation
Not applicable.

(i) Vehicular access
A second curb cut for the 266 Queen City Park parcel is proposed near the southeast corner of the parcel for access to the proposed loading dock. Approval from the Department of Public Works is needed. **(Affirmative finding if conditioned)**.

(j) Pedestrian access
Not applicable.

(k) Accessibility for the handicapped
Not applicable.

(l) Parking and circulation
Plans for reconfigured parking areas have been submitted, however, no shade analysis has been provided and one is required. **(Affirmative if conditioned)**

(m) Landscaping, fences, and retaining walls
A robust planting plan has been provided as part of the application materials. **(Affirmative finding)**

(n) Public plazas and open space
Not applicable.

(o) Outdoor lighting
See Sec 5.5.2 above.

(p) Integrate infrastructure into the design
Not applicable.

Part 3, Architectural Design Standards
Sec. 6.3.2, Review Standards

(a) Relate development to its environment:

Proposed buildings and additions shall be appropriately scaled and proportioned for their function and with respect to the purpose of the zoning district. They should integrate harmoniously into the topography, and to the use, scale, and architectural details of existing buildings in the vicinity; however, such consideration shall not require building height to be more limited than otherwise allowed within an applicable zoning district or overlay zone per Article 4.

The following shall be considered:

1. Massing, Height and Scale:

No changes to the building massing, height, or scale are proposed. Not Applicable.

2. Roofs and Rooflines.

No Changes to the roof or roofline are proposed. Not applicable.

3. Building Openings

Principal entrances shall be clearly defined and readily identifiable from a public street whether by a door, a canopy, porch, or other prominent architectural or landscape features. People with physical challenges should be able to use the same entrance as everyone-else and shall be provided an "accessible route" to the building. Attention shall also be accorded to design features which provide protection from the affects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage.

Window openings shall maintain consistent patterns and proportions appropriate to the use. The window pattern should add variety and interest to the architecture, and be proportioned to appear more vertical than horizontal.

Buildings placed on a side or rear property line where no setback is required shall contain neither doors nor windows along such façade so as not to restrict future development or re-development options of the adjacent property due to fire safety code restrictions. Otherwise they should be setback a minimum of 5-feet.

The existing loading dock/overhead door on the southwestern side of 266 Queen City Park Road which will be removed and replaced with a depressed loading dock and new overhead door, An overhead door is also proposed on the southeastern façade of the building at 266 Queen City Park Road. The applicant has not specified the style or material of the proposed southwestern overhead door. Such details are needed. **(Affirmative finding if conditioned)**

(b) Protection of Important Architectural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Where the proposed development involves buildings listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8. The introduction of new buildings to a historic district listed on a state or national register of historic places shall make every effort to be compatible with nearby historic buildings.

Not applicable.

(c) Protection of Important Public Views:

Development shall preserve distant terminal views of Lake Champlain and the Adirondack Mountains and important public and cultural landmarks from public places and along east-west public rights-of-way to the extent practicable. This shall not be construed to include similar views from exclusively private property.

Sensitivity shall be used in the massing of proposed development such that light and air is allowed to penetrate and some views may be preserved. Alternatives that extend access to such views by allowing public access into and through the proposed development are encouraged. In no case shall development be permitted to span across the public rights-of-way in such corridors.

There are no protected public views here. Not applicable.

(d) Provide an active and inviting street edge:

Building facades shall be varied along the street edge by the integration of architectural features, building materials, or physical step-backs of the façade along its length. Large expanses of undifferentiated building wall shall be avoided. This may be accomplished by incorporating fenestration patterns, bays, horizontal and vertical façade articulations, the rhythm of openings and prominent architectural features such as porches, patios, bays, articulated bases, stepping back an elevation relative to surrounding structures, and other street level details. The use of traditional facade components such as parapet caps, cornices, storefronts, awnings, canopies, transoms, kick plates, and recessed entries are highly encouraged. In areas where high volumes of pedestrian traffic are desired, the use of architectural recesses and articulations at the street-level are particularly important in order to facilitate the flow of pedestrian traffic

The proposed development does not affect the street edge. Not applicable.

(e) Quality of materials:

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts. Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

Owners of historic structures are encouraged to consult with an architectural historian in order to determine the most appropriate repair, restoration or replacement of historic building materials as outlined by the requirements of Art 5, Sec. 5.4.8

A spec sheet for the proposed loading dock door has been provided and the material appears to be to be acceptably durable. A spec sheet has not been provided for the new southeastern overhead door but one is needed. **(Affirmative finding if conditioned)**

(f) Reduce energy utilization:

All new construction shall meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

Proposed overhead doors will be required to meet Commercial Building Energy Standards (CBES). **(Affirmative finding if conditioned)**

(g) Make advertising features complementary to the site:

Where signs and other advertising features are proposed, the applicant shall meet the requirements as per Article 7 – Signs. The size, location. Design. Texture, lighting, and materials of all exterior signs and advertising features shall not detract from the use and enjoyment of proposed buildings or surrounding properties. National branding through signage and architecture shall be discouraged.

Not applicable.

(h) Integrate infrastructure into the building design:

Exterior machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory features shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties.

Rooftop mechanicals, including heating and cooling devices and elevator equipment, should be incorporated into the structure's design, and shall be arranged to minimize their visibility from the street level. Such features, in excess of one foot in height, shall be either enclosed within the roof structure, outer building walls, or parapets, or designed so that they are integrated into the overall design and materials of the building. Where such rooftop features do not exceed ten percent (10%) of the total roof area, they may be considered "ornamental and symbolic features" pursuant to Sec. 5.2.7 for the purposes of measuring building height.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 5 Performance Standards.

There appears to currently be a fence at 266 Queen City Park Road that screens the loading dock from view as seen from the sidewalk. The submitted site plans and planting plan do not indicate any fence or plantings are proposed to screen the loading dock; however, its location on a secondary façade is acceptable. **(Affirmative finding)**

(i) Make spaces secure and safe:

Spaces shall be designed to facilitate building evacuation, accessibility by fire, police or other emergency personnel and equipment, and, to the extent feasible, provide for adequate and secure visibility for persons using and observing such spaces. Building entrances/entry points shall be visible and adequately lit, and intercom systems for multi-family housing should be incorporated where possible, to maximize personal safety.

See Sec. 5.5.2 above.

Article 8: Parking

Sec. 8.1.9 Maximum On-Site Parking Spaces

While new parking areas are being proposed as a part of the scope of work, there is going to be a net reduction in the total number of spaces. **(Affirmative finding)**

II. Conditions of Approval

In the event that outstanding items above are addressed or the DRB feels that approval is warranted with conditions, the following conditions are recommended.

1. **Prior to the release of the zoning permit:**
    a. The following items shall be submitted for staff review and approval:
        i. Proposed lot coverage calculations for both parcels.
        ii. Proposed lighting plan including fixture cut sheets and illumination levels.
        iii. Specifications for proposed overhead door on southeastern side of 266 Queen City Park Road.
        iv. Plan for screening proposed loading dock at 266 Queen City Park Road.
        v. Shade analysis for reconfigured parking lots.
    b. The submitted EPSC plan and stormwater management plan shall be approved by the city's Stormwater Program staff.
    c. Approval from the Department of Public Works shall be obtained for the proposed curb cut on 266 Queen City Park Road.
    d. All zoning permits issued after July 13, 1989 shall receive Certificates of Occupancy or be closed out as applicable. In this case, zoning permits ZP-19-749, ZP-17-850, ZP-15-579, and ZP-19-191 have expired.
2. Vermont Commercial Building Energy Standards apply to this project. Compliance with the standards is the Owner's responsibility. For more information, see http://publicservice.vermont.gov/energy_efficiency.
3. Standard conditions 1-15.