

Burlington Design Advisory Board

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DESIGN ADVISORY BOARD Tuesday, September 23, 2014 Conference Room 12, City Hall, Burlington, VT AGENDA

*Each applicant has about 10 minutes to present his/her application to the board within their allotted session time. **Please note session times are approximate.***

Session I - 3:00 – 3:10 p.m.

15-0079CA: 281 FLYNN AVENUE (RL, Ward 5) Sandra B. Vishnevsky

Add second story to existing single family dwelling. (Project Manager: Mary O'Neil)

Session II - 3:10 – 3:30 p.m.

15-0254CA: 434-436 SOUTH WINOOSKI AVENUE (RM, Ward 6) Avery Rifkin/Nathaniel Plasha

Repair rear two story porch with timberframe style, install bark shingle siding on portion, install secondary rail on second floor. (Project Manager: Mary O'Neil)

Session III - 3:30 – 4:15 p.m.

15-0338PD: 112-114 ARCHIBALD STREET (NMU, Ward 2) Champlain Housing Trust, Inc.

15-0341PD: 27 BRIGHT STREET (NMU, Ward 2) Champlain Housing Trust, Inc.

15-0342PD: 35-39 BRIGHT STREET (NMU, Ward 2) Champlain Housing Trust, Inc.

15-0343PD: 47 BRIGHT STREET (NMU, Ward 2) Champlain Housing Trust, Inc.

Final Plat Review to demolish 3 existing residential buildings (retain the duplex at 27 Bright Street) and construct four new residential buildings for 42 new units (total of 44 units) with associated site improvements. (Project Manager: Scott Gustin)

Session IV - 4:15 – 5:00 p.m.

15-0358CA: 82 UNIVERSITY PLACE (I, Ward 1) University of Vermont & State Agricultural College

Demolish Angell Hall and Cook Physical Science building; construct new STEM building with connecting bridge to Votey Hall. (Project Manager: Scott Gustin)

Department of Planning and Zoning

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Elsie Tillotson, Department Secretary



MEMORANDUM

To: The Design Advisory Board

From: Mary O'Neil, AICP, Senior Planner

RE: ZP 15-0338PD; 112-114 Archibald Street

ZP15-0341PD; 27 Bright Street

ZP15-0342PD; 35-39 Bright Street

ZP15-0343PD; 47 Bright Street

Date: September 23, 2014



Zone: NMU **Ward:** 2

Date application accepted: September 5, 2014

Applicant/ Owner: Duncan Wisniewski Architecture/ Champlain Housing Trust in partnership with Housing Vermont

Request: Final Plat review to demolish 3 existing residential buildings (112-114 Archibald Street, 35-39 Bright Street and 47 Bright Street; retaining the duplex at 27 Bright Street) and construct 4 new residential buildings and associated site improvements. The two existing units at 27 Bright Street to remain; addition of 42 new units for a 44-unit development.

Overview: The applicant is seeking final plat approval for a major PUD involving several properties on Bright and Archibald Streets. Champlain Housing Trust, partnered with Housing Vermont, seeks to combine four parcels (58,977 sf) with 14 existing residential units; redevelop the site retaining one duplex (27 Bright Street) with construction of four new buildings providing 44 residential units, 42 of them new. Proposed for demolition are 114 Archibald St. (9 residential units), 35 Bright Street (1 unit) plus outbuildings, and 47 Bright Street (1 unit.) New development will include construction of 2 duplex townhouses, one triplex, and one three story, 35 unit structure within the interior. The development will provide a net gain of 31 new residential units. All parking is proposed within an enclosed underground parking structure, with the exception of 2 surface parking spaces at the proposed Archibald duplex.

The application involves several properties, and therefore, includes several separate zoning permit applications. All are reviewed concurrently as a single project. Four parcels will be merged into one, but 27 Bright Street will remain a separate parcel.

This proposal underwent sketch plan review with the DRB August 6, 2013; Preliminary plat review and approval in July 2014. The project is scheduled for review by the Conservation Board at their October 6, 2014 meeting.

Conditions of the July 2014 Preliminary Plat Review approval were as follows:

1. This preliminary plat approval in no way grants or implies final plat approval. Final plat application shall be filed in accordance with Section 10.1.9, *Final Plat Approval Process*, of the CDO and per these Conditions of Approval.
2. Prior to final plat application, written acceptance of the adequacy of emergency vehicle access shall be obtained from the Fire Marshal. [Attached; Summary dated 4.1.2014.]
3. Prior to final plat application, a boundary survey by a VT licensed land surveyor shall be provided and shall show all proposed boundary adjustments. [Provided herein.]
4. Final plat plans *should* include a project phasing schedule that calls out what project components will be built and when they will be built. [No phasing schedule requested.]
5. Final plat plans shall include an update on the remediation and “corrective action plan” for the site. [Update in cover documents attached.]
6. Final plat plans shall include proposed days and hours of construction. [Requested construction hours 7am-5 pm weekdays; 8 am -5pm weekends. Typically no construction is allowed on weekends, with the exception of Saturday interior work.]
7. Final plat plans shall include the final stormwater system design and shall also include the final details for the erosion prevention and sediment control plan. [attached; to be reviewed by the Conservation Board October 6, 2014.]
8. Final plat plans shall include outdoor lighting details compliant with the standards of Sec. 5.5.2, *Outdoor Lighting*, particularly garage lighting and building entry lighting. [Specs and photometric attached.]
9. Final plat plans shall include bicycle parking details compliant with the Department of Public Works *Bicycle Parking Guidelines*. [Attached.]
10. Final plat plans shall include details as to the amount and extent of affordability of the proposed dwelling units per the requirements of Article 9, *Inclusionary Housing*. [See *Bright Street Cooperative* coverletter, Item #10.]
11. Final plat plans shall include a plan for snow removal. [ibid, #11.]

12. Final plat application shall include a final review letter from a preservation consultant with concurrence from the Vermont Division for Historic Preservation relative to project impacts. [Attached.]
13. Unless phased by request to the DRB, the time between demolition of the listed historic buildings and commencement of new construction generally shall not exceed six (6) months. [See comments under Section 5.4.8 (d), below.]

The applicant has provided responses within the submission to meet these conditions.

Background:

Previous zoning actions for the subject properties are as follows:

112-114 Archibald Street

- o **Zoning Permit** 14-0909PD; 112-114 Archibald Street, Preliminary Plat Review July 2014.
- o **Zoning Permit** 14-0026SP; 112-114 Archibald Street, Sketch Plan Review, August 6, 2013.
- o Request to operate an automotive garage, body and fender service and used car sales at 114 ½ Archibald Street, **Denied**, September 1964. (Had been operating without a permit.) Front building identified as a fish market.

27 Bright Street

- o **Zoning Permit** 14-0910PD; Preliminary Plat Review and approval; July 2014.
- o Not proposed to be altered.

35-39 Bright Street

- o **Zoning Permit** 14-0911PD; Preliminary Plat Review and approval; July 2014.
- o No zoning permits on file for this property.

47 Bright Street

- o **Zoning Permit** 14-0912PD; Preliminary Plat Review and approval; July 2014.
- o **Zoning Permit 98-475**; Installation of a stockade style fence across the front property line of the single family home. Approved May 1998.
- o **Zoning Permit 97-593**; Construction of a single story attached rear shed, measuring 13'10" x 20' on existing concrete slab for the existing single family home. Materials to be T-111. Approved July 1997.

Part 1: Land Division Standards

The Bright Street Cooperative neighborhood will combine the four parcels owned by Champlain Housing Trust. 27 Bright Street will be retained as a separate lot, yet continue to be operated by CHT as part of the overall project.

Section 6.1.2 Review Standards

(a) Protection of important natural features:

There are no watercourses, wetlands, steep slopes, rock outcroppings, and wildlife habitat or travel corridors within the review area.

(b) Block size and arrangement

No new blocks are proposed. Street frontages for existing parcels will be supported with new construction to “complete” the street edge.

(c) Arrangement of lots

No new lots will be created. The project will join four existing lots. Through development, the existing street pattern will be perpetuated by location of new structures that support the streetface.

(d) Connectivity of Streets within the city street grid:

No change.

(e) Connectivity of sidewalks, trails and natural systems:

All public sidewalks will be re-established; interior sidewalks will support continued ease of pedestrian mobility within the interior of the site and to the overall public sidewalk flow.

Part 2: Site Plan Design Standards

Sec. 6.2.2 Review Standards

(a) Protection of important natural features:

There are no important natural features on the subject properties. Green space is generally open grassy area with scattered trees. Plan L1.0 defines the removal of 15 trees located within the site and possibly some around the perimeter near foundation excavation locations. See plan L1.0 as revised for tree and fencing demo diagram. A landscaping/planting plan has been submitted (see Plan L2.0.) The species proposed within the greenbelt on Bright Street was recommended for revision by the city arborist. The replacement species has been guided by his recommendation.

(b) Topographical alterations

The site slopes slightly downward from east to west. Slight modification to the grade will be required to facilitate the development. Due to the parking garage ramp and entrance off of Archibald Street, in combination with the first floor pedestrian entrance to the 35 plex off of Bright Street, existing grades will be modified.

(c) Protection of important public views

There are no significant public views from or through the property. Not applicable.

(d) Protection of important cultural resources

Two properties are currently listed on the Vermont State Register of Historic Resources. See Section 5.4.8, below.

(e) Supporting the use of alternative energy

The roof of the 35-plex is designed for photo-voltaic panels, but it is not known until further build-out if funding will allow their inclusion. In any event, they are encouraged.

(f) Brownfield sites

The property is included on the Vermont DEC Hazardous Site List as a brownfield with PAH contamination. The development is enrolled in the BRELLEA program (formerly the RCPP or Redevelopment of Contaminated Properties Program) and CHT is pursuing an EPA brownfield clean-up grant. A Corrective Action Plan will be required by DEC for PAH impacted soils on the site prior to development. With updated submission materials, the applicant defines procurement of a CAP as currently in progress. This remains a condition of approval.

(g) Provide for nature's events

The project will use infiltration chambers to infiltrate the 1 year storm event. Almost all of the impervious runoff will be directed to those chambers. The driveway to the parking garage and minor sidewalk runoff are the only areas that do not make it to the infiltration chambers. City engineers have reviewed the plans.

The Conservation Board will review the design at their October 6, 2014 meeting.

Snow on the garage entrance ramp will be handled with an integrated melting system. Removal from walkways will be blown into adjacent green belts and larger amounts will be stored at adjacent patio areas.

There are several open porches that will provide respite from inclement weather for building residents.

(h) Building location and orientation

Street front buildings along the periphery of the development line up with adjacent structures and reinforce the existing streetscape. The large 35-unit center building is located in the interior behind these new street front buildings. This location avoids disruption of the existing street edge and mitigates the mass of this building as perceived from the street.

(i) Vehicular access

One vehicular access point, from Archibald Street, will be provided into the site. [Please note that 27 Bright Street will remain as an independent parcel, and retain its own driveway.] A curb cut and driveway exist under current conditions but will be modified to accommodate the proposed development. Adequate access for emergency vehicles and fire apparatus has been considered and addressed; see submission material dated April 1, 2014 and confirmation April 7, 2014 between the applicant and the Burlington fire marshal's office.

(j) Pedestrian access

All of the new street edge buildings have front walkways that connect to the public sidewalk system. The interior building will connect to the public sidewalk system via new interior walkways and a wide promenade west to Bright Street. Trinity and Duplex 1 will have their own pedestrian walkway; Duplex 2 will enjoy access from the walkway that connects the public sidewalk to the interior of the site, patio and gardens.

(k) Accessibility for the handicapped

The submission narrative states that the design will meet applicable state and federal handicapped accessibility requirements for both site and units. All units in the 35plex meet FHA requirements and 5% will meet UFAS and be fully accessible. Two identified handicap parking spaces are illustrated on the parking level plan (5.3). The building inspector will require compliance with ADA standards.

(l) Parking and circulation

All new parking will be located under the central building. Two surface parking spaces are proposed behind the duplex at 112-114 Archibald Street; there are four existing parking spaces at 27 Bright Street. Plan 5.3 defines the parking level, with one compact parking space, 2 handicapped parking spaces for a total of 42 parking spaces. Two additional surface spaces are located behind 112-114 Archibald duplex 2. The four existing parking spaces at 27 Bright will remain unchanged.

Exterior bicycle parking is illustrated on plan L2.0. The original plan defined 12 exterior bike parking spaces, and 11 interior. Revised plans add an additional 5 spaces, with a likelihood to increase that number. Interior bicycle parking is shown (behind the elevator) with 12 spaces identified, and on the parking level (plan 5.3) providing 16 spaces in the northwest corner.

A multi unit building is required to provide the following:

Long Term Bike Parking: 1 per every 4 units

Short Term Bike Parking: 1/10 units

For the total of 44 units, the requirement will be:

11 long term bike parking spaces (44/4) and

4 short term bike parking spaces (44/10).

As submitted, the plan meets the bicycle parking requirement.

(m) Landscaping and fences

Ample garden space will be provided in the form of raised beds throughout the project site. A detailed landscaping plan has been submitted with preliminary and final plat plans. See plan L1.0 for existing tree and fencing demo diagram, and plan L2.0 for a proposed planting plan. Existing fencing will be retained and gaps filled in with wood fencing around 27 and 31 Bright Street. Existing fencing will be reset at some property lines where the survey has corrected those boundaries. A wood and metal privacy fence and safety barrier will be installed near the garage entrance ramp. The graduated grade of the entrance ramp is proposed to be supported with steel sheet piling similar to what is adjacent to the parking garage entrance off College Street near South Champlain Street. The grade changes are reflecting in contour lines from 238 to 228 as the parking access ramp descends; the barrier wall to be approximately 7' in height at the garage opening location. A walkway parallels that descent. The proposed retaining wall will require review and approval by the city engineer. A plan for the barrier fence will need to be provided for staff review and approval.

(n) Public plazas and open space

No public plazas are proposed, however significant outside area is planned for the use of the residents. A significant courtyard is proposed near Bright Street, with ample eastern and southern exposure to the sun with shading provided by new trees and neighboring buildings.

The garden beds, patios, and walkways accessed from the Archibald Street sidewalk will provide pleasant grounds for resident enjoyment and passive activity. Several clotheslines and play areas are also identified on the plan (See L2.0.) Much opportunity is afforded for residential pleasure on the grounds of the newly developed site.

(o) Outdoor lighting

Light specs, a photometric, and lighting plan have been submitted. Lighting is proposed to be full cut-off, and building mounted. The duplex and triplex front porches have recessed can lights to be controlled by occupants. All other lights are proposed to be controlled by photoeye sensors and timers. All lighting is low cutoff LED; there are no pole mounted lights.

Lighting at building entrances exceeds standards of the ***Outdoor Lighting Manual for Vermont Municipalities***, Table 2, p. 10: *Building Entry – active use, 5 footcandles average maintained.* Measurements on the lighting plan illustrate entryway lighting between 5.1 fc (duplex 2 on Archibald Street) to 8.7 fc (Trinityeast entrance.) All building entrances exceed the 5 footcandle limitation, and will require revision to meet these standards, or confirmation that the average maintained level meets the standard.

Walkway lighting appears to meet the standards, with maximum illumination not exceeding 2 footcandles, and average illumination below 0.5 footcandles. Light levels for within the parking garage have been provided, and illustrate a much higher level of lighting than typically acceptable for outdoor parking lots. Garage lighting is anticipated to be higher and more uniform to create a sense of security. Light fixtures are generally uplit; and should not be visible from the exterior. There is a modest amount of light spill at the garage entrance, likely from the overhead light that will need to be addressed.

Assurance is needed that the parking garage lighting plan conforms to RP-20-98, as required by Sec. 5.5.2 (f) 5.

(p) Integrate infrastructure into the design

Utility lines are proposed to be undergrounded from existing municipal services in the street.

The Archibald Duplex (2) will have a trash/recycling/storage closet in the adjacent garden shed and residents will be responsible for curbside.

The 35plex has a separate room to the right of the main entry and the trash removal company will bring the totes curbside for removal.

The Bright Street Duplex (1) will utilize the 35plex common trash/recycling room.

At the Trinity building, (Bright St. Triplex) each unit will have a closet off their back deck and either tote their trash curbside or they may choose to use the common room in 35plex and just use the closet for storage.

No information has been submitted relative to proposed mechanical equipment. If intended for inclusion, details must be provided.

Part 3, Architectural Design Standards

Section 6.3.2 Review Standards

(a) Relate development to its environment:

The smaller buildings proposed to front Archibald and Bright Street are of a scale and character that may successfully be integrated into the existing streetscape. With individual front porches on the duplex and triplex, these buildings relate to the existing neighborhood personality. With the

location of the larger building on the interior of the parcel, coupled with underground parking, the building mass is diminished and the site retains a substantial amount of green space for resident use.

1. Massing, Height and Scale:

With the proposed duplex and triplex fronting Archibald and Bright Streets, the building mass remains consistent along both streetscapes. The larger (35plex) building, situated in the center of the proposed parcel, will be less apparent due to the location; however its height is not without precedent in the neighborhood. Immediately across the street from the Archibald Street frontage exists a newer three story residential structure, fronting the street. This plan, however, minimizes the building mass as perceived from the public ROW. The 35plex has an elongated, winding footprint which will be visually available as glimpsed through other properties and not in its entirety. Planar changes break up the building mass where each of the three wings join and provide visual interest.



2. Roofs and Rooflines.

The duplexes are proposed to have compound gabled roofs, while the triplex and the 35 plex to have flat roofs. Both are familiar and available within the immediate block.

3. Building Openings

The duplexes and the triplex will have easily identifiable entrances to at least on unit fronting on the public street. Additional entrances are provided off pedestrian paths (or courtyard) on which they front. Both the south elevation (Archibald Street) and the east elevation (Bright Street) of the 35 plex have clearly identifiable entrances off pedestrian walkways.

Window openings maintain consistent patterns and proportions appropriate to the proposed residential use. The window pattern is varied, as broken up between wings of the 35 plex, and provides interest to the architecture. No awnings or canopies have been identified that may encroach into the public right-of-way, which would require an encroachment permit issued by the Dept. of Public Works. Canopies on the rear 35 plex are within the project development area.

The buildings are setback from the property line, so no restriction on window or door openings is anticipated to be required to fire safety code restrictions.

(b) Protection of Important Architectural Resources:

The applicant has engaged preservation consultant Liz Pritchett to assess the area of potential impact, any historic properties involved, and to determine the impact on each. Her report was attached in the Preliminary Plat review. A subsequent communication, dated August 6, 2014 is enclosed as part of the Final Plat review.

From that letter:

I reviewed this undertaking in my Historic Buildings Evaluation Report dated October 2013. On January 8, 2014, the State Historic Preservation Officer concurred with my determination that the proposed demolition of the house at 39 Bright Street, a dwelling that is in poor condition but appears marginally eligible for listing in the National Register of Historic Places, would result in an adverse effect. The SHPO also agreed with the proposed mitigation measure to handle the adverse effect, which called for new construction that will be compatible with the surrounding historic resources in this neighborhood in the Old North End, and for the opportunity to review plans and elevations of the proposed new buildings on the site. I have recently reviewed updated plans and elevations dated 7.16.2014, and also a 3-D rendering of the proposed buildings....

In my professional opinion, the proposed designs for the Bright Street Cooperative comply with The Secretary of the Interior's Standards for new construction in a historic neighborhood, and meet the mitigation measure for this project for new designs that are compatible with the historic character of Bright Street and surrounding resources.

[Signature of SHPO provided as concurrence.]

(c) Protection of Important Public Views:

There are no public views from these parcels. Not applicable.

(d) Provide an active and inviting street edge:

Duplex 1 and 2 both provide engaging streetfronts, with triple windows at the first floor street level and wrap around porches slightly off grade. Windows are regularly spaced, and indicative of interior use. The buildings actually have 2 building fronts as designed, because rear facades serve the second unit, and open to public courtyards and interior lot common spaces.



The 35plex, although not immediately fronting the street, has attractively designed facades facing both streetfronts, albeit setback substantially from the street. Visual interest is provided by material placement, alteration to the corniceline, siding changes, rhythm of window placement, window sizes, and articulated porches. The elevator shaft provides an interesting design element distinctive to the plan. Revised images illustrate the street address has been lowered to meet sign placement requirements of the ordinance.

(e) Quality of materials:

Proposed materials are fiber cement siding and trim; sloped roofs to be shingles; flat roofs membrane. Colors will be chosen from either the James Hardie or Certainteed Color palette. Windows will be fiberglass double hung with some awning and casement. Porch railings are proposed to be painted metal; porch posts painted wood.

(f) Reduce energy utilization:

The narrative defines the plan for highly energy efficient buildings designs. The development will be required to meet all energy efficiency standards as defined by Burlington Electric, and will be available for incentives.

The 35 plex roof will be designed to incorporate solar panels, although preliminary development plans cannot assure that solar will be incorporated immediately.

The smaller building sizes fronting Archibald and Bright Street do not suggest the need for shadow studies. The interior location (and spatial separation from neighboring building) of the 35 plex do not raise immediate concern about shadow cast. Ample opportunity remains here, and at adjoining building sites, for the utilization of passive and active solar utility.

(g) Make advertising features complementary to the site:

Any signage will require a separate sign permit.

The street identification number (“37”) has been lowered on Final elevation plans to meet the requirements of the ordinance. Sign installation height in the NMU is limited to 14’, or the ceiling height of the first floor.

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p), above.

(i) Make spaces secure and safe:

The proposed buildings will be sprinklered. Development will be required to meet all applicable building and life safety code as defined by the building inspector and the fire marshal.

For this multi unit building, an intercom system is recommended for residential safety.

Section 5.4.8 (d)

Two buildings within the project area are listed on the Vermont State Register of Historic Resources. Both are proposed to be demolished. A consultant’s report has been included with the submission materials for Preliminary Plat, and a final communication for Final Plat review. See comments under Sec. 6.2.3 (b), above. In general the report and subsequent letter of confirmation reflect the acceptability of the new housing as mitigation for the loss of a group of buildings with marginal historic integrity; understanding the greater public benefit of the prospect of newer, cleaner, safer, affordable housing in the neighborhood.

Herein are the standards for review:

(d) Demolition of Historic Buildings:

The purpose of this subsection is:

- . To discourage the demolition of a historic building, and allow full consideration of alternatives to demolition, including rehabilitation, adaptive reuse, resale, or relocation;*
- . Provide a procedure and criteria regarding the consideration of a proposal for the demolition of a historic building; and,*
- . To ensure that the community is compensated for the permanent loss of a historic resource by a redevelopment of clear and substantial benefit to the community, region or state.*

1. Application for Demolition.

For demolition applications involving a historic building, the applicant shall submit the following materials in addition to the submission requirements specified in Art. 3:

- A. A report from a licensed engineer or architect who is experienced in rehabilitation of historic structures regarding the soundness of the structure and its suitability for rehabilitation;*

This was included with the Preliminary Plat submission documents.

- B. A statement addressing compliance with each applicable review standard for demolition;*

- C. Where a case for economic hardship is claimed, an economic feasibility report prepared by an architect, developer, or appraiser, or other person experienced in the rehabilitation and adaptive reuse of historic structures that addresses:*

(i) the estimated market value of the property on which the structure lies, both before and after demolition or removal; and,

(ii) the feasibility of rehabilitation or reuse of the structure proposed for demolition or partial demolition;

Both the structural engineer and the 36-CFR certified preservation consultant concurred that the poor condition of both buildings, coupled with the loss of integrity and level of alteration make rehabilitation economically unviable. All concur that the best solution would be to remove the structures and allow redevelopment to occur, conditioned upon compatibility with the context of the neighborhood.

- D. A redevelopment plan for the site, and a statement of the effect of the proposed redevelopment on the architectural and historical qualities of other structures and the character of the neighborhood around the sites;*

This application proposes redevelopment of the site.

and,

- E. Elevations, drawings, plans, statements, and other materials which satisfy the submission requirements specified in Art. 3, for any replacement structure or structures to be erected or constructed pursuant to a development plan.*

Attached.

2. Standards for Review of Demolition.

Demolition of a historic structure shall only be approved by the DRB pursuant to the provisions of Art. 3, Part 5 for Conditional Use Review and in accordance with the following standards:

- A. The structure proposed for demolition is structurally unsound despite ongoing efforts by the owner to properly maintain the structure; or,*
- B. The structure cannot be rehabilitated or reused on site as part of any economically beneficial use of the property in conformance with the intent and requirements of the underlying zoning district; and, the structure cannot be practicably moved to another site within the district; or,*
- C. The proposed redevelopment of the site will provide a substantial community-wide benefit that outweighs the historic or architectural significance of the building proposed for demolition.*

And all of the following:

- D. The demolition and redevelopment proposal mitigates to the greatest extent practical any impact to the historical importance of other structures located on the property and adjacent properties;*
- E. All historically and architecturally important design, features, construction techniques, examples of craftsmanship and materials have been properly documented using the applicable standards of the Historic American Building Survey (HABS) and made available to historians, architectural historians and others interested in Burlington's architectural history; and,*
- F. The applicant has agreed to redevelop the site after demolition pursuant to an approved redevelopment plan which provides for a replacement structure(s).*
 - (i) Such a plan shall be compatible with the historical integrity and enhances the architectural character of the immediate area, neighborhood, and district;*
 - (ii) Such plans must include an acceptable timetable and guarantees which may include performance bonds/letters of credit for demolition and completion of the project; and,*
 - (iii) The time between demolition and commencement of new construction generally shall not exceed six (6) months.*

This requirement may be waived if the applicant agrees to deed restrict the property to provide for open space or recreational uses where such a restriction constitutes a greater benefit to the community than the property's redevelopment.

The applicants have not offered to deed restrict the property. However as a public housing project, a substantial and long lasting community benefit would be realized by the redevelopment of the subject parcels, providing 44 residential units (42 in four new buildings, and 31 of them new.)

Due to the scale and ambitious breadth of the project, the applicant has asked for a rational extension of time in which to replace the buildings post demolition. This standard (iii) notes *the time between demolition and construction generally shall not exceed six months*. See applicant's discussion under *Bright Street Cooperative* cover letter, item #13. The dual factors of the potential of a vacant building at 114 Archibald Street and the onset of winter weather, an early demolition of that structure with spring construction would allow a reasoned and understandable flexibility of that standard.

3. Deconstruction: Salvage and Reuse of Historic Building Materials.

The applicant shall be encouraged to sell or reclaim a structure and all historic building materials, or permit others to salvage them and to provide an opportunity for others to purchase or reclaim the building or its materials for future use. An applicant may be required to advertise

the availability of the structure and materials for sale or salvage in a local newspaper on at least three (3) occasions prior to demolition.

As noted.

Staff recommendation: Approval of Final Plat Application with noted conditions; forward to the DRB with a recommendation for Approval.

Conditions of approval:

1. **Prior to release of the zoning permit**, written approval confirming compliance with Chapter 26, Wastewater, Stormwater and Pollution Control measures shall be received from the City Stormwater Engineering staff.
2. **Prior to release of the zoning permit**, confirmation that the parking garage lighting plan conforms to RP-20-98, as required by Sec. 5.5.2 (f) 5 must be submitted to staff. Any garage lighting fixture visible from the exterior of the garage facility shall be shielded in a manner that prevents glare to be visible from the exterior of the parking garage.
3. Lighting at building entrances exceeds standards of the ***Outdoor Lighting Manual for Vermont Municipalities***, Table 2, p. 10: *Building Entry – active use, 5 footcandles average maintained*. Measurements on the lighting plan illustrate entryway lighting between 5.1 fc (duplex 2 on Archibald Street) to 8.7 fc (Trinityeast entrance.) All building entrances exceed the 5 footcandle limitation, and will require revision to meet these standards, or confirmation that the average maintained level meets the standard.
4. A Corrective Action Plan will be required by DEC for PAH impacted soils on the site prior to development. The applicant shall submit confirmation that all required site remediation has taken place and appropriate controls are in place; that the site is deemed acceptable for residential use.
5. Proposed design and construction details for any retaining walls over 3-feet in height shall be subject to review and written approval by the city engineer **prior to release of the zoning permit**.
6. If HVAC or rooftop equipment is proposed, the submission should be augmented with that information (including any additional height, which would apply toward overall building height limitation) with anticipated noise level (dB) of each unit.
7. A State Wastewater Permit will be required for water and sewer service. It is the obligation of the owner/applicant to seek this and any other required additional permits.
8. A plan for the barrier fence will need to be provided for staff review and approval.
9. An extension of the 6 month time limit between demolition and new construction is recommended due to the potential hazard of vacant buildings over winter months. That limit is recommended to be further defined by the DRB, but understood to be less than one year.
10. The applicant is encouraged to sell or reclaim structures and all historic building materials, or permit others to salvage them in reasonable manner that will not forfeit public health or safety.

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Scott Gustin, AICP, CFM, Senior Planner
Mary O'Neil, AICP, Senior Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



MEMORANDUM

To: The Design Advisory Board
From: Mary O'Neil, AICP, Senior Planner *mo*
RE: ZP 15-0079CA
Date: September 23, 2014

File: ZP 15-0079CA
Location: 281 Flynn Avenue
Zone: RL **Ward:** 5
Date application accepted: July 16m 2014
Applicant/ Owner: Sandra Vishnevsky
Request: Add second story to existing single family home.
1st Review by Design Advisory Board: August 12, 2014.

Recommendations by DAB:

- Enlarge 2nd floor eaves to match depth of 1st floor eaves.
- Reconfigure front 2nd floor windows reducing their size and height
- Retain bow window
- Eliminate the gable porch roof – shed okay.
- Second floor siding change to shingle is acceptable.
- 2nd floor fascia should be the same as first floor fascia.

Revised Plans Received: September 9, 2014 via email.

Revised plans illustrate the reconfiguration of front 2nd floor windows, reducing their size and height. The bow window is retained. The porch roof is now a hip roof and the plans define the siding change to shingle on the 2nd floor.

The disparity lies in the complete elimination of the first floor eave line, and expansion of the 2nd floor to fit squarely over the first floor. Therefore, the first and 6th recommendation relating to the relationship between the first floor eave and 2nd floor is not reflected. The floor plan reflects the expanded 2nd story space.

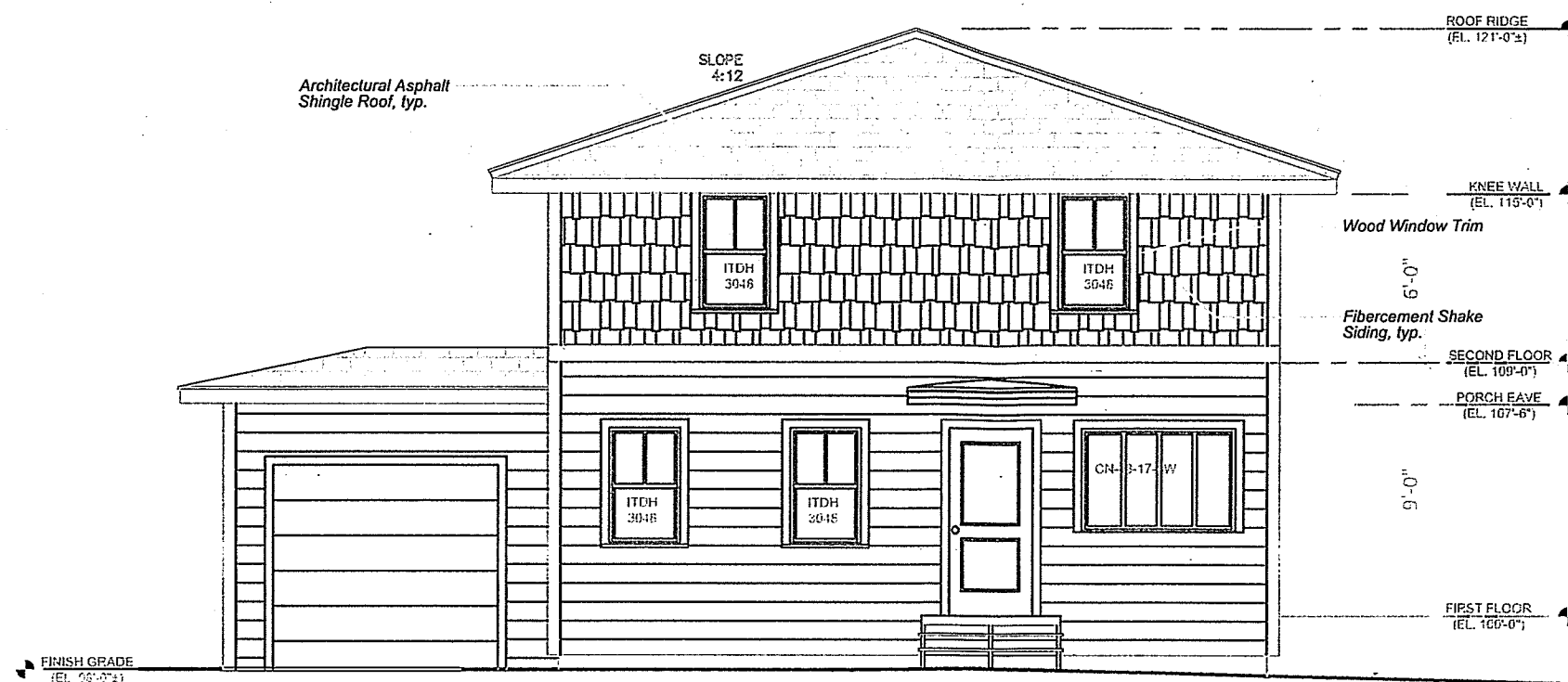
As noted in the staff report for August 12, 2014, the decision of the board will guide staff in the administrative review of this application. If the changes are found to meet the guidance of this board and acceptable as revised, then the application may be approved and enter a 15 day appeal period.

Rec'd via email

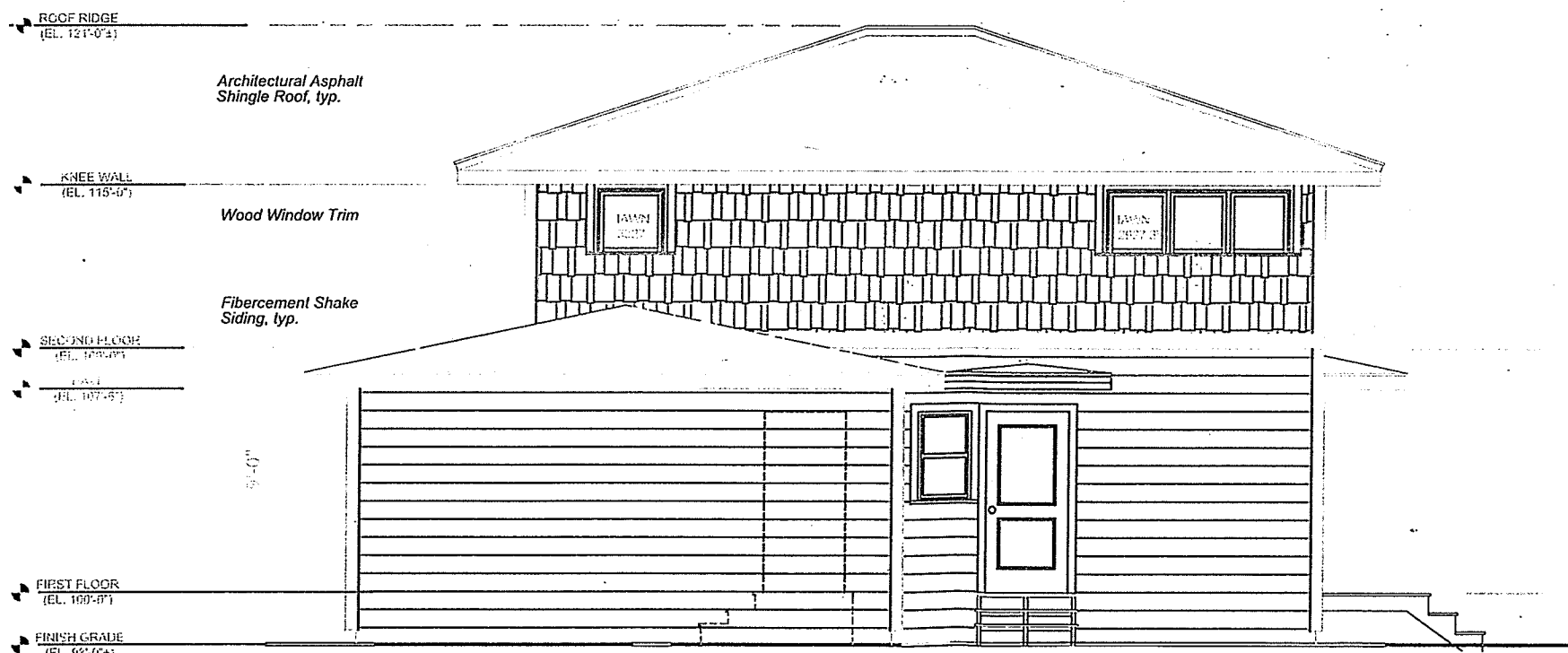
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SEP 09 2014

DEPARTMENT OF
PLANNING & ZONING



1 North Elevation



2 East Elevation

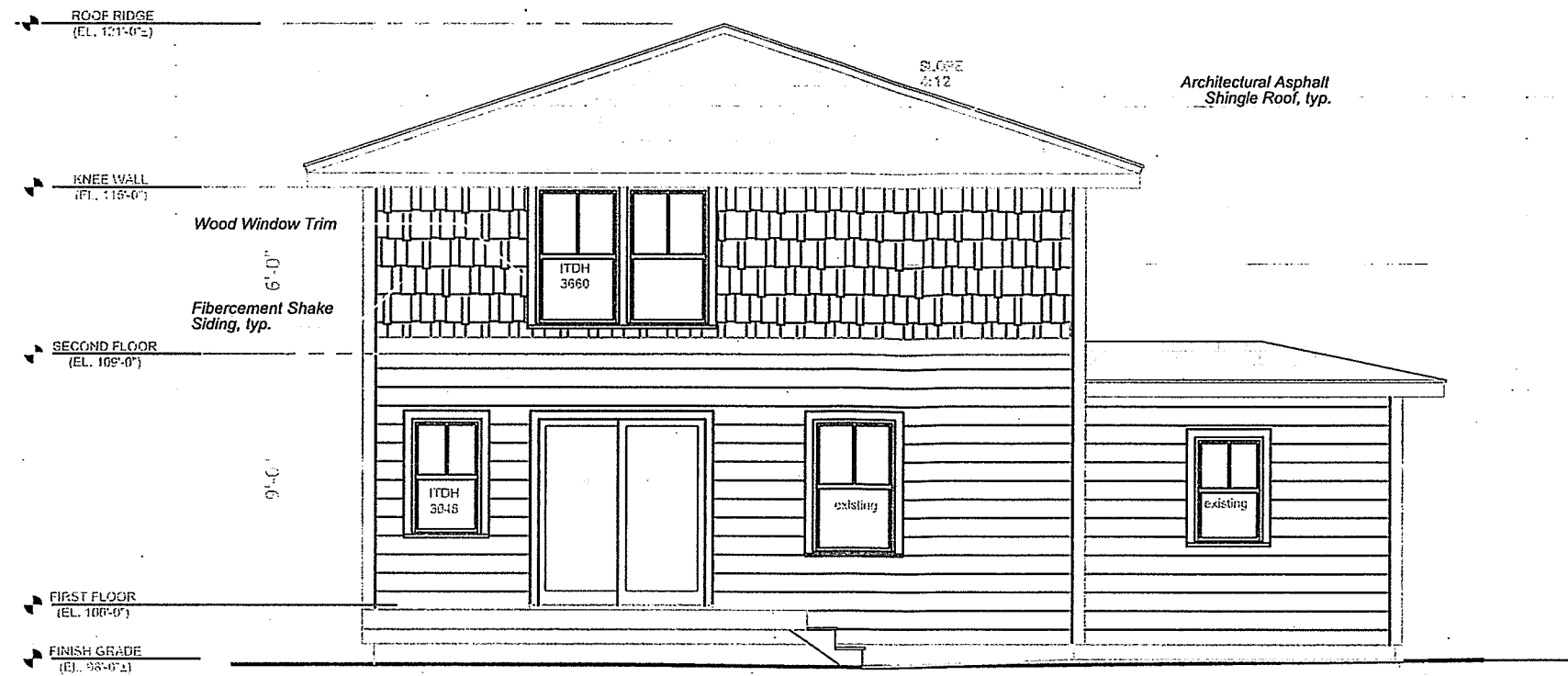
VISHNEVSKY RENOVATION

Rec'd via email

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SEP 09 2014

DEPARTMENT OF
PLANNING & ZONING



1 South Elevation



2 West Elevation

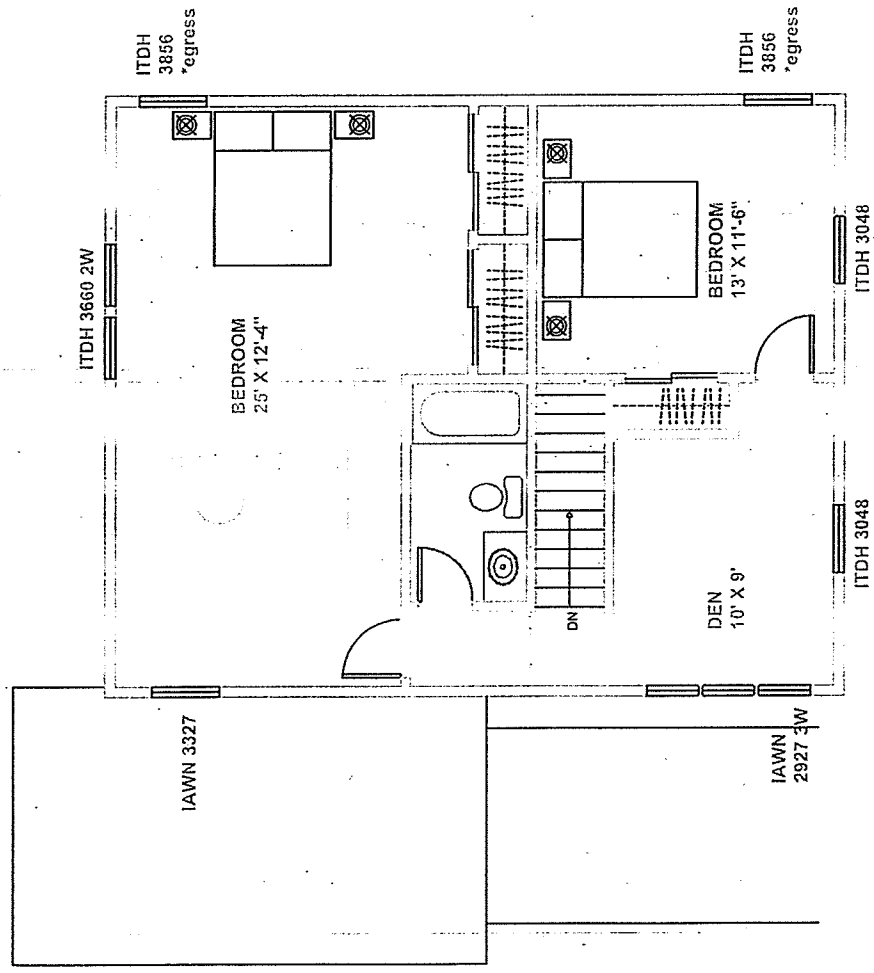
VISHNEVSKY RENOVATION

Via email

RECEIVED

SEP 09 2014

DEPARTMENT OF
PLANNING & ZONING



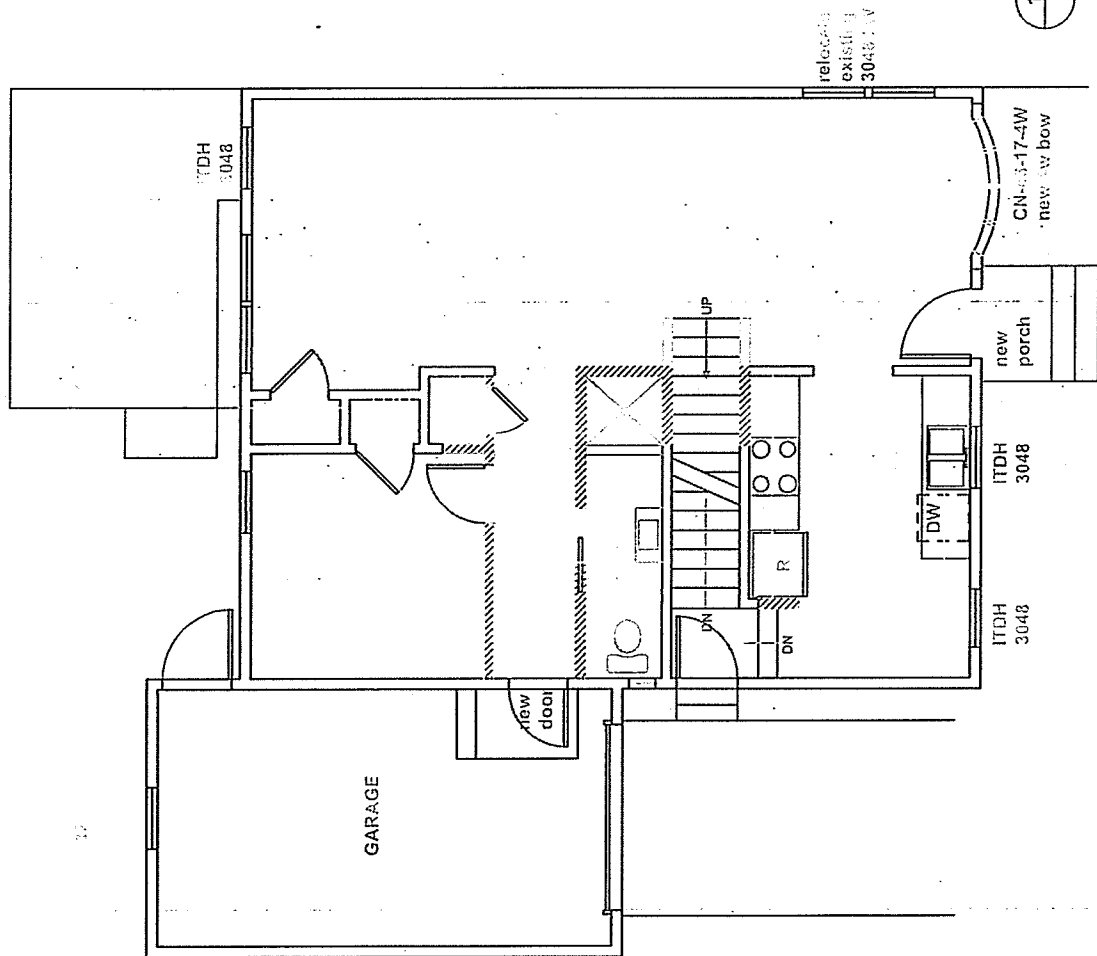
2 Proposed Second Floor Plan

Via email

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DEPARTMENT OF
PLANNING & ZONING

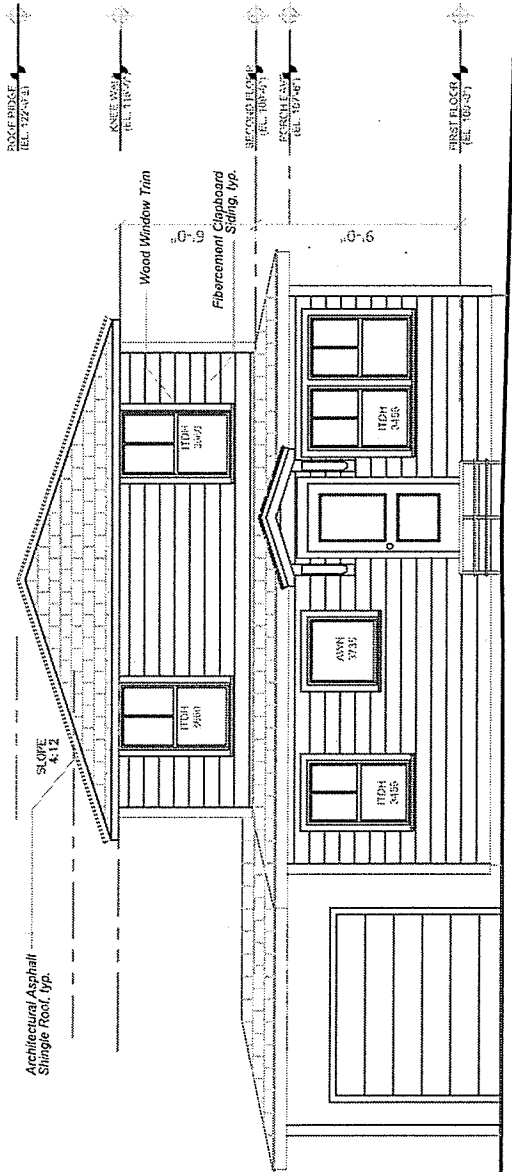


1 Proposed Floor Plan
Phase 1

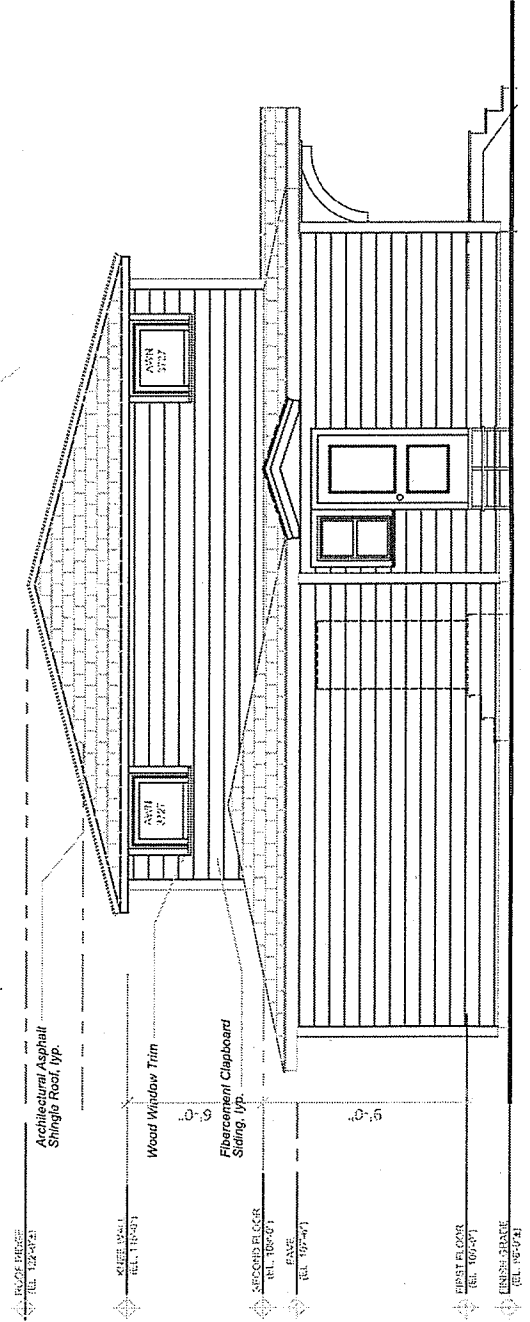
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JUL 16 2014

DEPARTMENT OF
PLANNING & ZONING

1st
proposal



1 North Elevation



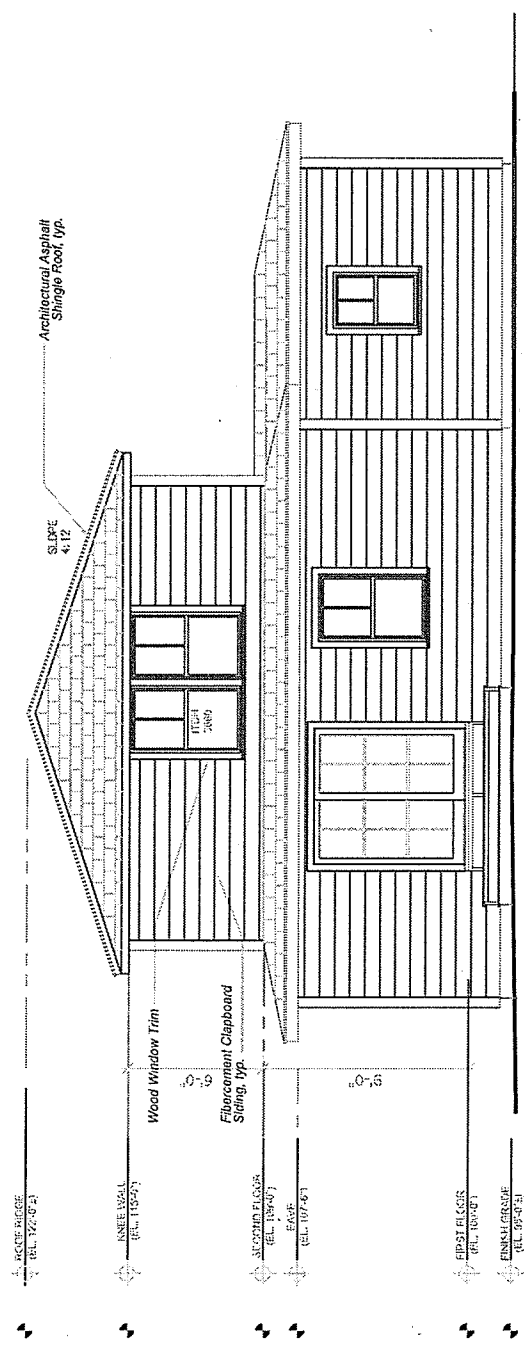
2 East Elevation

1st
proposal

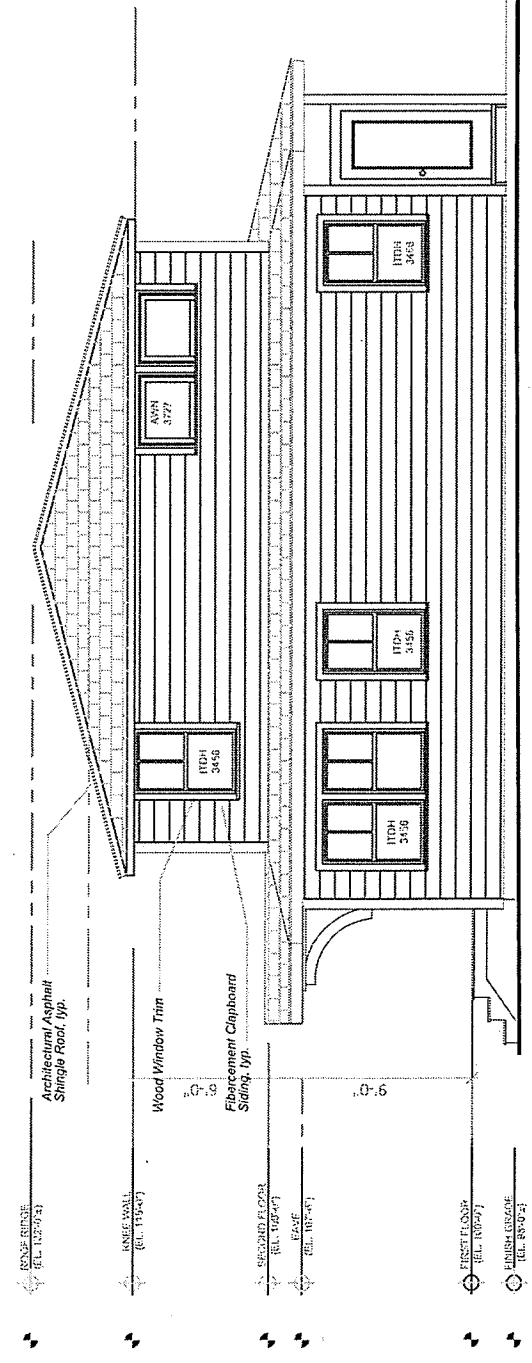
DEPARTMENT OF
PLANNING & ZONING

JUL 16 2014

RECEIVED



1 South Elevation



2 West Elevation

Department of Planning and Zoning

149 Church Street
Burlington, VT 05401
<http://www.burlingtonvt.gov/pz>
Telephone: (802) 865-7188
(802) 865-7195 (FAX)

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Ken Lerner, Assistant Director
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Scott Gustin, AICP, CFM, Senior Planner
Mary O'Neil, AICP, Senior Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



MEMORANDUM

To: The Design Advisory Board
From: Mary O'Neil, AICP, Senior Planner
RE: ZP 15-0254CA; 434-436 South Winooski Avenue
Date: September 23, 2014

File: ZP 15-0254CA

Location: 434-436 South Winooski Avenue

Zone: RM **Ward:** 6

Date application accepted: August 21, 2014

Applicant/ Owner: Nathaniel Plasha/Avery Rifkin

Request: Rebuild rear 2 story porch; add new bark shingle siding and timber frame detailing; bring second story knee wall up to safety standards.

Background:

- **Zoning Permit 13-0702CA;** Repair and replace front two story porch. New decking, footings, ceilings, trim, posts and railings. January 2013.
- **Zoning Permit 98-108;** construction of three dormers, on either side of the roof of the existing duplex. Expansion represents expanded living space for the second floor unit. All materials to match existing. September 9, 2007.
- **Zoning Permit 86-045;** Finish off third floor attic to create a studio. Conditions of this permit are: No exterior modifications, for owner's personal use only, not established as a home occupation. March 1986.
- **Zoning Permit;** erect a 4' x 30' wire fence on the rear of the property line; erect a 4' x 15' wood picket fence between the garage and the porch. June 1978.

Overview: 434-436 South Winooski Avenue is a 1924 Colonial Revival residential duplex listed on the Vermont State Register of Historic Resources. The applicant proposes rebuilding the rear integral 2 story porch with a timber frame, wood bark sheathed replacement.

PART 1: LAND DIVISION DESIGN STANDARDS

Not applicable.

PART 2: SITE PLAN DESIGN STANDARDS

(d) Protection of Important Cultural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Archeological sites likely to yield information important to the city's or the region's pre-history or history shall be evaluated, documented, and avoided whenever feasible. Where the proposed development involves sites 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(b).

See Section 5.4.8, below.

PART 3: ARCHITECTURAL DESIGN STANDARDS

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

No change to the massing, height or scale of the building is proposed. Not applicable.

2. Roofs and Rooflines.

The main house displays a jerkinhead roof; the rear porch a low pitched modified hip. Neither is proposed for alteration.

3. Building Openings

The open corner porch is proposed to be retained.

(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.

See Section 5.4.8, below.

(c) Protection of Important Public Views:

There are no protected public views from the site. Not applicable.

(d) Provide an active and inviting street edge:

As this is a rear porch, its visibility from the public street is limited. Not applicable.

(e) Quality of materials:

The applicant proposes hemlock timber frame construction, Douglas Fir beadboard ceiling and poplar bark shingles. Both are traditional materials, although the durability of the proposed sheathing is unknown in this climate.

(f) Reduce energy utilization:

Not applicable.

(g) Make advertising features complementary to the site:

Not applicable.

(h) Integrate infrastructure into the building design:

No machinery, rooftop equipment, mailboxes, utility connections, HVAC installation, or other similar infrastructure are proposed with the porch replacement. Not applicable.

(i) Make spaces secure and safe:

The application includes the specific intent to raise the barrier wall to meet current code requirements.

Sec. 5.4.8 Historic Buildings and Sites

(a) Applicability:

These regulations shall apply to all buildings and sites in the city that are listed, or eligible for listing, on the State or National Register of Historic Places.

434-436 South Winooski Avenue is listed on the Vermont State Register of Historic Places.

(b) Standards and Guidelines:

The following development standards, following the Secretary of the Interior's Standards for the Treatment of Historic Properties, shall be used in the review of all applications involving historic buildings and sites subject to the provisions of this section and the requirements for Design Review in Art 3, Part 4. The Secretary of the Interior's Standards are basic principles created to help preserve the distinctive character of a historic building and its site. They are a series of concepts about maintaining, repairing and replacing historic features, as well as designing new additions or making alterations. These Standards are intended to be applied in a reasonable manner, taking into consideration economic and technical feasibility.

1. *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

No change in use. The building continues to be residential.

2. *The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

Although the porch is proposed to be reconstructed in the same location, the finishes, detailing, and materials will alter the historic character of the feature. As a whole, the Colonial Revival style refers to the re-emerging interest in the early English and Dutch houses common to New England and along the eastern coast. The wood shingle/wood clapboard material combination is one of the most recognizable characteristics of these structures. The existing porch at 434-436 South Winooski Avenue remains clearly integral to the structure, finished in a manner characteristic of the Colonial Revival dwelling (shingles on the 2nd floor walls and barrier wall; clapboard on the first floor.) The proposed is to introduce an admittedly rustic vocabulary, with projecting timber supports and rough bark shingles. The projecting roof supports, identified first with Pueblo Revival as vigas and then more stylized with Craftsman style structures, are incongruous in this application. Typical to Colonial Revival and this structure, the cornice line would be continuous with fascia and eave wrapping around the corner with minor molding detailing; not with projecting wood supports as proposed.

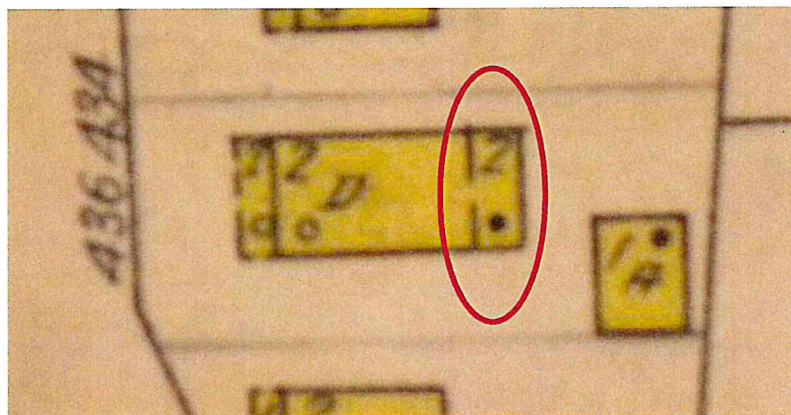
As is evident here and typical to the style, the barrier wall has a slight cant at floor level, with a weep hole to provide an area for rain/snow melt. The stylistic planar protrusion does not appear to be proposed for replication.

The material choice of rough bark also is incompatible with the Colonial Revival aesthetic, and more appropriate for other applications.

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

The proposed projecting timber supports are not from this architectural vocabulary or period of historic development; therefore inappropriate on this structure. Similarly, rustic bark sheathing is not a sympathetic and compatible application in this setting.

4. *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*



1926 Sanborn map, detail

The porches are original to the house, not a later addition.

5. *Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

The existing wood clapboard and shingles are distinctive materials and finishes that characterize the property, and should be replicated. Timber roof braces and bark sheathing are not.

6. *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials recognizing that new technologies may provide an appropriate alternative in order to adapt to ever changing conditions and provide for an efficient contemporary use. Replacement of missing features will be substantiated by documentary and physical evidence.*

Deteriorated shakes and wood clapboard are easily available to be used as replacement for the existing finishes. The proposed finishes will not match the old in design, texture, or materials, per this standard. There is no documentary or physical evidence that the porch design or materials were similar to what is being proposed.

7. *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

Not applicable.

8. *Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

Not applicable.

9. *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.*

Although the applicant asserts that the proposal will assure differentiation from the original structure, the plan will also assure the loss of architectural integrity and be incompatible with the historic materials, features, and character of the property.

10. *New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

Removal of the clapboard/shingles without replacement in kind will alter the essential form and integrity of the rear porch. The installation of projecting timber roof braces, more characteristic of a bungalow or a Prairie style home, will be a structural installation that is unlikely to be considered reversible. As proposed, the porch replacement will alter the essential form and integrity of the historic Colonial Revival rear porch.

Staff recommendation: **Denial** of the porch alteration as proposed. Recommendation is to repair and replace in-kind, matching materials, features, finishes, and construction techniques, with the inclusion of a barrier rail(s) to meet code requirements.



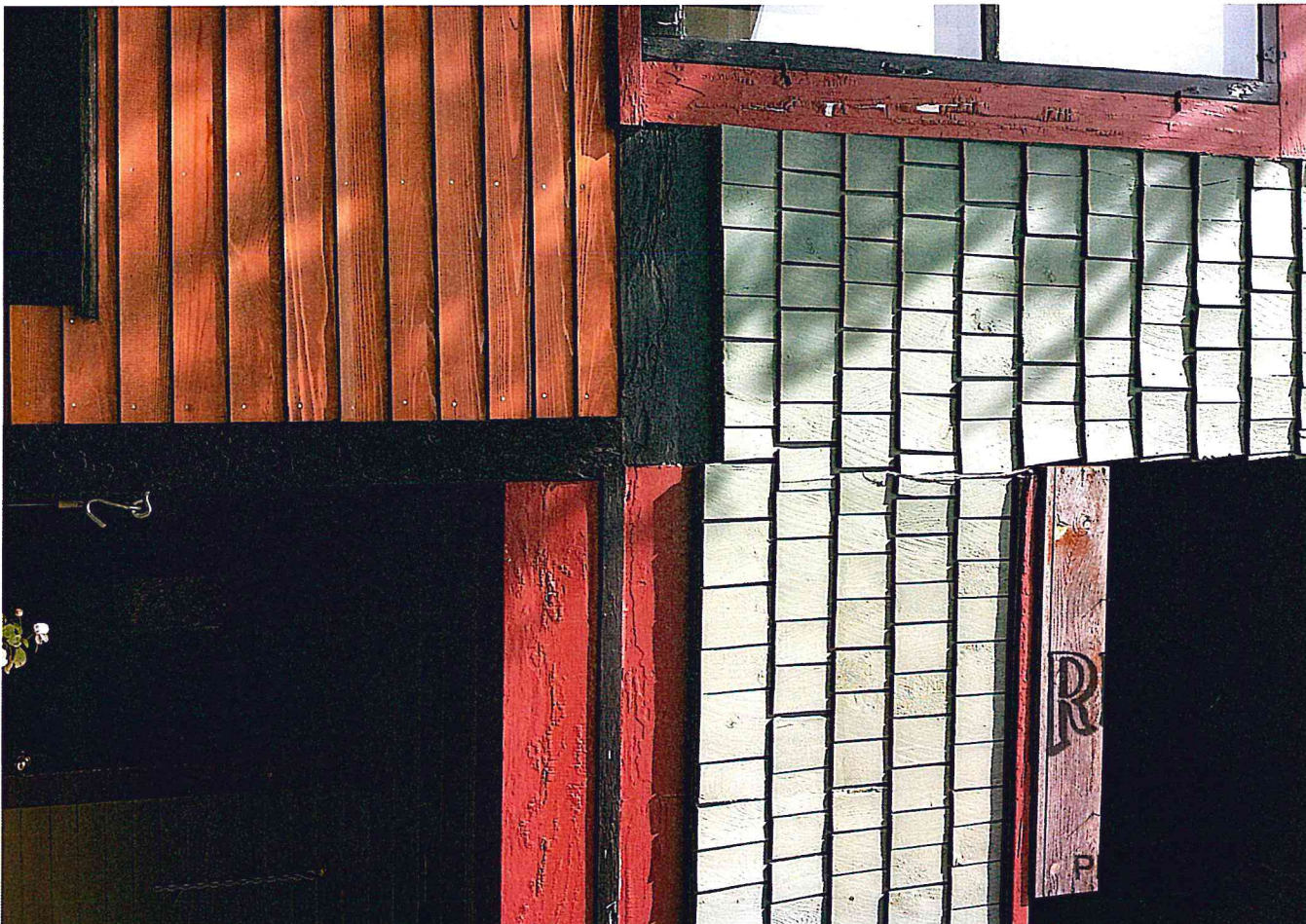
front porch



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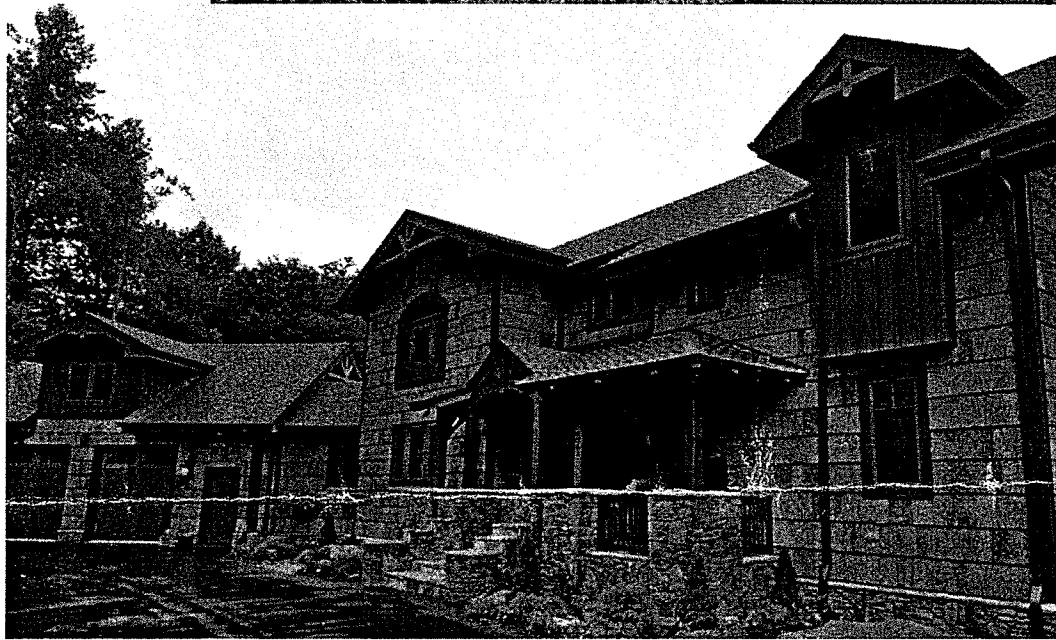
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Gallery



- Mouldings & Millwork



- Bark Veneer Laminates



- Handrail Components



- Split Rail Fencing



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DEPARTMENT OF
PLANNING & ZONING

To whom it may concern,

I have submitted a proposal, for Planning and Zonings approval, concerning the upstairs/downstairs porches on the rear of 434/436 S Winooski St. The design for the reworking of said porches strays from the dominant language of the original house, and the surrounding homes. Materials are being introduced that have a unique vernacular. Below are a variety of reasons why this design and these material choices are relevant and acceptable.

Physical Characteristics of Structure:

- The main body of the house is known through its roof line and foundation.
- The roof is comprised of a hip-on-gable roof on both the front and rear of the house (also known as a jerkinhead roof). This dominant roof is flanked by hipped roofs also on the front and rear of the house. These secondary roofs parallel each other dimensionally. The front covers a two story porch, recently reconstructed. The rear covers the corner porches as well as a single room upstairs and a single room downstairs.
- The main body of the house sits upon a full story foundation. This foundation does not extend to either the front porches, nor the rear porches/living space.
- The trim-work at the rear of the house shows breaks and inconsistencies as it moves from the main structure (represented by the jerkinhead roof line and full foundation) to the rear structure. These inconsistencies show up in both the eave and the horizontal band that separates the lower clapboards from the upper cedar shingles.
- See attached photos.

I would suggest, due to this evidence, that the rear "addition" was not part of the original structure upon construction. Or, that this "addition" was at one time a porch unto itself that was enclosed.

Further Considerations:

- The rear porches under consideration cannot be seen from the street.
- The design for the rear porches is unique, and therefore not attempting to identify with the original. The timber frame creates clear boundaries between 1910 and 2014.
- The design for the back porches is in harmony with the newly constructed front porches. They each convey a refined rustic sensibility.
- See attached photos.

I would be happy to provide further photos and dialogue if that is necessary.

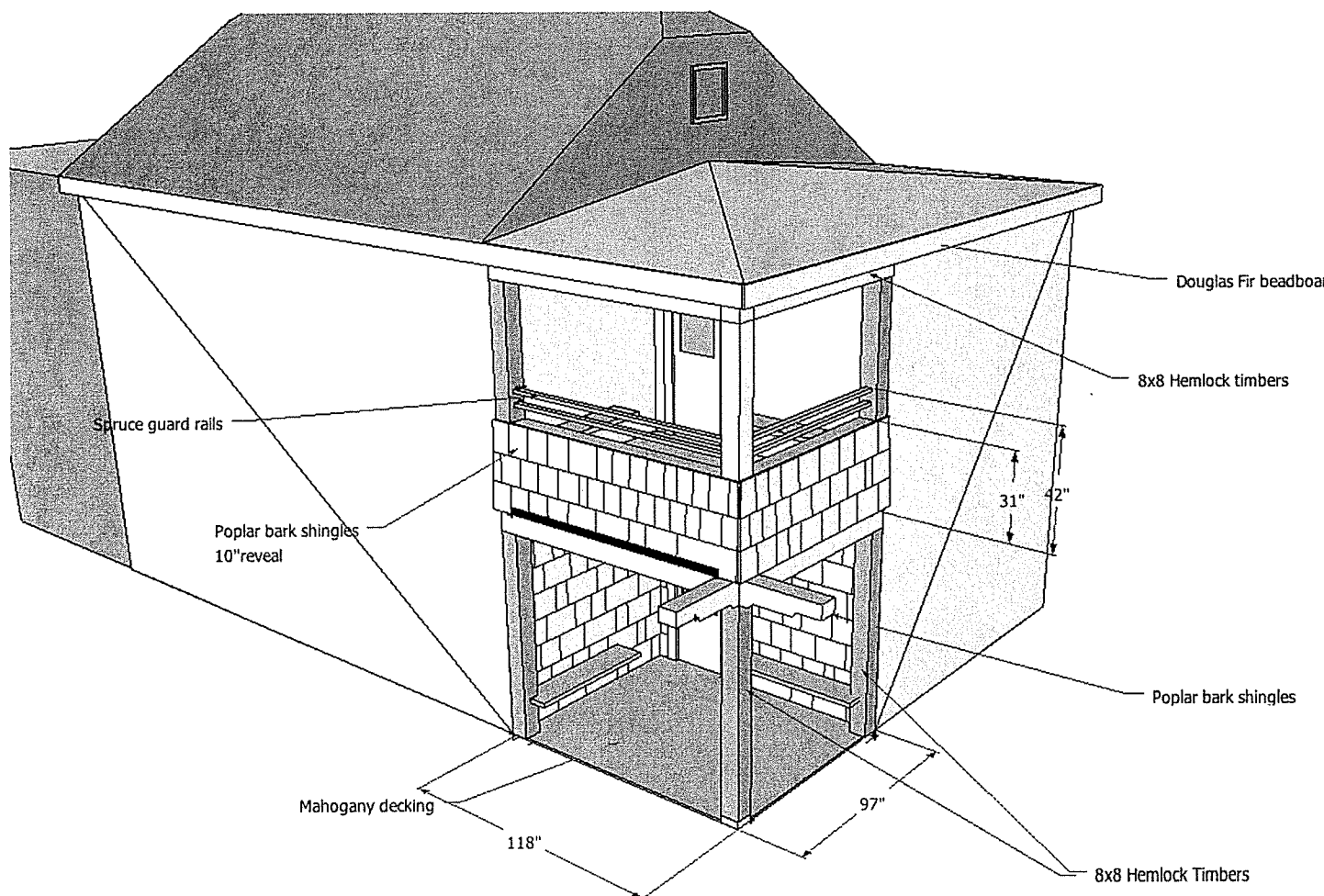
Thanks,

Nathaniel Plasha

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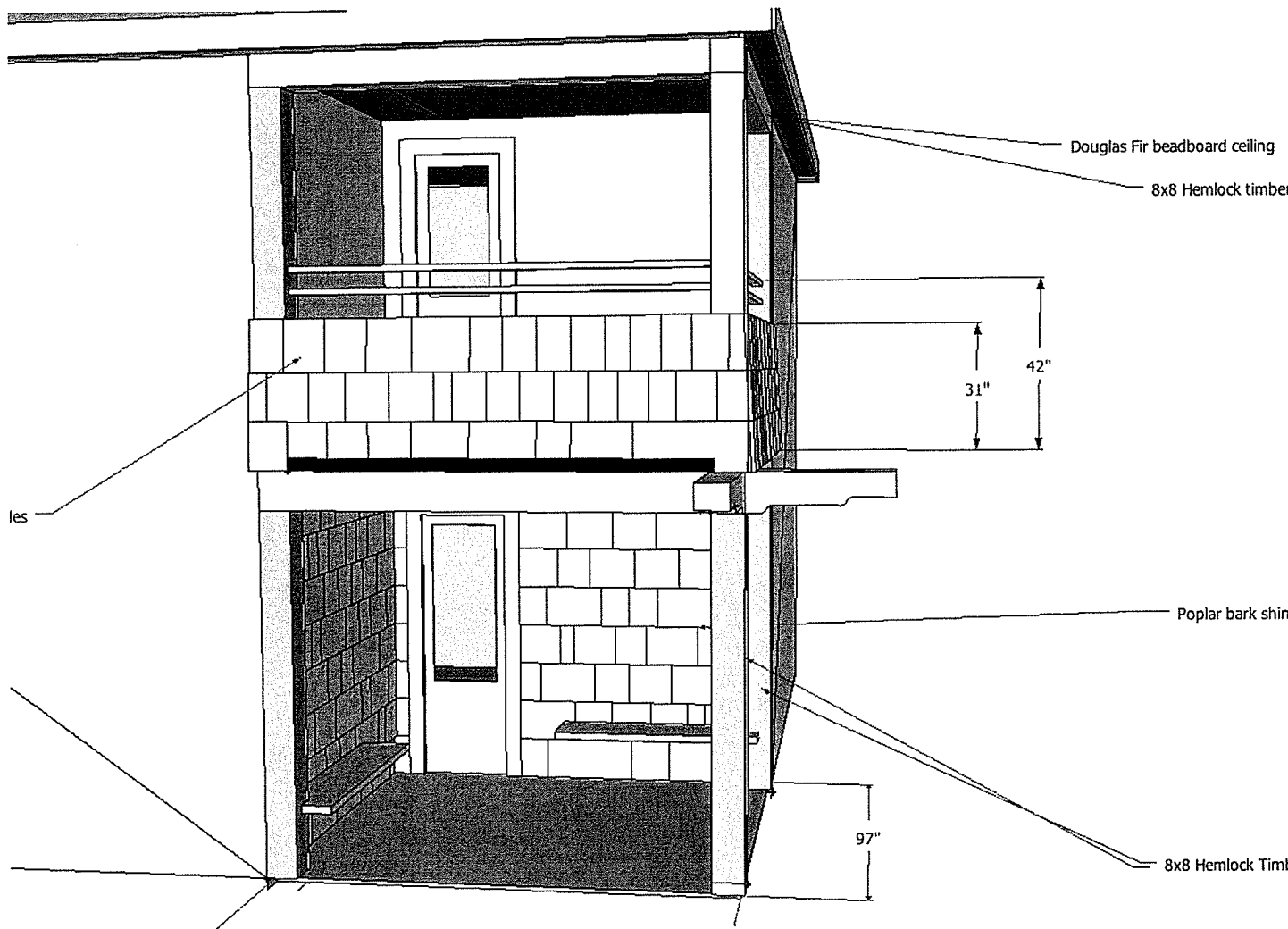
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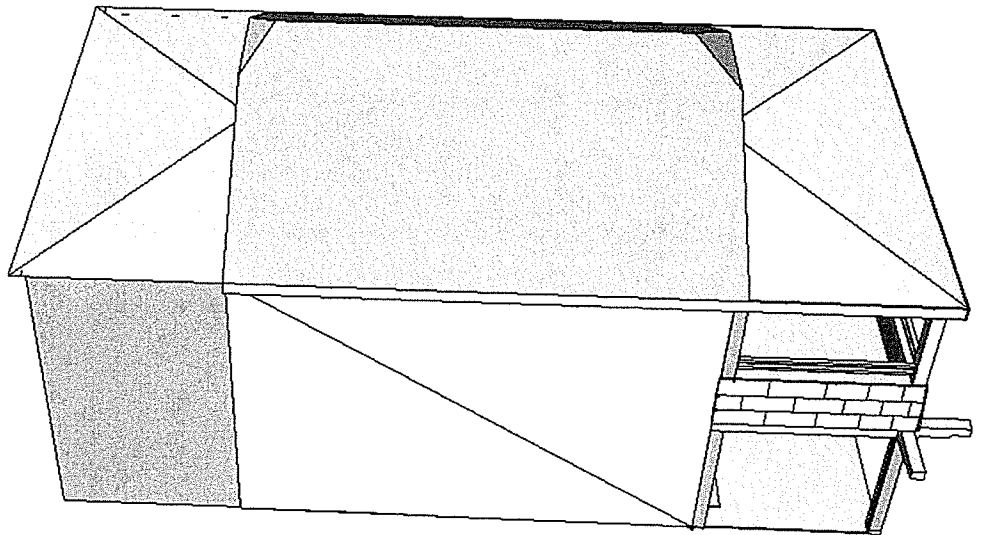
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DEPARTMENT OF
PLANNING & ZONING



STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

COUNTY:	Chittenden
TOWN:	Burlington
LOCATION:	
COMMON NAME:	
FUNCTIONAL TYPE:	dwelling
OWNER:	Winston Munson
ADDRESS:	Thayers Bch. R.F.D. 3 Holy Cross Rd., Winooski, Vt.
ACCESSIBILITY TO PUBLIC:	Yes ☐ No ☒ Restricted ☐
LEVEL OF SIGNIFICANCE:	Local ☒ State ☐ National ☐

GENERAL DESCRIPTION:

Structural System

1. Foundation: Stone ☐ Brick ☐ Concrete ☒ Concrete Block ☐
2. Wall Structure
 - a. Wood Frame: Post & Beam ☐ Balloon ☒
 - b. Load Bearing Masonry: Brick ☐ Stone ☐ Concrete ☐ Concrete Block ☐
 - c. Iron ☐ d. Steel ☐ e. Other:
3. Wall Covering: Clapboard ☒ Board & Batten ☐ Wood Shingle ☐ Shiplap ☐ Novelty ☐ Stucco ☐ Sheet Metal ☐ Aluminum ☐ Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐ Bonding Pattern: Other:
4. Roof Structure
 - a. Truss: Wood ☐ Iron ☐ Steel ☐ Concrete ☐
 - b. Other:
5. Roof Covering: Slate ☐ Wood Shingle ☐ Asphalt Shingle ☐ Sheet Metal ☐ Built Up ☐ Rolled ☐ Tile ☐ Other:
6. Engineering Structure:
7. Other:

Appendages: Porches ☒ Towers ☐ Cupolas ☐ Dormers ☐ Chimney ☐ Sheds ☐ Ells ☐ Wings ☐ Other:

Roof Style: Gable ☐ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐ Jerkinhead ☒ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ With Parapet ☐ With False Front ☐ Other:

Number of Stories: 2 1/2

Number of Bays: 2 x 6

Approximate Dimensions:

SURVEY NUMBER:	434-436 So. Winooski
NEGATIVE FILE NUMBER:	77-A-273
UTM REFERENCES:	Zone/Easting/Northing
U.S.G.S. QUAD. MAP:	
PRESENT FORMAL NAME:	
ORIGINAL FORMAL NAME:	
PRESENT USE:	dwelling
ORIGINAL USE:	dwelling
ARCHITECT/ENGINEER:	
BUILDER/CONTRACTOR:	
PHYSICAL CONDITION OF STRUCTURE:	Excellent ☐ Good ☒ Fair ☐ Poor ☐
THEME:	
STYLE:	Colonial-jerkinhead
DATE BUILT:	1924

THREAT TO STRUCTURE:

No Threat ☐ Zoning ☐ Roads ☐ Development ☐ Deterioration ☐ Alteration ☐ Other:

LOCAL ATTITUDES:

Positive ☐ Negative ☐ Mixed ☐ Other:

ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

Massing - large rectangular block with front jerkin orientation. 2 story facade veranda. Slight bay projection on south wall.

Fenestration - 1/1 sash, paired on facade.

Entrances - 3/4 glazed doors.

Cornice - boxed cornice.

Clapboard 1st story shingled 2nd. 2 story rear porch.

RELATED STRUCTURES:

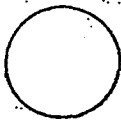
2 car garage with jerkinhead.

STATEMENT OF SIGNIFICANCE:

This Colonial Revival duplex is distinguished by its jerkinhead roof. The land was purchased by Alfred S. Killary in 1924 and he is listed as occupying one of the duplexes in 1924. The structure is very similar to 410-412 So. Winoski Ave. which was built in 1919 by Alfred's brother and father Charles and John.

REFERENCES:

Sanborns, directories

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

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

RECORDED BY:

Clark Schoettle

ORGANIZATION:

VT Division for Historic Preservation

DATE RECORDED:

8/25/77

Department of Planning and Zoning

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7142 (TTY)

David White, AICP, Director
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Jay Appleton, GIS Manager
Scott Gustin, AICP, Senior Planner
Mary O'Neil, AICP, Senior Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



TO: Design Advisory Board
FROM: Scott Gustin 
DATE: September 23, 2014
RE: 15-0358CA, 82 University Place

Zone: I Ward: 1
Owner/Representative: University of Vermont

Request: Demolish Angell Hall and Cook Physical Science Building, construct new STEM building with connecting bridge to Votey Hall.

OVERVIEW:

The applicant is requesting approval for demolition of the Cook Physical Sciences building and the adjacent Angele Lecture Center. In their place, the applicant is seeking approval to construct a 193,650 sf Science, Technology, Engineering, & Math (STEM) complex. The project site is located within the University's Central Campus and within the Institutional Core Campus Overlay wherein intensified development is anticipated. The proposed building is comprised of two distinct components of up to 5 stories and is expected to take 4 years to construct.

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

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 project site contains no significant natural features. The project site consists of grassy lawn, hardscape courtyards and walkways, and buildings.

(b) Topographical alterations

Not applicable per 24 VSA, Sec. 4413.

(c) Protection of important public views

Not applicable per 24 VSA, Sec. 4413.

(d) Protection of important cultural resources

Not applicable per 24 VSA, Sec. 4413.

(e) Supporting the use of alternative energy

Not applicable per 24 VSA, Sec. 4413.

(f) Brownfield sites

Not applicable per 24 VSA, Sec. 4413.

(g) Provide for nature's events

Not applicable per 24 VSA, Sec. 4413. Chapter 26: Wastewater, Stormwater, and Pollution Control is a separate city ordinance that governs stormwater and erosion control standards. As a result, the project still must comply with the standards of Chapter 26. As required, an erosion prevention and sediment control plan has been provided as has information relative to post construction stormwater management. Review and approval by the Stormwater Administrator and Conservation Board will be required.

(h) Building location and orientation

The proposed building is located within the University's Central Campus and does not directly front on any public street. Within the Central Campus, the proposed building will have two primary facades, one facing east towards the Central Campus Quadrangle and the other one facing west towards Old Mill and Williams Hall. Both facades contain clearly defined entrances readily visible from the University's interior network of walkways.

(i) Vehicular access

Not applicable per 24 VSA, Sec. 4413.

(j) Pedestrian access

Not applicable per 24 VSA, Sec. 4413.

(k) Accessibility for the handicapped

Not applicable per 24 VSA, Sec. 4413. Applicable accessibility requirements under the City's building code continue to apply.

(l) Parking and circulation

No changes to parking and vehicular circulation are included in this proposal. The site plan depicts several locations for bicycle parking, sheltered and otherwise. Details as to the number of bike parking spaces provided, both short term and long term, will be required prior to Development Review Board review. Per the applicable standards of Article 8, the proposed building will require 10 long-term bicycle parking spaces (1 per 20,000 sf) and 116 short-term bicycle parking spaces (3 per 5,000 sf).

(m) Landscaping and fences

A comprehensive landscaping plan has been provided. Trees will line most of the proposed walkways. Foundation plantings will accent the eastern and western building facades.

Landscaping will also be planted to screen the service bay into the building. Proposed trees consist of a variety of deciduous and evergreen species. Ornamental grasses and shrubs are also proposed.

(n) Public plazas and open space

A south-facing plaza between the two building sections is proposed. It will be constructed of concrete and will afford ample space for pedestrian use. It is immediately adjacent to a terraced outdoor seating space. Both will have southern exposure for maximum solar gain.

(o) Outdoor lighting

Building entries, walkways, and the plaza will be illuminated. A photometric plan has been submitted that depicts acceptable lighting levels throughout. While the photometric plan notes four fixture types (all LEDs), no fixture cut sheets have been provided and are needed.

(p) Integrate infrastructure into the design

New utility lines serving the proposed construction must be buried. A partially below grade service area is proposed at the southeastern corner of the new building. This service area contains a loading dock, dumpster, and compactor. It connects to the campus' interior roadway network and is screened by new landscaping.

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(a) Relate development to its environment

1. Massing, Height, and Scale

The proposed building is very large at almost 200,000 sf and 5 stories. The scale of this building is tempered by the proposed massing. It is split into two distinct sections set apart from one another with a central connection. Extensive glazing is proposed on the north and south elevations and above the main entries on the east and west elevations. Uniform fenestration and partially recessed roof forms also lessen the perceived scale. The building will be set within the interior of the Central Campus and has no direct frontage on any city street. It is set behind and downhill from the iconic Old Mill, Williams Hall, and Billings Library buildings. It is also set downhill and across the green from the even larger Fletcher Allen Health Care facility. It is set far back from Colchester Avenue, behind Votey and Fleming Museum. This interior campus location substantially reduces the building's perceived scale from any public street. The proposed 72' 9" height is acceptable. The eastern building section (the classroom) is located within the Central Campus Height Overlay which allows height up to 140'. The western building section (the lab) is not within the height overlay but is within the UVM Central Core Campus Overlay. Height within this overlay is limited to that of the tallest structure within the Core Campus existing as of January 1, 2008. In this case, the tallest structure is the Health Sciences Research Facility at 73.85' tall. Confirmation of compliance with the second part of this height provision is needed; specifically, that the height of the proposed building does not exceed the plane running parallel to sea level from the top of the Health Sciences Research Facility. In other words, the height above sea level of the proposed building cannot exceed the height above sea level of the Health Sciences Research Facility.

2. Roofs and Rooflines

Not applicable per 24 VSA, Sec. 4413.

3. Building Openings

Not applicable per 24 VSA, Sec. 4413.

(b) Protection of important architectural resources

Not applicable per 24 VSA, Sec. 4413.

(c) Protection of important public views

Not applicable per 24 VSA, Sec. 4413.

(d) Provide an active and inviting street edge

Not applicable per 24 VSA, Sec. 4413.

(e) Quality of materials

Not applicable per 24 VSA, Sec. 4413.

(f) Reduce energy utilization

Not applicable per 24 VSA, Sec. 4413.

(g) Make advertising features complimentary to the site

Signs are noted on the proposed site plans; however, they are not specifically included in this application. All outdoor signs are subject to separate zoning permit review.

(h) Integrate infrastructure into the building design

As noted previously, a dedicated service area is proposed for the loading bay, dumpster, and compactor. Building-mounted mechanical equipment will be fully enclosed within a rooftop penthouse.

(i) Make spaces safe and secure

All building and life safety code, as defined by the building inspector and fire marshal, shall be implemented in the construction of this building. Building entries will be illuminated as noted above.

RECOMMENDED MOTION:

Review and forward to the Development Review Board subject to the following conditions:

1. Bicycle parking details (numbers, types, and locations) per Article 8: Parking, Part 2: Bicycle Parking.
2. Outdoor lighting fixture cut sheets.
3. Confirmation that the height of the western section of the proposed building does not exceed that of the Health Sciences Research Facility as measured above sea level.



CAMPUS PLANNING SERVICES

<http://www.uvm.edu/~plan/>

September 9, 2014

Ken Lerner, Zoning Administrator
Burlington Planning & Zoning Department
149 Church Street
Burlington, Vermont

Re: Request for Zoning Permit COA Level II for University of Vermont New Science, Technology, Engineering and Mathematics (STEM) Laboratory and Classroom Building, 82 University Place

Dear Ken,

The University of Vermont has identified a Science Technology Engineering and Mathematics (STEM) Initiative as its highest priority facilities need in the Capital Plan for the institution. The existing facilities housing the programs of Chemistry, Physics, Engineering and Mathematics and Statistics require major changes to meet current needs.

The existing facilities at Cook Physical Science Building are outdated and do not meet current standards. The University's goal is a modern laboratory and classroom facility to accommodate the teaching and research needs of the STEM programs, to more fully meet the STEM program requirements.

The location of Cook Physical Science Building, Angell Hall, Votey and Perkins is the current location of many of the STEM facilities. The 2006 UVM Campus Master Plan specifies, as part of its general land use premises, that "each college/school should have an integrated identifiable location... (including) building complexes designed to meet programmatic needs (instruction, research and public service), integration and accessibility." (Page 5)

This Project proposes to create integrated, state of the art STEM facilities in the area of the main campus that currently houses many of the STEM study areas. This will contribute to the academic quality of the programs by concentrating resources in one physical area. It is also a best use of limited campus land, concentrating academic functions on the main campus in the area designated for high intensity academic use.

Significant initial efforts were made to renovate the buildings, however modernization to building codes and operational phasing requirements made renovation options impractical. The proposed approach allows for continued operations throughout construction by completing the Lab wing of the building as Cook remains occupied.

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The Project consists of the following components, phased over a period of four (4) years to enable maximum functionality during construction:

1. Demolition of Angell Hall;
2. Construction of lab wing of the new facility in the area of Angell Hall;
3. Demolition of Cook Physical Science Building;
4. Construction of classroom wing of the new facility in the area of Cook;
5. Construction of a building bridge from the lab wing to Votey Hall, over the roadway leading from University Place to the Central Quad.

The area of the Cook Physical Science Building and Angell Hall, where the new facility will be located, is surrounded by Votey Hall and Kalkin to the north, the Central Campus Quadrangle to the east, the Royall Tyler Theater and the Central Heating and Chiller Plant to the south, and Lafayette, Old Mill and Williams to the west. For purposes of this application, the Project Site is located within the University's Central Campus District and within the City's Institutional Zoning District inclusive of the Institutional Campus Core Overlay (ICC-UVM) and partially within the ICC-UVM Central Campus Height Overlay.

The City's Planning & Zoning Department has advised the University that this Project will be reviewed under Certificate of Appropriateness (COA) Level II. This is a permitted use within the ICC-UVM District. This Project does not result in a change of use or increased parking demand because it is replacing existing facilities. The University believes this Project conforms to all the applicable sections of the Burlington Comprehensive Development Ordinance, including Section 4.5.2 Institutional Core Campus Overlay Districts.

The City's Planning & Zoning Department has advised the University that the University of Vermont is subject to limited zoning review per 24 VSA, §4413, *Limitations on Municipal Bylaws*, which specifies that this application may be reviewed only with respect to location, size, height, building bulk, yards, courts, setbacks, density of buildings, off street parking, loading facilities, traffic, noise, lighting, landscaping and screening requirements.

Location & Size: As noted above, this Project is located within the ICC which allows for an increased development scale and intensity.

Height: The classroom wing of the new facility is located within the Central Campus Height Overlay which allows for 140' in height. The proposed building is 70' 8" from entry grade to mid slope.

The lab wing is not within the height overlay; its height is 72' 9". According to §4.5.2(d)5, the maximum allowable height would be the actual height of the tallest existing structure as of January 1, 2008 and located within the core campus district. The Health Sciences Research Facility is 73.85' in height.

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Building Bulk: The architectural proportions, massing and materials have been carefully composed understanding the diverse and historic context of the surrounding campus, resulting in a true facilitation of both programmatic and physical environments.

The exterior facades of brick and cast stone are paired with a slate roof and appointed with high performance metal glazing systems and accents which harken to the historic and hint of the modern program within. See attached elevations.

Yards, courts, setbacks: A southerly facing outdoor tiered teaching/sitting area is designed within the landscape. This project conforms to the setback requirements within the ICC-UVM Overlay.

Density of Buildings: The ICC allows for an increased development scale and intensity. Lot coverage is well under what is permitted. See Project Description for more details.

Parking & Loading: Limited loading dock only. There are no new parking needs as this is a replacement facility. Existing parking campuswide will serve this facility, in the same manner that existing parking, including handicap parking, serves the current Cook building. There will be no changes in number of parking spaces on site.

Traffic: This Project is not expected to increase traffic, as it is an existing use.

Noise: It is expected that the decibel level of the proposed project will be lower than the decibel levels of the current exterior roof mounted system. This is due to a consolidated, more advanced system that will be mounted within the interior of the penthouse.

Lighting: This Project will include exterior LED lighting as per the University standard lighting specifications.

Landscaping: This Project will include extensive landscaping and tree planting. See Planting Plan.

Screening: The loading dock will be screened from the Central Quad with a retaining wall as well as plantings.

The phasing of construction is critical in order to enable continuous instruction during the entire construction period. Angell will be removed, starting May 2015, then the lab wing will be constructed. After the new lab is completed, Cook will be removed in January 2017, and the classroom wing will be constructed. The majority of the project will be completed and occupied by August 2018. The landscaping will be complete by spring 2019.

Therefore the University requests that this permit be extended until the spring of 2019, for a period of four years, in order to complete all construction and landscaping.

The University requests that this permit include Saturday construction. There are no residential areas directly facing the construction site and existing buildings block anyone on Colchester Avenue from seeing or hearing much from this area; The University will closely monitor any construction impacts and work with all neighbors.

The University is working with the Burlington Fire Department, the Burlington Electric Department and the Burlington Department of Public Works on completion of technical details.

Stormwater and Erosion Control:

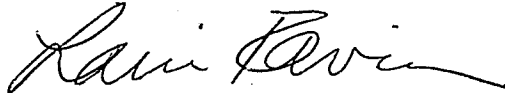
See attached Erosion Prevention & Sediment Control Narrative and permit application, as well as the Stormwater Discharge Narrative. The University will continue to work closely with Megan Moir and copy her on information given to and received from the state stormwater permitting authorities.

As consistent with past practices, the University has met with key community stakeholders including the NPAs to inform about this Project.

The total estimated hard construction cost of the project is \$80M.

Please contact me if you have any further questions or need more information.

Sincerely,



Lani Ravin, AICP, UVM Associate Planner
Campus Planning Services

cc: Linda Seavey, Director, Campus Planning Services
Robert Vaughan, Director, Capital Planning & Management
Todd Merchant, Project Manager, Facilities Design & Construction

ATTACHMENTS:

Zoning Permit Application
Check #1328074 for \$160,110 Application Fee
Attachment 1: Project Description
Attachment 2: Site Location Plan (orthophoto)
Attachment 3: Existing Conditions Photographs
Attachment 4: Stormwater Discharge Narrative

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Attachment 5: Erosion Prevention & Sediment Control Narrative
Attachment 6: Small Project Erosion Prevention & Sediment Control Application

Drawings: EX-1.0 Existing Conditions
 C-001 Overall Civil Grading Plan
 C-002 Overall Civil Erosion Control Plan
 LA-200 Landscape Layout Plan
 LA-400 Planting Plan
 LA-500 Lighting Plan
 A1.6 Roof Plan
 A3.1 Classroom Building Exterior Elevations
 A3.2 Lab Building Exterior Elevations
 A3.3 Perspective Views
 A3.4 Site & Detail Views
 A12.1 Solar Studies

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Project Description:

University of Vermont Science, Technology, Engineering and Mathematics (STEM) Facility

What:

Located in the heart of campus behind University Row, the STEM (Science, Technology, Engineering, and Math) Complex will include two wings: a classroom and office wing that will replace the existing Cook Physical Science Building, and the construction of a new lab facilities wing to the west. The building connects with the existing Votey building via an elevated enclosed pedestrian bridge between the second floor of the lab wing and the third floor of Votey. The design of this project will be visionary and forward looking – befitting a facility whose focus is on the future, yet it will honor the past and complement the important architecture that surrounds it.

Proposed Land Uses:

Academic: Science, Technology, Engineering and Mathematics labs, classrooms, offices and support spaces.

Size of Proposed Project:

Approximately 193,650 square feet (s.f.) facility; this includes four stories plus basement and mechanical penthouse within the roofline. The existing lot coverage will be 47.56% (after demolition of CBW and FAHC boundary adjustment.) This Project will include demolition and new construction, with a net new increase of approximately 13,500 s.f. impervious surface. This will be well within the 70% -- 75% permitted within the ICC. There will be approximately 65,650 net new gross s.f. (interior space).

Building Height:

The lab wing will be 72'9", a foot less than the height of the Health Sciences and Research Facility (HSRF building). The classroom wing is 70'8".

Parking:

Limited loading dock only. There are no new parking needs as this is a replacement facility. Existing parking campuswide will serve this facility, in the same manner that existing parking, including accessible parking, serves the current Cook building. There will be no changes to the number of parking spaces.

Construction Phasing:

Angell will be removed, starting May 2015, then the lab wing will be constructed. After the new lab is completed, Cook will be removed in January 2017, and the classroom wing will be constructed. The building project will be completed by August 2018. The landscaping will be completed by spring 2019.

Architecture and Structure:

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The architecture facilitates the confluence of science, technology, engineering and mathematics departments in the central campus east of Williams and Old Mill, south of Votey and north of the library. To accomplish the Project, the existing Cook and Angell buildings will be removed. Significant initial efforts were made to renovate the buildings, however modernization to building codes and operational phasing requirements made renovation options impractical. The proposed approach allows for continued operations throughout construction by completing the Lab wing of the building as Cook remains occupied.

The building is sited to create new more intimate and functional green spaces complementing pedestrian walkways and activities with accessible walkways, plazas and an outdoor tiered teaching/ sitting area. Trees, plantings and lighting accompany the landscape in keeping with campus standards.

Programmatically an elevated pedestrian bridge links the state of the art new lab and classroom building with the Engineering & Math Programs in the existing Votey building.

The architectural proportions, massing and materials have been carefully composed understanding the diverse and historic context of the surrounding campus, resulting in a true facilitation of both programmatic and physical environments.

The exterior facades of brick and cast stone are paired with a slate roof and appointed with high performance metal glazing systems and accents which harken to the historic and hint of the modern program within. See attached elevations.

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Site Location Map
Cook Physical Science Building & Angell Hall
University of Vermont

Attachment 2

Orthophoto: Spring 2011



Prepared by Campus Planning Services
Date: 9/7/2014

0 80 160 320 Feet



Path: S:\cps\PLANNING\PROJECTS\PLANNING WORK\Lani master.mxd

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University of Vermont
Cook Physical Science Building
Angell Hall
Existing Conditions Photographs
September 2014



Cook, South and West Facades



Cook, East Façade

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Cook, South Façade



Cook, West Façade

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Cook, West Facade



Cook, Angell: North Façade

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Angell, North and West Façade



Angell, North Façade

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Angell, South Façade

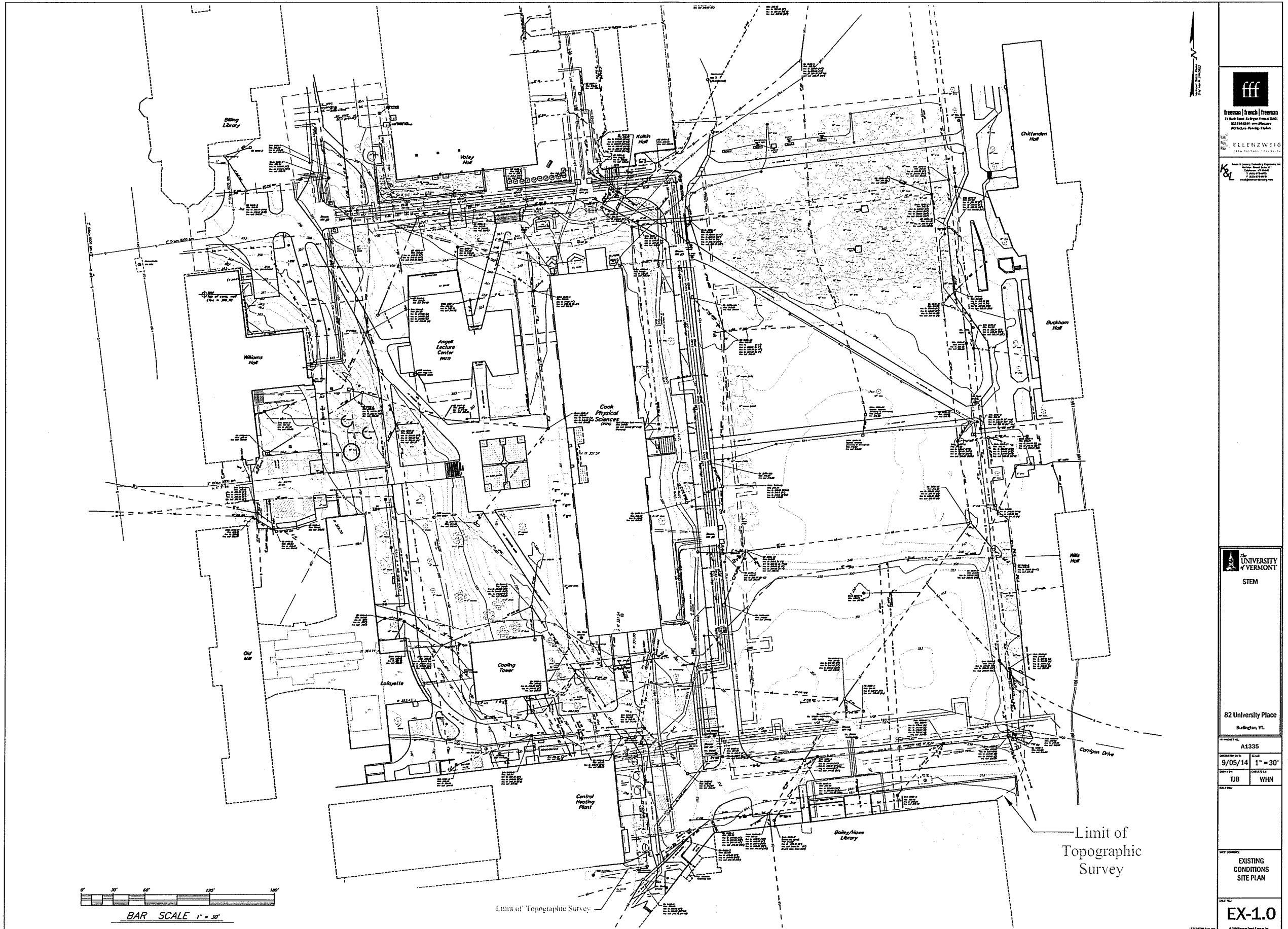


Angell, West Facade

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ARCHITECTS
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THE UNIVERSITY OF VERMONT
STEM

82 University Place
Burlington, VT

A1335	
DATE	9/05/14
SCALE	1" = 30'
DESIGNED BY	TJB
CHECKED BY	WHN

EXISTING
CONDITIONS
SITE PLAN

EX-1.0

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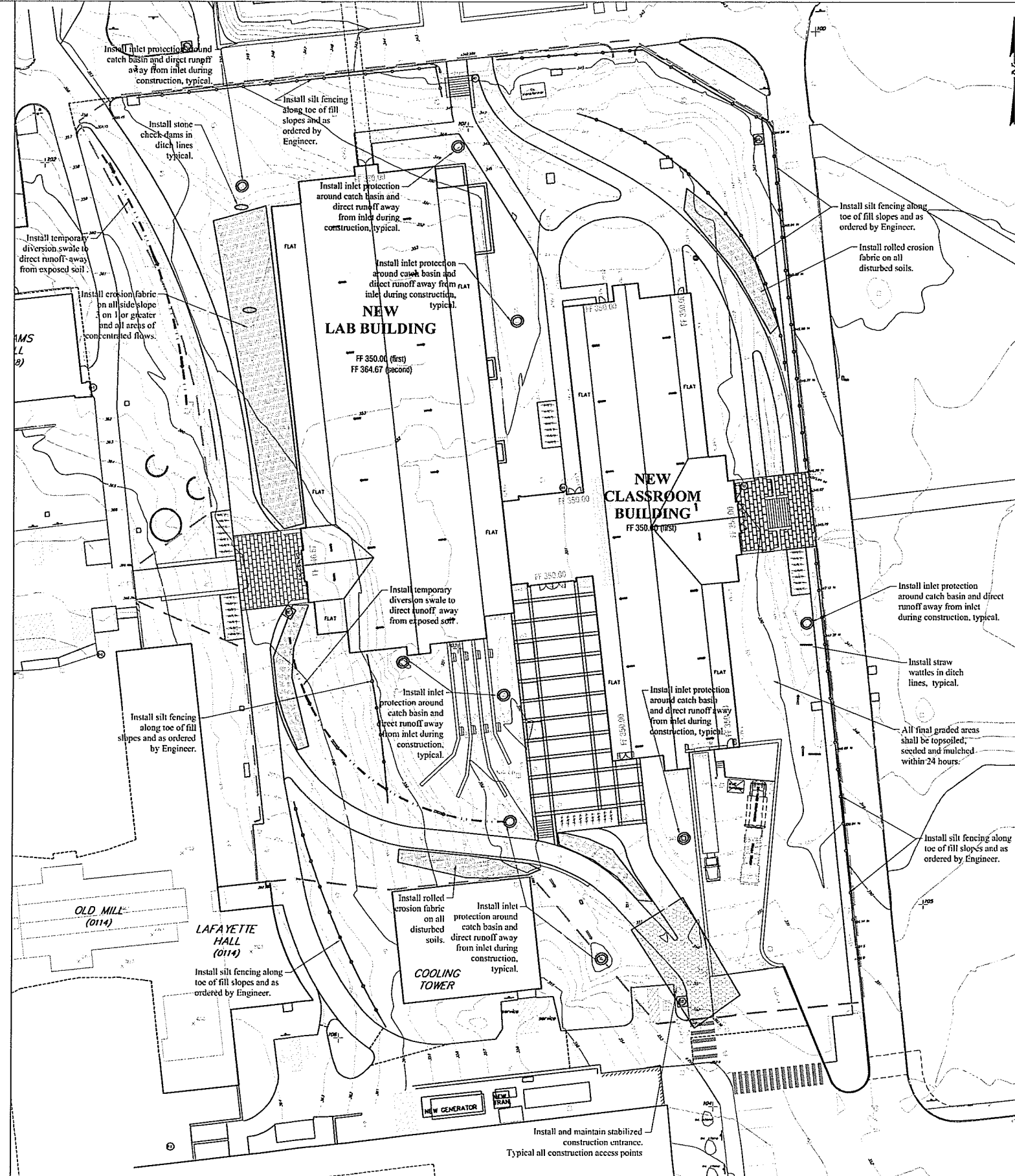
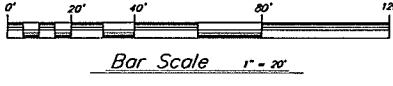
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Erosion Prevention and Sediment Control Notes

- Contractor shall be responsible for complying with all State and Local erosion prevention and sediment control standards and permit requirements during construction.
- The limit of disturbance shall be clearly defined by Contractor's surveyor prior to clearing. Erosion and sediment control devices shall be established to trap sediment on site.
- Trees, woods, and phased disturbance areas shall be cleared and grubbed after disturbance limits and sediment controls are in place. All roots, stumps and deleterious materials shall be removed from the site. The Contractor shall minimize the amount of disturbed land at any given time.
- All erosion control shall be placed as shown on the drawings or as ordered by the Engineer. The Contractor shall maintain the erosion control measures until the Engineer is satisfied that permanent ground cover is established and that further measures are not required. It shall be the responsibility of the Contractor to employ appropriate erosion control as shown on these drawings and any other measures as necessary to trap sediment on site. Refer to permit maintenance and inspection requirements.
- All areas of disturbance shall be permanently or temporarily stabilized as soon as possible and within 48 hours of final grading. All areas of disturbance shall be at least temporarily stabilized within 14 days of initial disturbance. Any disturbance after 14 consecutive days of exposed soil shall be stabilized daily unless the following exceptions apply:
 - Stabilization is not required if earthwork is to continue in the area in the next 24 hours.
 - Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 ft. or greater (e.g. house foundation excavation, utility trenches). Stabilization measures shall include mulch and netting, erosion control matting, crushed stone, gravel, or pavement.
- Unless specifically indicated on the plans acceptable methods of stabilization shall include:
 - Mulching - 2 tons per acre. Approximately 1" uniform thickness. Only allowed on relatively flat areas with minimum up-slope watershed. Mulch must be properly anchored to prevent material from being blown away by wind (windbreaks).
 - Hydroseeding - Applied at the manufacturer's recommended application rate. Contractor shall provide evidence of proper application rate. Hydroseeding is not allowed in areas of concentrated flow.
 - Erosion control matting - S75 matting must be applied to all slopes 3:1 (H:V) or greater (unless otherwise indicated).
 - Crushed stone or crushed gravel - Typically used for temporary access roads and construction staging areas.
 - Paved surfaces (concrete, asphalt, etc.)
 - Weighted impermeable barriers and other materials as approved by the Engineer.
- The Contractor shall use water for dust control.
- The Contractor shall provide inlet protection around all catch basins (existing or new) that collect construction site stormwater runoff.
- A stabilized construction entrance shall be installed and maintained at all construction access locations.
- Any paved roads used by construction vehicles shall be swept daily, or at a greater frequency, if dirt or gravel is tracked from the site. The swept debris shall be immediately removed from face of curb if applicable.
- During construction of underground utility lines the following standards must be met:
 - No more than 500 linear feet of trench may be open at one time.
 - Excavated material must be placed on the uphill side of the trench or immediately hauled to an approved and protected soil stockpile area.
- All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the measures are no longer needed, unless otherwise authorized.
- All sediment removed from sediment control practices shall be placed in an approved soil disposal area. Contractor shall be responsible for providing a permitted off-site soil disposal for the project.
- All areas that do not have established vegetation by October 15th must be stabilized in accordance with the Water Stabilization requirements outlined in the Low Risk Site Handbook.
- After permanent seeding the Contractor shall be responsible for watering, if necessary, to ensure adequate vegetative growth.
- To ensure disturbance is limited to a maximum of 5 acres of exposed soils, the Contractor shall complete each phase before commencing the following phase.

Erosion Control Legend

- Temporary straw wattle
- Inlet protection around catch basin
- Temporary diversion swale
- Temporary Silt Fence
- Temporary erosion control matting
- Temporary stabilized construction entrance



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THE UNIVERSITY OF VERMONT
STEM

82 University Place
Burlington, VT

PROJECT NO.	A1335
DATE	9/08/14
SCALE	1" = 20'
DESIGNED BY	TJB
CHECKED BY	WHN
DATE	9/08/14

OVERALL
CIVIL
EROSION CONTROL
PLAN

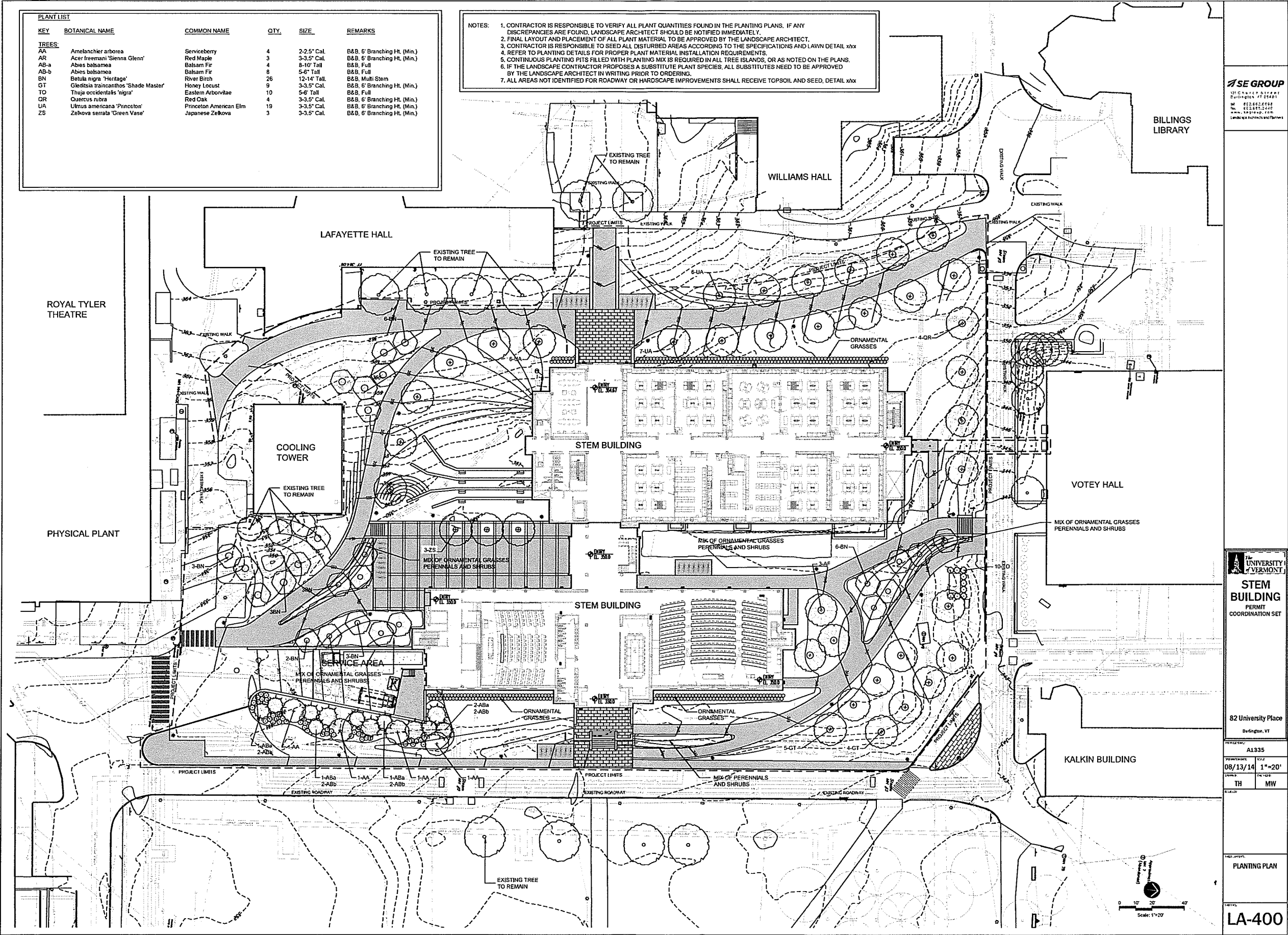
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PLANT LIST				
KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE
TREES:				
AA	Amelanchier arborea	Serviceberry	4	2-2.5" Cal.
AR	Acer freemanii 'Sienna Glenn'	Red Maple	3	3-3.5" Cal.
AB-a	Abies balsamea	Balsam Fir	4	8-10' Tall
AB-b	Abies balsamea	Balsam Fir	8	5-6' Tall
BN	Betula nigra 'Heritage'	River Birch	26	12-14' Tall
GT	Gleditsia triacanthos 'Shade Master'	Honey Locust	9	3-3.5" Cal.
TO	Thuja occidentalis 'nigra'	Eastern Arborvitae	10	5-6' Tall
OR	Quercus rubra	Red Oak	4	3-3.5" Cal.
UA	Ulmus americana 'Princeton'	Princeton American Elm	19	3-3.5" Cal.
ZS	Zelkova serrata 'Green Vase'	Japanese Zelkova	3	3-3.5" Cal.

- NOTES:
1. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL PLANT QUANTITIES FOUND IN THE PLANTING PLANS. IF ANY DISCREPANCIES ARE FOUND, LANDSCAPE ARCHITECT SHOULD BE NOTIFIED IMMEDIATELY.
 2. FINAL LAYOUT AND PLACEMENT OF ALL PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
 3. CONTRACTOR IS RESPONSIBLE TO SEED ALL DISTURBED AREAS ACCORDING TO THE SPECIFICATIONS AND LAWN DETAIL XXX
 4. REFER TO PLANTING DETAILS FOR PROPER PLANT MATERIAL INSTALLATION REQUIREMENTS.
 5. CONTINUOUS PLANTING PITS FILLED WITH PLANTING MIX IS REQUIRED IN ALL TREE ISLANDS, OR AS NOTED ON THE PLANS.
 6. IF THE LANDSCAPE ARCHITECT PROPOSES A SUBSTITUTE PLANT SPECIES, ALL SUBSTITUTES NEED TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO ORDERING.
 7. ALL AREAS NOT IDENTIFIED FOR ROADWAY OR HARDSCAPE IMPROVEMENTS SHALL RECEIVE TOPSOIL AND SEED, DETAIL XXX



SE GROUP
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FAX: 802.662.0442
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LANDSCAPE ARCHITECTS/PLANNERS

THE UNIVERSITY OF VERMONT
STEM BUILDING
PERMIT
COORDINATION SET

82 University Place
Burlington, VT

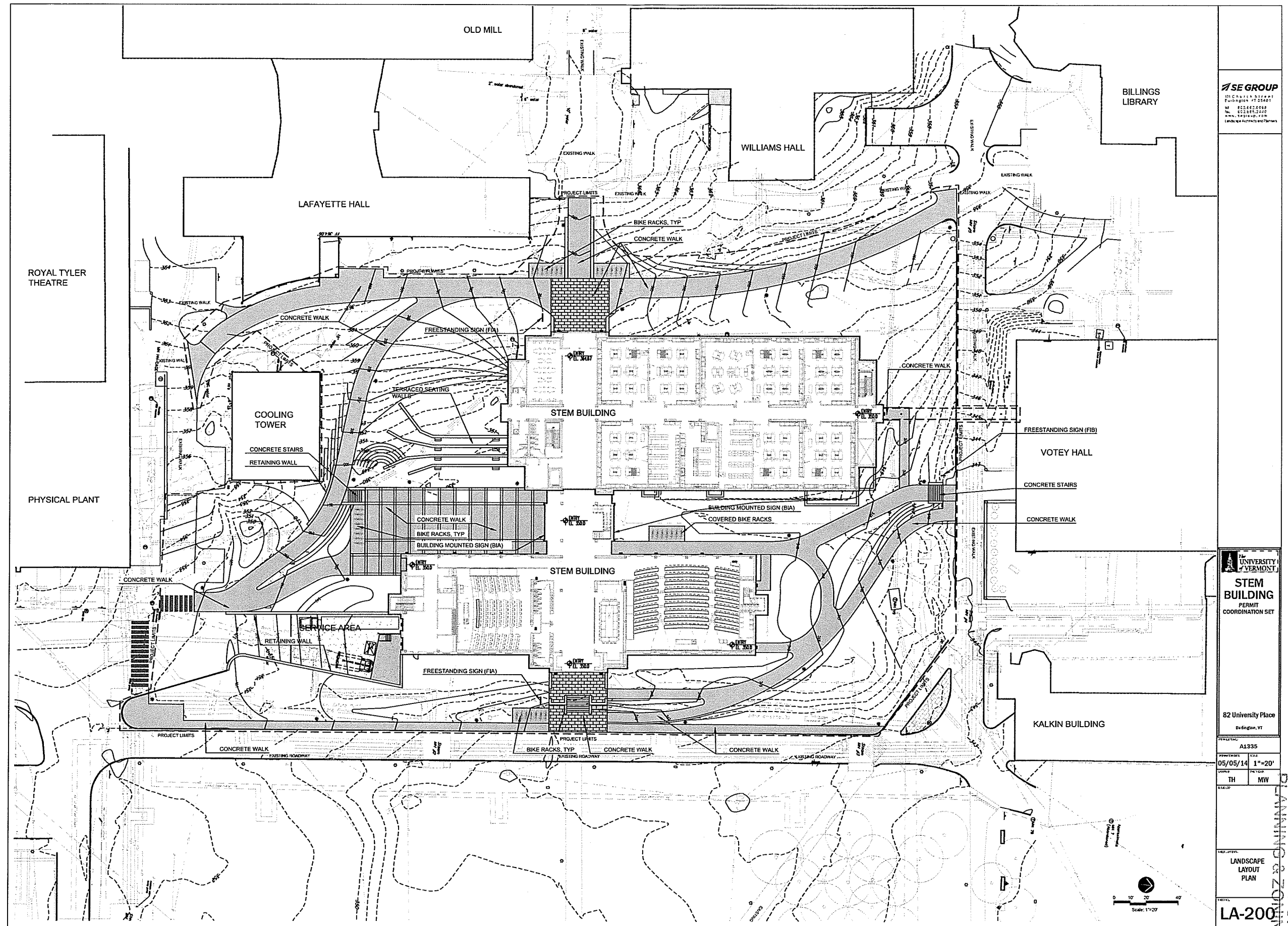
PROJECT: A1335
DATE: 08/13/14
SCALE: 1"=20'
DRAWN BY: TH
CHECKED BY: MW

PLANTING PLAN

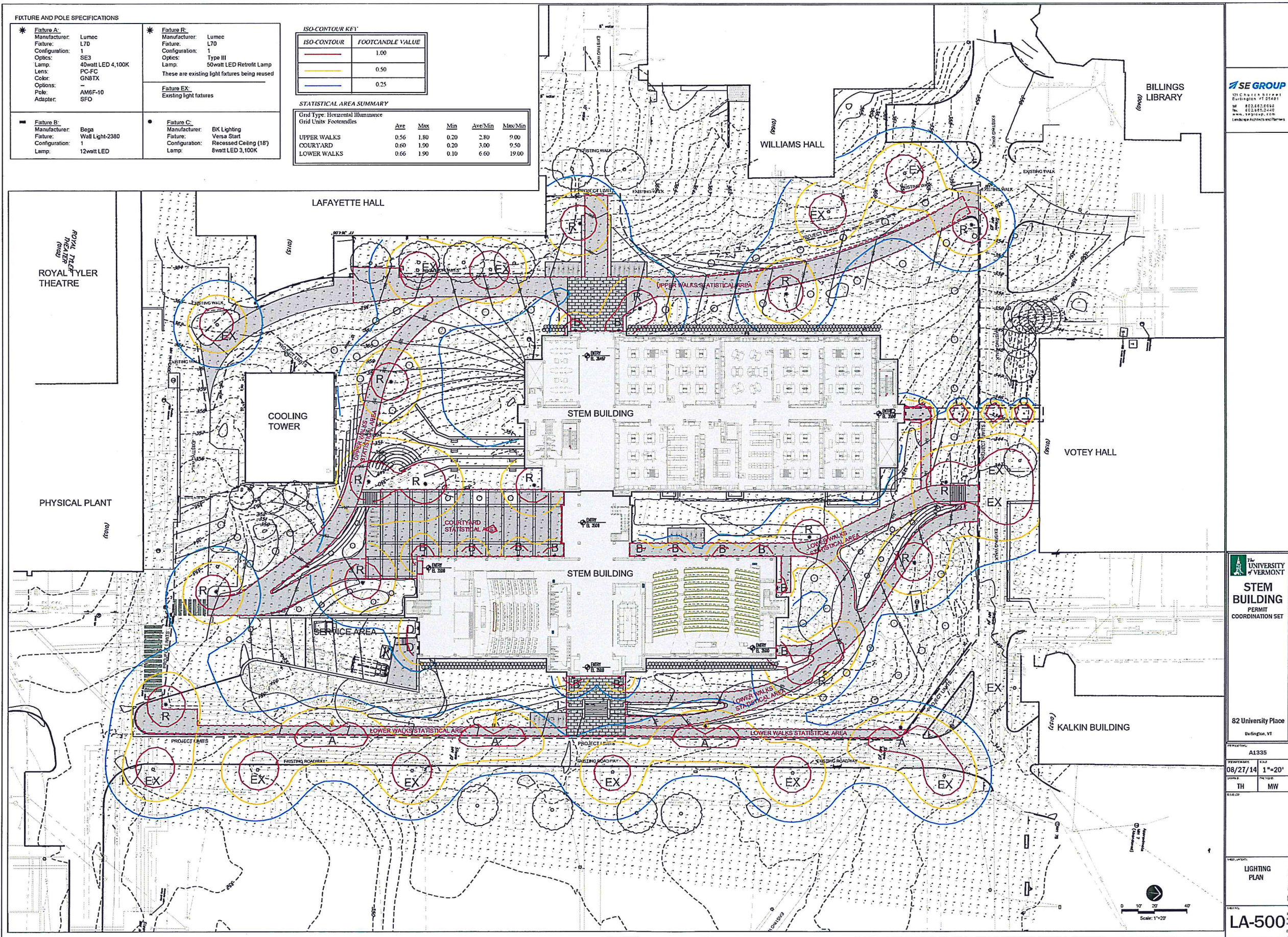
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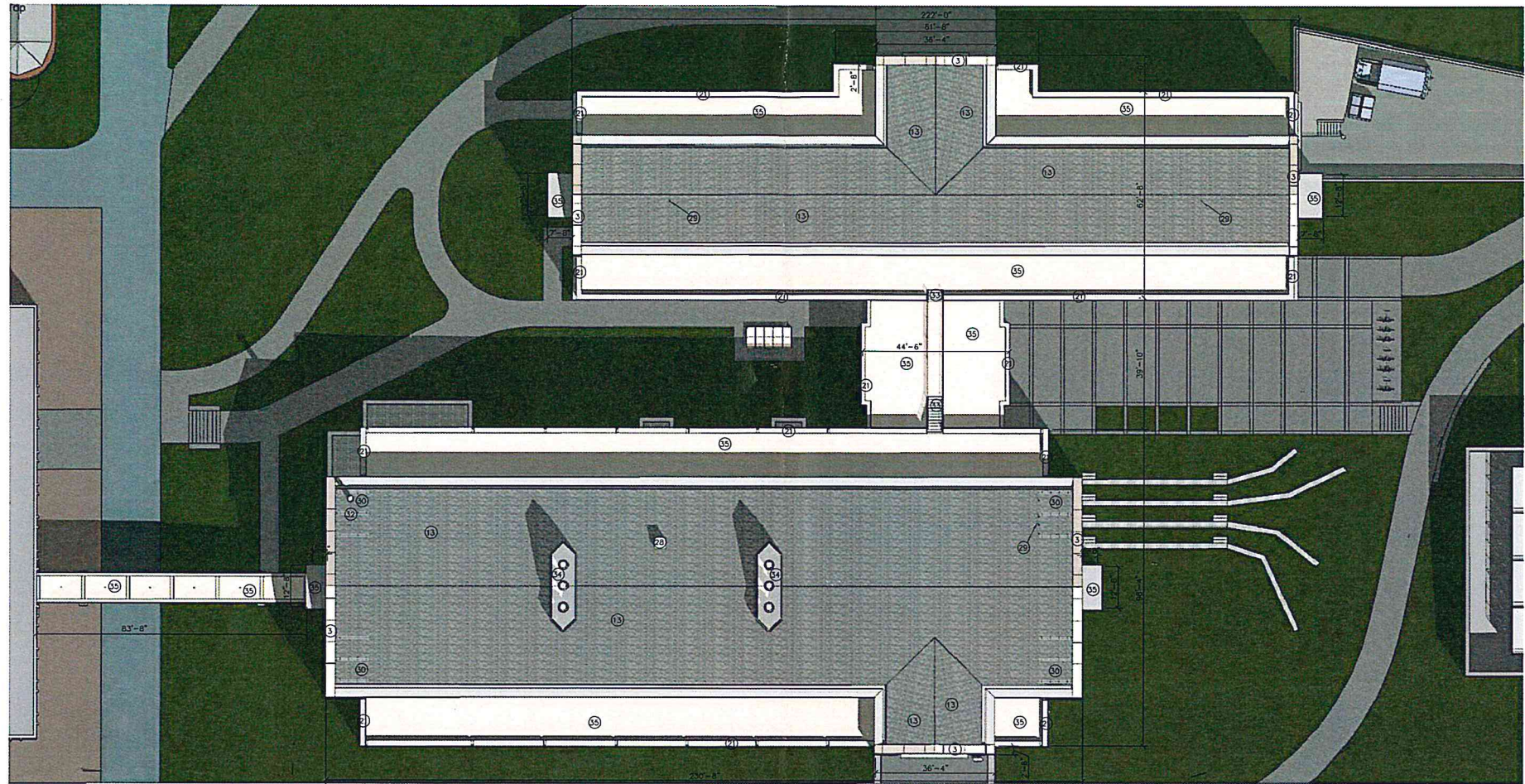
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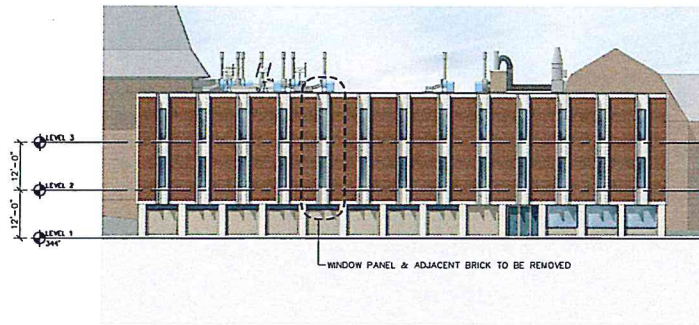


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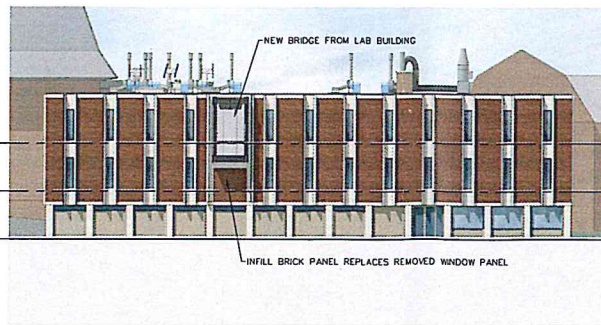


- KEY NOTES**
- | | | |
|---|--|---------------------------------|
| 1. VENEER BRICK, RUNNING BOND | 13. SLATE ROOFING SHINGLES | 25. FDC |
| 2. ALUMINUM COMPOSITE METAL | 14. 2" DEEP x WINDOW WIDTH BRICK VENEER RECESS | 26. HOSE BIB |
| 3. CAST STONE | 15. 2" DEEP x 8" WIDE BRICK VENEER RECESS, STACK BOND | 27. SLOPPER |
| 4. CAST STONE LINTEL | 16. 2" DEEP x 16" WIDE BRICK VENEER RECESS, STACK BOND | 28. ELEVATOR VENT |
| 5. CAST STONE SILL | 17. 8" WIDE SLOPED RECESS, SOLDIER COURSE | 29. PLUMBING VENT(S) |
| 6. GRANITE BASE | 18. ACM MEDALLION | 30. SNOW GUARD |
| 7. INSULATED METAL PANEL | 19. LOW-PROFILE ALUMINUM LOUVER | 31. BWE LOCKERS |
| 8. PAINTED METAL LINTEL | 20. PERFORATED STAINLESS STEEL SCREEN | 32. EMERGENCY GENERATOR EXHAUST |
| 9. ALUMINUM WINDOW (W/INTERGRADED SILL) | 21. PAINTED ALUMINUM PARAPET | 33. ROOF TOP EGRESS STAIRWAY |
| 10. STOREFRONT SYSTEM | 22. CORRUGATED PANEL | 34. STACK ENCLOSURE |
| 11. CURTAIN WALL SYSTEM | 23. OMNI-BEGA 2300 LED WALL PACK | 35. MEMBRANE ROOF |
| 12. INSULATED METAL PANEL | 24. STROBE & HORN | 36. PAINTED METAL DOOR |
| | | 37. KNOX BOX |
| | | 38. GAS METER |

1 STEM COMPLEX ROOF PLAN
1"=16'-0"



2 VOTEY BEFORE BRIDGE ADDITION
1"=16'-0"



3 VOTEY AFTER BRIDGE ADDITION
1"=16'-0"

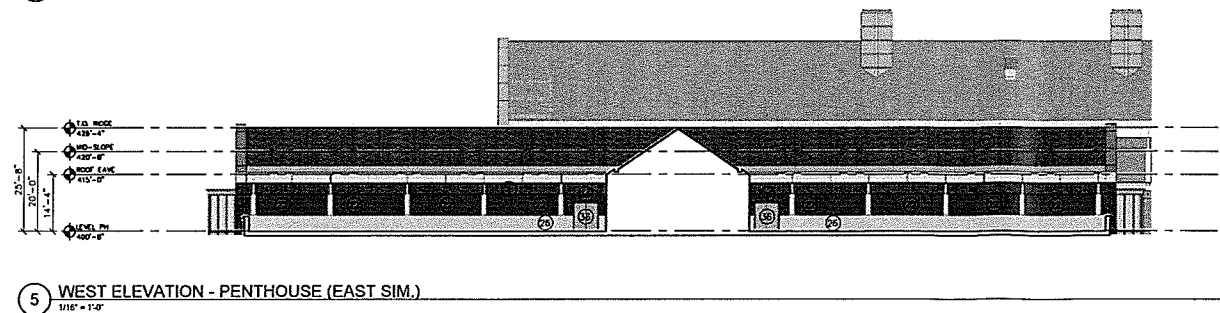
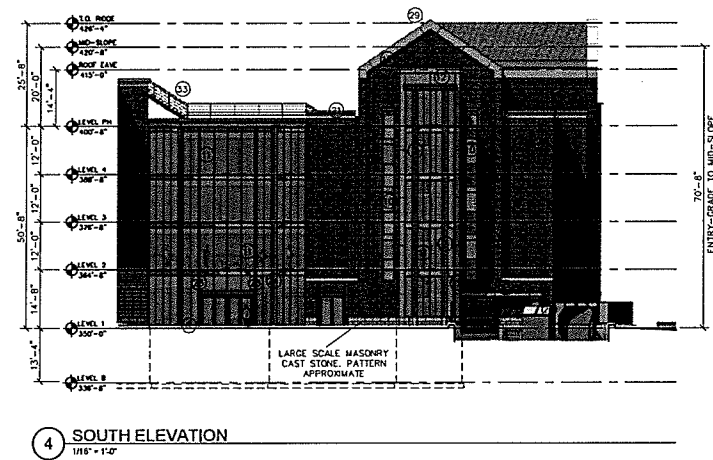
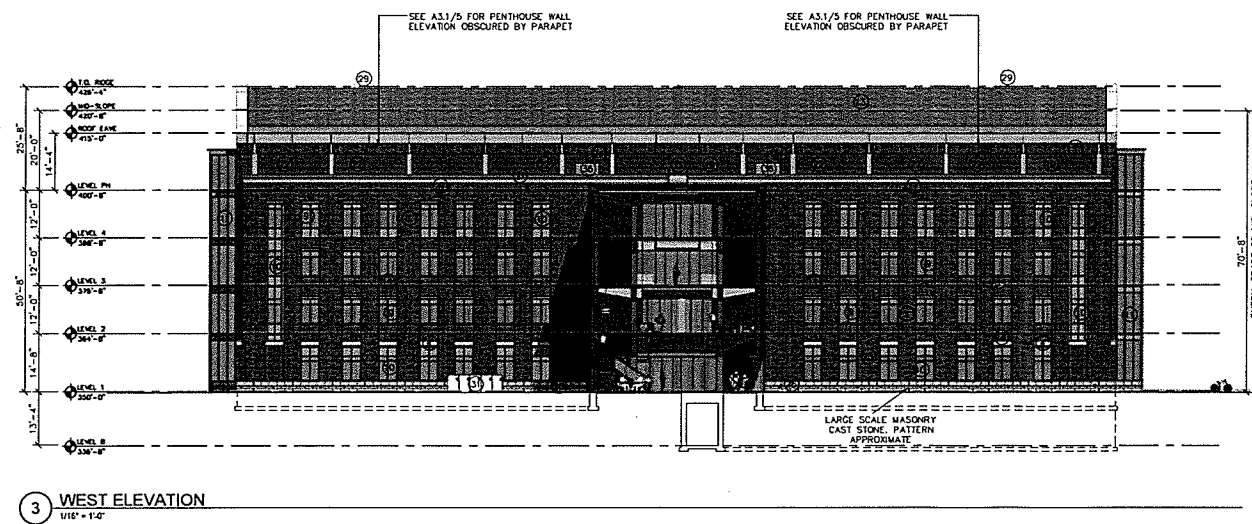
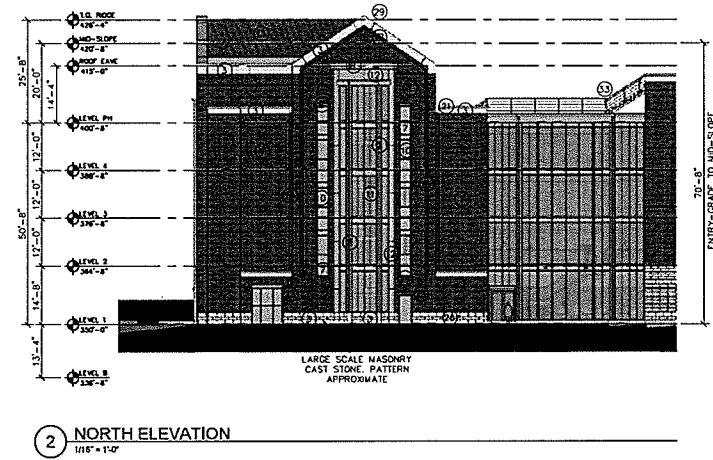
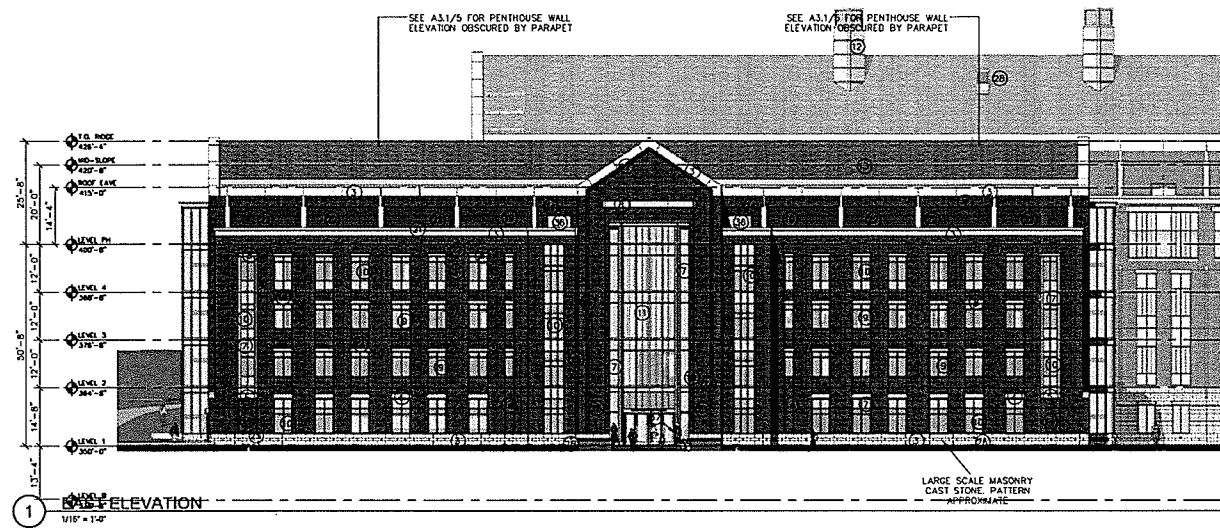


4 VOTEY BEFORE BRIDGE ADDITION
N/A



5 VOTEY AFTER BRIDGE ADDITION
N/A

0 8' 16' 32'
SCALE: 1/16" = 1'-0"



- KEY NOTES**
- | | | |
|--|--|---------------------------------|
| 1. VENEER BRICK, RUNNING BOND | 13. SLATE ROOFING SHINGLES | 25. FDC |
| 2. ALUMINUM COMPOSITE METAL | 14. 2" DEEP x WINDOW WIDTH BRICK VENEER RECESS | 26. HOSE BB |
| 3. CAST STONE | 15. 2" DEEP x 8" WIDE BRICK VENEER RECESS, STACK BOND | 27. SCUPPER |
| 4. CAST STONE LINTEL | 16. 2" DEEP x 16" WIDE BRICK VENEER RECESS, STACK BOND | 28. ELEVATOR VENT |
| 5. CAST STONE SILL | 17. 8" WIDE SLOPED RECESS, SOLDIER COURSE | 29. PLUMBING VENT(S) |
| 6. GRANITE BASE | 18. ADM MEDALLION | 30. SNOW GUARD |
| 7. INSULATED METAL PANEL | 19. LOW-PROFILE ALUMINUM LOUVER | 31. BONE LOCKERS |
| 8. PAINTED METAL LINTEL | 20. PERFORATED STAINLESS STEEL SCREEN | 32. EMERGENCY GENERATOR EXHAUST |
| 9. ALUMINUM WINDOW (W/INTERGRADED SKI) | 21. PAINTED ALUMINUM PARAPET | 33. ROOF TOP EGRESS STAIRWAY |
| 10. STOREFRONT SYSTEM | 22. CORRUGATED PANEL | 34. STACK ENCLOSURE |
| 11. CURTAIN WALL SYSTEM | 23. QUNE-BECA 2500 LED WALL PACK | 35. MEMBRANE ROOF |
| 12. INSULATED METAL PANEL | 24. STROBE & HORN | 36. PAINTED METAL DOOR |
| | | 37. KNOX BOX |
| | | 38. GAS METER |

0 8' 10' 32'
SCALE: 1/16" = 1'-0"



82 University Place
Burlington, VT

PROJECT NO: A1335
SUBMISSION DATE: 09/28/11
SCALE: 1/16"
GROUP BY: PH
CHECKED BY: ELENZWEIG

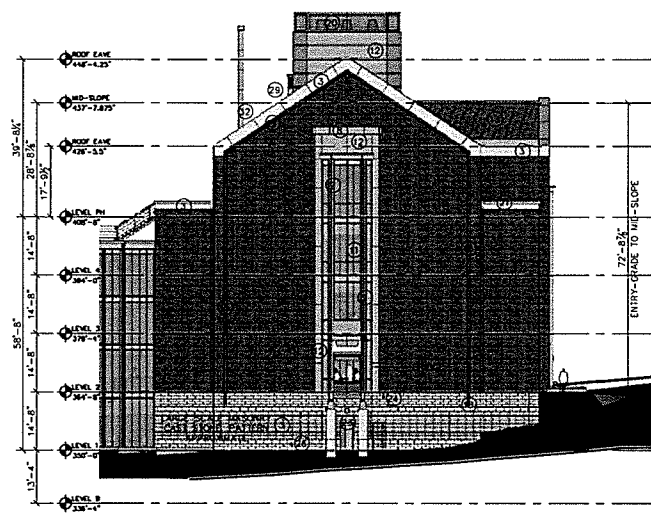
ZONING SUBMISSION

CLASSROOM BLDG
EXTERIOR
ELEVATIONS

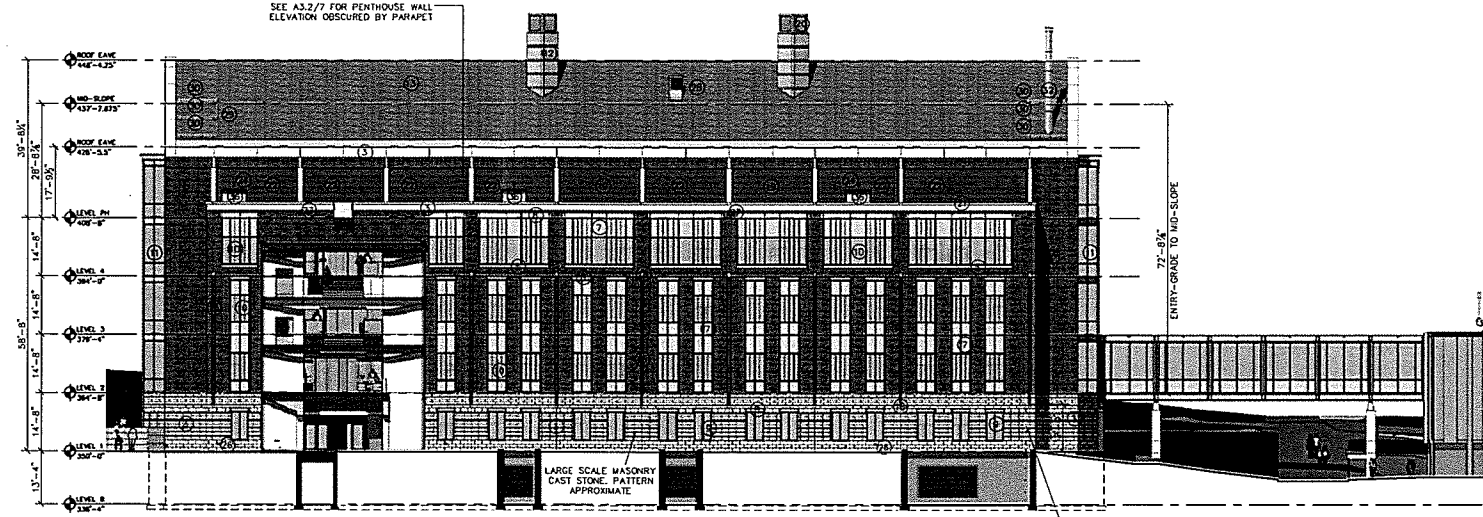
SHEET NO: A3.1

DEPARTMENT OF
PLANNING & ZONING

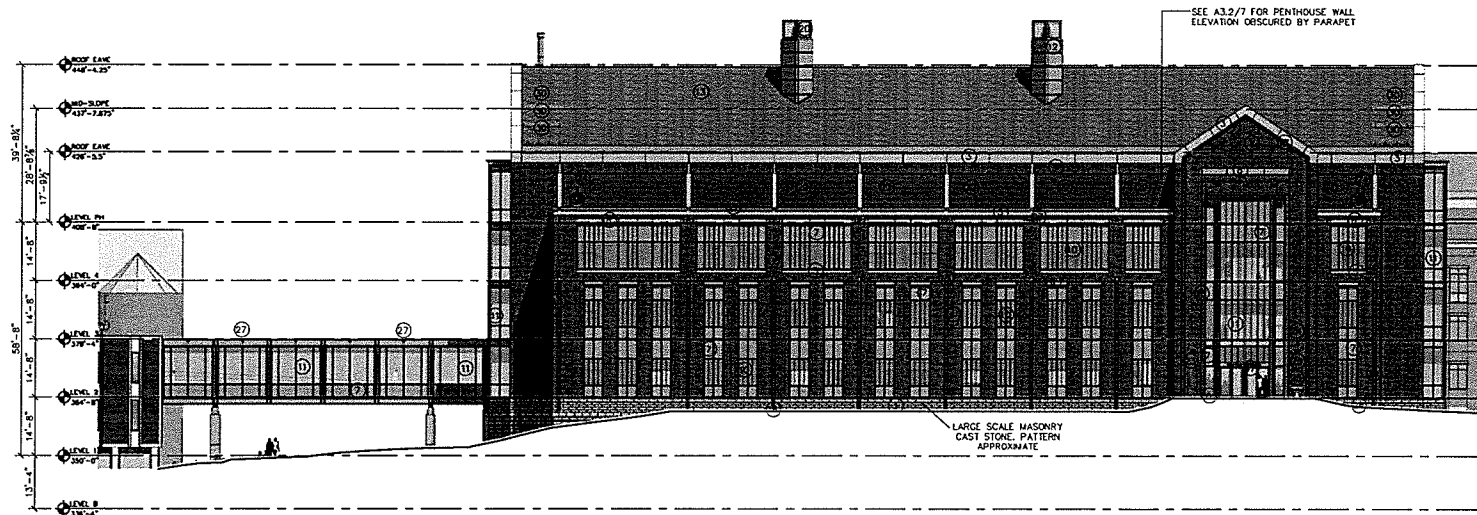
SEP 09 2011



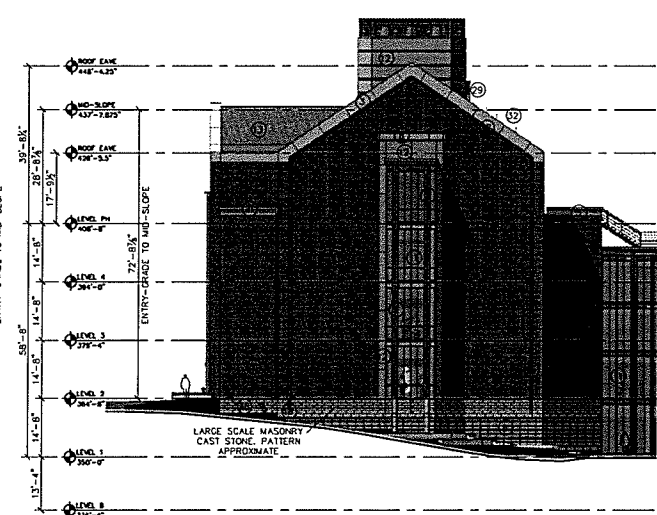
1 NORTH ELEVATION
1/16" = 1'-0"



2 EAST ELEVATION
1/16" = 1'-0"



3 WEST ELEVATION
1/16" = 1'-0"



4 SOUTH ELEVATION
1/16" = 1'-0"

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10. STOREFRONT SYSTEM	22. CORRUGATED PANEL	34. STACK ENCLOSURE
11. CURTAIN WALL SYSTEM	23. OMNI-BEGA 2380 LED WALL PACK	35. MEMBRANE ROOF
12. INSULATED METAL PANEL	24. STAIRS & HORN	36. PAINTED METAL DOOR
		37. KNOX BOX
		38. GAS METER



5 WEST ELEVATION - PENTHOUSE (EAST SIM.)
1/16" = 1'-0"

0 8' 16' 32'
SCALE: 1/16" = 1'-0"



① STEM COMPLEX - LOOKING SOUTHWEST
NTS



③ STEM COMPLEX - LOOKING NORTHEAST
NTS



⑤ STEM COMPLEX - LOOKING SOUTHEAST
NTS



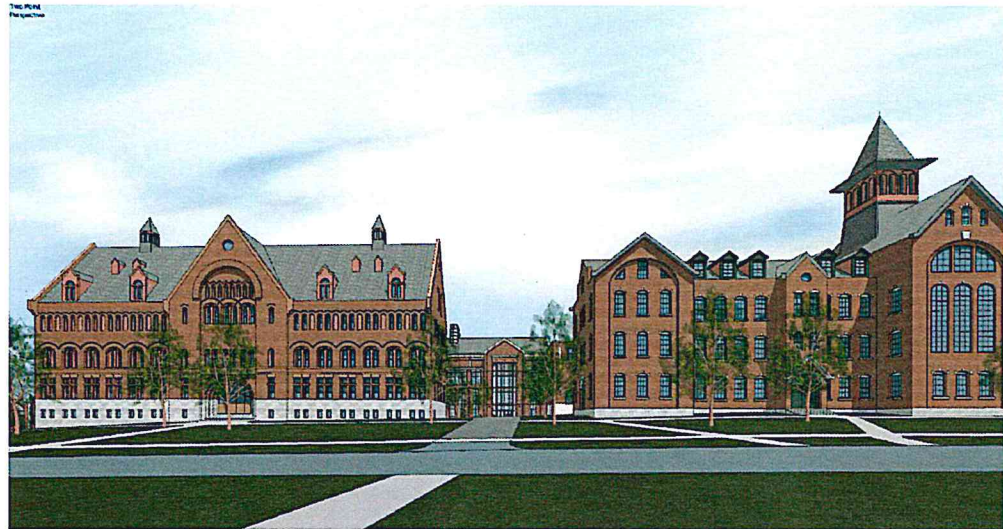
② STEM COMPLEX - LOOKING NORTH
NTS



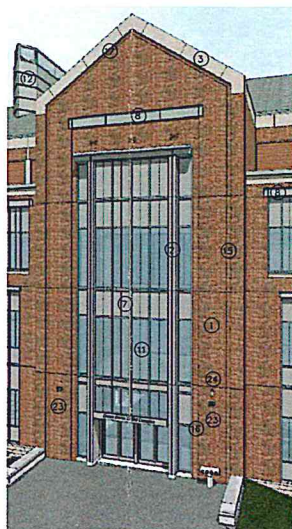
④ STEM COMPLEX - LOOKING EAST
NTS



⑥ STEM COMPLEX - THE BRIDGE
NTS



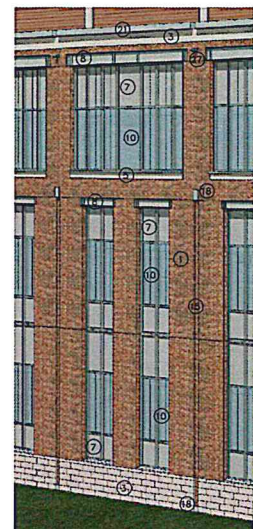
1 VIEW OF STEM COMPLEX FROM UNIVERSITY PLACE
N/A



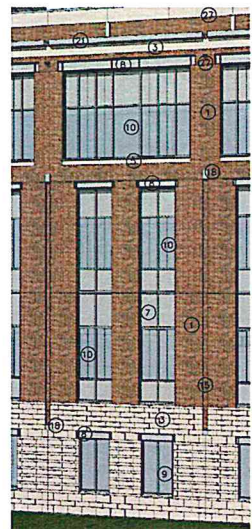
2 LAB BLDG ENTRY GABLE
N/A



3 LAB BLDG ENTRY
N/A



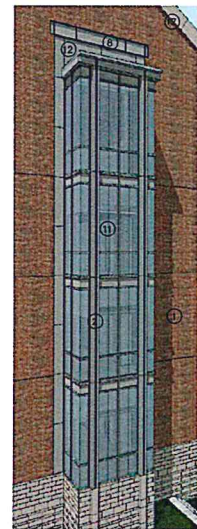
3 LAB BLDG WEST BAY
N/A



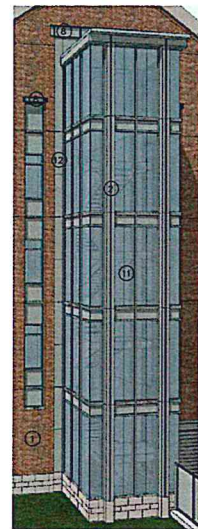
4 LAB BLDG EAST BAY
N/A



5 SITE SECTION - LOOKING NORTH
N/A



6 LAB BLDG END BAY
N/A



7 CLASS BLDG STAIR BAY
N/A



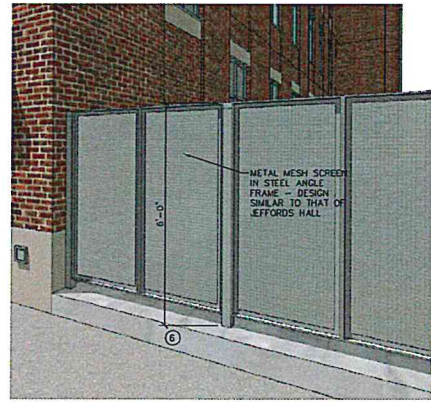
8 CLASS BLDG ENTRY GABLE
N/A



9 CLASS BLDG WINDOW BAYS
N/A



10 THE CONNECTOR
N/A



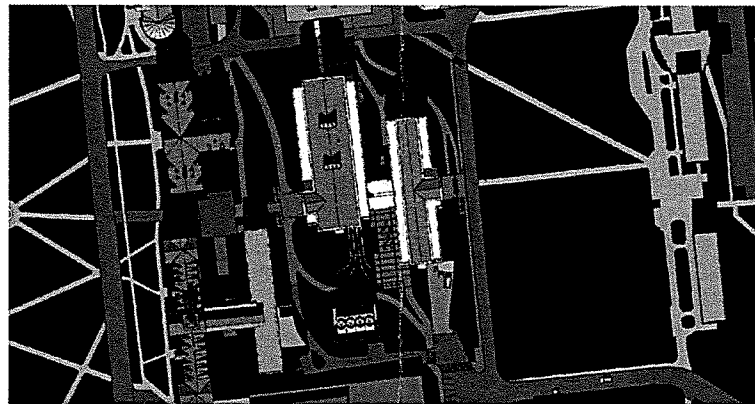
11 5 SECURE BIKE LOCKERS (10 BICYCLES)
N/A

12 METAL PANEL SCREEN @ SERVICE AREA
N/A

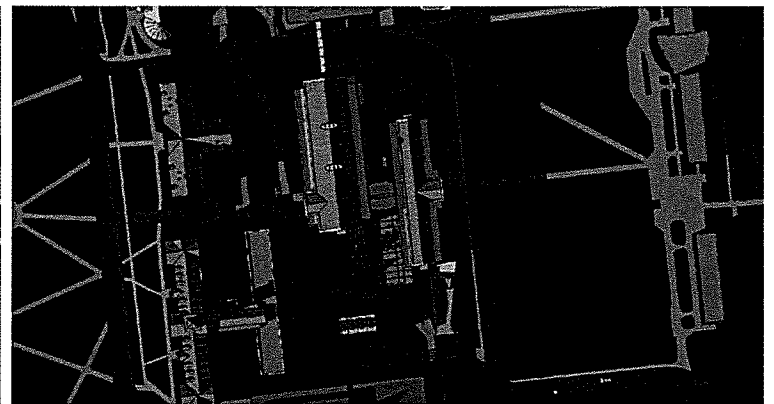
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		37. KNOX BOX
		38. GAS METER



1 EQUINOX - 9:00AM
N/A



2 EQUINOX - 12:00 PM
N/A



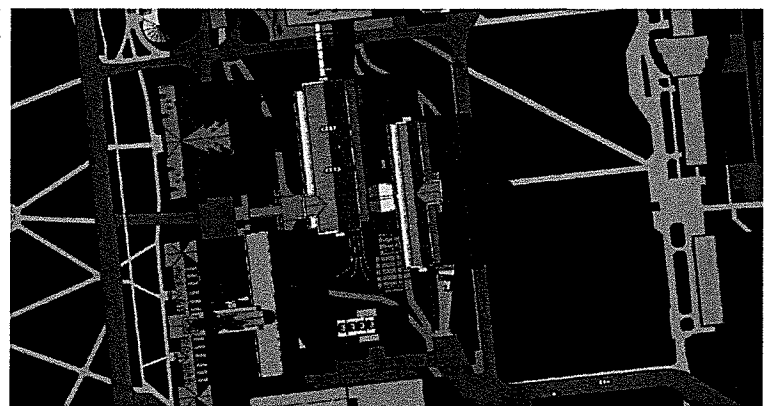
3 EQUINOX - 4:00PM
N/A



4 SUMMER SOLSTICE - 9:00AM
N/A



5 SUMMER SOLSTICE - 12:00 PM
N/A



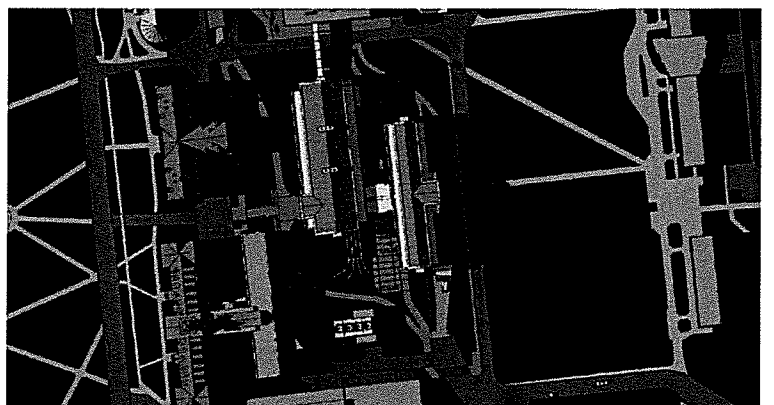
6 SUMMER SOLSTICE - 4:00PM
N/A



7 WINTER SOLSTICE - 9:00AM
N/A



8 WINTER SOLSTICE - 12:00 PM
N/A



9 WINTER SOLSTICE - 4:00PM
N/A

BRIGHT STREET COOPERATIVE

Final Plat Application
to the City of Burlington



APPLICANT: CHAMPLAIN HOUSING TRUST

September 05, 2014



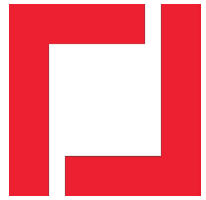
Duncan Wisniewski Architecture

Bright Street Cooperative

Prepared for: The City of Burlington DRB

Prepared by: Duncan Wisniewski Architecture (Taryn Barrett and Michael Wisniewski)

September 5, 2014



cover letter

The Champlain Housing Trust (CHT), partnered with Housing Vermont (HVT), has the honor of presenting the Bright Street Cooperative final plat application to the City of Burlington Development Review Board. This application includes new items listed in the Index on the next page along with all of the original drawings. For the project overview and narrative, section 106 historic buildings evaluation report, structural assessment report, and the traffic evaluation see the appendix from the preliminary plat application.

The following items are responses to items listed in the Preliminary Plat Approval Comments:

2. See attached Fire Marshall's email agreeing with accuracy of minutes when we collaborated to define emergency vehicle access to the site.
3. Boundary Survey attached.
4. There are no proposed phases to this project. Plans are to begin construction in the spring of 2015 and finish approximately 12 months after.
5. Corrective Action Plan is currently a work in progress.
6. Proposed construction hours 7am-5pm weekdays and 8am-5pm weekends.
7. This project will use infiltration chambers to infiltrate the 1 year storm event. Almost all of the impervious runoff will be directed to the chambers. The driveway to the parking garage and minor sidewalk runoff are the only areas that do not make it to the infiltrators. Megan Moir and Steve Roy have reviewed the design. Final details are shown on the detail sheets.
8. See attached RAB drawings for outdoor lighting including the added garage lighting plan and the revised entry & walkway lighting plan.
9. The original bike parking called for 12 exterior spaces and 11 interior spaces. We would like to add 5 additional spaces (likely inside), probably more. See attached details.
10. Affordability: There will be three tiers of income targeting – 14 will be affordable to households earning less than 50% of Area Median Income (AMI); 22 will be targeted to households earning less than 60% of AMI and the remaining six units will be market-rate units available for rent without a maximum income limit.
11. Snow on the garage entrance ramp will be handled with an integrated melting system. Removal from walkways will be blown into adjacent green belts and larger amounts will be stored at adjacent patios.
12. See the attached sign-off from the Vermont Division of Historic Preservation.
13. CHT, HVT, & DWA would like to request a waiver to the 6 mo. period between demolition and the commencement of new construction. We hope to demolish 114 Archibald St in November 2014 because it will be vacant and potentially become a threat to public safety. Although we expect to begin construction in May, a slightly later start would be outside of the 6 mo. window.

Sincerely

Michael Wisniewski

INDEX

forms (Attached)

- ZONING PERMIT APPLICATION FORM
APPLICATION FEE: ECC \$6.9 Million = \$14,010 Fee.
 - \$10 Filing Fee +
 - \$300 per lot or unit = \$12,600 or,
 - \$200 + \$2/\$1,000 ECC = \$14,000 or,
 - \$.10/sq. ft. = \$6,433.
- Development Review Fee: (due prior to release of DRB approval)
 - \$3/\$1,000 ECC = \$20,700 or,
 - \$0.20/sq. ft. = \$12,865.

text

- MEETING MINUTES: FIRE MARSHALL OFFICE AND DWA (AGREES W/ SITE ACCESS CONDITIONS AS DESIGNED)
- DIVISION OF HISTORIC PRESERVATION SIGN-OFF

appendix

- REVISED RAB LIGHTING CUT SHEETS
- BIKE PARKING CUT SHEETS

drawings (Bound Separately)

- 1.0 ARCHITECTURAL SITE PLAN 1:20
- 2.0 AERIAL PERSPECTIVE
- 3.0 STREET PERSPECTIVE
- 4.0 CONTEXT PHOTOGRAPHS
- 5.1 35-PLEX ELEVATIONS (minor revisions)
- 5.2 35-PLEX ELEVATIONS (minor revisions)
- 5.3 35-PLEX GARAGE PLAN (minor revisions)
- 6.0 TRINITY ELEVATIONS (minor revisions)
- 7.0 DUPLEX ELEVATIONS (minor revisions)
- 8.0 ARCHITECTURAL WALL CROSS SECTIONS
- L1.0 EXISTING TREE AND FENCING DEMO DIAGRAM
- L2.0 PLANTING PLAN
- RAB SITE LIGHTING PLAN (revised)
- RAB WALKWAY LIGHTING PLANS (revised)
- RAB GARAGE LIGHTING PLANS (added)
- RAB SITE LIGHTING SCHEDULES (revised)
- EX-1 EXISTING CONDITIONS PLAN
- SP-1 SITE PLAN
- SP-2 SITE DEMOLITION PLAN
- CD-1 CIVIL DETAILS
- CD-2 CIVIL DETAILS
- CD-3 CIVIL DETAILS
- CD-4 CIVIL DETAILS
- CD-5 CIVIL DETAILS
- CD-6 CIVIL DETAILS
- CD-7 EROSION PREVENTION & SEDIMENT CONTROL
- BOUNDARY SURVEY, LANDS OF CHAMPLAIN HOUSING TRUST (added)



Department of Planning and Zoning

149 Church Street, City Hall
Burlington, VT 05401-8415
Phone: (802) 865-7188
Fax: (802) 865-7195

www.burlingtonvt.gov/pz

Zoning Permit Application

Use this form for ALL zoning permit applications. See the relevant checklist for specific requirements.

PROJECT LOCATION ADDRESS: 112-114 ARCHIBALD; 27, 35-39, 47 BRIGHT STREET

PROPERTY

OWNER*: c/o AMY DEMETROWITZ

*If condominium unit, written approval from the Association is also required

POSTAL ADDRESS: 88 KING STREET

CITY, ST, ZIP: BURLINGTON, VT 05401

DAY PHONE: 802-862-6244

EMAIL: AMY.DEMETROWITZ@CHAMPLAINHOUSINGTRUST.ORG

SIGNATURE:

[Signature]
I am the owner. In addition, I duly authorize the applicant (if noted) to act on my behalf for all matters pertaining to this zoning permit application.

APPLICANT: C/O MICHAEL WISNIEWSKI

POSTAL ADDRESS: 255 SOUTH CHAMPLAIN ST

CITY, ST, ZIP: BURLINGTON, VT 05401

DAY PHONE: 802-864-6693

EMAIL: MICHAELW@DUNCANWISNIEWSKI.COM

SIGNATURE:

[Signature]

Description of Proposed Project: DEVELOP 42 NEW HOUSING UNITS TO FORM A P.U.D. AS A HOUSING COOPERATIVE. THE MAIN PEDESTRIAN ACCESS IS FROM BRIGHT STREET AND VEHICULAR ACCESS IS OFF OF ARCHIBALD STREET. THE PROJECT HAS A MIX OF UNIT TYPES, OUTDOOR SPACES, AND UNDERGROUND PARKING.

Existing Use of Property: ☐ Single Family ☒ Multi Family: # 14 Units ☐ Other: _____

Proposed Use of Property: ☐ Single Family ☒ Multi Family: # 44 Units ☐ Other: _____

Will 400 sq ft or more of land be disturbed, exposed and/or developed? Yes ☒ No ☐

(If yes, you will need to provide the 'Erosion Prevention and Sediment Control Plan' questionnaire with a site plan)

For Single Family & Duplex, will total impervious area be 2500 sq ft or more? Yes ☒ No ☐

(If yes, you will need to provide the 'Stormwater Management Plan' questionnaire with a site plan)

Are you proposing any work within or above the public right of way? Yes ☒ No ☐

(If yes, you will need to receive prior approval from the Department of Public Works)

Estimated Construction Cost (value)*: \$ 6,900,000.00

(*Estimated cost a typical contractor would charge for all materials and labor, regardless of who physically completes the work)

- Within 30 days of submission, the permit application will be reviewed for completeness, and, if complete, will be processed administratively or referred to a board for review. All permit approvals or denials are subject to an appeal period (15 days for administrative permit; 30 days for board permit).
- A building (and/or electrical, mechanical, plumbing, curb cut) permit will also be required. Contact the Department of Public Works at 802-863-9094 to inquire.
- Please ask for assistance if you have any questions about filling out this form. Call the Planning and Zoning at 802-865-7188, or visit the office in the lower level of City Hall, 149 Church Street.

Office Use Only: Zone: _____ Eligible for Design Review? _____ Age of House _____ Lot Size _____

Type: SN _____ AW _____ FC _____ BA _____ COA 1 _____ COA 2 _____ COA 3 _____ CU _____ MA _____ VR _____ HO _____ SP _____ DT _____ MP _____

Check No. _____ Amount Paid _____ Zoning Permit # _____

From: Barry Simays BSimays@burlingtonvt.gov
Subject: RE: Bright Meeting 04_Fire Department
Date: April 7, 2014 at 12:14 PM
To: Michael Wisniewski michaelw@duncanwisniewski.com, Demetrowitz Amy amy.demetrowitz@champlainhousingtrust.org, Cobb Sue Sue@hvt.org, Nedde Bill Bill.Nedde@krebsandlansing.com, Joseph Keenan JKeenan@burlingtonvt.gov, Jeff Hodgson jhodgson@wagnerhodgson.com, Bonnie Kirn Donahue bkirn@wagnerhodgson.com, Taryn Barrett tarynb@duncanwisniewski.com

Michael,

Thank you for providing this summary. The content accurately represents our discussion at this office on 4/1/2014. As stated during the meeting, this office will require a standpipe system in the 35-plex based on significant firefighter access concerns presented by building position, and the excessive hose-lays that would otherwise be required to fight a fire in a remote unit on the top floor.

Thank you again,

BC Barry Simays, CFI
Fire Marshal
Burlington Fire Department
132 North Avenue
Burlington, VT 05401
(802) 864-5577
(802) 658-7665 (Fax)
bsimays@burlingtonvt.gov

Non-Discrimination

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at 865-7145.

From: Michael Wisniewski [michaelw@duncanwisniewski.com]
Sent: Wednesday, April 02, 2014 20:06
To: Demetrowitz Amy; Cobb Sue; Nedde Bill; Joseph Keenan; Barry Simays; Jeff Hodgson; Bonnie Kirn Donahue; Taryn Barrett
Subject: Bright Meeting 04_Fire Department

Hi All,

Here are the notes from our meeting with Fire Department yesterday.

Michael

Michael Wisniewski
Duncan • Wisniewski Architecture
255 South Champlain St.
Burlington, VT 05401
802.864.6693 ext. 2#
michaelw@duncanwisniewski.com

DATE 04.01.14

FROM Michael Wisniewski & Taryn Barrett, Duncan • Wisniewski Architecture

TO Amy Demetrowitz - CHT
Sue Cobb - HVT
Jeff Hodgson, Bonnie Kirn Donahue - WH
Bill Nedde - KL
Joe Keenan, Barry Simays - BFD

RE **BRIGHT STREET - Fire Department Access/Requirements Review**

GENERAL

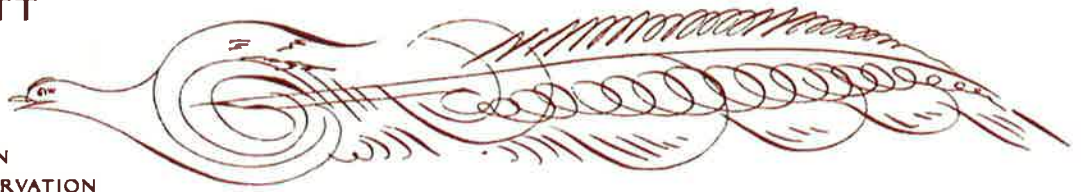
- We reviewed the latest drawing presented by DWA, showing all revisions to date including many changes since the last BFD input during technical review.
- BFD would like to access the 35-Plex aerially with either Engine 2 or 4 along the ramp at the Archibald entrance. In the original design the duplex was built over this ramp precluding fire truck access. This ramp starts out at 5.4%, decreases to 5% at the 2 parking spaces, then continues down to the parking garage at a maximum 10.2% slope. These 'straight stick' aerials can reach up to 60' with their ladders, which would park them partially on the 10.2% slope and partially along the 5% slope. The maximum allowed for these engines is 12%. The width of the ramp is adequate at 23 feet, with 20 feet designated towards the drive aisle and 3 feet for pedestrians or bikers. However, when an engine is parked here it will limit vehicle access from the garage to the street. This is not atypical for emergency vehicles to block civilian traffic.
- The ramp will be designed to carry the tower weight even though it is unlikely to be utilized.
- BFD requests a Fire Department Connection (FDC) closer to the street than the entry point of the 35-Plex, either on the Trinity or Duplex 1. The purpose is to reduce the length of 4" lines from the engine parked on Bright Street to the sprinkler system in the building which requires personnel that may be needed to perform other tasks. It was determined that the best location may be along the courtyard on Duplex 1, where it can rise up through the slab under a stair and elbow out the wall. This remote FDC must be labeled according to the NFPA lettering requirements indicating that it does not serve the building for which it is located on, and that it does serve the 35-Plex. An outdoor horn/strobe shall be located over the FDC that will be activated with the 35-Plex system. The FDC must be within 100 feet of the closest hydrant, which Bill is locating along Bright Street proximate to the NE corner of the Trinity.
- Riverside Ave has a 10 inch water line that meets an old 6 inch water line on Bright Street, servicing an existing hydrant at the northern end of the street. The water flow calculations done last fall by DPW and coordinated by KL were presented and are very strong for this existing hydrant. All parties agree to minimize the use of the existing 6 inch line and to tap into the water as close as possible to the existing hydrant, run a new 6 inch line south to a

new hydrant. Bill will contact Rob Green and Adam at the water department about the construction and location of this hydrant.

- Due to the reduced access to the 35-Plex and the length of the building the BFD will require a standpipe in each of the two stairwells for water supply in an emergency.
- The southern pedestrian entry is required to have a horn/strobe, annunciator panel, and a Knox box.
- The Trinity does not require a sprinkler system by code, Michael will verify this with Ned Holt.
- Based on all of the above the original requirement of an open courtyard at the main entry off Bright St. being designed for fire truck access is no longer required given that they will access the building off Archibald. We will still provide a 9' curb cut and a 12' wide paved access for small emergency and service vehicles.

LIZ PRITCHETT
ASSOCIATES

HISTORIC PRESERVATION
ARCHITECTURAL CONSERVATION



August 6, 2014

James Duggan, Environmental Review Coordinator
Vermont Division for Historic Preservation
1 National Life Drive, 6th Floor
Montpelier, Vermont 05620

Re: Bright Street Cooperative, Burlington, VT
14 Archibald Street, 35-39 Bright Street, 47 Bright Street, Burlington, VT
Section 106 Review - HOME funds: Final Review Letter

Dear James;

I have conducted review of the above-referenced undertaking in accordance with the standards set forth in 36 C.F.R. 800, regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act. Project review consists of identifying the project's potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and known or potential archeological resources.

I reviewed this undertaking in my Historic Buildings Evaluation Report dated October 2013. On January 8, 2014, the State Historic Preservation Officer (SHPO) concurred with my determination that the proposed demolition of the house at 39 Bright Street, a dwelling that is in poor condition but appears marginally eligible for listing in the National Register of Historic Places, would result in an adverse effect. The SHPO also agreed with the proposed mitigation measure to handle the adverse effect, which called for new construction that will be compatible with the surrounding historic resources in this neighborhood in the Old North End, and for the opportunity to review plans and elevations of the proposed new buildings on the site. I have recently reviewed updated plans and elevations dated 7/16/14: #s 5.1, 5.2, 6.1, 7.1, and also a 3-D rendering of the proposed buildings on the site, a conceptual streetscape view of Bright Street with the new housing structures, and a site plan. Copies of these plans have been forwarded to the SHPO for review and concurrence.

In my professional opinion, the proposed designs for the Bright Street Cooperative comply with *The Secretary of the Interior's Standards* for new construction in a historic neighborhood, and meet the mitigation measure for this project for new designs that are compatible with the historic character of Bright Street and surrounding resources. If the SHPO concurs with this determination, please sign on the line provided below.

Sincerely yours,

Liz Pritchett

Liz Pritchett, Historic Preservation Consultant

Concur:

Samuel Presich
Vermont State Historic Preservation Officer

8/8/14
Date

cc: Amy Demetrowitz, Champlain Housing Trust

SLIM12Y

12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

LED Info

Watts: 12W
 Color Temp: 3000K (Warm)
 Color Accuracy: 82
 L70 Lifespan: 100000
 LM79 Lumens: 1,019
 Efficacy: 72 LPW

Driver Info

Type: Constant Current
 120V: 0.12A
 208V: 0.08A
 240V: 0.07A
 277V: 0.06A
 Input Watts: 14W
 Efficiency: 85%

Technical Specifications

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IP Rating:

Ingress Protection rating of IP66 for dust and water.

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 350mA, 100-240VAC 0.3-0.15 Amps, 277VAC 0.15Amps, Power Factor 99%.

THD:

10.4% at 120V

Input Watts:

14W.

Output Lumens:

1,019.

Color Accuracy (CRI):

82 CRI

Correlated Color Temp. (Nominal CCT):

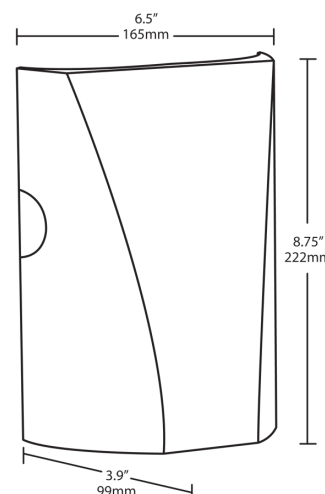
3000K

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.



Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 8 ft.

HID Replacement Range:

The SLIM12 can be used to replace 70W MH based on delivered lumens.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

ADA Compliant:

SLIM™ is ADA Compliant.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.



SLIM12Y - continued

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Green Technology:

Mercury and UV free, and RoHS compliant.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

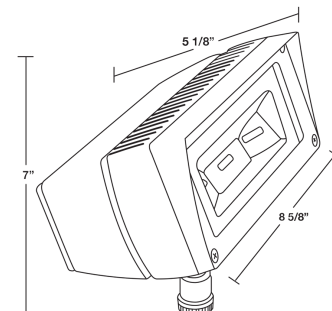


FFLED18Y

Rectangular shaped LED floodlight designed to replace 70W Metal Halide. Patent Pending airflow technology ensures long LED and driver lifespan. Use for building facade lighting, sign lighting, LED landscape lighting and instant-on security lighting.

Color: Bronze

Weight: 4.8 lbs



LED Info

Watts: 18W
 Color Temp: 3000K (Warm)
 Color Accuracy: 84
 L70 Lifespan: 100000
 LM79 Lumens: 1,422
 Efficacy: 64 LPW

Driver Info

Type: Constant Current
 120V: 0.2A
 208V: 0.15A
 240V: 0.13A
 277V: 0.11A
 Input Watts: 22W
 Efficiency: 81%

Technical Specifications

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

IP Rating:

Ingress Protection rating of IP65 for dust and water.

NEMA Type:

7H x 6V Beam Spread.

Airflow:

Patent pending Airflow technology heat sink for superior cooling.

LEDs:

18 Watt high performance LEDs.

Driver:

Constant Current, Class 2, 100 - 277V, 50 - 60 Hz, 100 - 277VAC 0.4 Amps.

THD:

10.6% at 120V

Surge Protection:

6kV

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Thermal Management Housing:

Die-cast aluminum housing, lens frame and mounting arm.

Mounting:

Heavy-duty mounting arm with O ring seal & stainless steel screw.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for (SSL) Products, ANSI C78.377-2008.

Equivalency:

The FFLED18 is Equivalent in delivered lumens to a 70W Metal Halide.

Reflector:

Semi-specular anodized aluminum.

Gaskets:

High-temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy Lighting Facts label.



FFLED18Y - continued

California Title 24:

FFLED18 complies with California Title 24 building and electrical codes.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The FFLED design is protected by U.S. Pat. D643,147, Canada Pat. 140798, China Pat. ZL201130171304.1, Mexico Pat. 36757 and pending patent in Taiwan.

UL Listing:

Suitable For Wet Locations. Suitable for mounting within 1.2M(4FT) of the ground.

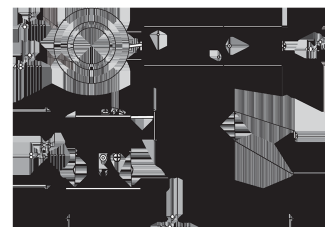


RDLED2R8-WY-TW

Clean, unobtrusive design delivers smooth and abundant light from an aperture just over 1 inch wide. Available in flush trim for a trimless look without the mess left behind from ceiling finishing work.

Color: White trim

Weight: 1.5 lbs



LED Info

Watts: 8W
 Color Temp: 3000K
 Color Accuracy: 83
 L70 Lifespan: 100000
 LM79 Lumens: 582
 Efficacy: 65 LPW

Driver Info

Type: Constant Current
 120V: 0.08A
 208V: N/A
 240V: N/A
 277V: N/A
 Input Watts: 9W
 Efficiency: 90%

Technical Specifications

UL Listing:

Suitable for wet locations in a covered ceiling

IC Rating:

Suitable for direct contact with insulation

Trim Component:

This component can be ordered with New Construction housing in order to make a complete fixture.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LED:

High-output, long-life LED with 2-step binning and integrated driver technology

Driver:

Constant Current, Class 2, 120VAC Only, 50/60Hz, 200mA, 0.07A

Ambient Temperature:

Suitable for use in 55°C ambient temperatures

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C

Dimming Driver:

TRIAC compatible dimmer as low as 10%.

Lens:

Nanostructure lens eliminates "hot spots", and helps provide smooth, uniform light and higher efficiency

Housing:

Specification-grade, die-cast aluminum construction

Installation:

Torsion springs easily install into ceiling collar (remodeler) or rough-in (new construction)

Optics:

Wall wash optics engineered for wide lateral distribution and smooth soft light from ceiling to floor.

Trim Ring:

White powder coated die cast 1/2" trim ring.

Spacing Criteria:

0-180° (along): 0.92
 90-270° (across): 1.28
 diagonal: 1.06

Equivalency:

RDLED 8W is equivalent to 50W MR16

Color Consistency:

2-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period

Green Technology:

Mercury and UV free, and RoHS compliant

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

IESNA LM79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

RDLED2R8 complies with 2013 California Title 24 building and electrical codes as a commercial indoor fixture for general spaces when used with a vacancy sensor and TRIAC dimming control. Select a vacancy sensor using catalog number LVS800. TRIAC dimmer provided by others.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010)

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4

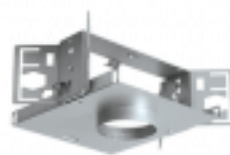


ND2T

Easy to install 2" new construction rough-in for use with RDLED2 trims. The Remodeler Trim component must be ordered with the New Construction Housing in order to make a complete fixture. Available in flush trim for a trimless look without the mess left behind from ceiling finishing work.

Color: Natural

Weight: 1.6 lbs



LED Info

Watts: 0W
 Color Temp: Sold Separately
 Color Accuracy: N/A
 L70 Lifespan: N/A
 LM79 Lumens: 0
 Efficacy: N/A

Driver Info

Type: N/A
 120V: N/A
 208V: N/A
 240V: N/A
 277V: N/A
 Input Watts: 0W
 Efficiency: N/A

Technical Specifications

UL Listed:

Suitable for wet locations in a covered ceiling

IC Rating:

Suitable for direct contact with insulation

Housing Component:

This component must be ordered with the 2 inch downlights trim in order to make a complete fixture.

[See here for Square 2" Trims](//productLines.php?majorGroup=REMODELER_2INCH_SQUARE)

Housing:

Professional-grade, heavy-gauge steel construction with 1/2" trim.

Butterfly Brackets:

The Butterfly bracket allows to mount with the following 1/4 x 1/2" bar stock, C Channel, 1/2" conduit, or nailer bars.

Easy Installation:

Ceiling clamps install quickly and hold housing securely. Clamp ceilings from 1/2" to 2 1/2" thick, with coarse and fine adjustments.

Trim:

1/2" trim

California Title 24:

ND2T complies with 2013 California Title 24 building and electrical codes as a commercial indoor fixture for general spaces when used with a RAB 2 inch LED downlight, a vacancy sensor and TRIAC dimming control. Select a vacancy sensor using catalog number LVS800. TRIAC dimmer provided by others.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010)

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4

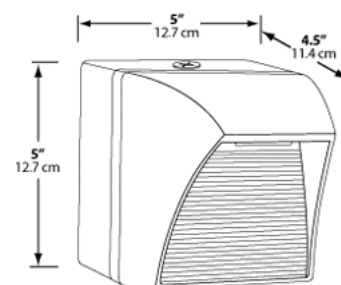


WPLED5Y

LED 5W Wallpacks. 3 cutoff options. Patent Pending thermal management system. 100,000 hour L70 lifespan. 5 Year Warranty.

Color: Bronze

Weight: 2.0 lbs



LED Info

Watts: 5W
Color Temp: 3000K (Warm)
Color Accuracy: 88
L70 Lifespan: 100000
LM79 Lumens: 128
Efficacy: 24 LPW

Driver Info

Type: Constant Current
120V: 0.18A
208V: 0.18A
240V: 0.18A
277V: N/A
Input Watts: 5W
Efficiency: 94%

Technical Specifications

UL Listing:

Suitable for wet locations in downlight position only.
Suitable for mounting within 1.2m (4ft) of the ground.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

IP Rating:

Ingress Protection rating of IP66 for dust and water.

Patents:

The WPLED design is protected by patents pending in the U.S., Canada, China, Taiwan and Mexico.

LEDs:

5W, high-output, long-life LED.

Drivers:

Constant current, Class 2, 100 - 240VAC, 50 - 60 Hz, 0.18 Amps.

Fixture Efficacy:

24 Lumens per Watt

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Surge Protection:

1 KV

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Thermal Management:

Integral cast aluminum mounting pad for optimum heat sinking to ensure cool operation with maximum LED life and light output.

Housing:

Precision die cast aluminum housing and mounting plate. 1 1/2" backbox with three 1/2" conduit entry points.

Gaskets:

High temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Color Accuracy:

88 CRI

Color Temperature (Nominal CCT):

3000K

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2008.

Equivalency:

The WPLED5 is Equivalent in delivered lumens to a 13W CFL or 60W incandescent.

Green Technology:

Mercury and UV free.



WPLED5Y - continued

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

WPLED5 complies with California Title 24 building and electrical codes.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

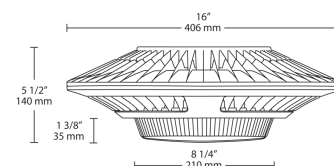


GLED78

78 Watts of energy efficient LED garage lighting replaces 250 Watt Metal Halide. 100,000 hour LED lifespan. 5 year warranty. High-performance output maximizes spacing criterion.

Color: Bronze

Weight: 18.2 lbs



LED Info

Watts: 78W
Color Temp: 5100K (Cool)
Color Accuracy: 68
L70 Lifespan: 100000
LM79 Lumens: 7,053
Efficacy: 80 LPW

Driver Info

Type: Constant Current
120V: 0.74A
208V: 0.47A
240V: 0.41A
277V: 0.35A
Input Watts: 88W
Efficiency: 88%

Technical Specifications

UL Listing:

Suitable for Wet Locations. Covered Ceiling Mount Only.

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs:

6x13W high-output, long-life LEDs.

Drivers:

3x26W Driver, Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kv Surge Protection, 720mA, 100-277VAC 0.4 Amps.

Power Factor:

99.4% at 120V, 90.8% 277V

THD:

8.0% at 120V, 10.7% at 277V

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F).

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.

Thermal Management:

Superior heat sinking with integrated air-flow fins.

Housing:

Precision die-cast aluminum housing and door frame.

Mounting:

Easy hanging plate with hooks for ceiling mount.

Lens:

Prismatic polycarbonate lens.

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Equivalency:

The GLED78 is Equivalent in delivered lumens to 250W Metal Halide.

Green Technology:

Mercury and UV Free, and RoHS compliant.



Tech Help Line: 888 RAB-1000

Email: sales@rabweb.com

On the web at: www.rabweb.com

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Note: Specifications are subject to change without notice

Page 1 of 2

GLED78 - continued

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

See GLED78BB/BL or GLED52/D10 for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

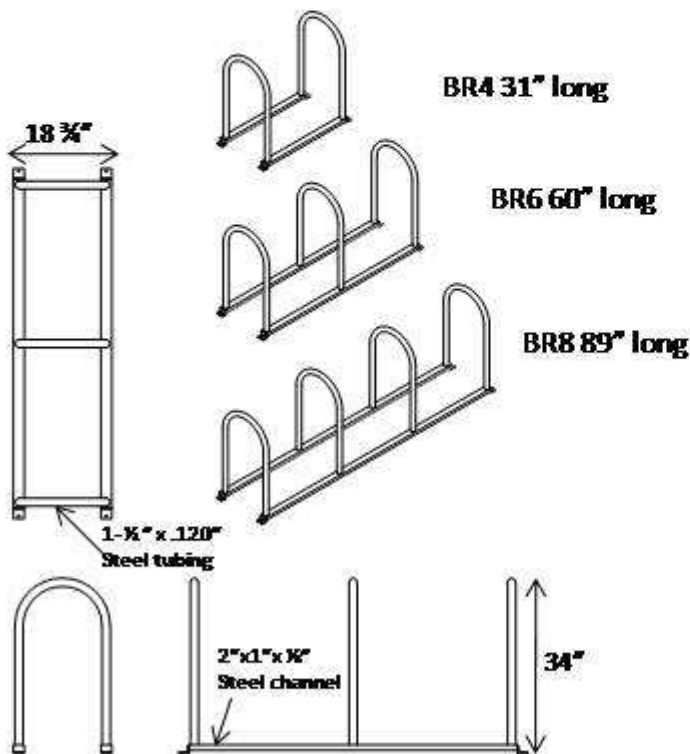
The design of GLED78 is protected by patents pending in US, Canada, China, Taiwan and Mexico.



Data Sheet

The Bike Rib® Rack

Stable, secure, easy to use, no-nonsense bike parking. The Rib Rack has been an industry standard for the last 20 years, replacing the old wheel bender racks in schoolyards, playgrounds and city streets throughout the USA.



Finish Options

Galvanized

Hot-dipped after fabrication

Powder Coat Paint

With optional zinc rich prime coat

Thermo-plastic Coating

With optional zinc rich prime coat

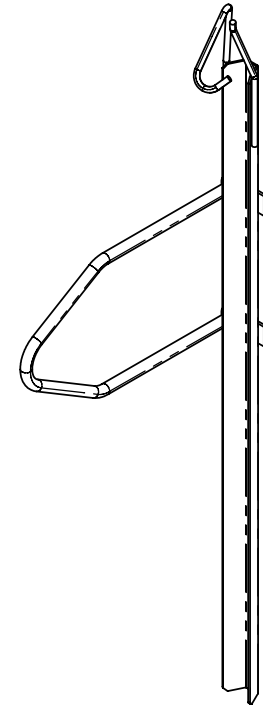
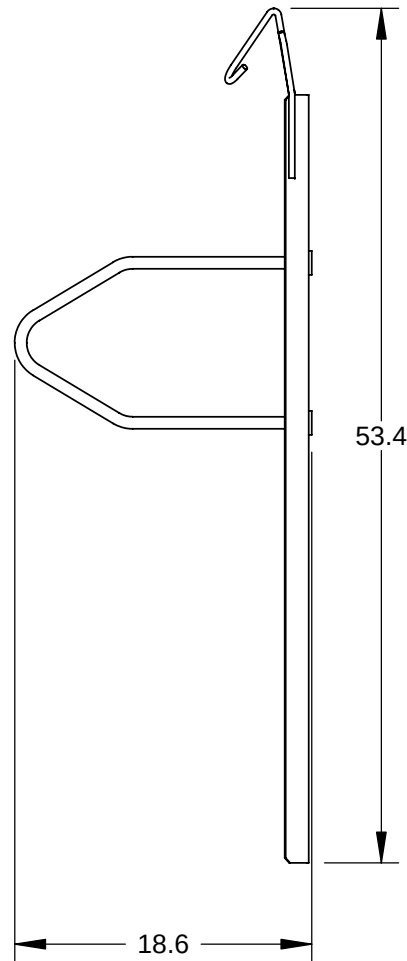
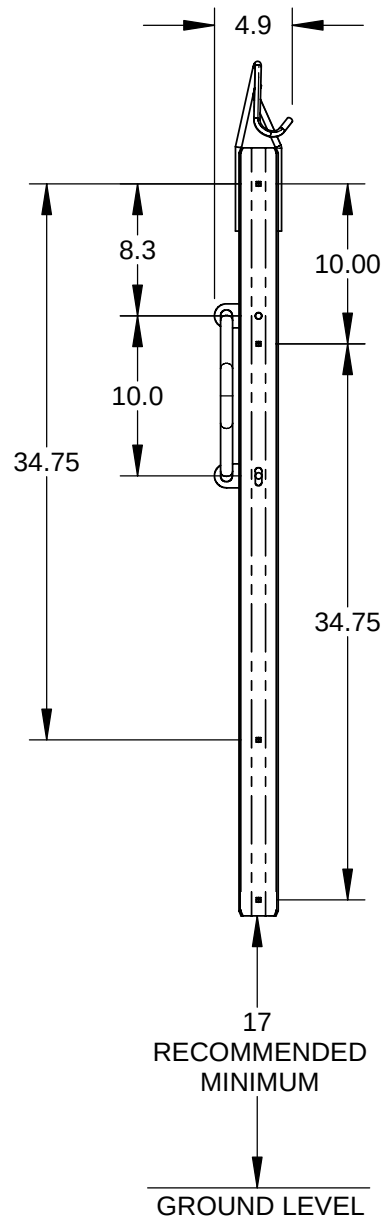
Only available in surface mount (shown in photos)

Function First, Inc. 3935 N. Country Club Rd. #25 Tucson, AZ 85716

<http://www.bikerack.com> - bikeribs@yahoo.com

1.888.BIKE.RIB 1.888(245.3742)

FAX 1.520.844.1110



NOTE:

1. DO NOT SCALE DRAWING.
2. INTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



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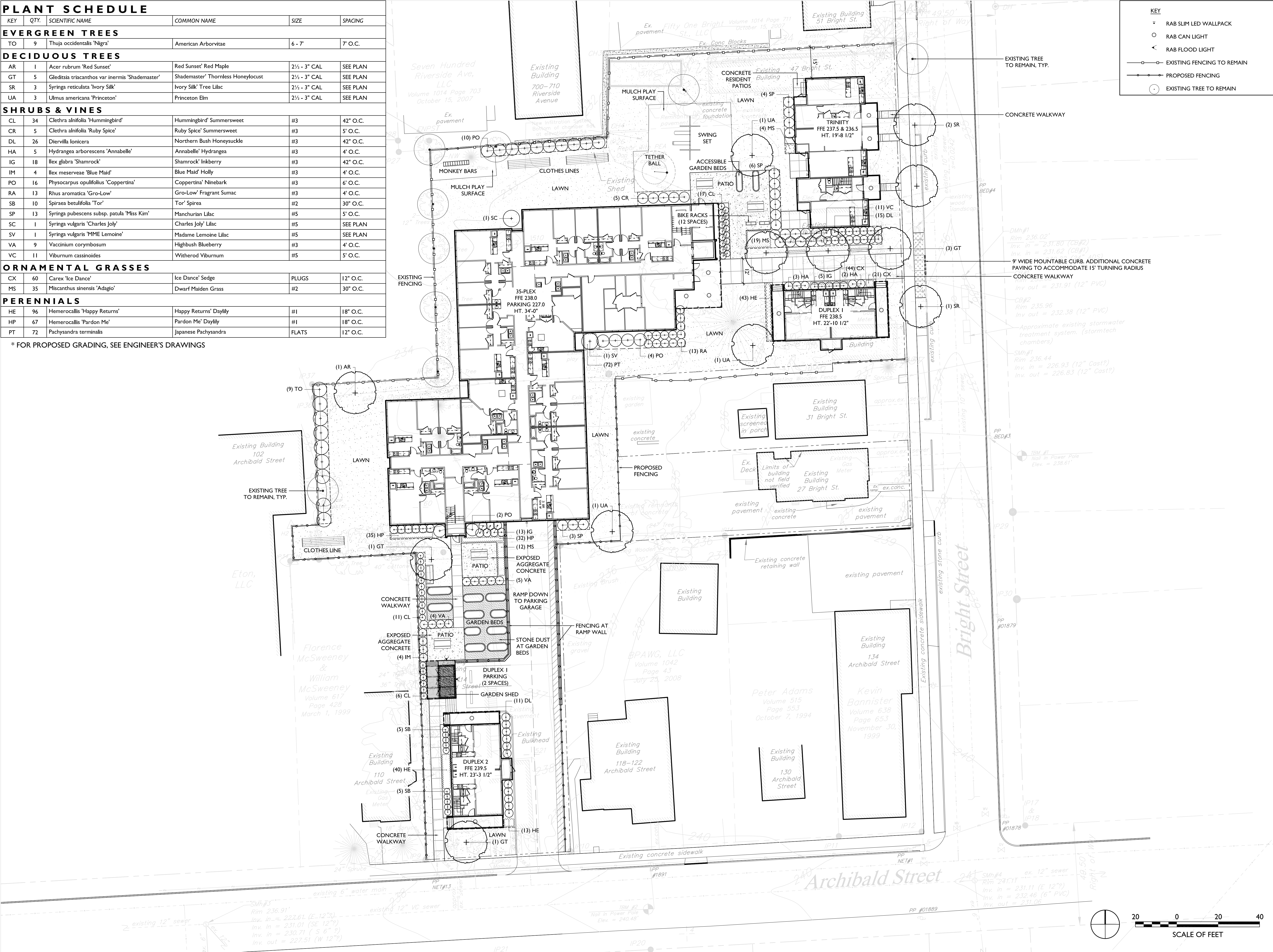
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TITLE:

6006 - LOCKING VERTICAL RACK

PLANT SCHEDULE					
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
EVERGREEN TREES					
TO	9	Thuja occidentalis 'Nigra'	American Arborvitae	6 - 7'	7' O.C.
DECIDUOUS TREES					
AR	1	Acer rubrum 'Red Sunset'	Red Sunset' Red Maple	2½ - 3" CAL	SEE PLAN
GT	5	Gleditsia triacanthos var inermis 'Shademaster'	Shademaster' Thornless Honeylocust	2½ - 3" CAL	SEE PLAN
SR	3	Syringa reticulata 'Ivory Silk'	Ivory Silk' Tree Lilac	2½ - 3" CAL	SEE PLAN
UA	3	Ulmus americana 'Princeton'	Princeton Elm	2½ - 3" CAL	SEE PLAN
SHRUBS & VINES					
CL	34	Clethra alnifolia 'Hummingbird'	Hummingbird' Summersweet	#3	42" O.C.
CR	5	Clethra alnifolia 'Ruby Spice'	Ruby Spice' Summersweet	#3	5' O.C.
DL	26	Diervilla lonicera	Northern Bush Honeysuckle	#3	42" O.C.
HA	5	Hydrangea arborescens 'Annabelle'	Annabelle' Hydrangea	#3	4' O.C.
IG	18	Ilex glabra 'Shamrock'	Shamrock' Inkberry	#3	42" O.C.
IM	4	Ilex meserveae 'Blue Maid'	Blue Maid' Holly	#3	4' O.C.
PO	16	Physocarpus opulifolius 'Coppertina'	Coppertina' Ninebark	#3	6' O.C.
RA	13	Rhus aromatica 'Gro-Low'	Gro-Low' Fragrant Sumac	#3	4' O.C.
SB	10	Spiraea betulifolia 'Tor'	Tor' Spirea	#2	30" O.C.
SP	13	Syringa pubescens subsp. patula 'Miss Kim'	Manchurian Lilac	#5	5' O.C.
SC	1	Syringa vulgaris 'Charles Joly'	Charles Joly' Lilac	#5	SEE PLAN
SV	1	Syringa vulgaris 'MME Lemoine'	Madame Lemoine Lilac	#5	SEE PLAN
VA	9	Vaccinium corymbosum	Highbush Blueberry	#3	4' O.C.
VC	11	Viburnum cassinoides	Witherod Viburnum	#5	5' O.C.
ORNAMENTAL GRASSES					
CX	60	Carex 'Ice Dance'	Ice Dance' Sedge	PLUGS	12" O.C.
MS	35	Miscanthus sinensis 'Adagio'	Dwarf Maiden Grass	#2	30" O.C.
PERENNIALS					
HE	96	Hemerocallis 'Happy Returns'	Happy Returns' Daylily	#1	18" O.C.
HP	67	Hemerocallis 'Pardon Me'	Pardon Me' Daylily	#1	18" O.C.
PT	72	Pachysandra terminalis	Japanese Pachysandra	FLATS	12" O.C.

* FOR PROPOSED GRADING, SEE ENGINEER'S DRAWINGS



KEY

RAB SLIM LED WALLPACK

RAB CAN LIGHT

RAB FLOOD LIGHT

EXISTING FENCING TO REMAIN

PROPOSED FENCING

EXISTING TREE TO REMAIN

WAGNERHODGSON

LANDSCAPE ARCHITECTS

T802.864.0010 F802.864.6267 www.wagnerhodgson.com

BRIGHT STREET COOPERATIVE

PLANTING PLAN

REVISIONS

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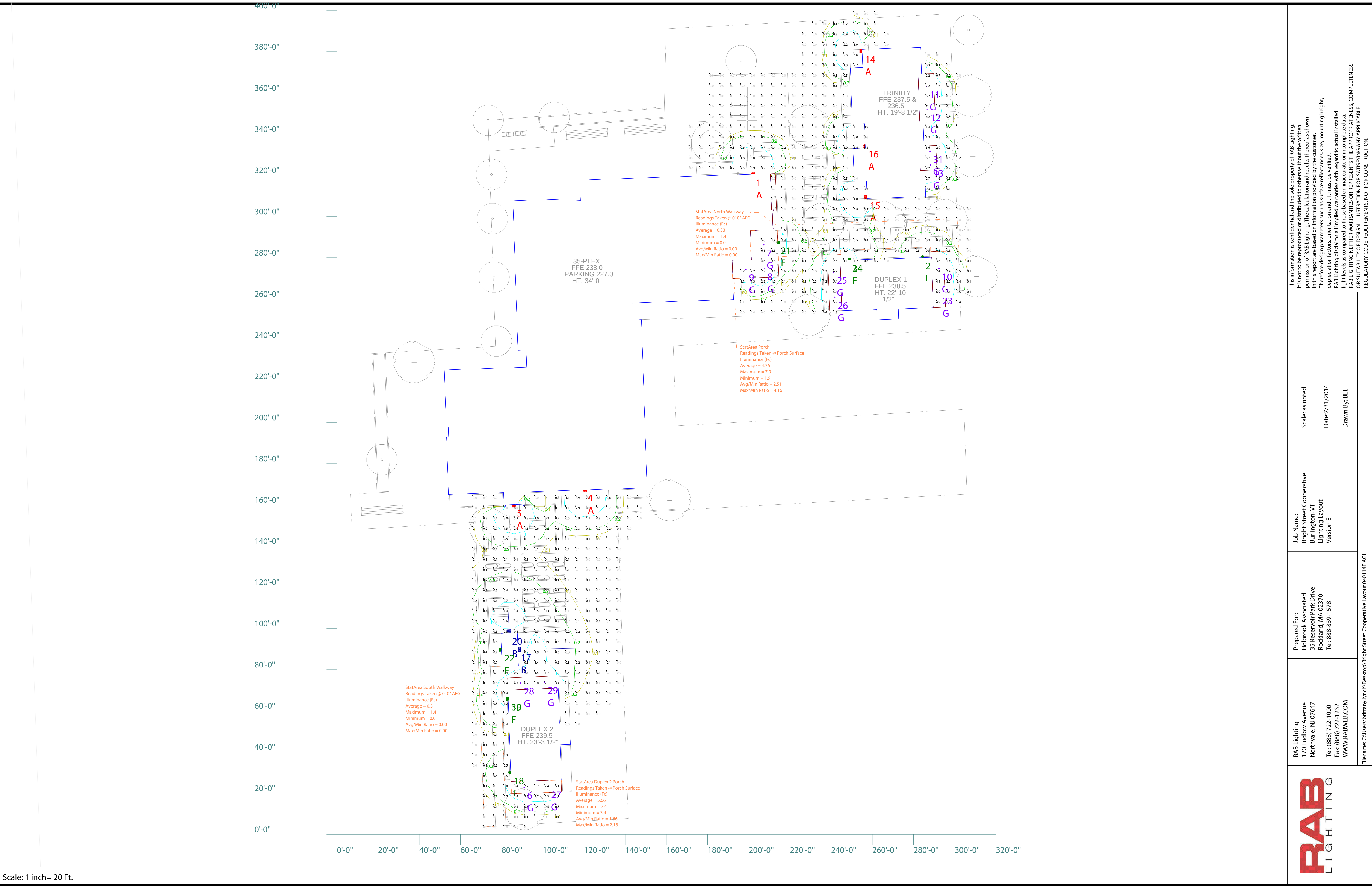
DRAWING NO.

JOB NO. 412

SCALE 1" = 20'-0"

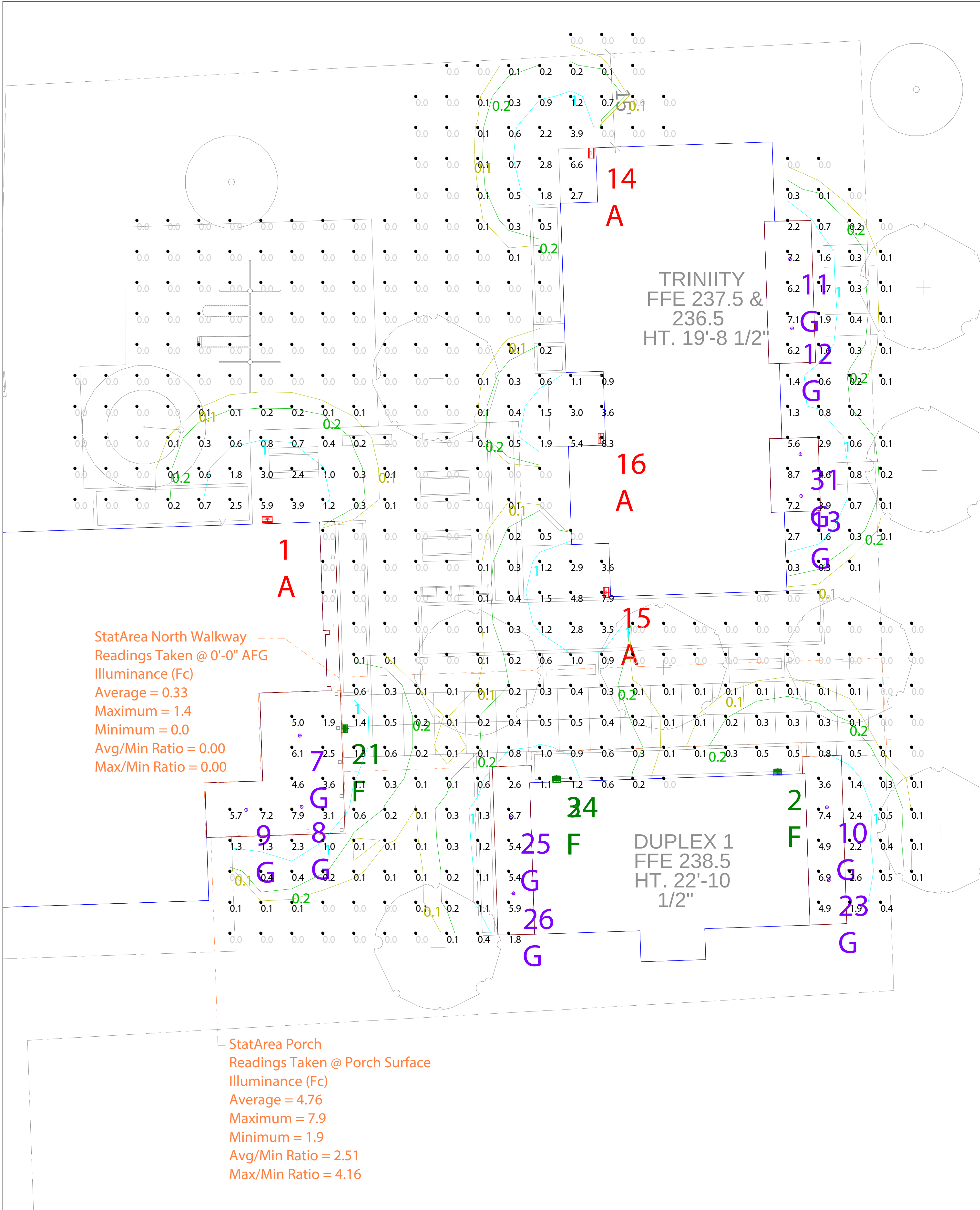
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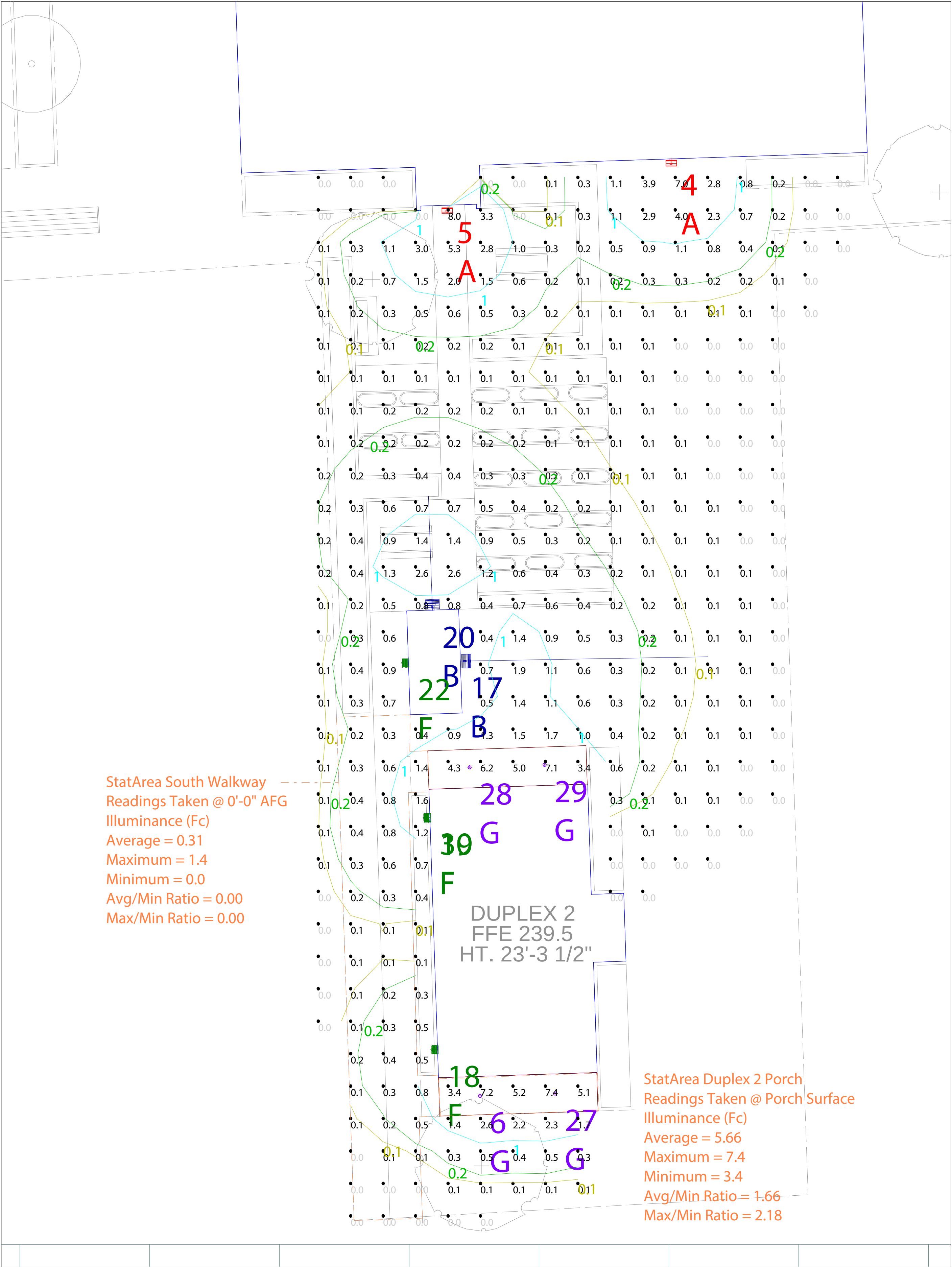


Scale: 1 inch= 20 Ft.

	RAB Lighting 170 Ludlow Avenue Northvale, NJ 07647 Tel: (888) 722-1000 Fax: (888) 722-1232 WWW.RABWEB.COM	Prepared For: Holbrook Associated 35 Reservoir Park Drive Rockland, MA 02370 Tel: 888-839-1578	Job Name: Bright Street Cooperative Burlington, VT Lighting Layout Version E	Scale: as noted Date: 7/31/2014 Drawn By: BEL	This information is confidential and the sole property of RAB Lighting. It is not to be reproduced or distributed to others without the written permission of RAB Lighting. The calculation and results thereof as shown in this report are based on information provided by the customer. Therefore design parameters such as surface reflectances, size, mounting height, depreciation factors, orientation and tilt must be verified. RAB Lighting disclaims all implied warranties with regard to actual installed light levels as compared to those based on inaccurate or incomplete data. RAB LIGHTING NEITHER WARRANTS NOR REPRESENTS THE APPROPRIATENESS, COMPLETENESS OR SUITABILITY OF DESIGN ILLUSTRATION FOR SATISFYING ANY APPLICABLE REGULATORY CODE REQUIREMENTS. NOT FOR CONSTRUCTION.
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Scale: 1 inch= 10 Ft.



Scale: 1 inch= 10 Ft.

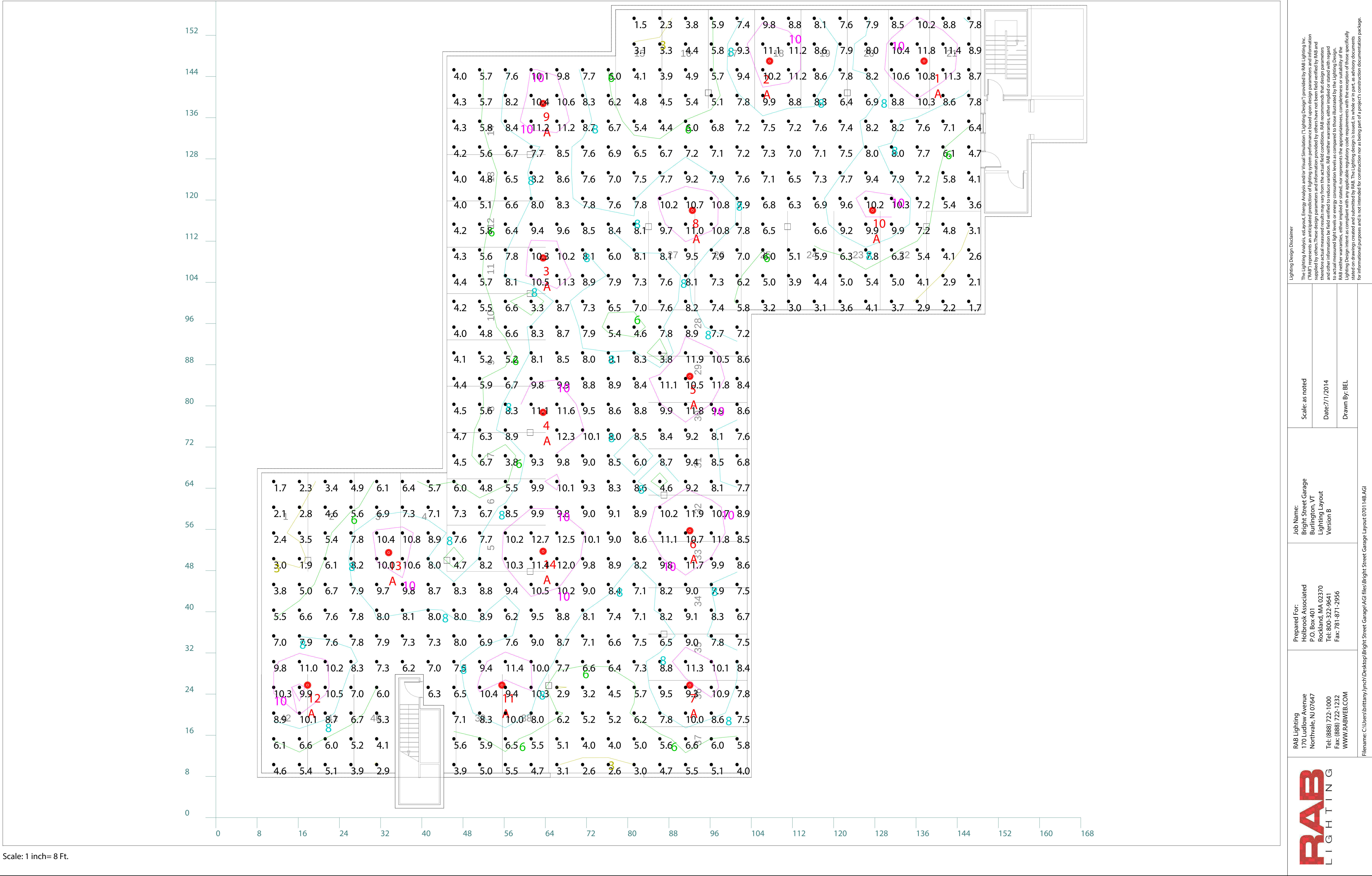
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Scale: as noted
Date: 7/31/2014
Drawn By: BEL

Job Name: Bright Street Cooperative Burlington, VT Lighting Layout Version E
--

Prepared For: Holbrook Associated 35 Reservoir Park Drive Rockland, MA 02370 Tel: 888-839-1576
--

RAB Lighting 170 Ludlow Avenue Northvale, NJ 07647 Tel: (888) 722-1000 Fax: (888) 722-1232 WWW.RABWEB.COM
--



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Scale: as noted

Date: 7/11/2014

Drawn By: BEL

Job Name:
Bright Street Garage
Burlington, VT
Lighting Layout
Version B

Prepared For:
Holbrook Associated
P.O. Box 401
Rockland, MA 02370
Tel: 800-322-9641
Fax: 781-871-2956

RAB Lighting
170 Ludlow Avenue
Northvale, NJ 07647
Tel: (888) 722-1000
Fax: (888) 722-1232
WWW.RABWEB.COM



Filename: C:\Users\brittany\mych\Desktop\Bright Street Garage\AGI files\Bright Street Garage Layout 070114B.AGI

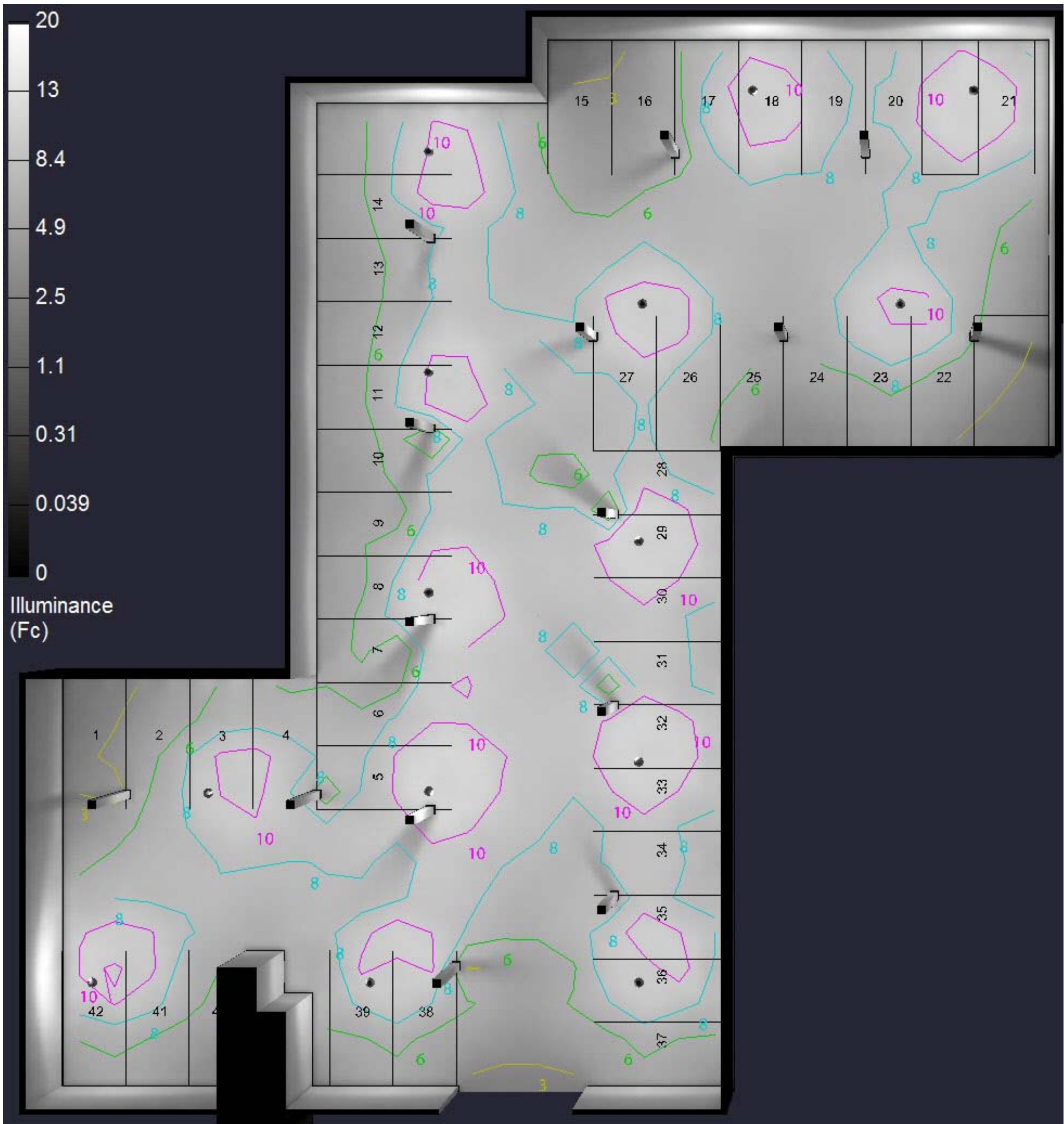
Luminaire Schedule											
Symbol	Tag	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Arr. Watts	Total Watts	Filename
	A	14	GLED78	SINGLE	7053	1.000	LED Garage Ceiling Mount 78W Cool	88.3	88.3	1236.2	GLED78 - Cool - ITL79965.IES

Calculation Summary										
Label	Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpCLr	PtSpCb
CalcPts Parking Garage	Readings Taken @ 0'-0" AFF	Illuminance	Fc	7.37	12.7	1.5	4.91	8.47	5	5

Expanded Luminaire Location Summary					
LumNo	Tag	Label	X	Y	Z
1	A	GLED78	133.5	147	8.15
2	A	GLED78	103.5	147	8.15
3	A	GLED78	59.5	108.75	8.15
4	A	GLED78	59.5	78.75	8.15
5	A	GLED78	88	85.75	8.15
6	A	GLED78	88	55.75	8.15
7	A	GLED78	88	25.75	8.15
8	A	GLED78	88.5	118	8.15
9	A	GLED78	59.5	138.75	8.15
10	A	GLED78	123.5	118	8.15
11	A	GLED78	51.5	25.75	8.15
12	A	GLED78	13.75	25.75	8.15
13	A	GLED78	29.5	51.5	8.15
14	A	GLED78	59.5	51.75	8.15
Total Quantity: 14					

NOTES:

- * The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.
- * Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.
- * The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting, Inc.
- * Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.
- * RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending apply.



Top View



Interior View



A : GLED78

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Scale: as noted

Date: 7/11/2014

Drawn By: BEL

Job Name:
Bright Street Garage
Burlington, VT
Lighting Layout
Version 1.0

Prepared For:
Holbrook Associated
P.O. Box 401
Rockland, MA 02370
Tel: 800-322-9641
Fax: 781-871-2956

RAB Lighting
170 Ludlow Avenue
Northvale, NJ 07647
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Fax: (888) 722-1232
WWW.RABWEB.COM

Filename: C:\Users\brittany\mycn\Desktop\Bright Street Garage\AGI Files\Bright Street Garage Layout 070114B.AGI



Luminaire Schedule											
Symbol	Tag	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Arr. Watts	Total Watts	Filename
	A	6	SLIM12Y	SINGLE	1019	1.000	LED Slim Wallpack 12W 3000K	14.3	14.3	85.8	SLIM12Y-Warm - ITL73995.IES
	B	2	FFLED18Y	SINGLE	1432	1.000	LED Floodlight 18W 3000K	22.1	22.1	44.2	FFLED18Y - Warm - ITL78797.IES
	F	8	WPLED5Y	SINGLE	128	1.000	LED Wallpack 5W 3000K	5.3	5.3	42.4	WPLED5Y-Warm - LSI27623.IES
	G	15	RDLED2R8-WY-TW +ND2T	SINGLE	582	1.000	LED Downlight 8W 3000K	8.91	8.91	133.65	RDLED2R8-WY - Warm - ITL81484.ies

Calculation Summary											
Label	Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb	
CalcPts Ground Plane	Readings Taken @ 0'-0" AFG	Illuminance	Fc	0.68	8.7	0.0	N.A.	N.A.	5	5	
StatArea Duplex 2 Porch	Readings Taken @ Porch Surface	Illuminance	Fc	5.66	7.4	3.4	1.66	2.18			
StatArea North Walkway	Readings Taken @ 0'-0" AFG	Illuminance	Fc	0.33	1.4	0.0	N.A.	N.A.			
StatArea Porch	Readings Taken @ Porch Surface	Illuminance	Fc	4.76	7.9	1.9	2.51	4.16			
StatArea South Walkway	Readings Taken @ 0'-0" AFG	Illuminance	Fc	0.31	1.4	0.0	N.A.	N.A.			

Expanded Luminaire Location Summary									
LumNo	Tag	Label	X	Y	Z	Orient	Tilt	Roll	
1	A	SLIM12Y	202.053	320.681	8	90	0	0	
2	F	WPLED5Y	284.357	280.308	11	90	0	0	
3	F	WPLED5Y	248.71	279.134	11	90	0	0	
4	A	SLIM12Y	120.358	167.127	8	270	0	0	
5	A	SLIM12Y	85.845	159.788	8	270	0	0	
6	G	RDLED2R8-WY-TW +ND2T	90.922	22.91	7.5	90	0	0	
7	G	RDLED2R8-WY-TW +ND2T	207.274	286.321	8	180	0	0	
8	G	RDLED2R8-WY-TW +ND2T	207.569	274.83	8	135	0	0	
9	G	RDLED2R8-WY-TW +ND2T	198.632	274.338	8	90	0	0	
10	G	RDLED2R8-WY-TW +ND2T	292.325	274.74	7.5	180	0	0	
11	G	RDLED2R8-WY-TW +ND2T	286.398	363.218	7.5	180	0	0	
12	G	RDLED2R8-WY-TW +ND2T	286.705	352.015	7.5	180	0	0	
13	G	RDLED2R8-WY-TW +ND2T	288.178	324.975	7.5	180	0	0	
14	A	SLIM12Y	254.803	380.313	7.5	180	0	0	
15	A	SLIM12Y	257.227	309.417	8	180	0	0	
16	A	SLIM12Y	256.366	334.297	8	180	0	0	
17	B	FFLED18Y	88.387	89.905	8	1	78	0	
18	F	WPLED5Y	84.109	30.03	11	180	0	0	
19	F	WPLED5Y	82.934	65.735	11	180	0	0	
20	B	FFLED18Y	83.568	98.184	8	92	65	0	
21	F	WPLED5Y	214.33	287.438	8	0	0	0	
22	F	WPLED5Y	79.58	89.633	8	180	0	0	
23	G	RDLED2R8-WY-TW +ND2T	292.627	262.985	7.5	180	0	0	
24	F	WPLED5Y	248.782	279.133	11	93.781	0	0	
25	G	RDLED2R8-WY-TW +ND2T	241.317	273.015	7.5	3.781	0	0	
26	G	RDLED2R8-WY-TW +ND2T	241.731	260.856	7.5	3.781	0	0	
27	G	RDLED2R8-WY-TW +ND2T	102.476	23.282	7.5	90	0	0	
28	G	RDLED2R8-WY-TW +ND2T	89.315	73.537	7.5	273.77	0	0	
29	G	RDLED2R8-WY-TW +ND2T	100.868	73.925	7.5	273.77	0	0	
30	F	WPLED5Y	82.932	65.812	11	183.77	0	0	
31	G	RDLED2R8-WY-TW +ND2T	288.055	331.727	7.5	180	0	0	
Total Quantity: 31									



A : SLIM12Y



B : FFLED18Y



G : RDLED2R8-WY-TW +ND2T



F : WPLED5Y

NOTES:

* CALCULATED VALUES DO NOT INCLUDE CONTRIBUTIONS FROM EXISTING LIGHT SOURCES

* The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting, Inc.

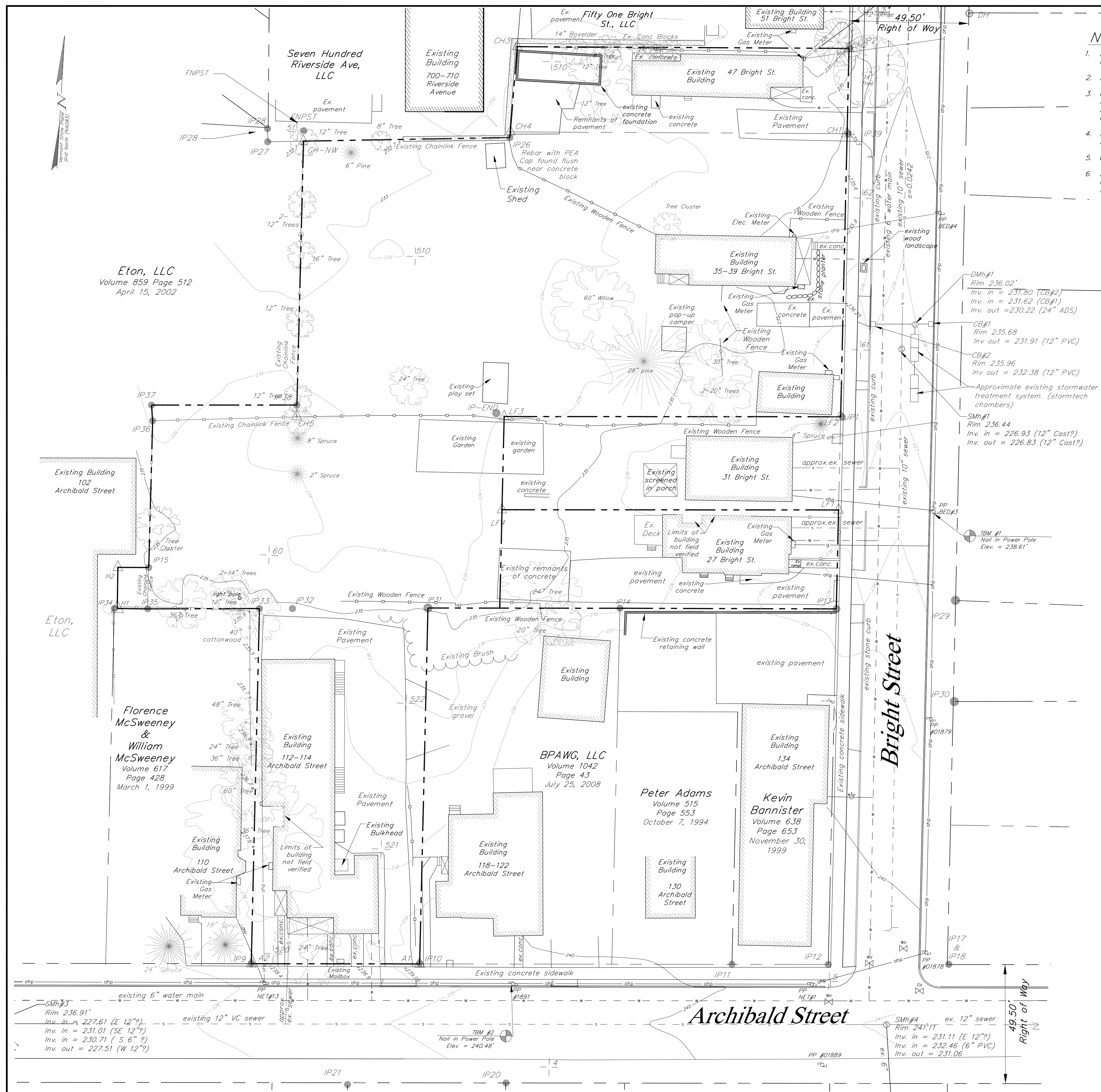
* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

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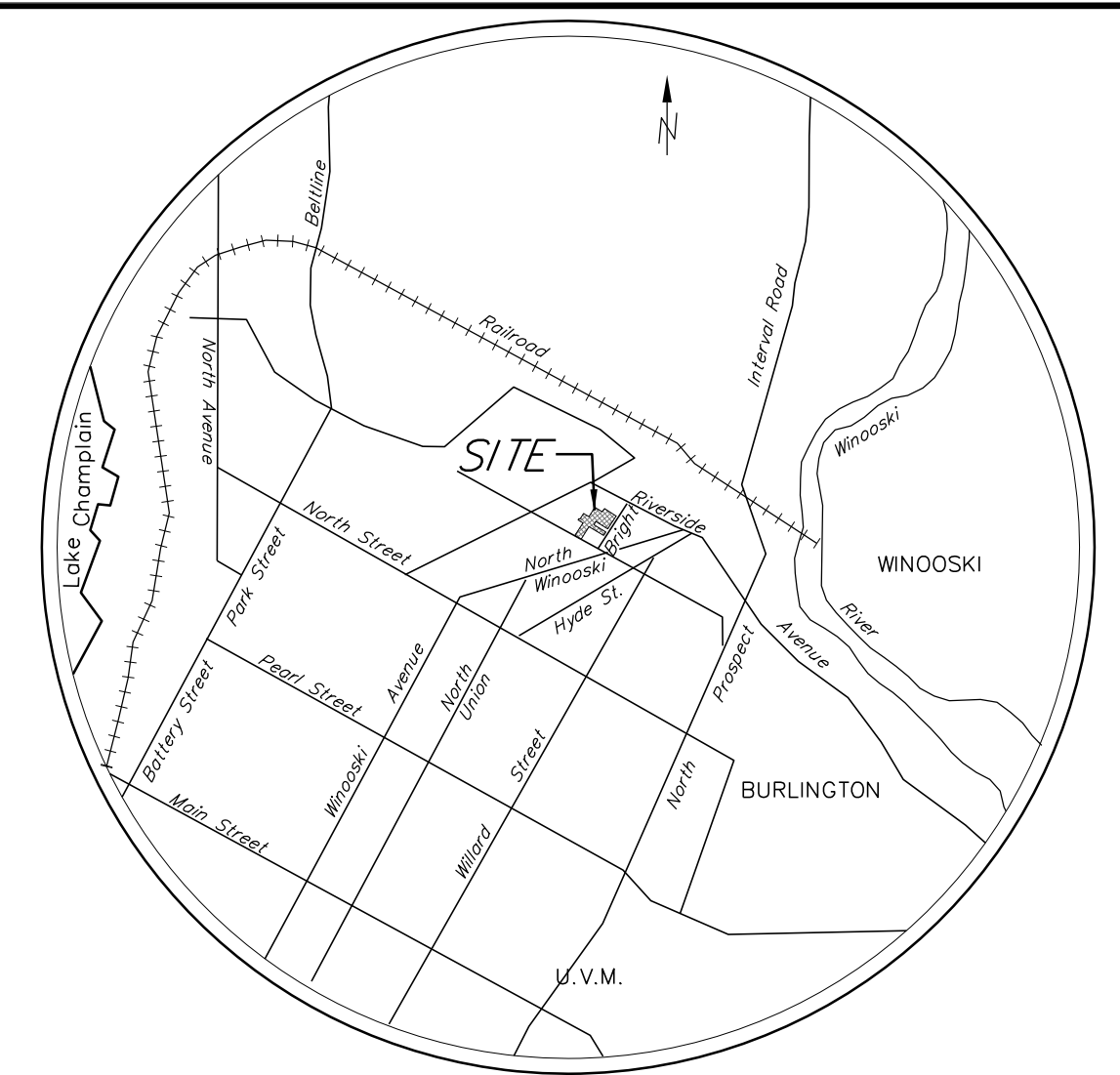
RAB Lighting 170 Ludlow Avenue Northvale, NJ 07647 Tel: (888) 722-1000 Fax: (888) 722-1232 WWW.RABWEB.COM	Prepared For: Holbrook Associated 35 Reservoir Park Drive Rockland, MA 02370 Tel: 888-839-1578	Job Name: Bright Street Cooperative Burlington, VT Lighting Layout Version E	Scale: as noted
			Date: 7/31/2014
			Drawn By: BEL
Filename: C:\Users\brittany\mycn\Desktop\Bright Street Cooperative Layout 040114E.AGI			





- Notes:

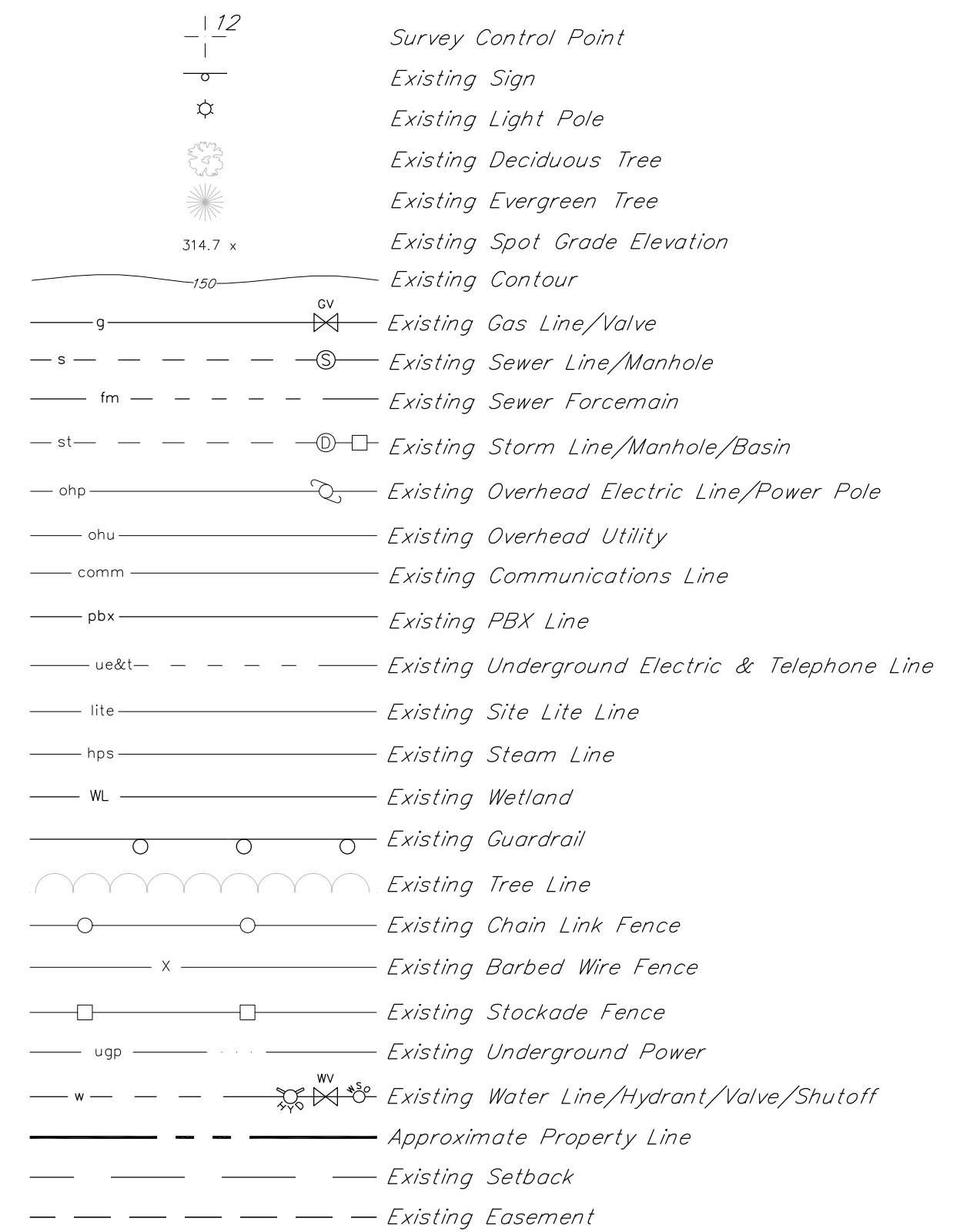
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2. Elevations are based on the NAVD 88 vertical datum.
3. Utilities shown on this plan are based on visible evidence found in the field. Underground utilities are not warranted to be exact or complete. Contact Dig Safe prior to any excavation.
4. This is not a boundary survey. See Boundary Survey prepared by Krebs and Lansing Engineers for boundary information.
5. Waterline information is based on City of Burlington Mapping.
6. Existing gas service lines shown on this plan are approximate and not complete. Contact VGS for complete and accurate information regarding existing gas lines.



Location Map

N.T.S.

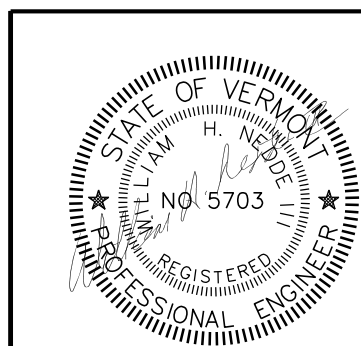
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Bar Scale

$$\underline{1'' = 20'}$$

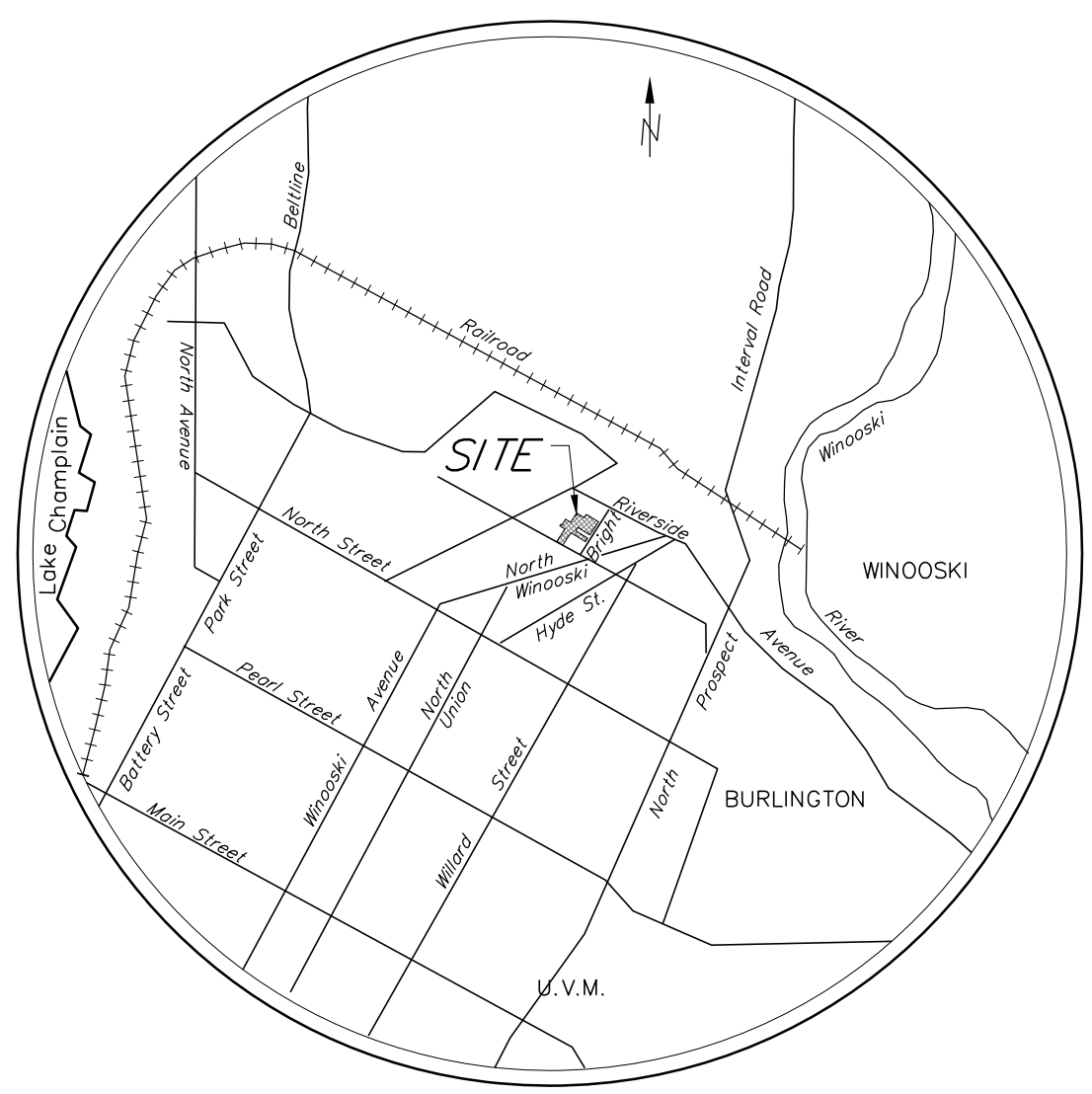
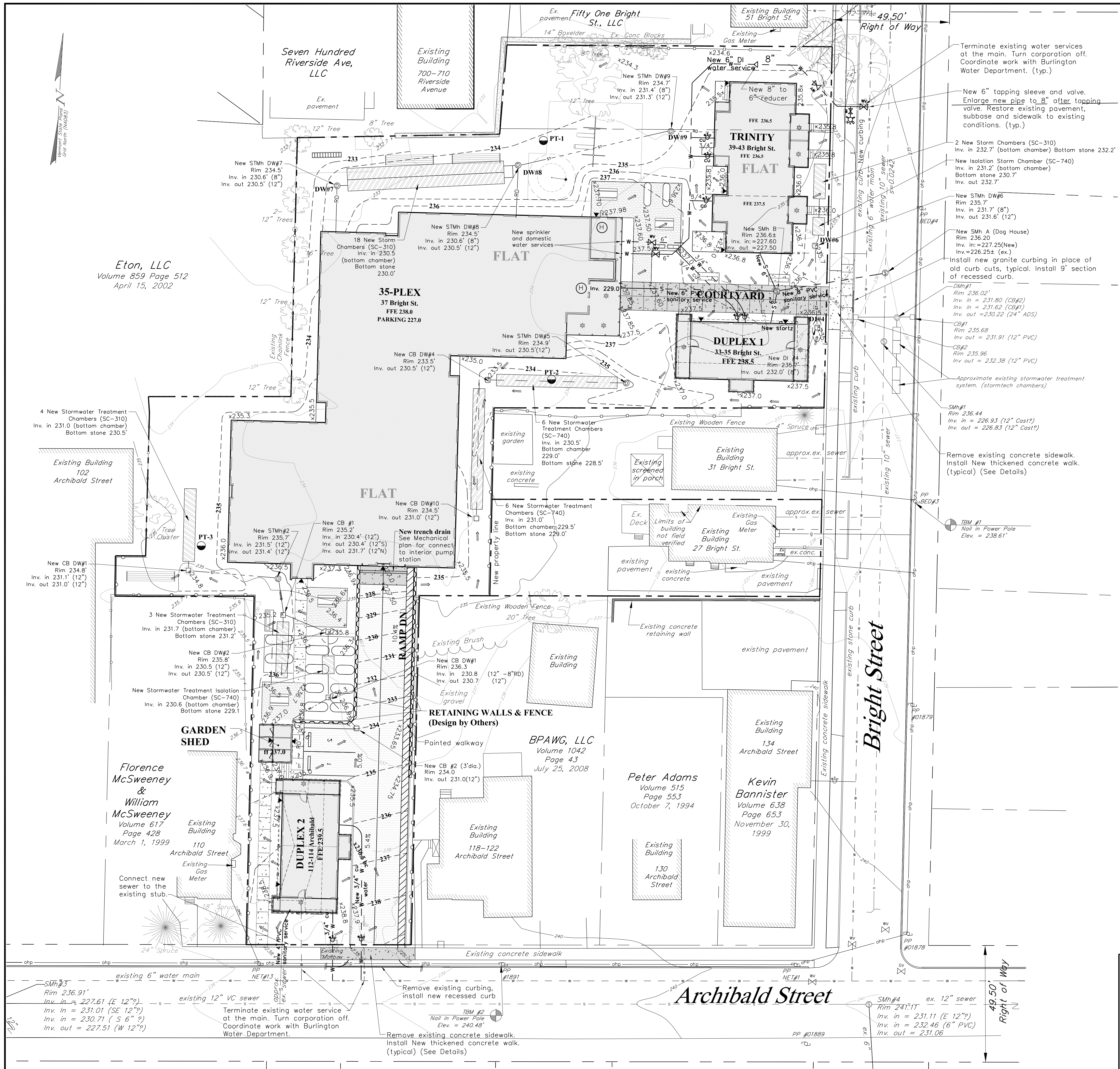
Date revised	Description	Checked	Date
Survey <u>RAK/RAW</u>	Existing Conditions Plan		
Drawn <u>RAW</u>			
Checked <u>IAJ</u>	Champlain Housing Trust Inc.		
Scale <u>1" = 20'</u>			
Date <u>April 4, 2014</u>			
Project <u>13220</u>			
Bright Street		Burlington, Vermont	
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446		dx-464	© Krebs & Lansing 2013 EX-1



PERMIT REVIEW ONLY

BK-464

EX-1



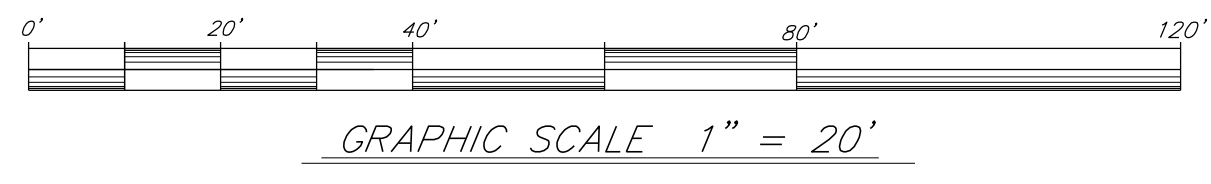
Legend

- Pre-construction Excavation
- New Deciduous Tree
- New Evergreen Tree
- Proposed Permeability Test
- Finish Grade Spot Grade Elevation
- Finish Grade Direction of Flow
- Finish Grade 5-foot Contour Interval
- Finish Grade 1-foot Contour Interval
- New Gas Line/Valve
- New Sewer Line/Manhole
- New Sewer Forcemain
- New Storm Line/Manhole/Basin
- New Underdrain
- New Roof Drain
- New Water Line/Hydrant/Valve/Shutoff
- New PBX Line
- New Underground Power
- New Clearing Limits
- New Chain Link Fence
- New Stockade Fence
- Construction Fence
- Barrier Fence
- Silt Fence
- New concrete
- New Structural concrete
- New concrete (exposed aggregate)
- New pavement and subbase

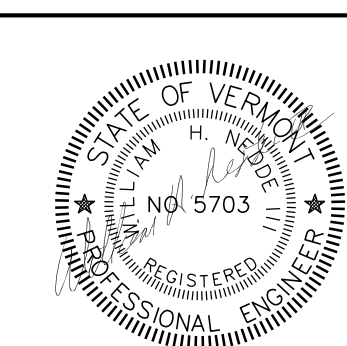
Site Plan Notes:

- New lighting shown is approximate, refer to lighting plans by others for lighting design and construction details.

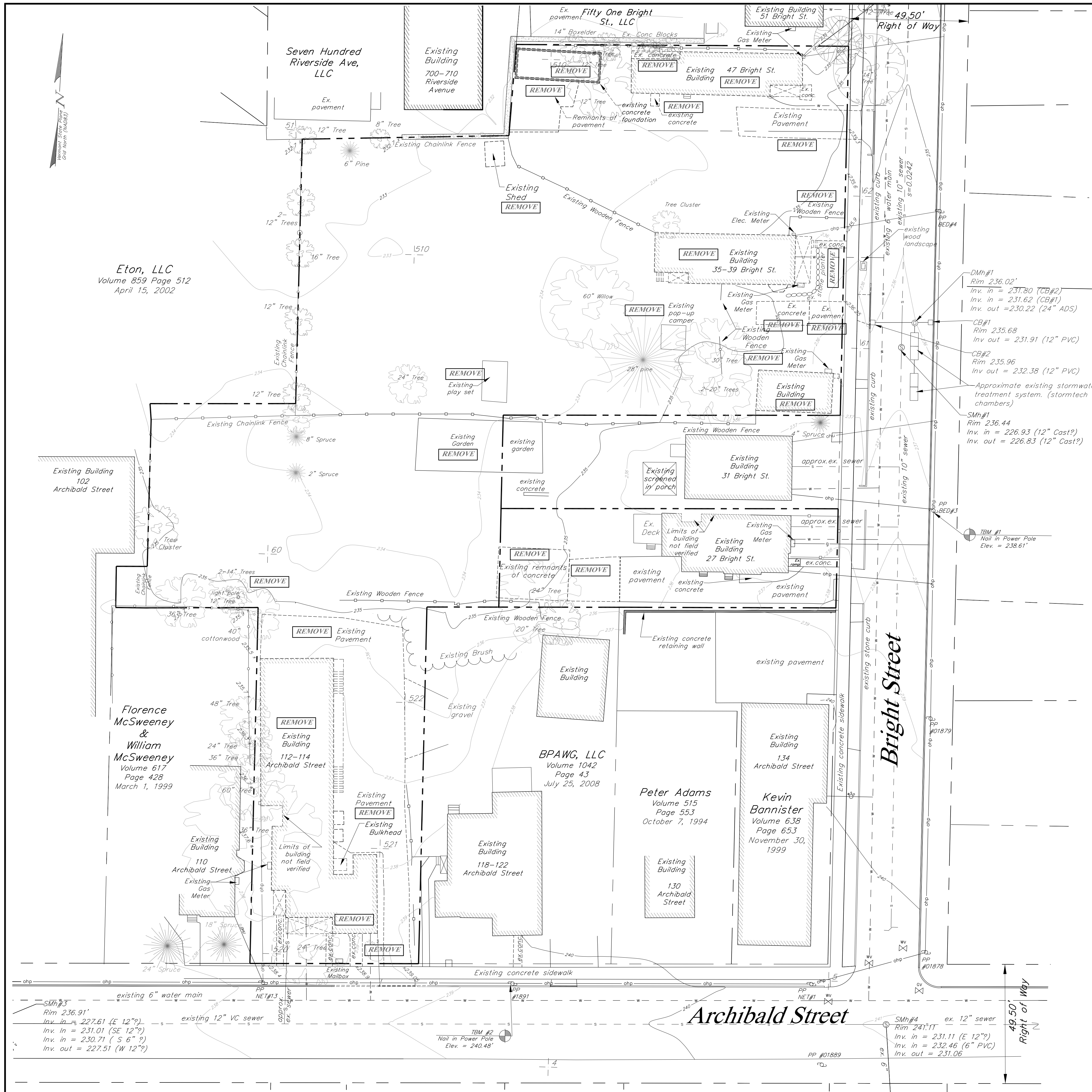
See Notes On Sheet EX-1:



Sept. 2, 2014 Aug. 19, 2014 July 28, 2014 Date revised	new stormwater treatment system, grading Add street addresses permeability tests added Description	dmr whn whn Checked	9/02/14 8/19/14 7/28/14 Date
Design Drawn Checked Scale Date	WHIN TJB 1" = 20' April 4, 2014	Site Plan Champlain Housing Trust Inc.	
Project	13220 Bright Street	Burlington, Vermont	
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446		Rev - 464 © Krebs & Lansing 2013 Bright-House-current-2014.dwg	SP-1

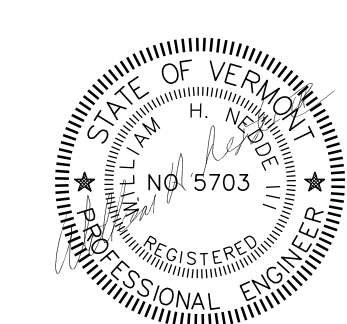
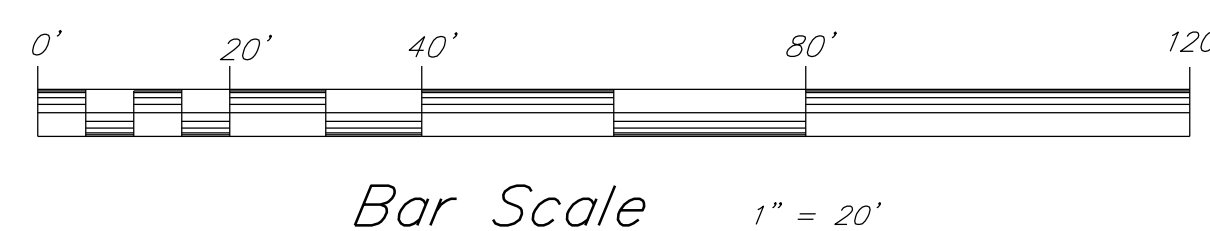


PERMIT REVIEW ONLY



Demolition Notes

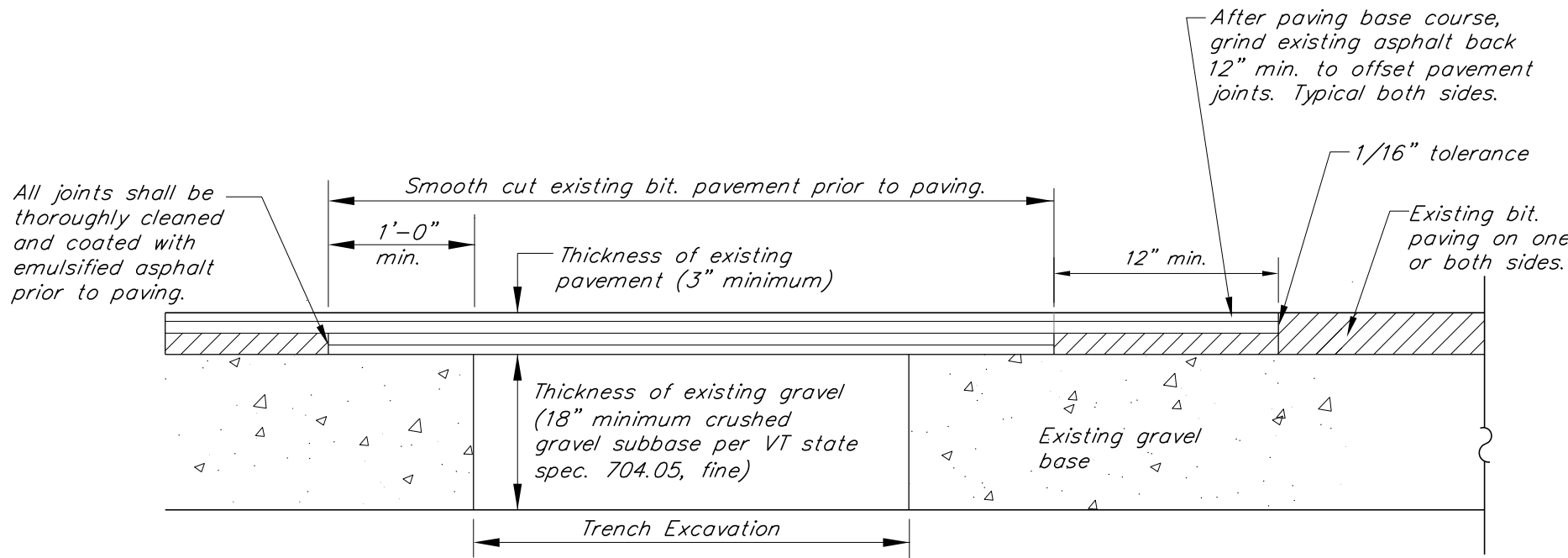
1. The location of underground electrical lines which service the site lights are not shown on the Civil Plans. Other electrical lines may exist which are not shown on this plan.
2. Refer to specifications for detailed scope of demolition work.
3. Prior to disrupting existing utilities, Contractor shall be responsible for confirming status of all utilities to be abandoned.
4. All abandoned utilities outside 6 ft. of the new building footprints shall be cut, capped, and abandoned in-place unless the removal of the abandoned utility is required during construction. All abandoned utilities within 6 ft. of the new building footprints shall be removed. All abandoned manholes, catch basins, and utility vaults shall be demolished and removed. Plug open ends of all abandoned pipes or conduits with concrete or water tight end cap. See Structural Plans for backfill requirements for all items removed from within the influence of the new building footprints. Use sand fill (703.03) for all demolition backfill outside the influence of the new building footprints (95% standard proctor compaction).
5. The Contractor shall establish snow fence protection barrier at the drip edge of all existing trees to remain within 10 ft. of construction disturbance.
6. All excess fill, stumps, rock, topsoil, waste, and other material is the exclusive property of the Contractor and shall be removed from the property and disposed of in a State approved disposal location.
7. Contractor shall maintain water and sanitary services to all existing buildings to remain.
8. Contractor shall demolish and remove all existing infrastructure necessary to construct the new project as designed. This plan does not show every item to be demolished and may not accurately show the limits of the items to be partially demolished.
9. See Specifications for recycling requirements for site and building.
10. This drawing refers to Civil Site Engineering items, located outside the building, only.
11. See Landscape Architect plans for demolition of existing trees, other existing vegetation and fencing.



Date revised	Description	Checked	Date
Designed	WHN		
Drawn	TJB		
Checked			
Scale	1" = 20'		
Date	April 4, 2014		
Project	13220	Bright Street	Burlington, Vermont
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446		SP-2	

Construction Notes

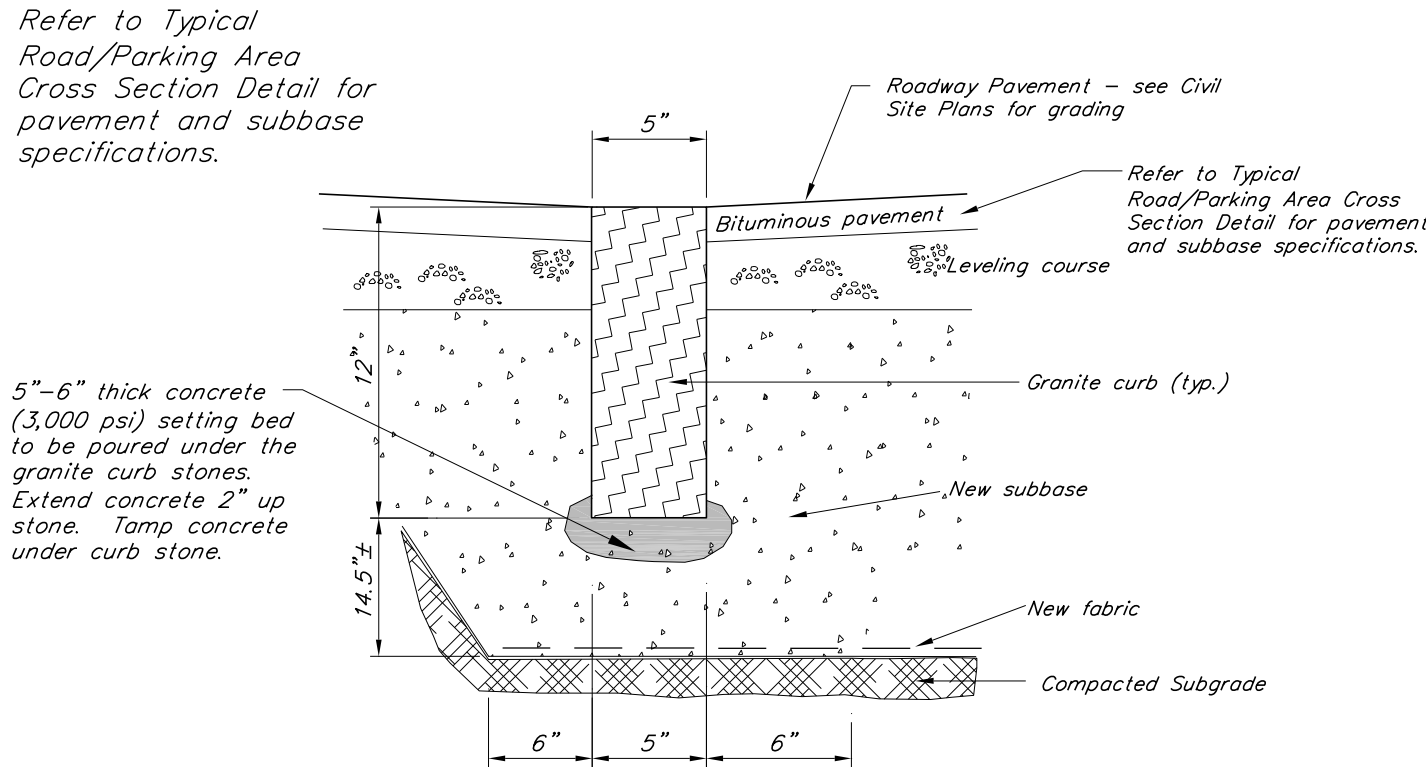
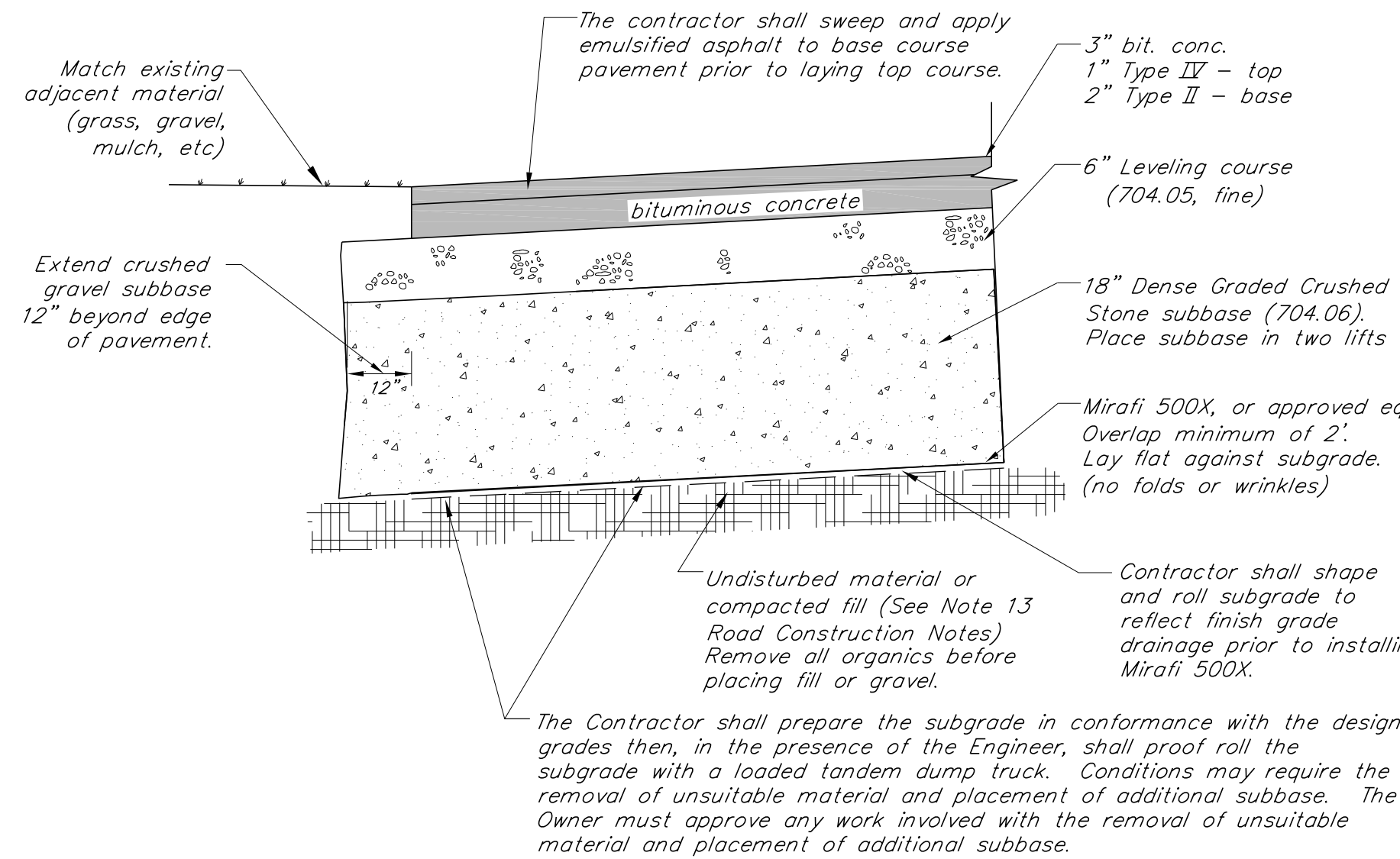
- The methods and materials of construction shall conform to the latest standards of the City of Burlington and the State of Vermont. All work shall be in conformance with all permits and approvals issued for the project. In case of conflict, the more stringent specification shall apply as directed by Engineer. All work shall be done in a workmanlike manner and completed in the time specified by Owner.
- The Contractor shall be responsible for all work and materials shown and required to make the job complete. These drawings do not show every fitting or appurtenance. Materials shall be as specified on the drawings. Manufacturer's product specifications shall be submitted for all materials to the Engineer for approval prior to installation.
- The location and size of existing underground utilities is not warranted to be exact or complete. The Contractor shall field locate all utilities and shall contact the affected utility company, the Engineer and the City of Burlington prior to making any hook ups. The Contractor shall be solely responsible for all existing utilities and their uninterrupted services. All off-site backfill, sheeting and shoring, dewatering, clearing and grubbing, erosion control, dust control, traffic control, grading, and all incidentals shall be included as part of the required work.
- Repair of all disturbed areas, grading, seeding, mulching, repair of roads and curbs, paving, and other incidentals are included as part of the required work. All disturbed areas shall be loamed and mulched until permanent ground cover is established.
- The Contractor shall verify all horizontal control and temporary bench marks before use.
- The workmen and public shall be protected by the Contractor from any and all hazards connected with the construction work. Open trenches, materials, or equipment within the working limits are to be guarded by the use of adequate barricades or flag men. All barricades left in position overnight are to be properly lighted. Kerosene pots are not acceptable. When work narrows the usable pavement, flag men shall be employed to aid the flow of traffic so that there will be no undue delays. The Contractor shall be held responsible for the safety of all workmen and the general public and all damages to property occurring from or upon the work occasioned by negligence or shall be held responsible for the safety of all workmen and the general public and all damages to property occurring from or upon the work occasioned by negligence or day or night within the working area. All work shall be in conformance to OSHA regulations, Title 19, Parts 1926.651 and 1926.652, and applicable to VOSHA regulations.
- Definition of "Preconstruction Excavation" for these contract documents shall be:
The site contractor shall expose utility and obtain all necessary information, including but not limited to, invert elevation, size, depth, pipe type, joint location, etc. Contractor shall transit survey the location and elevations of the utility. Contractor shall provide the engineer with sketches indicating horizontal and vertical information of pipe or conduit type and size, cross-section information, concrete encasement information (top and bottom elevations, width, etc.), joint location, etc. of each required existing underground utility. Accuracy of horizontal location is within 1 foot, and accuracy of vertical elevation is within 0.02 ft. (1/4"). Coordinate all excavation with City, Owner, and Engineer. Preconstruction excavations shall occur prior to ordering structures and prior to utility construction, to facilitate redesign if necessary.
- Contractor shall contact Dig Safe prior to any excavation.
- All new storm extending from catch basin structures shall be laid with a laser to elevation and slope as shown on the plans.
- The Contractor shall sawcut all existing pavement to be removed. The Contractor shall minimize the pavement area disturbance. Contractor shall be responsible for all pavement repair and restoration necessary to complete the work.
- The Contractor shall be responsible for all construction layout.
- Temporary silt fence shall be erected prior to any clearing or construction. Fencing may be erected in phases, but in no case shall construction of clearing proceed fencing. Special areas may be designated by the Owner for preservation of existing trees. These areas shall be the Contractor's responsibility to insure no damage is done to designated trees.
- Existing plantings are located in general areas as shown on the plans. Contractor shall protect plantings scheduled to remain so as not to damage these or their root systems.
- Contractor shall comply with all permits and approvals issued for this project.
- Contractor shall sign on as the Co-Permittee for the State of Vermont Erosion Prevention and Sediment Control permit for the project.
- Slope stability upon unsaturated soil conditions. If during construction saturated soils are encountered, contact the Engineer immediately.



- Set up and maintain signs and other safety control devices.
- Reshape hole and patch area by cutting with a concrete saw into square or rectangular shape and cut side faces vertically. Reshape downward solid material and around hole to sound pavement.
- Backfill trench in 6" lifts and compact each lift to 95% of maximum density of optimum moisture content as determined by ASTM D698 standard proctor.
- Remove all loose material and thoroughly sweep the hole area clean of mud and standing water.
- Apply liquid asphalt tack to vertical faces in a uniform manner. Do not puddle tack coat on bottom of hole.
- Fill top of hole with type IV bituminous concrete and compact in lifts no more than 2" thick. Each lift should be thoroughly compacted with a vibratory plate compactor or a portable roller. Experience has shown that 15 to 20 passes with a vibratory roller and mix temperature above 250°F (121°C) are necessary to ensure good compaction. Hand tamp should only be used for small areas (less than 1 s.f.).
- Clean up area. Do not leave excess fill or excavated material on the pavement. Remove safety signs.

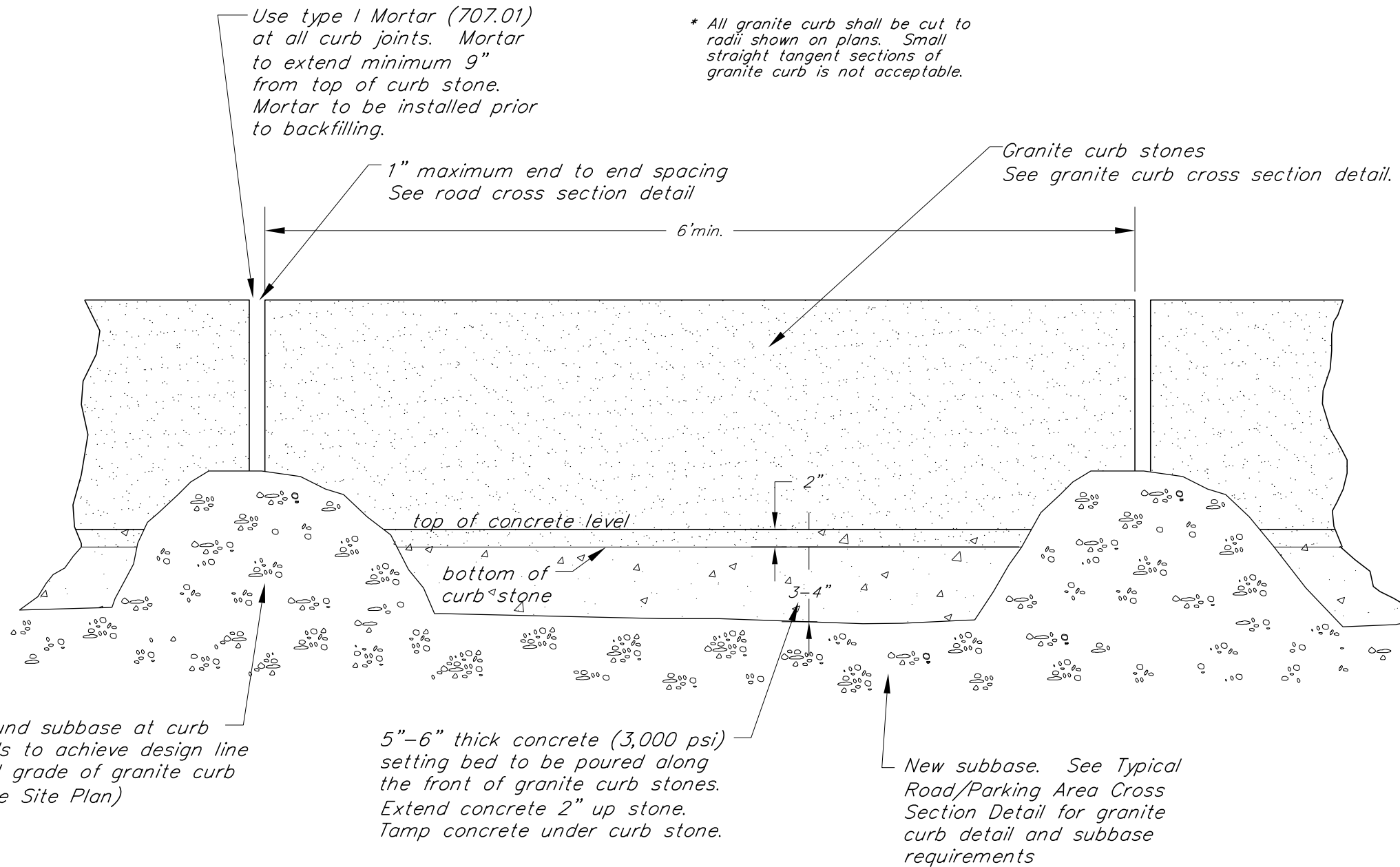
Replacement of Existing Road Subbase and Bituminous Pavement

N.T.S.



Flush Granite Curb

N.T.S.



Typical Granite Curb Section Detail

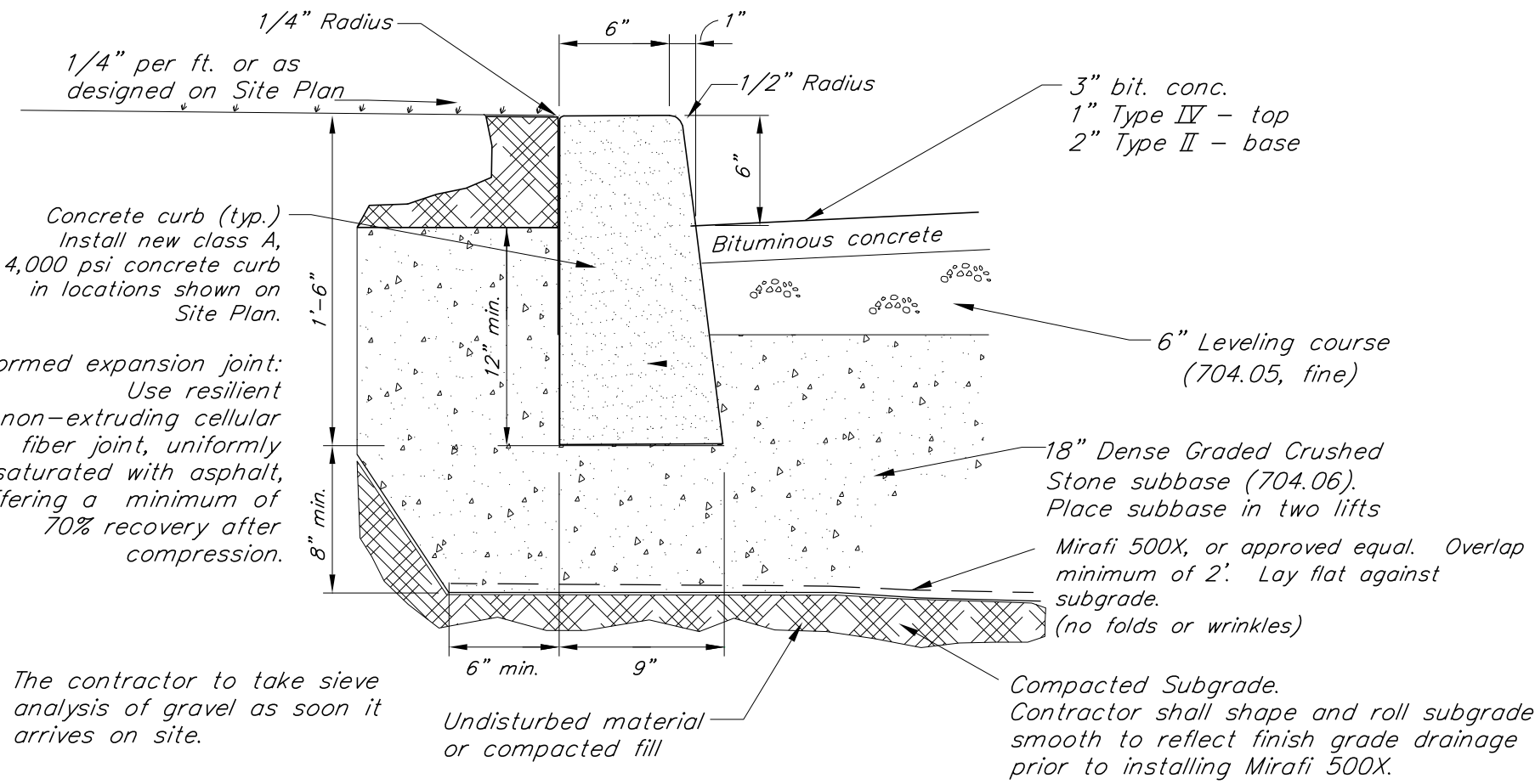
N.T.S.

Concrete Curb

- Broom finish concrete
- All joints to be tool finished
- Expansion/contraction joints every 20' with 1/2" joint filler
- Score 1/3 total depth at 10' intervals
- Apply 2 coats of Euclid Everclear VOX cure/seal compound to all concrete surfaces, per the manufacturer's specifications.

All concrete used in the construction of concrete curb shall be air entrained (5 - 7 %) and made with Portland cement. The concrete shall meet section 501 of the State of Vermont Standard Specification for Class 4 concrete and have min. 28 day compressive strength of 4,000 psi.

Provide a 6' taper at end of curb.



Travel over gravel with any vehicle tracking soil prior to placement of pavement is prohibited.

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

The Contractor shall prepare the subgrade in conformance with the design grades then, in the presence of the Engineer, shall proof roll the subgrade with a loaded tandem dump truck. Conditions may require the removal of unsuitable material and placement of additional subbase. The Owner must approve any work involved with the removal of unsuitable material and placement of additional subbase. Minimum proof roll area per inspection = 8,000 sf.

With Concrete Curb

Typical Road/Parking Area Cross Section Detail

N.T.S.

Road Construction Notes

(All references to road shall apply to parking areas as well.)

- New road shall be constructed to the line and grade shown on the drawings. The road and utility locations shall be as typically detailed unless otherwise shown.
- All road and parking construction shall be completed in accordance with the Vermont Agency of Transportation "Standard Specifications for Construction" 2011, hereafter called Vermont Highway Specifications, specifications found on these plans, and project specifications. In case of conflict, the more stringent specification shall apply as determined by the Engineer.
- The Contractor shall follow Vermont Highway Specifications (2011) Section 203.11 for placing and spreading embankments.
- Fill material for road embankment shall meet Note #13 below and be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 95% of maximum density (Standard Proctor).
- Road in fill sections shall be placed and compacted a minimum of 3 feet above top of any utility to be installed before trench is excavated for pipe placement. In trenches and cut sections, the Contractor shall provide all necessary sheeting, shoring and bracing to maintain compliance with all OSHA/VOSHA regulations.
- Methods for construction of subgrade shall conform to Vermont Highway Specifications (2011) 203.12 or as determined by the Engineer.
- Any subgrade or subbase disturbed by Contractor, or rendered unsuitable by construction machinery, shall be removed and replaced with approved granular backfill at the Contractor's expense. The subgrade shall be compacted to attain at least 95% of the maximum density (Standard Proctor) before placing road or embankment materials.
- The Owner will pay for on site soils testing (compaction, sieve, and proctor). The Contractor shall pay for failing tests.
- Sand borrow and cushion shall conform to Vermont Highway Specifications (2011) 703.03. Granular borrow shall conform to the Vermont Highway Specifications 703.04.
- Gravel subbase for pavement shall conform to Vermont Highway Specifications (2011) 704.06, Dense Graded Crushed Stone. Substitute materials identified in VAOT Specifications Section 301 - Subbase are not allowed.
- Leveling course shall conform to Vermont Highway Specifications (2011) 704.05, fine grading. Shoulders shall conform to Section 704.12, Aggregate for Shoulders. Substitute materials identified in VAOT Specifications Section 301 - Subbase are not allowed.
- Bituminous concrete pavement shall conform to Vermont Highway Specifications (2011) Section 404 and 406. Binder course shall be Type I + II, and finish wearing course shall be Type III, IV, or as detailed.
- Embankment fill for all impervious areas, EXCLUDING BUILDINGS, shall be a sieve specification as follows:

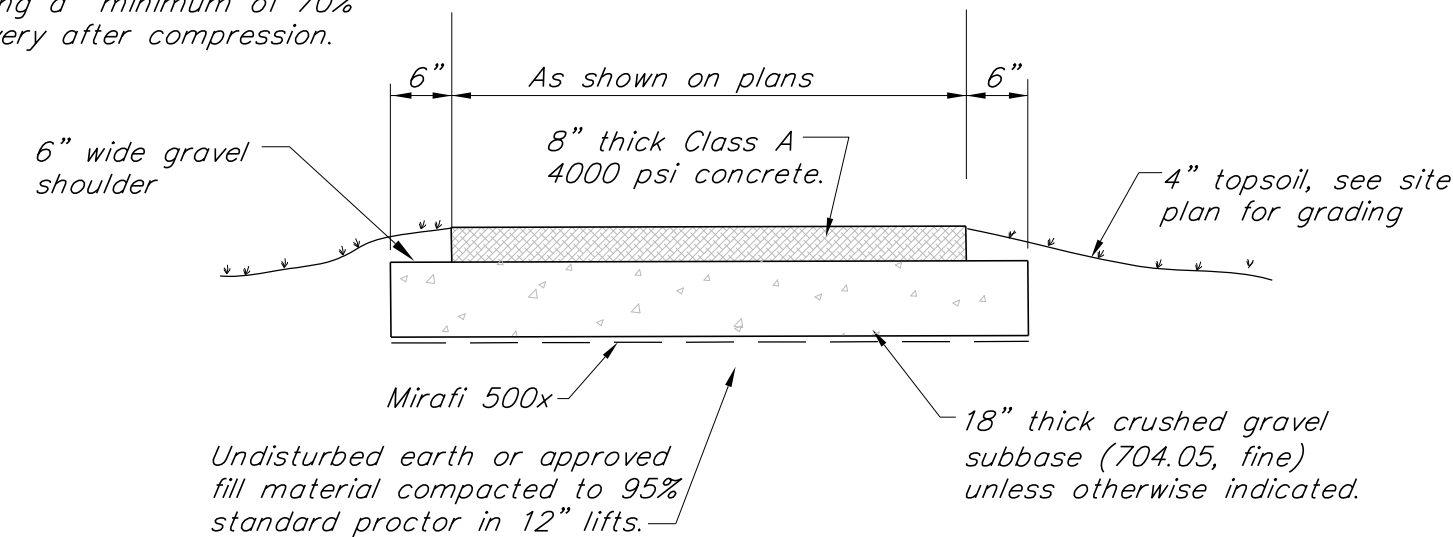
Sieve	% Finer
4"	100
2"	85-100
#4	60-100
#200	30 maximum
- Dense graded crushed stone, crushed gravel and sand borrow shall not be contaminated by work. Construction traffic shall not travel over exposed areas of this material.
- Contractor is responsible for all pavement markings (i.e. parking striping, handicap markings, stop bars, etc.) shown or implied on the Plans. This includes both new and replacement of existing.
 - Paint for pavement markings shall be Hydraplast Waterborne Traffic Paint by Franklin Paint Company. It shall be reflective, VOC compliant, fast drying, 100% acrylic waterborne traffic paint.
 - Traffic paint shall be applied with a uniform thickness and at a rate such that no pavement is visible after drying. Additional paint application will be required if underlying pavement is visible.

Date revised		Description	Checked	Date
Design	WHN			
Drawn	DMR			
Checked				
Scale	N.T.S.			
Date	April 3, 2014			
Project	13220	Bright Street		
PERMIT REVIEW ONLY		Civil Details		
KREBS & LANSING Consulting Engineers, Inc.		Champlain Housing Trust Inc.		
164 Main Street, Colchester, Vermont 05446		Burlington, Vermont		
The Vermont State Seal		KREBS & LANSING		
Professional Engineer		CD-1		

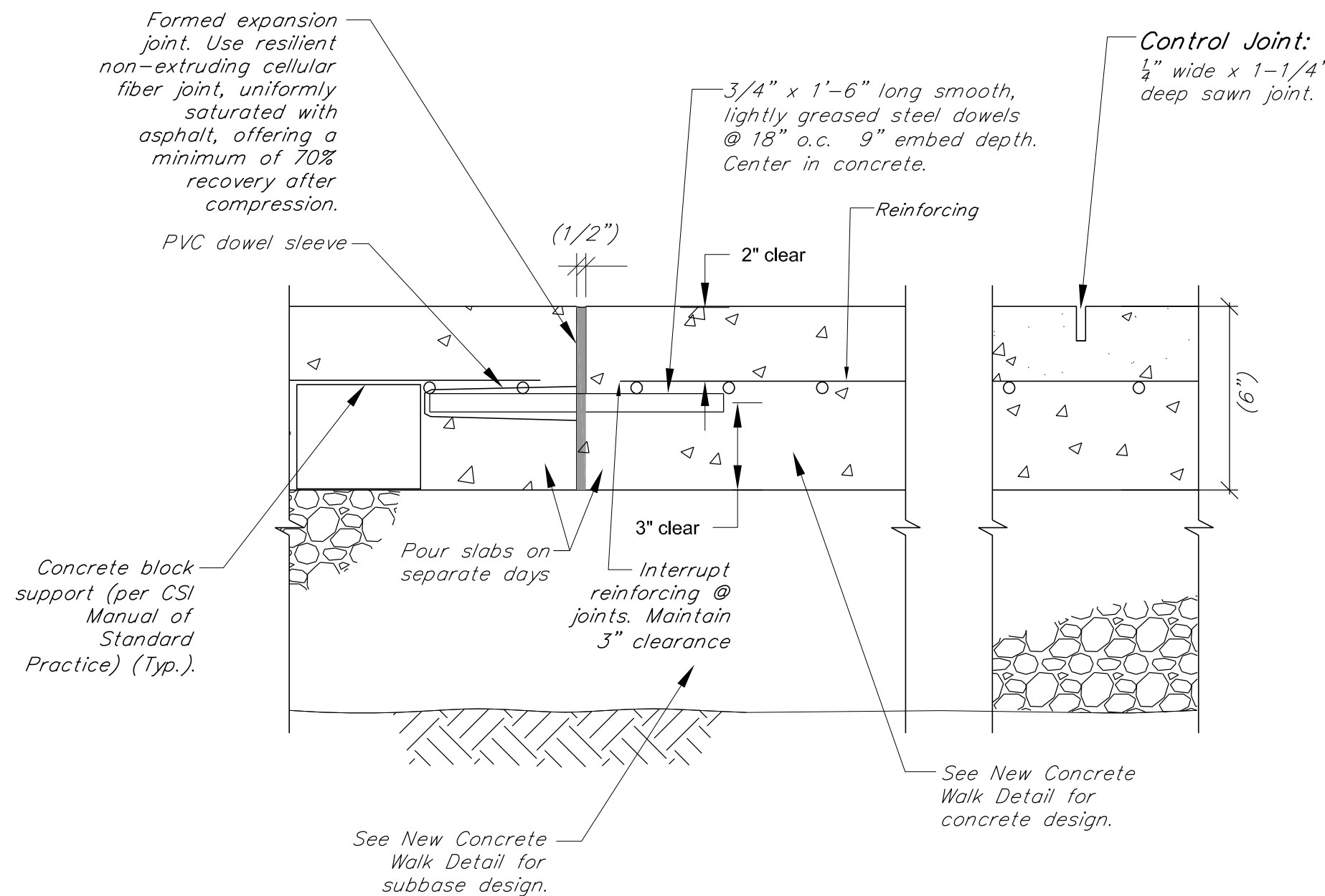
- *Broom finish concrete with tooled edges.*
- *Expansion joints shall be spaced 20 ft. on center unless otherwise indicated on Site Plan.*
- *Score control joints 1-1/4" depth at intervals equal to width of sidewalk.*
- *Apply 2 coats of Euclid Evercure VDX cure/seal compound to all concrete surfaces, per the manufacturer's specifications.*
- *Concrete construction shall conform to section 618.03 of the current VAOT Standard Specifications for Construction*

All concrete used in the construction of concrete sidewalk shall be air entrained and made with Portland cement. The concrete shall meet section 501 of the State of Vermont Standard Specification for Class A concrete and have 28 day compressive strength of 4,000 psi.

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



Cross Section
New Thickened Concrete Walk Detail
N. T.S.

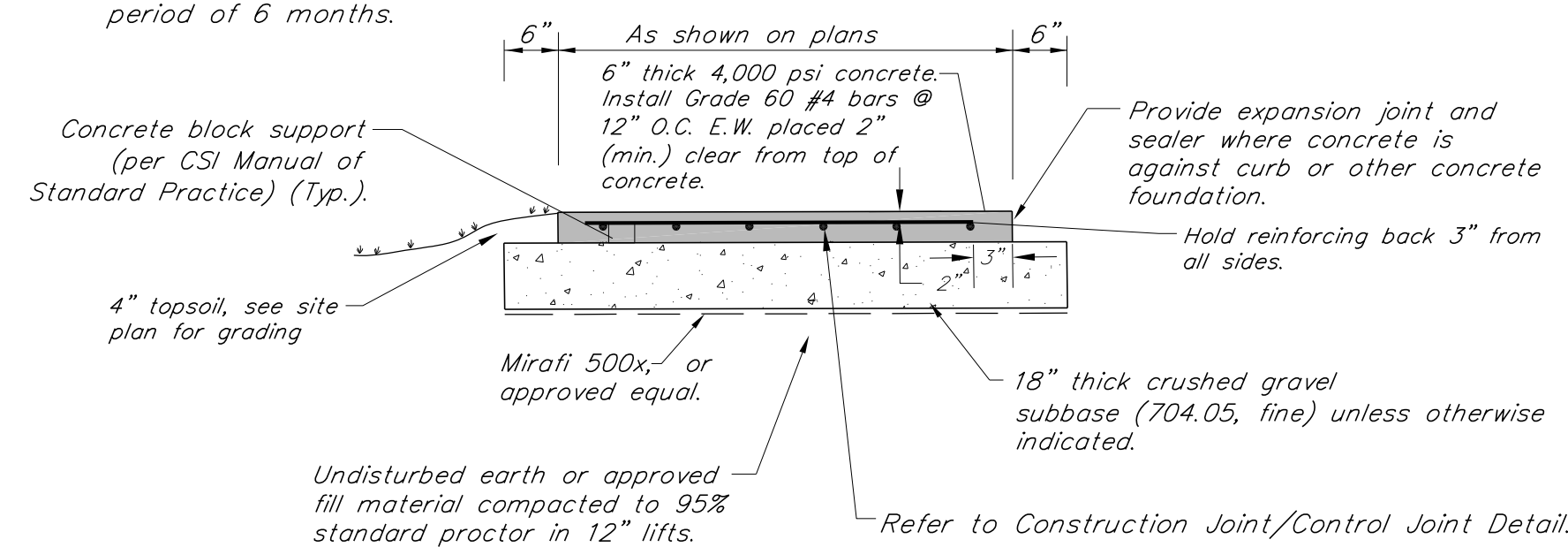


Concrete Construction Joint/Control Joint Detail

All concrete used in the construction of concrete sidewalk shall be air entrained (5 - 7 %) and made with Portland cement. The concrete shall meet section 501 of the State of Vermont Standard Specification for Class A concrete and have 28 day compressive strength of 4,000 psi.

*Note:
Owner or Contractor is not
allowed to place deicing
materials on newly poured
concrete sidewalk for a
period of 6 months.*

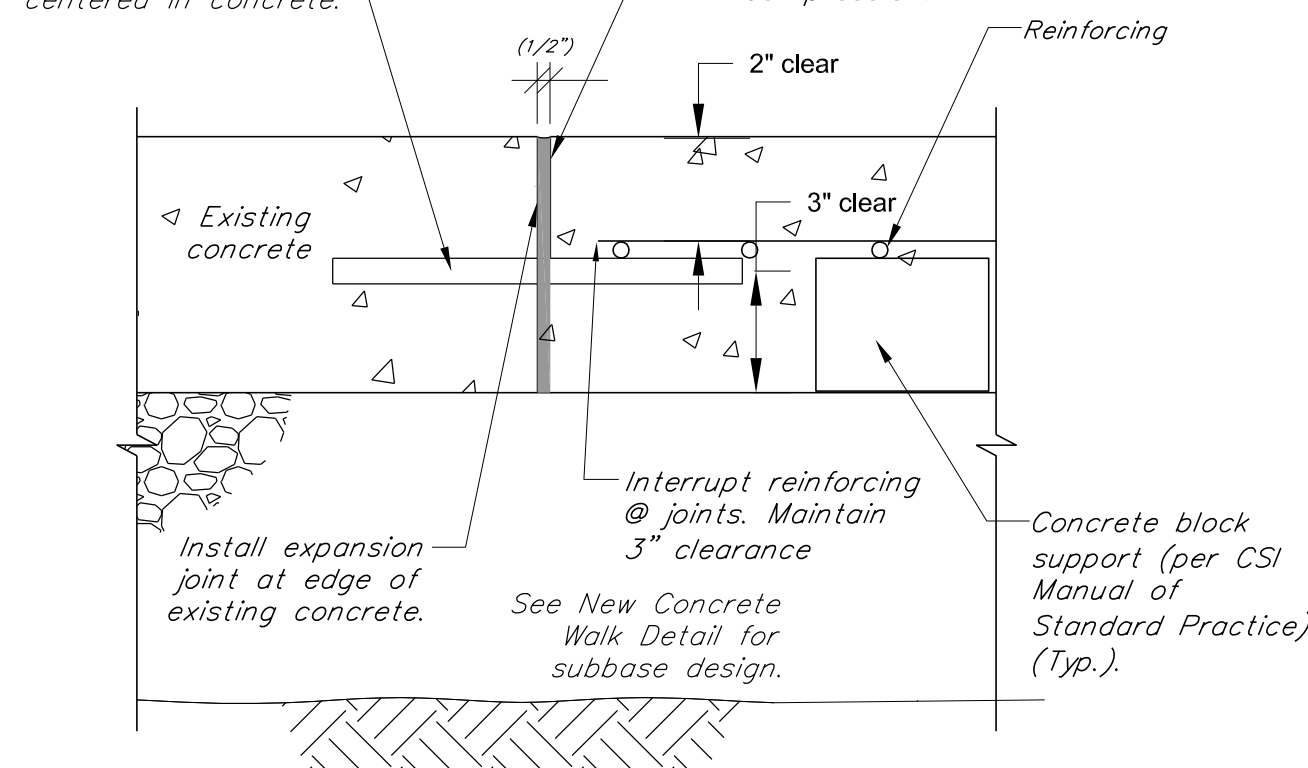
- Broom finish concrete with tool ed edges
- Construction joints shall be spaced max. 24' in all directions. See Site Plan for layout.
- Score control joints 1-1/4" depth at intervals equal to width of sidewalk.
- Apply 2 coats of Euclid Everclear VOX cure/seal compound to all concrete surfaces, per the manufacturer's specifications.
- Concrete construction shall conform to section 618.03 of the current VAOT Standard Specifications for Construction



Cross Section
New Concrete Walk Detail
(For Concrete Walks 7 ft. Wide or Greater)
N.T.S.

Drill and insert #4 x 1'-6" long smooth, steel dowels @ 18" o.c. 9" embed depth. Dowels to be level and centered in concrete.

Formed expansion joint. Use resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.

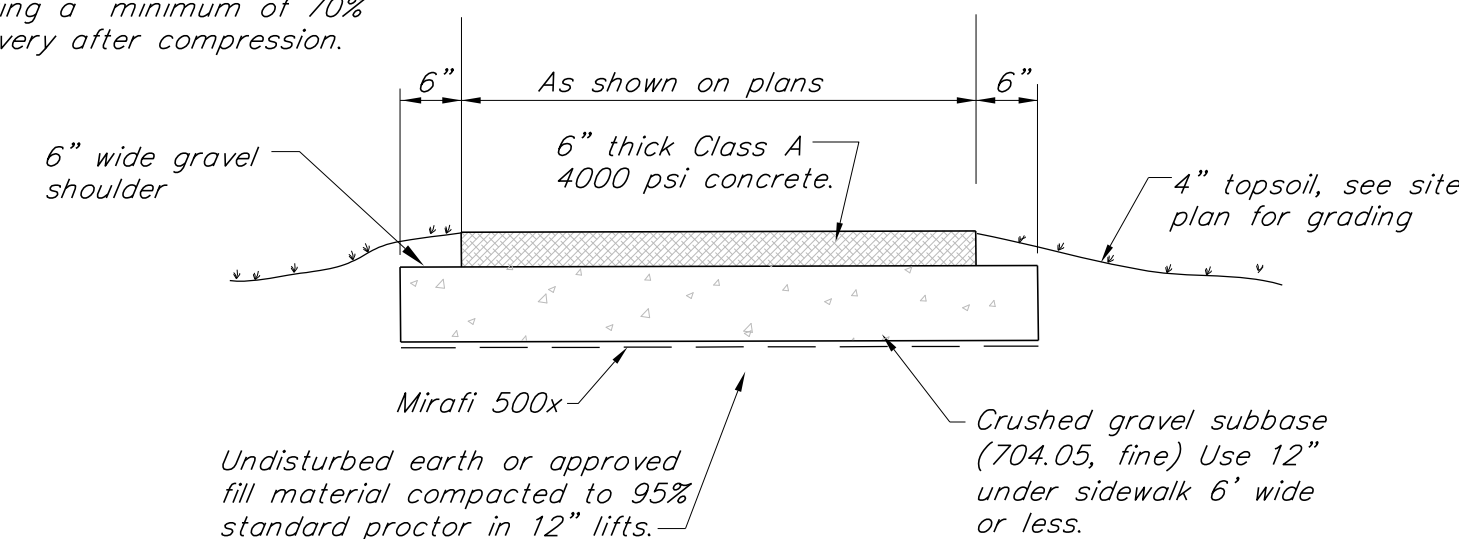


Concrete Slab Joint Detail for
Connection to Existing Concrete

M.T.S.

All concrete used in the construction of concrete sidewalk shall be air entrained and made with Portland cement. The concrete shall meet section 501 of the State of Vermont Standard Specification for Class A concrete and have 28 day compressive strength of 4,000 psi.

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



Cross Section

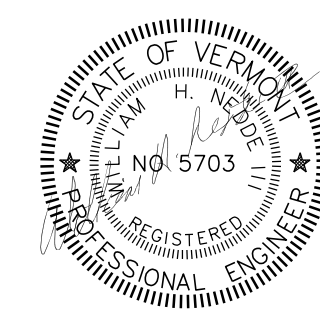
New Concrete Walk Detail

(For Concrete Walks 6ft. Wide or Less)

N.T.S.

- Broom finish concrete with tooled edges.
- Expansion joints shall be spaced 20 ft. on center unless otherwise indicated on Site Plans.
- Score control joints 1-1/4" depth at intervals equal to width of sidewalk.
- Apply 2 coats of Euclid Everclear VOX cure/seal compound to all concrete surfaces, per the manufacturer's specifications.
- Concrete construction shall conform to section 618.03 of the current VAOT Standard Specifications for Construction

Date revised	Description	Checked	Date
Design <i>WHN</i>	<i>Civil Details</i>		
Drawn <i>DMR</i>			
Checked	<i>Champlain Housing Trust Inc.</i>		
Scale <i>N.T.S.</i>			
Date <i>April 3, 2014</i>			
Project <i>13220</i>			
	<i>Bright Street</i>	<i>Burlington, Vermont</i>	
<i>KREBS & LANSING Consulting Engineers, Inc.</i>		The name Bright-Consulting Printing date	By <i>Krebs & Lansing</i> 2014
<i>164 Main Street, Colchester, Vermont 05446</i>			<i>CD-2</i>



PERMIT REVIEW ONLY

KREBS & LANSING Consulting Engineers, Inc
164 Main Street, Colchester, Vermont 05446

Burlington, Vermont	
File name Bright-Detols.doc	© Krebs & Lansing 2014
Printing date	CD-2

Construction Notes

The Contractor will be responsible for all construction of water main, storm and sanitary sewer systems as shown on the plans. The Contractor will be responsible for all necessary adapters, fittings, etc. to make connections to the existing and proposed units. The Contractor shall be responsible for all work shown or implied on the plans and/or referenced in the specifications and permits. The Contractor shall submit, for approval by the Engineer, all types of materials and products used.

Water Main (Applies to new domestic water mains and services) (See also Fire Service Main Notes)

- The pipe for water main shall be CL52 ductile iron. Ductile iron fittings shall conform to AWWA C110, 350 pounds working pressure. Valves shall be manufactured to meet all requirements of AWWA specification C509.
- All pipe shall be installed in accordance with AWWA C600. The pipe shall be kept free of foreign matter and debris during installation. When the process of pipe laying has stopped, any open ends of pipe shall be plugged. There shall be a minimum of 6'-0" (1.82 m) cover over all pipe and service lines. Any pipe deflection shall not exceed fifty (50%) percent of recommended manufacturer's maximum deflection. Backfill materials and procedures shall be as detailed on the drawings. The Contractor shall be responsible for any and all sheeting and/or shoring necessary to comply with OSHA - VOSHA regulations.
- The testing of the water main shall consist of the testing of all installed pipe, services and hydrants in accordance with AWWA C600. The testing shall consist of a pressure test and leakage test. All testing shall be done with potable water and in the presence of the Engineer and a representative from the Burlington Water Department. The pressure test consists of maintaining a minimum internal pipe pressure of 200 psi (140,620 kg/m²) for two (2) hours. If the pressure drops more than 5 psi (3515 kg/m²) in the first hour, this constitutes failure of the test for the particular section of pipe. Failure of any test section will necessitate repair and/or replacement of the failed section.
- Chlorinating of the system shall be accomplished after the water main has been successfully pressure tested and thoroughly flushed. Disinfecting shall be in accordance with AWWA C-651. The disinfecting process shall be deemed acceptable only after two samples of water from the flushed disinfected main shows no evidence of bacteriological contamination. Use minimum 25 mg/l chlorine concentration for 24 hours. The concentration must remain above 10 mg/l. Tablet disinfecting is not acceptable.
- The water main shall be thoroughly flushed with a minimum flow velocity of 2.5 ft/s to flush foreign materials out of the valves and hydrants. Prior to flushing, the Contractor shall contact the Owner, Fire Department in the municipality, the District Water Supply company, and the Engineer.

Fire Service Main

- The pipe for water main shall be CL52 ductile iron. Ductile iron fittings shall conform to AWWA C110, 350 pounds working pressure. Valves shall be manufactured to meet all requirements of AWWA specification C509.
- All pipe shall be installed in accordance with AWWA C600. The pipe shall be kept free of foreign matter and debris during installation. When the process of pipe laying has stopped, any open ends of pipe shall be plugged. There shall be a minimum of 6'-0" cover over all pipes and service lines. Any pipe deflection shall not exceed fifty (50%) percent of recommended manufacturer's maximum deflection. Backfill materials and procedures shall be as detailed on the drawings. The Contractor shall be responsible for any and all sheeting and/or shoring necessary to comply with OSHA - VOSHA regulations.
- The testing of the water main shall consist of the testing of all installed pipe, services and hydrants in accordance with NFPA 24. The testing shall consist of a pressure test and leakage test. All testing shall be done with potable water and in the presence of the Engineer. The pressure test consists of maintaining a minimum internal pipe pressure of 200 psi (140,620 kg/m²) for two (2) hours. The amount of leakage at the joints shall not exceed 2 qt/hr per 100 gaskets or joints, irrespective of pipe diameter. If the pressure drops more than 5 psi (3515 kg/m²) in the first hour, this constitutes failure of the test for the particular section of pipe. Failure of any test section will necessitate repair and/or replacement of the failed section.
- Chlorinating of the system shall be accomplished after the water main has been successfully pressure tested and thoroughly flushed. Disinfecting shall be in accordance with AWWA C-651. The disinfecting process shall be deemed acceptable only after two samples of water from the flushed disinfected main shows no evidence of bacteriological contamination. Use minimum 25 mg/l chlorine concentration for 24 hours. The concentration must remain above 10 mg/l. Tablet disinfecting is not acceptable.
- Acceptable water main flushing requirements are provided below. Prior to flushing, the Contractor shall contact the Owner, Fire Department in the municipality, the District Water Supply company, and the Engineer.

Underground piping, from the water supply to the system riser, and lead-in connections to the system riser shall be completely flushed before the connection is made to downstream fire protection system piping.

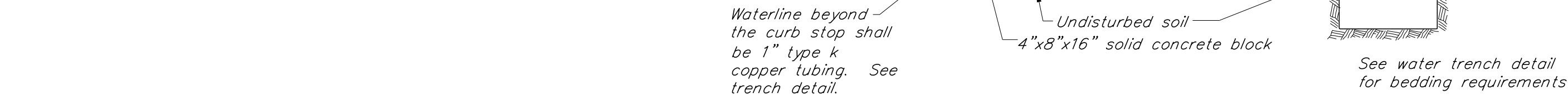
The flushing operation shall be continued for a sufficient time to ensure thorough cleaning.

The minimum rate of flow shall be not less than one of the following:

- Hydraulically calculated water demand flow rate of the system, including any hose requirements. (provided by the mechanical/sprinkler consultant)
- Flow necessary to provide a velocity of 10 ft/sec (3.1 m/sec) in accordance with the table below.
- Maximum flow rate available to the system under fire conditions.

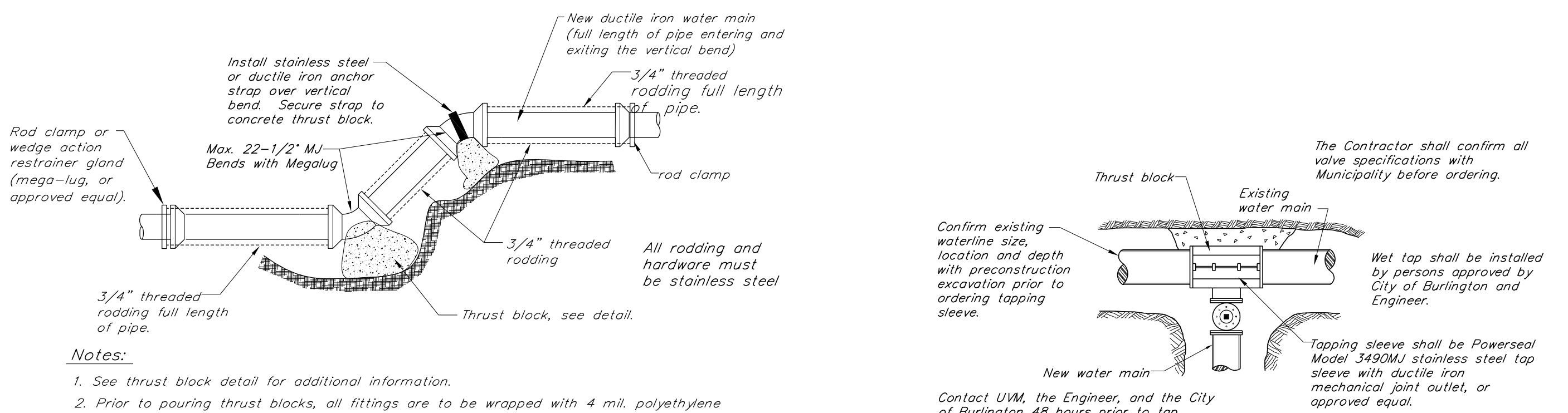
Flow Required to Produce a Velocity of 10 ft/sec (3 m/s) in Pipes

Pipe Size		Flow Rate	
In.	mm	gpm	L/min
4	102	390	1,476
6	152	880	3,331
8	203	1,560	5,905
10	254	2,440	9,235
12	305	3,520	13,323



Water Service Detail

N.T.S.

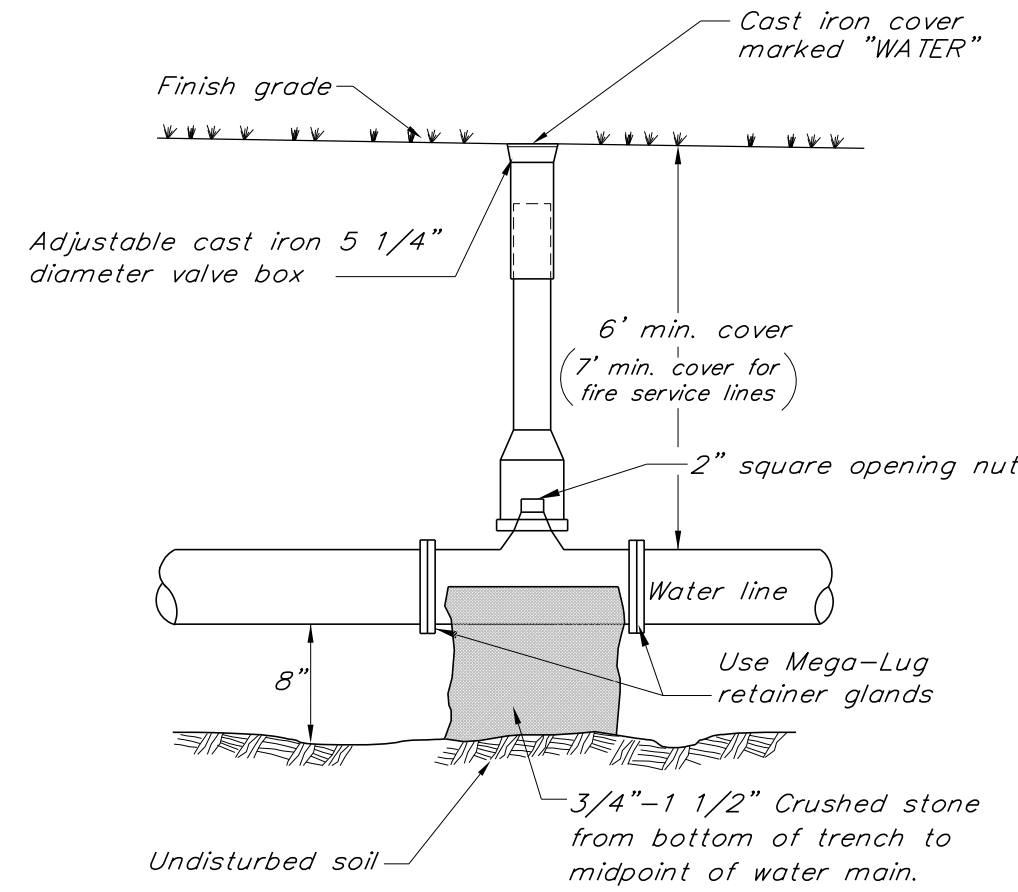


Vertical Bend Thrust Block Restraint Detail

N.T.S.

*The Contractor shall confirm all hydrant * specifications with Municipality before ordering.

- Gate valves shall be A.W.W.A. C 509 Standard Gate Valves with mechanical joints of sizes as required on the plans. All valves shall be of cast or ductile.
- All valves shall be of cast or ductile iron body, parallel brass seats, non-rising stems, inside screw, double disk construction with "O" Ring Stem Seals.
- The gate valves shall open counter-clockwise and be designed for a working pressure of 200 psi. Verify open direction with City of Burlington Water Department.
- All valves to be equipped with a valve box for a minimum of 6 feet (6') of cover material.



Typical Resilient Seat Gate Valve

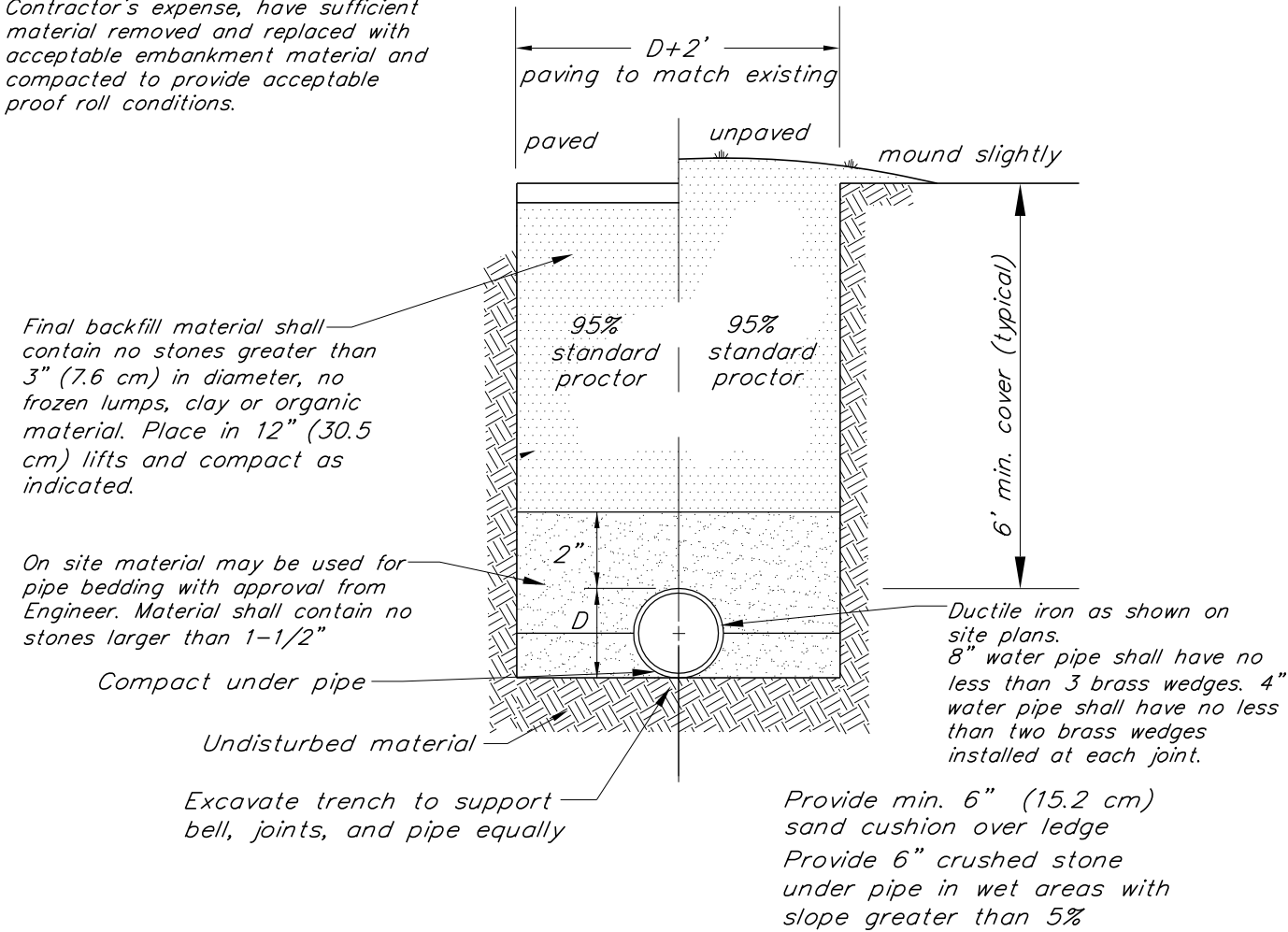
N.T.S.

General Water Main Notes:

- Four-inch and six-inch pipe shall have no less than 2 brass wedges installed at each joint. Eight-inch pipe shall have no less than 3 wedges installed at each joint.
- The Contractor shall coordinate the termination/shutdown of the existing water service with the Burlington Water Department and the Civil Engineer.
- These plans provide design and details of water main beyond 5 ft. outside the building.
- These plans provide design and details of water main beyond 5 ft. outside the building. The Site Contractor shall be responsible for extending the waterline to the plumbing connection within the building. (See Mechanical/Plumbing Engineers plans for scope, design and specifications within 5 ft. of the building.)
- Contractor shall provide all necessary fittings and appurtenances to complete the waterline construction work. This includes temporary fittings and gauges necessary to safely complete the flushing activities required prior to making connections with building plumbing.

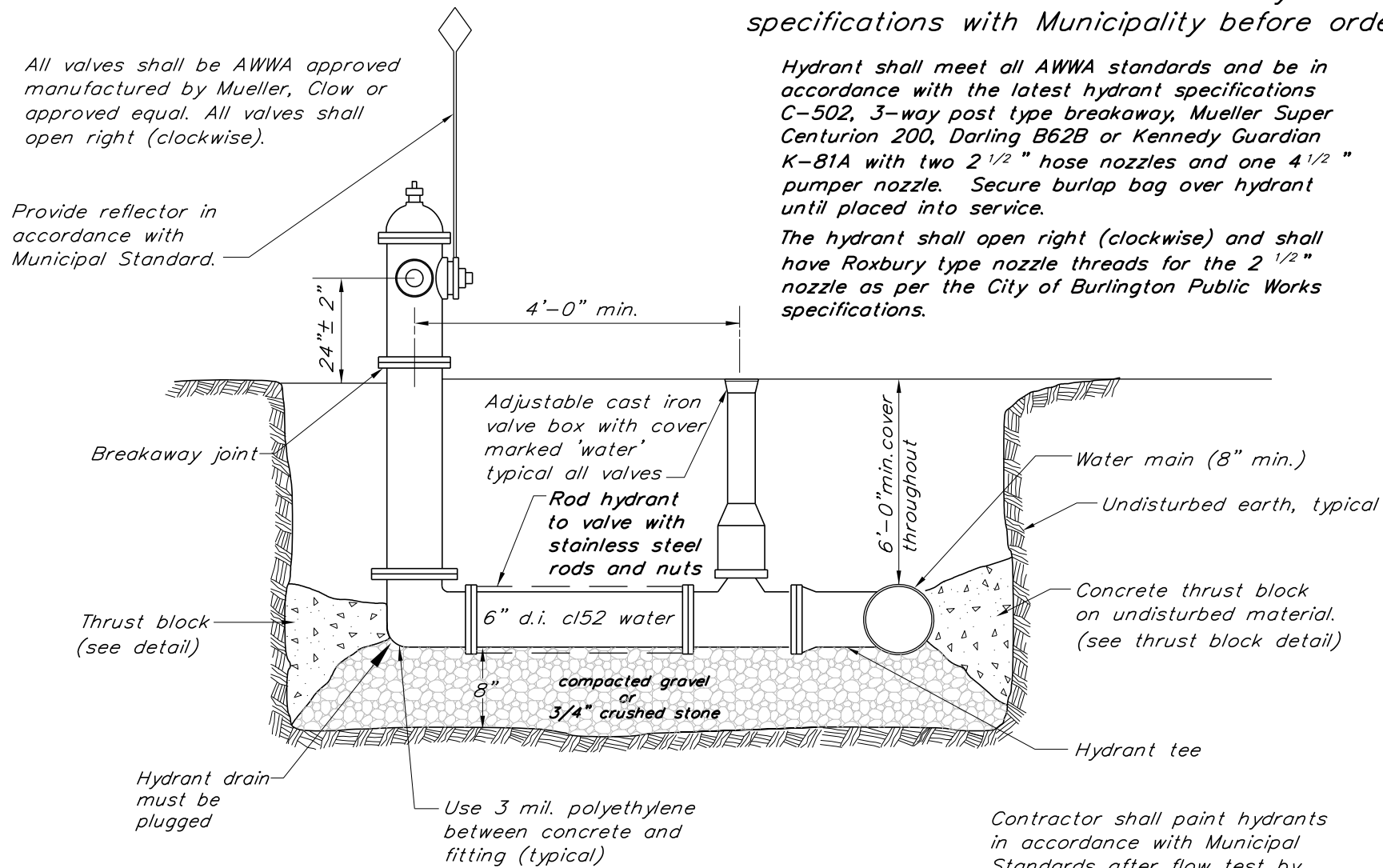
Backfill material under roads or paved areas must pass subgrade proof roll. Any trench area that does not successfully proof roll shall, at the Contractor's expense, have sufficient material removed and replaced with acceptable embankment material and compacted to provide acceptable proof roll conditions.

The Contractor shall be responsible for complying with OSHA - VOSHA regulations.



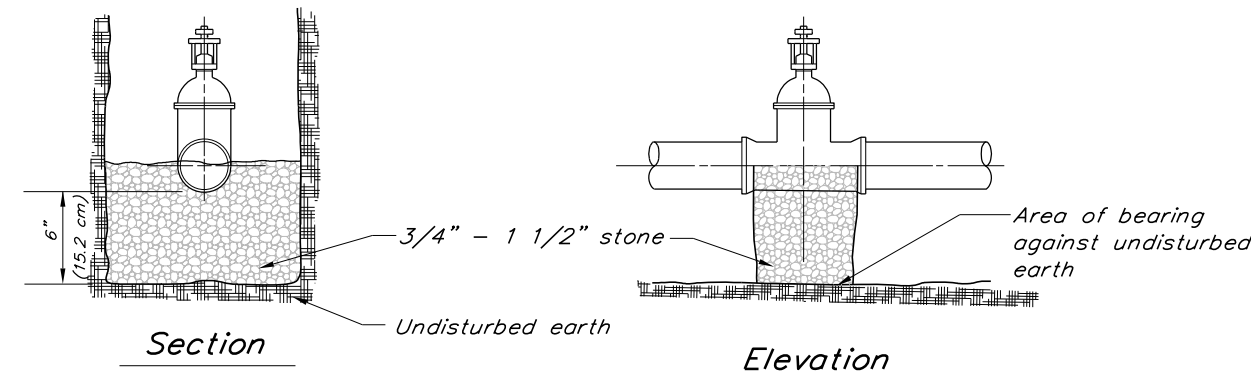
Typical Water Trench Detail

N.T.S.



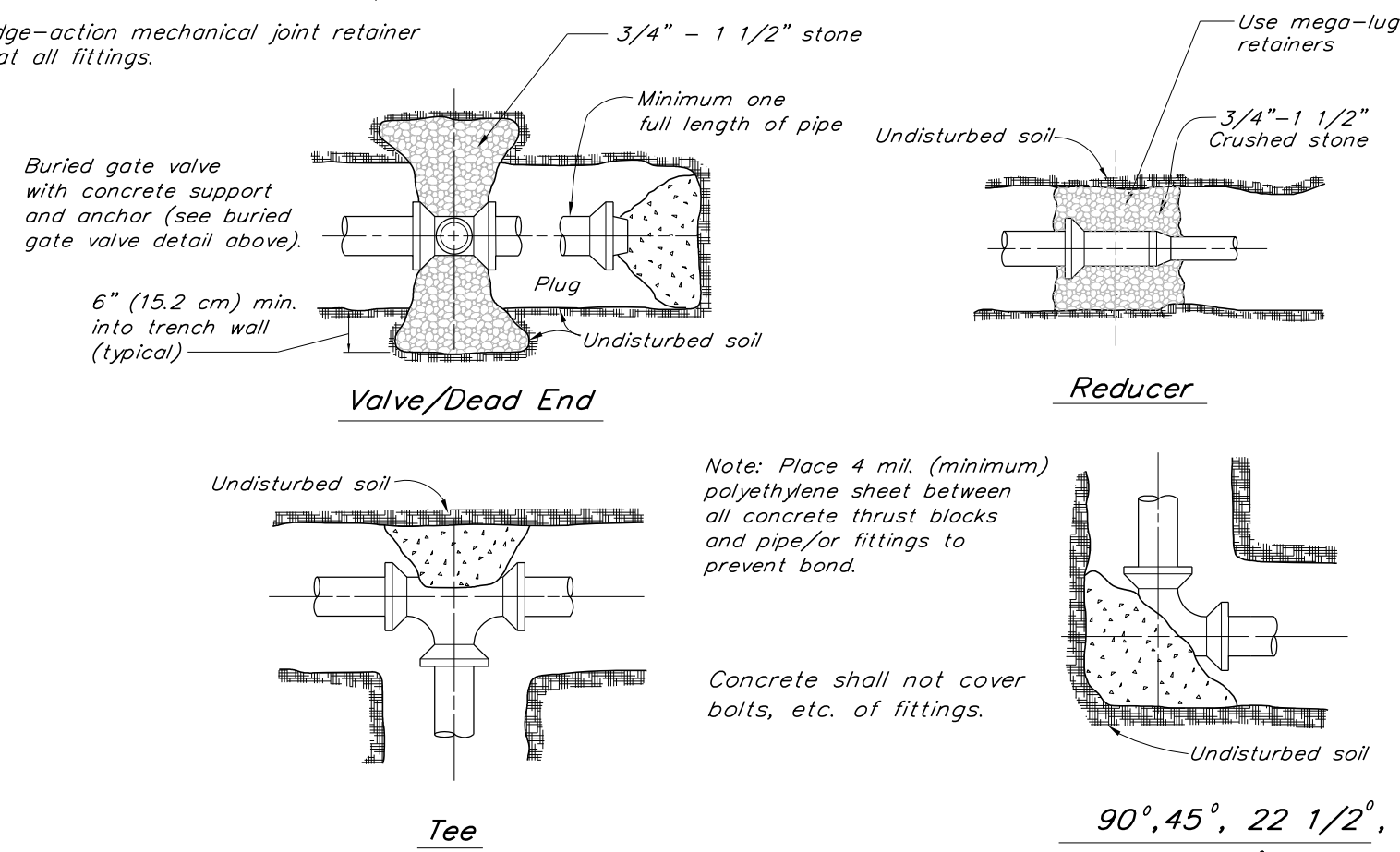
Typical Hydrant

(City of Burlington)
N.T.S.



Note

- A thrust block shall be installed at all water main bends, end caps, and tees.
- Precast thrust blocks are NOT acceptable.
- Redi-mix concrete (2,500 psi min) must be used for thrust blocks. Sacrete is NOT acceptable.
- Use wedge-action mechanical joint retainer glands at all fittings.



Minimum Area of Bearing Surface of Concrete Thrust Block (in square feet)

3"				4"				6"				8"				12"				SOIL CONDITION	SAFE BEARING LOAD(PSF)
ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.		
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	4.0	5.5	3.0	1.5	Sound shale	10,000
1.0	1.0	1.0	0.5	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.5	2.0	10.0	14.0	7.5	4.0	Cemented gravel & sand	4,000
1.0	1.0	1.0	0.5	2.0	0.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	Coarse & fine compact sand	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	Medium clay (can be soaked)	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	Soft clay	1,000

Maximum water pressure = 200 PSI (140,620 kg/m²)

Thrust Block Details

N.T.S.

Date revised	Description	Checked	Date
Design	WHN		
Drawn	DMR		
Checked			
Scale	N.T.S.		
Date	April 3, 2014		
Project	13220	Bright Street	Burlington, Vermont
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446			
PERMIT REVIEW ONLY		By:	© Krebs & Lansing 2014 Drawing date CD-3

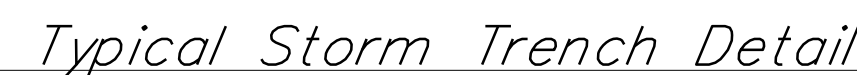
1. *All water lines and sewer lines shall be thoroughly tested by the Contractor in accordance with the Environmental Protection Rules (09/29/07), and the Chapter 21 Water Supply Rules (the more stringent rule shall apply).*
2. *All private or municipal waterlines shall be tested by the Contractor in accordance with the procedures outlined in AWWA C600 and/or NFPA 24.*
3. *No water main shall be closer than ten (10) feet to any sanitary sewer or sanitary manhole and five (5) feet to any catch basin or storm sewer line. Provide minimum of 18" vertical separation between water main and storm/sanitary sewer crossing.*
4. *The Contractor shall be responsible for construction as-builts to service locations, and any water main fittings. As-builts shall be recorded in accordance with the outlined procedures.*
5. *The Contractor shall be responsible for contacting Engineer at least 24 hours prior to starting construction on any portion of the exterior water or sanitary systems. This notification requirement shall continue to the completion of the water and sanitary systems.*
6. *Utility Testing. The Contractor shall be responsible for scheduling water and sanitary testing, with the Engineer and the Municipality Public Works Department, at a minimum of 24 hours prior to the test. Based on availability of Engineer's staff, the Engineer shall accommodate the testing schedule within 24 hours of the Contractor requested test date/time.*
7. *The Contractor shall pre-test water for 2 hours. The Contractor shall notify Engineer immediately if pre-test failed.*
8. *The Contractor shall immediately contact the Engineer if pre-scheduled testing and/or water/sewer construction is canceled. If Contractor does not contact Engineer and Engineer visits the site, the Contractor shall be responsible for Engineer's fees/mileage for site visit.*
9. *The Contractor shall coordinate water construction with the City of Burlington. The Contractor shall leave thrust blocks and other required sections of new line exposed until City has inspected and approved it.*

1. *The location of sewer mains in relation to water mains shall be in accordance with the "Recommended Standards for Sewage Works" so-called Ten State Standards and Water Supply Rules.*
2. *Sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. If this distance cannot be obtained, then the pipes shall be installed according to EPR, Chapter 1, Appendix 1-A-03(1)(1)a or b.*
3. *18" separation shall be maintained whether water is over or under sewer. If this distance cannot be obtained, then the pipes shall be installed according to EPR Chapter 1, 11b.*



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 possible to maintain the 18" vertical separation:

- 1.) the crossing shall be arranged so that one full length of sewer is centered above 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, whichever is greater;
- 3.) the section constructed to water 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.

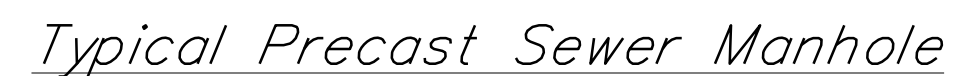


The pipe for storm sewer shall be as shown on the plans and detailed below:
All pipe shall be laid to the line and grade as shown on the plans.

- | | | |
|-------------------|--|---|
| <i>HDPE</i> | - Smooth Walled Corrugated
High Density Polyethylene Pipe | - Pipe shall be silt tight and conform to AASHTO M294*, Type S.
(ADS N12 or approved equal) |
| <i>PVC SDR 35</i> | - Polyvinyl chloride pipe | - Pipe shall conform to ASTM Specification D-3034 or F679, (PVC)
Sewer Pipe and Fittings, SDR35. |

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

1. *All sewer lines and manholes shall be thoroughly tested by the Contractor in accordance with the Environmental Protection Rules (09/29/07).*
2. *All sanitary manholes shall be vacuum tested in the presence of the Engineer. The structure shall be tested prior to backfill. Test procedures and pressure shall be determined jointly by the local approval agency and the Engineer. Failure of any vacuum test shall necessitate repair and/or replacement of the structure and retest. Water testing manholes is not acceptable.*
3. *All sanitary mains shall be air tested in the presence of the Engineer. At a minimum, the test pressure shall be 4 pounds per square inch at the highest point along the test for 4 minutes.*
4. *Utility Testing. The Contractor shall be responsible for scheduling sanitary testing at a minimum of 24 hours prior to the test. Based on availability of Engineer's staff, the Engineer shall accommodate the testing schedule within 24 hours of the Contractor requested test date/time.*
5. *The Contractor shall immediately contact the Engineer if pre-scheduled testing and/or water/sewer construction is canceled. If Contractor does not contact Engineer and Engineer visits the site, the Contractor shall be responsible for Engineer's fees/mileage for site visit.*

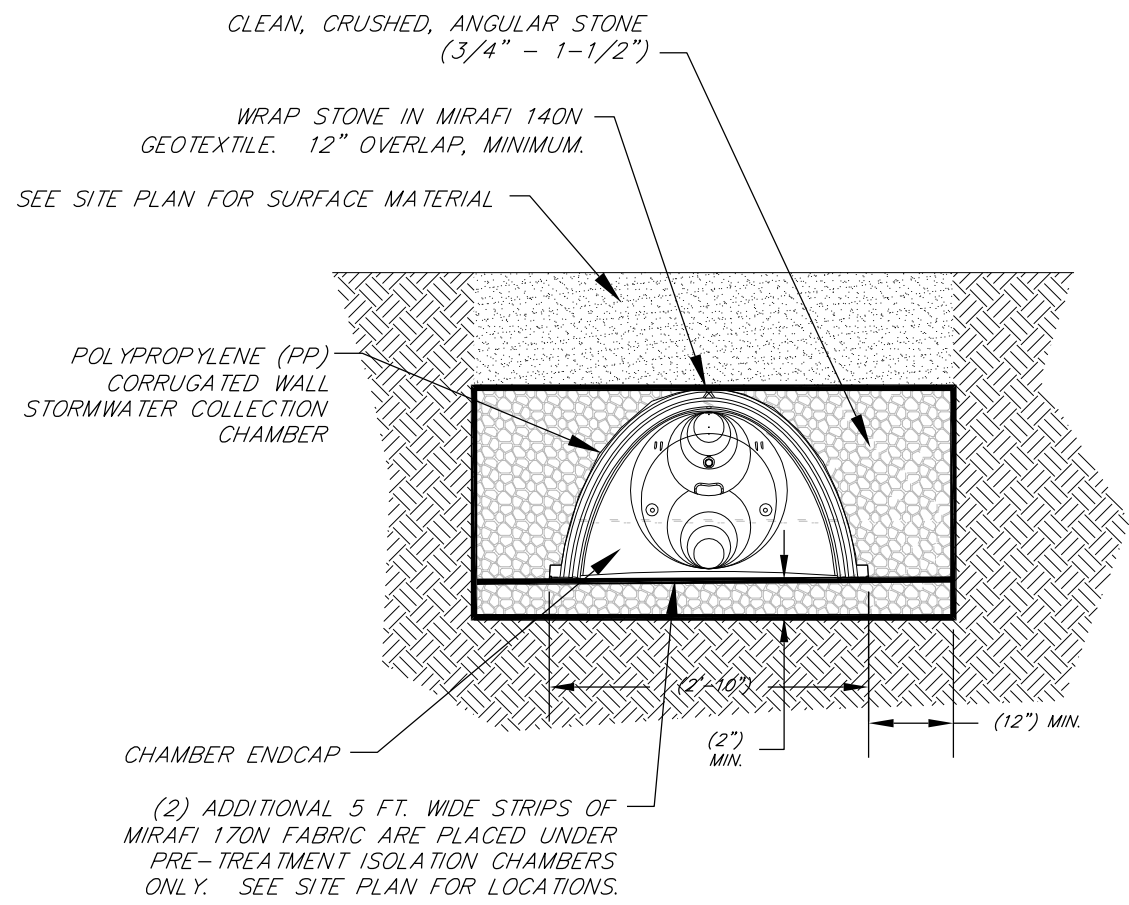


Date revised	Description	Checked	Date
Design <u>WHN</u>	Civil Details Champlain Housing Trust Inc.		
Drawn <u>DMR</u>			
Checked			
Scale <u>N.T.S.</u>			
Date <u>April 3, 2014</u>			
Project <u>13220</u>	<u>Bright Street</u>	<u>Burlington, Vermont</u>	
<i>KREBS & LANSING Consulting Engineers, Inc.</i> <i>164 Main Street, Colchester, Vermont 05446</i>		See notes Bright-Details Inc. Printing date	© Krebs & Lansing 2014 <i>CD-4</i>

Stormwater infiltration chambers detailed on this plan are based on specifications for the StormTech SC-310 system.

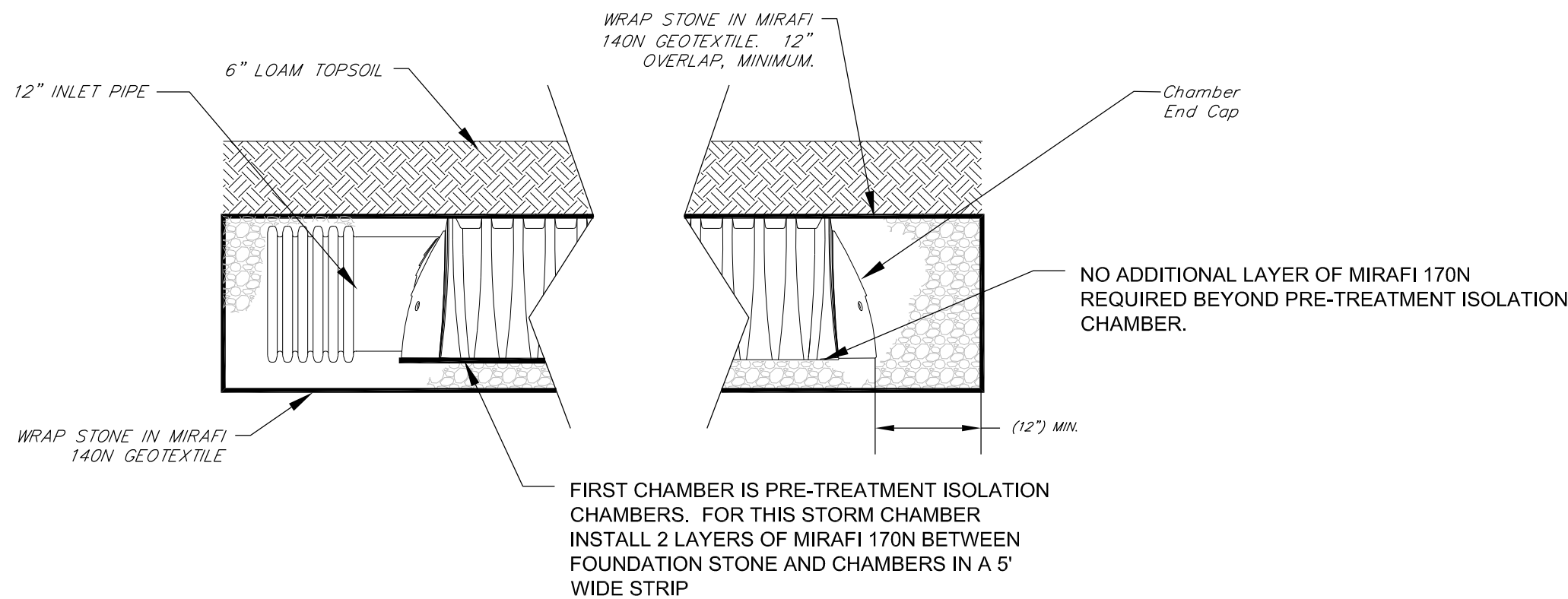
Infiltration System Construction Notes:

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



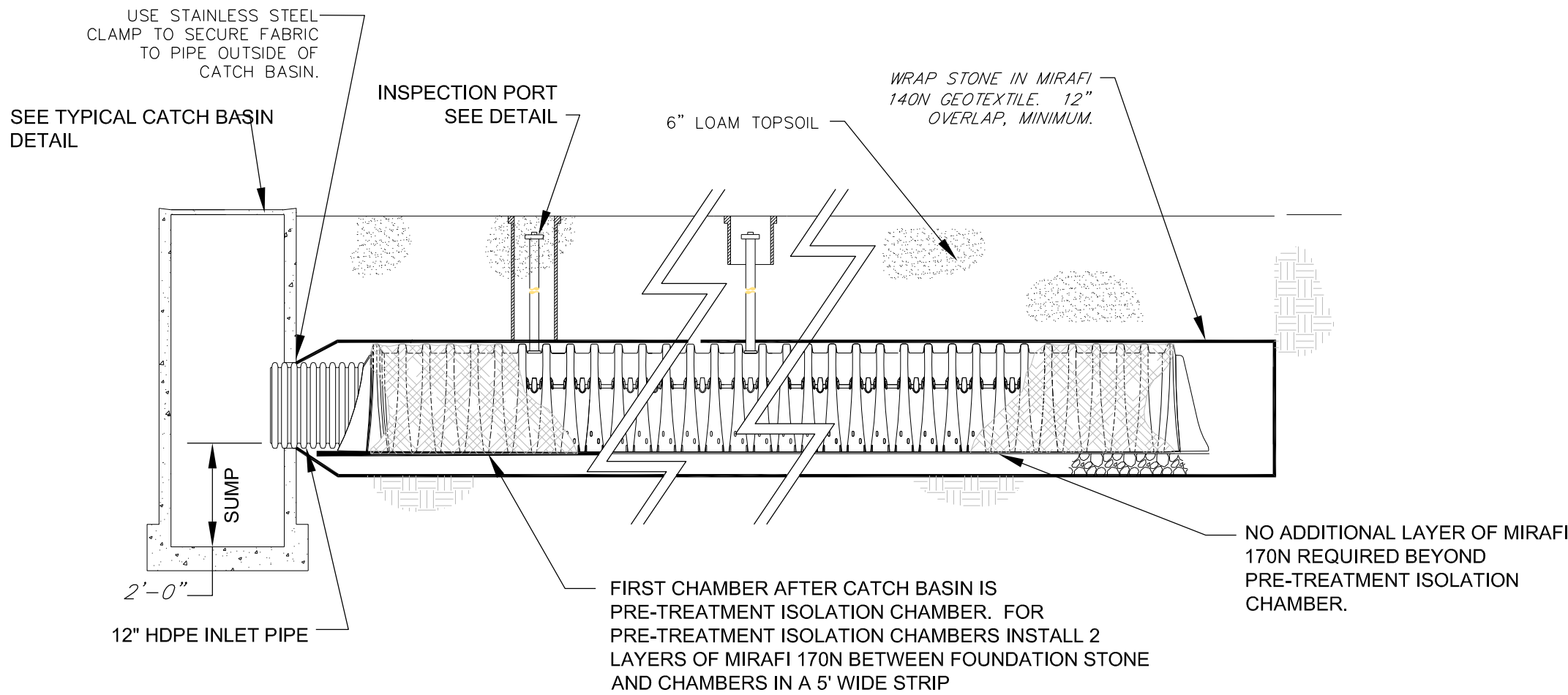
Typical Infiltration Trench Cross Section

N.T.S.



Typical Infiltration Row Inlet and End
(System Southeast of Storage Facility)

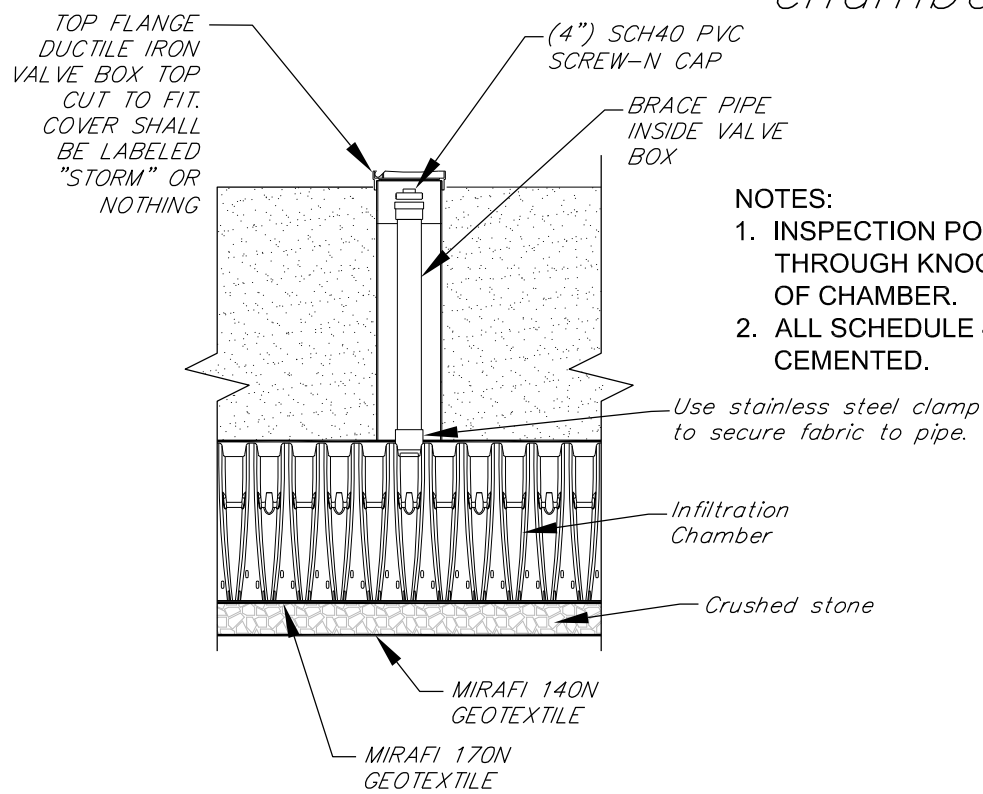
N.T.S.



Overall Trench Cross Section
(System Southeast of Storage Facility)

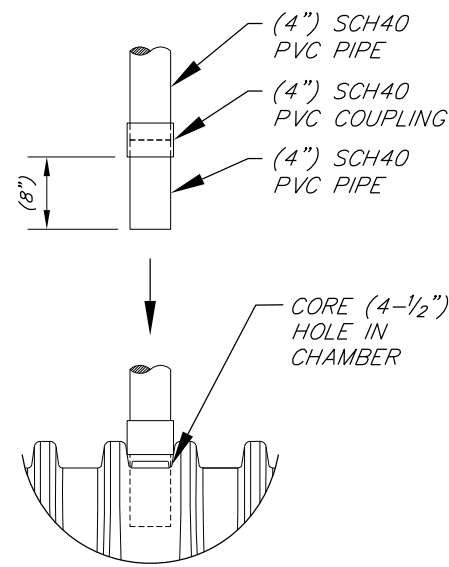
N.T.S.

Inspection ports shall be installed in all pre-treatment isolation chambers and in the first chamber outside the catch basin when no isolation chamber is specified.



Typical Inspection Port Cross Section

N.T.S.



CONNECTION DETAIL
NTS

SIGN MATERIALS:

THE SIGN BASE MATERIALS USED FOR REGULATORY SIGNS MAY BE ANY OF THE FOLLOWING OF THE MINIMUM THICKNESS NOTED.

	24" X 12"		
	24" X 24"		
	24" X 30"		
	24" X 36"		
12" X 18"	24" X 36"	36" X 48"	
18" X 24"	30" X 24"	48" X 60"	
	0.060"	0.080"	0.100"

FLAT SHEET ALUMINUM

ALL PANELS SHALL HAVE RETROREFLECTIVE BACKGROUNDS

ALL SIGN POSTS SHALL BE SQUARE TUBE GALVANIZED STEEL PLACED IN GALVANIZED STEEL ANCHORS – SEE POST AND ANCHOR SELECTION CHART

GENERAL NOTES:

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

POST AND ANCHOR SELECTION CHART

POST SIZE (IN.)	POST THICKNESS (IN.)	POST WEIGHT (LBS/FT.)	POST GAGE	SECTION MODULUS (IN. ³)	ONE POST SV	TWO POST SV	THREE POST SV	POSTS PERMITTED IN 8' PATH	ANCHOR SIZE (IN.)	ANCHOR GAGE	MINIMUM ANCHOR LENGTH
1.75	.083	1.88	14	0.222	45	90	135	TWO	2.00	12	30
2.00	.109	2.42	12	0.393	80	160	240	TWO	2.25	12	48
2.50	.109	3.35	12	0.673	137	274	411	ONE	3.00	7	48

NOTES:

- All sign posts shall have 7/16 inch holes every one inch on center (all four sides).
- The number of sign posts permitted within an eight foot path assumes that the sign assembly is not protected by guardrail or is located within a guardrail's deflection distance determined per the current "American Association of State Highway and Transportation Officials" (AASHTO) roadside design guide. additional posts may be installed using slip bases that meet "national cooperative highway research program" (NCHRP) report 350 or the AASHTO "Manual For Assessing Safety Hardware" (mash). The appropriate resource shall be determined as described in the mash publication.
- To use the selection value (SV) columns in the table above, multiply a sign's surface area in square feet (H X L) by the sign's height in feet measured from the ground to the centroid of the sign assembly (H). This result must be less than or equal to the corresponding selection value. Note, that for signs with multiple posts, the largest height dimension shall be used to calculate the post selection value.
- The design criteria utilized in sign post and anchor selection is as follows: wind speed of 70 mph (10 year mean recurrence interval), wind pressure of 19 psf, steel minimum yield of 55,000 psi, and an allowable stress of 1.4 (0.60 fy).

Roadway Sign and Post Details

N.T.S.

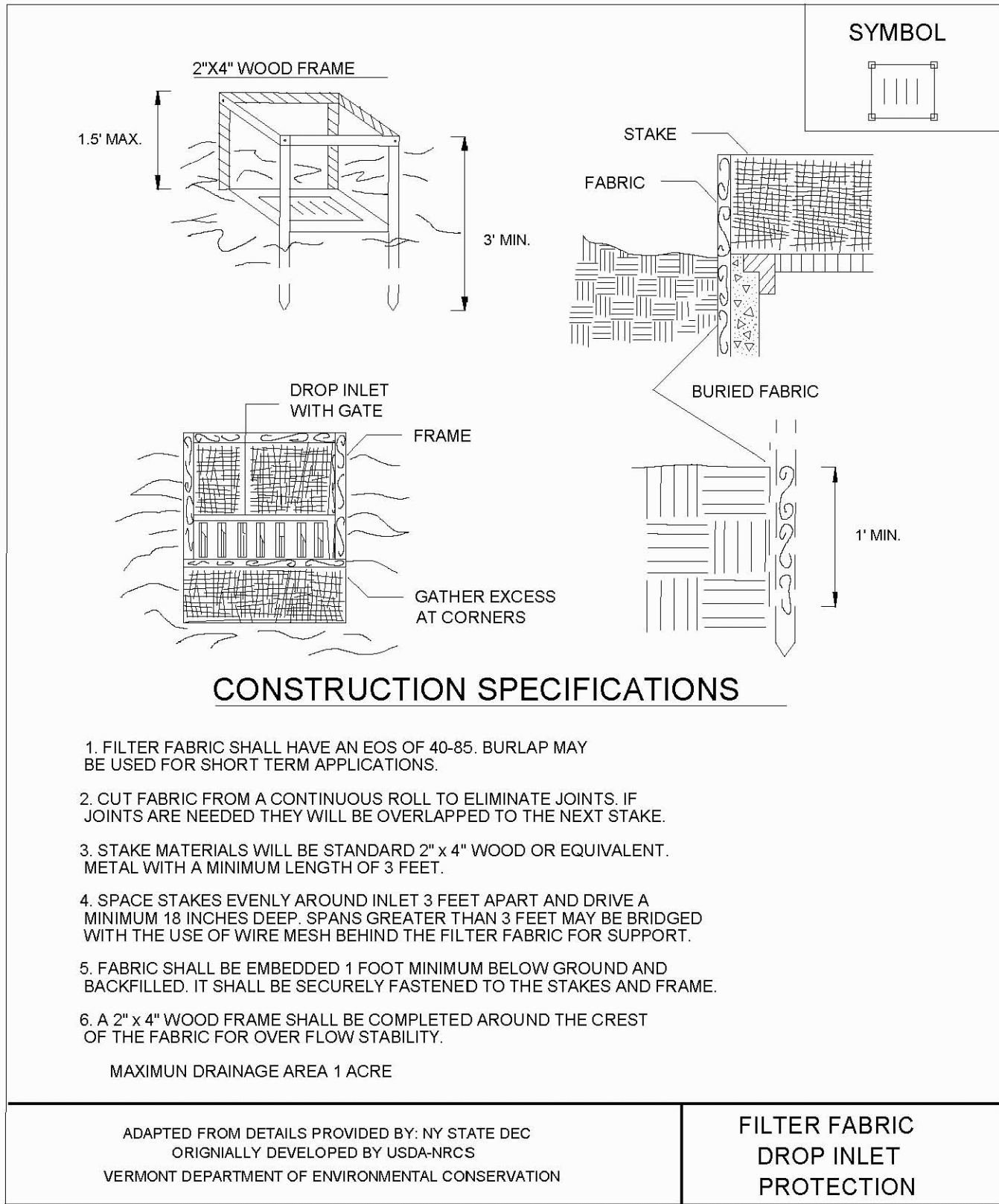
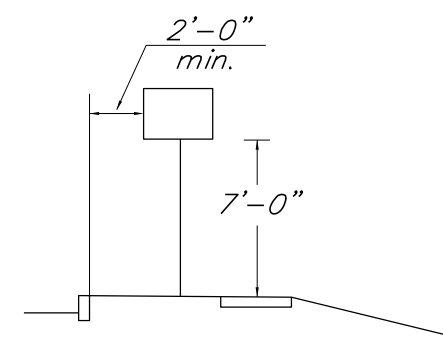
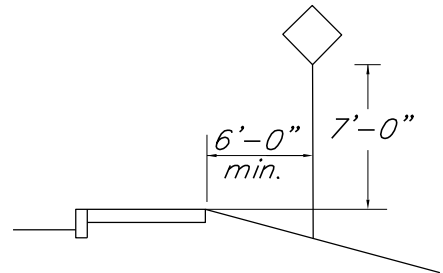
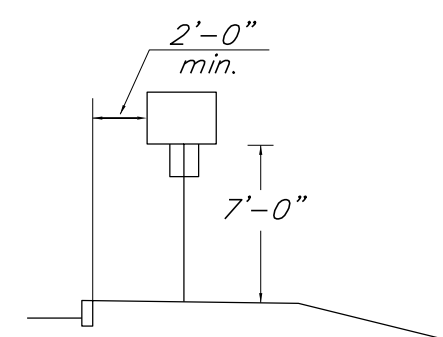


Figure 5.3b Storm Drain Inlet Protection: Filter Fabric



IF SUFFICIENT CLEARANCE IS NOT AVAILABLE BETWEEN CURB AND SIDEWALK MOUNT SIGN BEHIND SIDEWALK AS SHOWN AT TOP. CHECK FOR ADEQUATE R.O.W.



Roadway Sign Height Details

N.T.S.

Date revised	Description	Checked	Date
Design	WHN		
Drawn	DMR		
Checked			
Scale	N.T.S.		
Date	April 3, 2014		
Project	13220	Bright Street	Burlington, Vermont
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446		CD-5	

Erosion Prevention and Sediment Control Notes

- Contractor shall be responsible for complying with all State and Local erosion prevention and sediment control standards and permit requirements during construction.
 - The limit of disturbance shall be clearly defined by Contractor's surveyor prior to clearing. Erosion and sediment control devices shall be established to trap sediment on site.
 - All erosion control shall be placed as shown on the drawings or as ordered by the Engineer. The Contractor shall maintain the erosion control measures until the Engineer is satisfied that permanent ground cover is established and that further measures are not required. It shall be the responsibility of the Contractor to employ appropriate erosion control as shown on these drawings and any other measures as necessary to trap sediment on site.
 - All areas of disturbance shall be permanently or temporarily stabilized as soon as possible and within 48 hours of final grading. All areas of disturbance shall be at least temporarily stabilized within 7 days of initial disturbance. Any disturbance after 7 consecutive days of exposed soil shall be stabilized daily unless the following exceptions apply:
 - Stabilization is not required if earthwork is to continue in the area in the next 24 hours and there is no precipitation forecast in the next 24 hours.
 - Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 ft. or greater (e.g. house foundation excavation, utility trenches). Stabilization measures shall include mulch and netting, erosion control matting, crushed stone, gravel, or pavement.
 - Refer to the Low Risk Site Handbook for Erosion Prevention and Sediment Control for acceptable methods of stabilization.
 - The Contractor shall use water for dust control. **There will be a ZERO tolerance for dust**
 - The Contractor shall provide inlet protection around all catch basins (existing or new) that collect construction site stormwater runoff. Crushed stone inlet protection may be used in non-paved areas.
 - A stabilized construction entrance (See Detail) shall be installed and maintained at all construction access locations.
 - All paved roads used by construction vehicles shall be swept daily during periods of active construction, or at a greater frequency, if dirt or gravel is tracked from the site. The swept debris shall be immediately removed from the curb face if applicable.
 - All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the measures are no longer needed, unless otherwise authorized.
 - All sediment removed from sediment control practices shall be placed in an approved soil disposal area.
 - All areas that do not have established vegetation by October 15th must be stabilized in accordance with the Winter Construction Requirements listed on this sheet.
 - After permanent seeding the Contractor shall be responsible for watering, if necessary, to ensure adequate vegetative growth.
 - Water from dewatering activities that flows off site must be clear. Water must not be pumped into storms sewers, lakes, or wetlands unless the water is clear.
 - The Contractor shall be responsible for all inspection and maintenance of the erosion prevention and sediment control practices for the project. Inspections and corresponding reports shall be performed at a minimum, once a week and after every precipitation event that results in a discharge from the site.
- Contractor shall call 540-1748 or email Megan Mair (mmair@ci.burlington.vt.us) at least 24 hours prior to initiating earth disturbance and submit name, cell phone number, and email contact information of the erosion control coordinator for the project.

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

Winter Construction Requirements (October 15th - April 15th)

- For areas to be stabilized by vegetation, seeding shall be completed no later than September 15th to ensure adequate growth and cover.
- If seeding is not completed by September 15th, additional non-vegetative protection must be used to stabilize the site for the winter period. This includes the use of Erosion Control Matting or netting of a heavy mulch layer.
- Where mulch is used for temporary stabilization it must be applied at double the standard rate, or a minimum of 3 inches with an 80%-90% cover.
- Stabilized Construction Entrances shall be enlarged to provide for snow stockpiling.
- Limits of disturbance shall be moved or replaced to reflect any revised boundaries of winter work.
- A snow management plan shall be prepared with adequate storage and control of meltwater, requiring cleared snow to be stored down slope of all areas of disturbance and out of stormwater treatment structures.
- A minimum 25 foot buffer shall be maintained from perimeter controls such as silt fence.
- Drainage structures must be kept open and free of snow and ice dams.
- Silt fence and other practices requiring earth disturbance must be installed ahead of frozen ground.
- 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:
 - 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.
 - Disturbed areas that collect and retain runoff, such as house foundation or open utility trenches.
- Prior to stabilization, snow or ice must be removed to less than 1 inch thickness.
- Use stone to stabilize areas such as the perimeter of buildings under construction or where construction vehicle traffic is anticipated. Stone paths should be 10-20 feet wide to accommodate vehicular traffic.

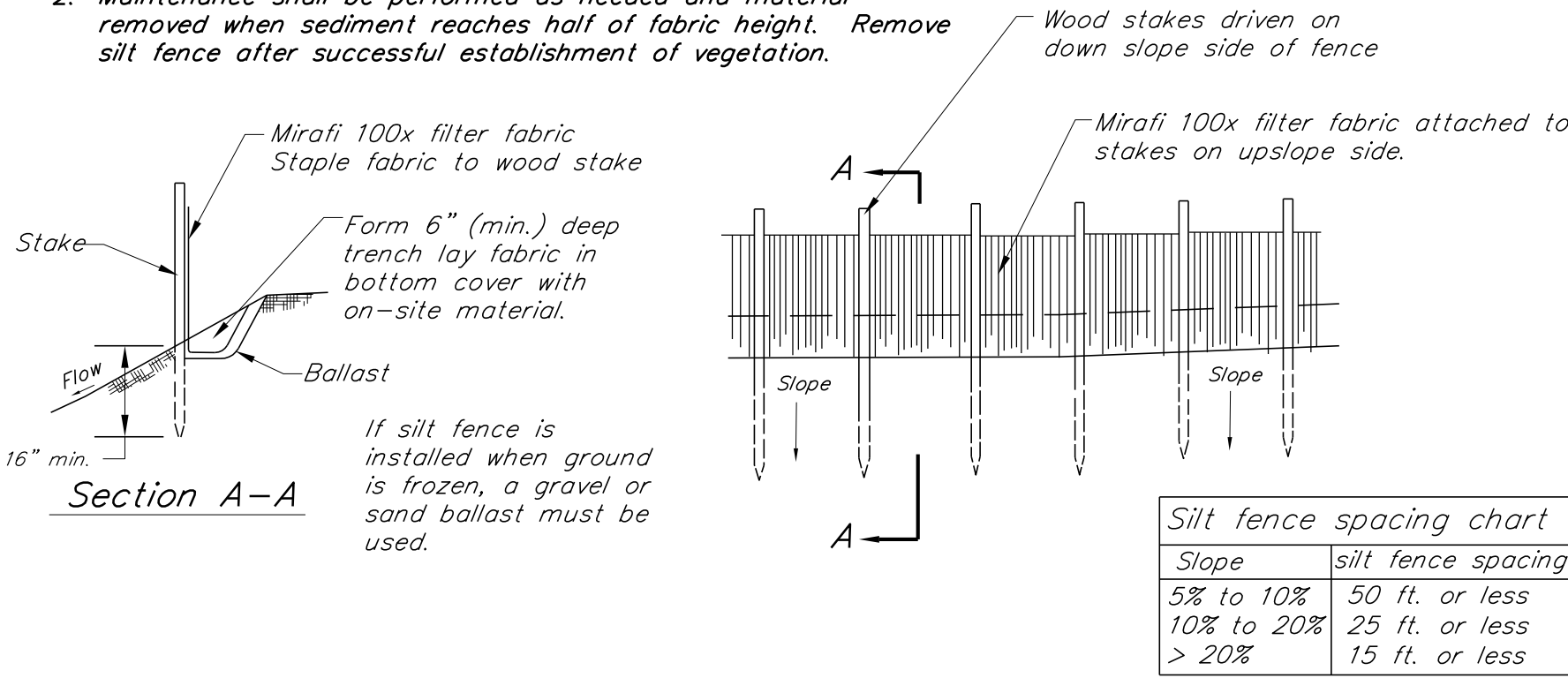
General Grading and Site Work Notes

- All area disturbed and all areas within the clearing limits shall be graded and covered with a minimum of 4" of compacted loam topsoil. The areas to be loamed shall be free and clear of roots, waste material and other deleterious material. Topsoil shall be spread and lightly compacted to a depth of 4". Topsoil shall be approved by the Engineer.
- All cut slopes shall be no steeper than 3h on 1v. All fill slopes shall be no steeper than 2.5h on 1v.
- Temporary silt fence shall be erected prior to any clearing or construction. Fencing may be erected in phases, but in no case shall construction of clearing proceed fencing. Special areas may be designated by the Owner for preservation of existing trees. These areas shall be the Contractor's responsibility to insure no damage is done to designated trees.
- Existing plantings are located in general areas as shown on this plan. Contractor shall protect plantings so as not to damage these or their root systems.
- Slope stability based upon unsaturated soil conditions. If during construction saturated soils are encountered, contact the Engineer immediately

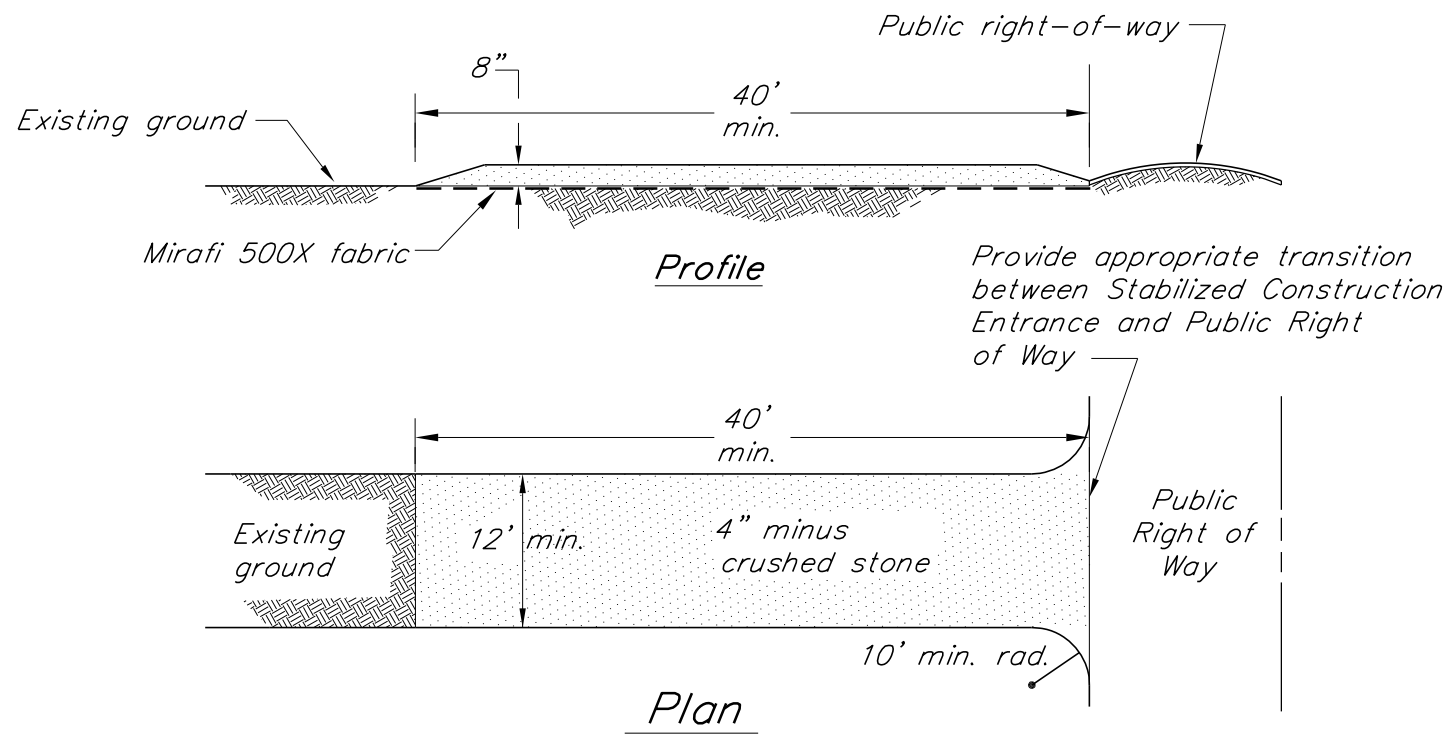
Construction Limit Barriers

- Temporary chain-linked construction fence shall be used to delineate construction limits where practical.
- Orange construction fence or snow fence shall be used to demarcate short-term construction activities as well as around the drip line of any existing trees to remain.
- 3" thick orange polyester mesh webbing may also be used to demarcate construction limits except within 50 feet of any stream, lake, pond or wetland. For this project, polyester mesh webbing should not be used in areas that are proximate to pedestrian or vehicular traffic.

- NOTE:**
- Contractor shall be responsible for the installation, maintenance, and removal of silt fence in all locations shown on the plans.
 - Maintenance shall be performed as needed and material removed when sediment reaches half of fabric height. Remove silt fence after successful establishment of vegetation.



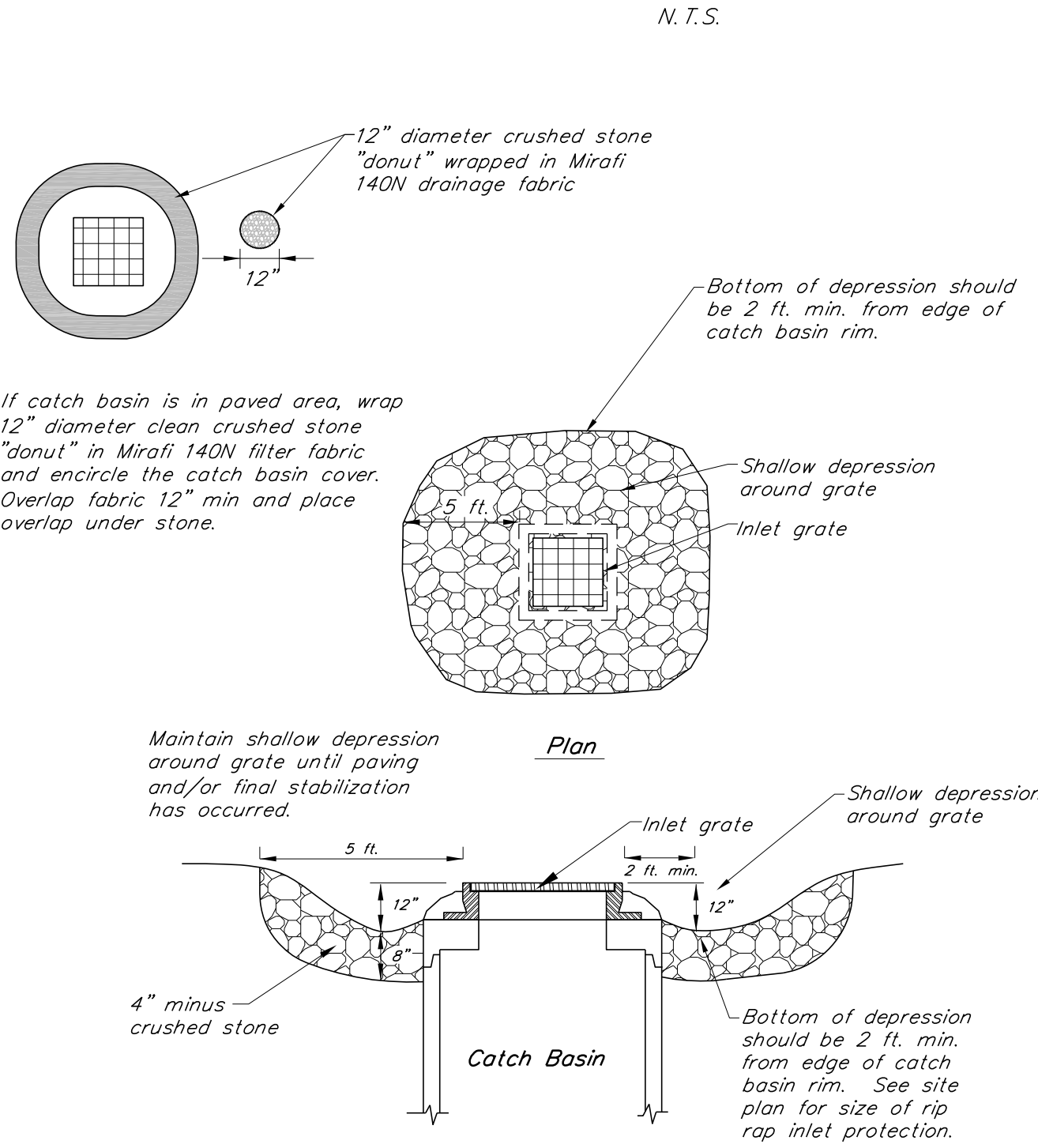
Typical Temporary Silt Fence



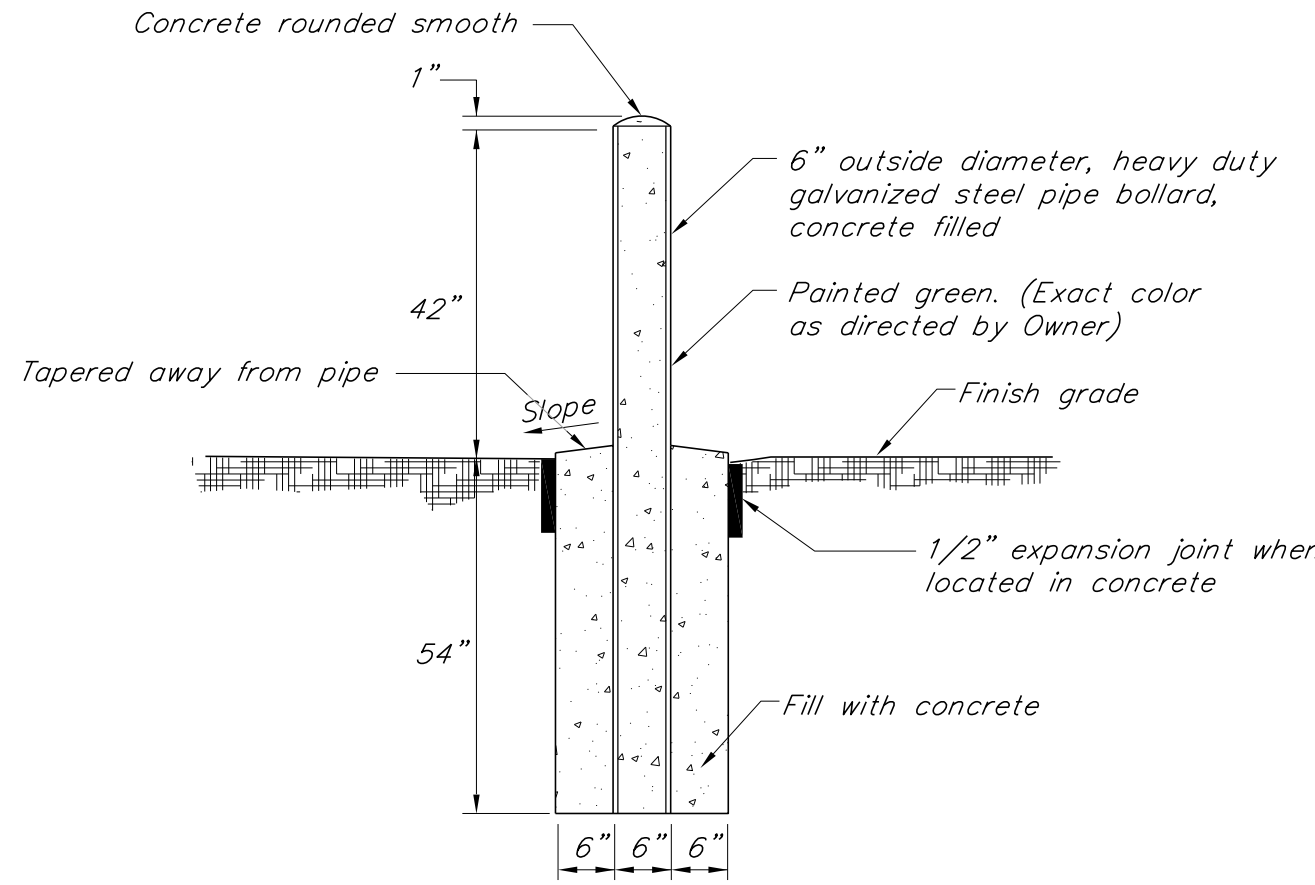
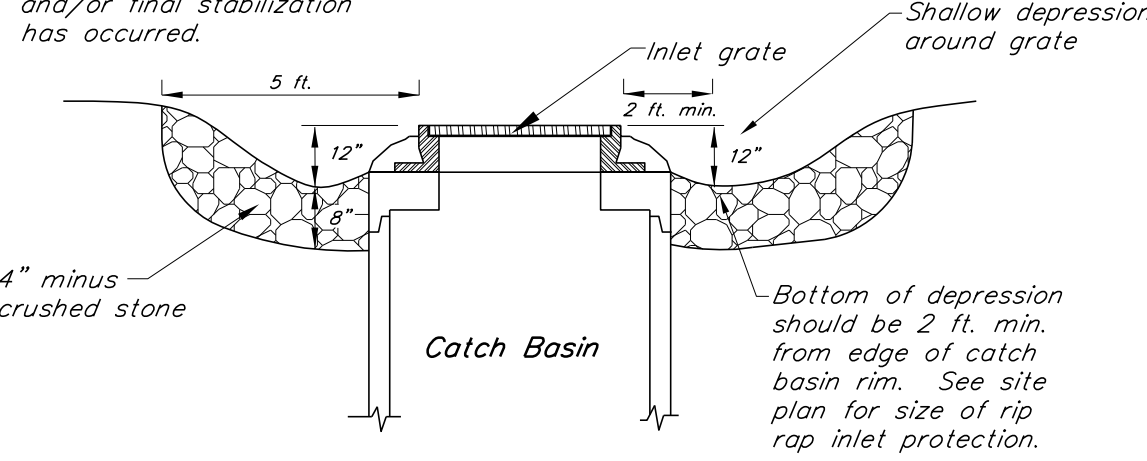
Note:

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

Temporary Stabilized Construction Entrance



Catch Basin Inlet Protection



Bollard Detail

Soil and Seeding Notes

- Topsoil shall be screened and shall have a minimum 4" depth unless additional depth is specified on the plans. Topsoil shall be natural, fertile, friable soil representative of local productive soil and free of clay lumps, stones, subsoil or other foreign matter, not frozen or muddy. Acidly range PH 5-7 not less than three (3) percent humus. Samples will be required for approval. All soil testing costs will be paid by Contractor.
- Commercial fertilizer shall be a complete plant food containing nitrogen (50% organic) phosphoric acid and potash. Soil tests will indicate composition required.
- Hydro seeding is the preferred practice for turf establishment. Specifications are:
Fertilizer: 19-19-19 75 lbs per 1,000 gallons of water
Lime: 100 lbs. per 1,000 gallons of water
Seed: 6 lbs per 1,000 square feet.
71.46% Min. Futuro 3000 Per Rye Grass Germ: 90%
14.81% Min. Dynasty Tall Fescue Germ: 90%
9.74% Min. Creeping Red Fescue Germ: 90%
2.32% Max. Crab
1.61% Max. Inert
0.06% Max. Weed
Mulch: 300 lbs. per 1,000 gallons of water.
Faciler: 5 lbs. per 1,000 gallons of water.
- The grass seed may be applied by hand method at a rate of 6 lbs. per 1,000 sq. ft.
- Areas having soil compaction as a result of construction shall be rato-tilled prior to seeding.
- If hand seeding, only straw mulch is to be used and secured by netting either organic or inorganic. If inorganic is used, it must be removed before the first mowing.
- Starter fertilizer shall be applied at the normal rate at the time of seeding. Fertilizer application will not be allowed in sensitive areas and adjacent to drainage ways as determined by the Engineer.
- Watering is to be done by the Contractor to maintain proper growth. Contractor shall supply the water and all apparatus necessary to apply the water (i.e. hoses, sprinklers, etc.).
- Staking of all topsoiled areas to control foot traffic will be required. Acceptable staking materials will be grade stakes and twine or string with flagging attached for visibility. Contractor is responsible to maintain stakes throughout the warranty period.
- A guarantee through the first growing season is required with any sparse or bare areas larger than 1 sq. ft. to be redone.
- The Contractor shall test topsoil to determine proper application rate of lime and fertilizer. Submit tests to Engineer for approval.
- Seeding is permitted from May 15 - June 15, and August 15 - September 15. Other seeding is possible at other times with prior approval from the Engineer.

CONSTRUCTION STAKEOUT NOTES

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

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

North American Green S75BN

Material Content

Straw	100% (.50 lbs/sq.yd.) (.27 kg/m2)
Netting	Leno woven, 100% biodegradable jute fiber
Weight	approximately 1.64 lbs/1000 s.f.
Thread	Biodegradable
Installed as per manufacturer's specifications.	

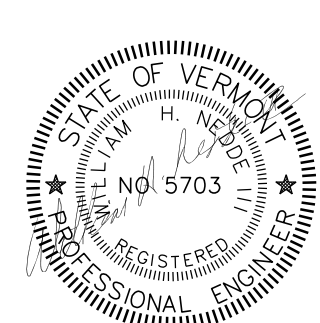
Material Specifications

Erosion control blanket shall be a machine-produced mat of 100% agricultural straw.

The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with natural fiber netting having an approximate 1/2" X 1/2" mesh and be sewn together with biodegradable thread.

Straw erosion control blanket shall be S75BN as manufactured by North American Green, Inc. (812-867-6632) or equivalent. Erosion control blanket shall have the following properties:

Erosion Control Matting

				
	Date revised	Description	Checked	Date
	Design	WHN	Civil Details	
	Drawn	DMR		
	Checked			
Scale	N.T.S.	Champlain Housing Trust Inc.		
Date	April 3, 2014			
PERMIT REVIEW ONLY	Project	13220	Bright Street	Burlington, Vermont
	KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446			The Vermont State Seal Krebs & Lansing 2014 CD-6

The Low Risk Site Handbook for Erosion Prevention and Sediment Control

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Section 1: Introduction

Section 2: The Requirements

Section 3: Additional Resources

Example Site Inspection Form

How to calculate slope

Approximate Slope Conversions

Area in acres

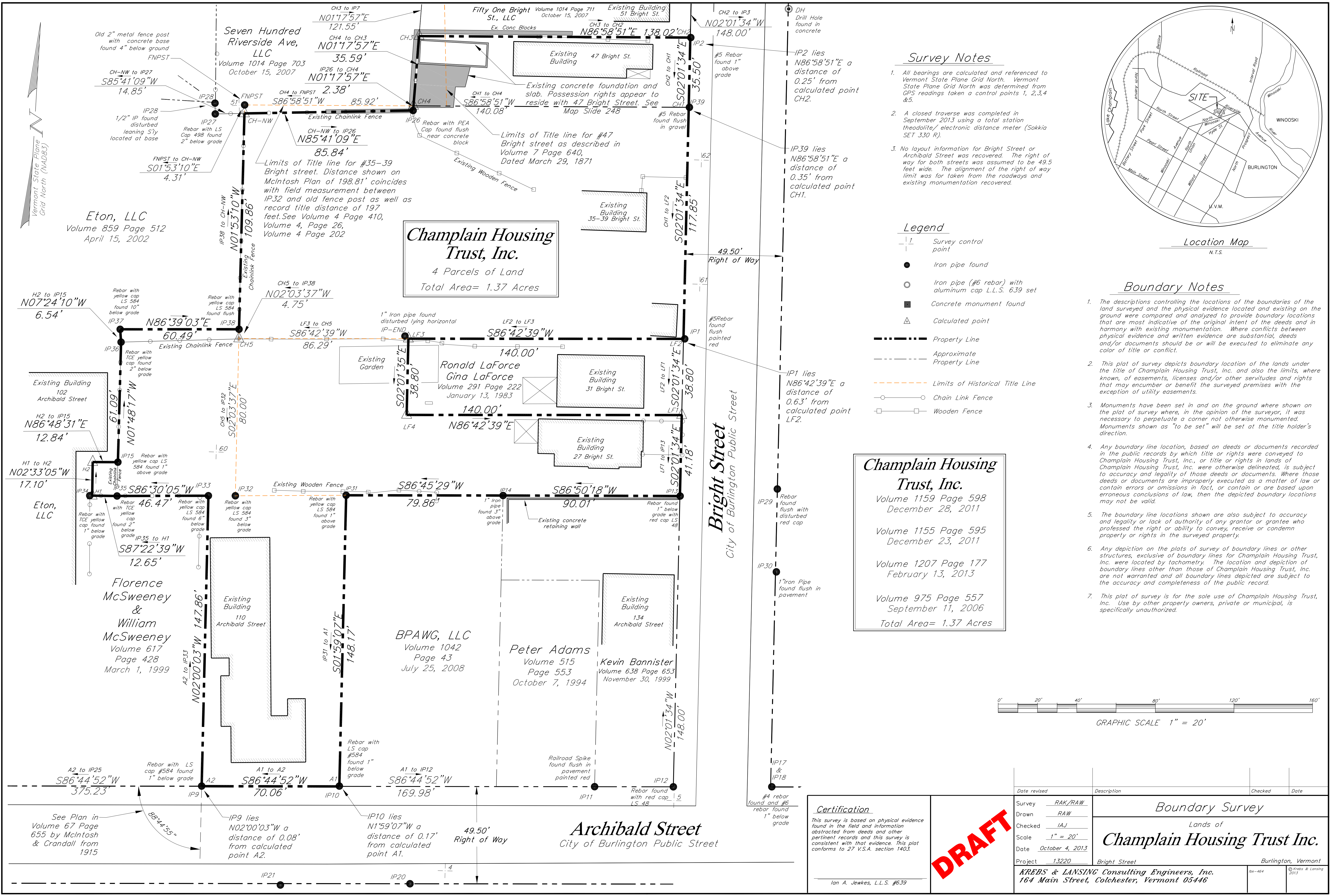
How to estimate disturbance area

Acknowledgments

Contractor shall employ as many of these best management practices to prevent soil from leaving the construction site. If evidence is found of soil leaving the construction site, the Engineer shall direct Site Contractor to implement additional best management practices at no additional cost to Owner.



Date revised	WHN	Description	Checked	Date
Designed	WHN	Low Risk Site Handbook for Erosion Prevention & Sediment Control Champlain Housing Trust Inc. Bright Street Burlington, Vermont		
Drawn	DMR			
Checked				
Scale	N.T.S.			
Date	April 3, 2014			
Project	13220			
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446		Burlington, Vermont 13202 UNES/10/2014 CD-7		

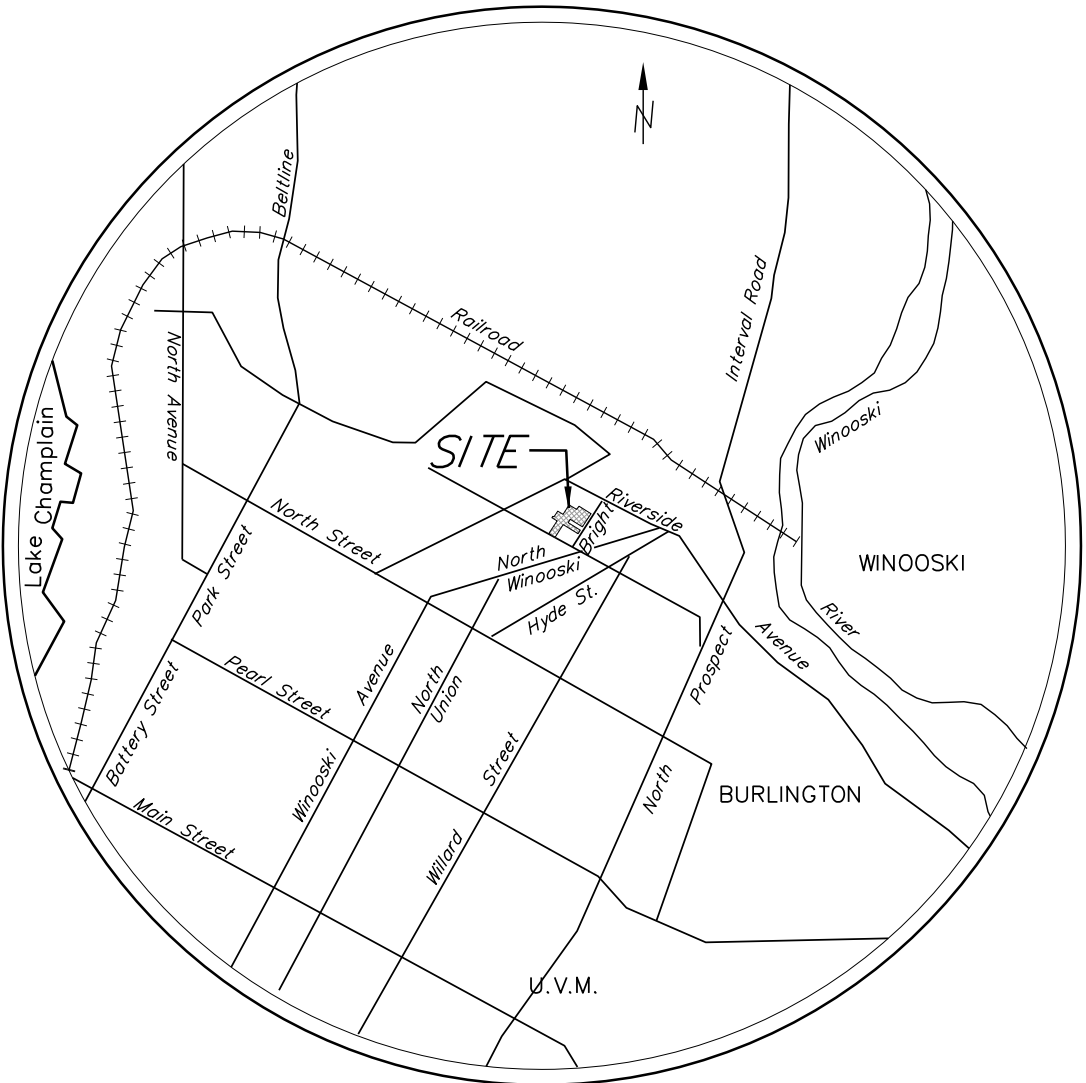


Survey Notes

- 1. All bearings are calculated and referenced to Vermont State Plane Grid North. Vermont State Plane Grid North was determined from GPS readings taken at control points 1, 2, 3, 4 & 5.
- 2. A closed traverse was completed in September 2013 using a total station theodolite/ electronic distance meter (Sokkia SET 330 R).
- 3. No layout information for Bright Street or Archibald Street was recovered. The right of way for both streets was assumed to be 49.5 feet wide. The alignment of the right of way limit was taken from the roadways and existing monumentation recovered.

Legend

- Survey control point
- Iron pipe found
- Iron pipe (#6 rebar) with aluminum cap L.L.S. 639 set
- Concrete monument found
- Calculated point
- Property Line
- Approximate Property Line
- Limits of Historical Title Line
- Chain Link Fence
- Wooden Fence



Location Map
N.T.S.

Boundary Notes

- 1. The descriptions controlling the locations of the boundaries of the land surveyed and the physical evidence located and existing on the ground were compared and analyzed to provide boundary locations that are most indicative of the original intent of the deeds and in harmony with existing monumentation. Where conflicts between physical evidence and written evidence are substantial, deeds and/or documents should be or will be executed to eliminate any color of title or conflict.
- 2. This plat of survey depicts boundary location of the lands under the title of Champlaine Housing Trust, Inc. and also the limits, where known, of easements, licenses and/or other servitudes and rights that may encumber or benefit the surveyed premises with the exception of utility easements.
- 3. Monuments have been set in and on the ground where shown on the plat of survey where, in the opinion of the surveyor, it was necessary to perpetuate a corner not otherwise monumented. Monuments shown as "to be set" will be set at the title holder's direction.
- 4. Any boundary line location, based on deeds or documents recorded in the public records by which title or rights were conveyed to Champlaine Housing Trust, Inc., or title or rights in lands of Champlaine Housing Trust, Inc. were otherwise delineated, is subject to accuracy and legality of those deeds or documents. Where those deeds or documents are improperly executed as a matter of law or contain errors or omissions in fact, or contain or are based upon erroneous conclusions of law, then the depicted boundary locations may not be valid.
- 5. The boundary line locations shown are also subject to accuracy and legality or lack of authority of any grantor or grantee who professed the right or ability to convey, receive or condemn property or rights in the surveyed property.
- 6. Any depiction on the plats of survey of boundary lines or other structures, exclusive of boundary lines for Champlaine Housing Trust, Inc. were located by tachometry. The location and depiction of boundary lines other than those of Champlaine Housing Trust, Inc. are not warranted and all boundary lines depicted are subject to the accuracy and completeness of the public record.
- 7. This plat of survey is for the sole use of Champlaine Housing Trust, Inc. Use by other property owners, private or municipal, is specifically unauthorized.

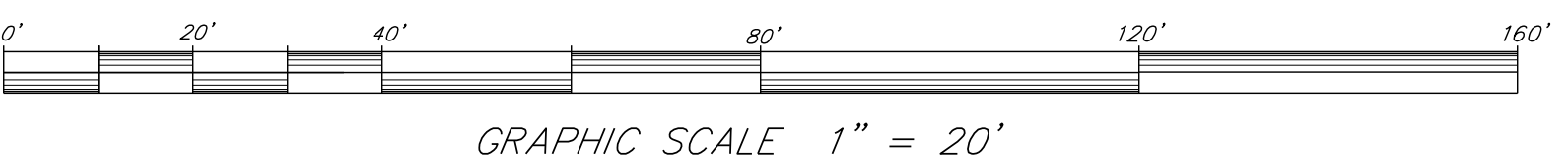
Champlaine Housing Trust, Inc.

Volume 1159 Page 598
December 28, 2011

Volume 1155 Page 595
December 23, 2011

Volume 1207 Page 177
February 13, 2013

Volume 975 Page 557
September 11, 2006
Total Area= 1.37 Acres

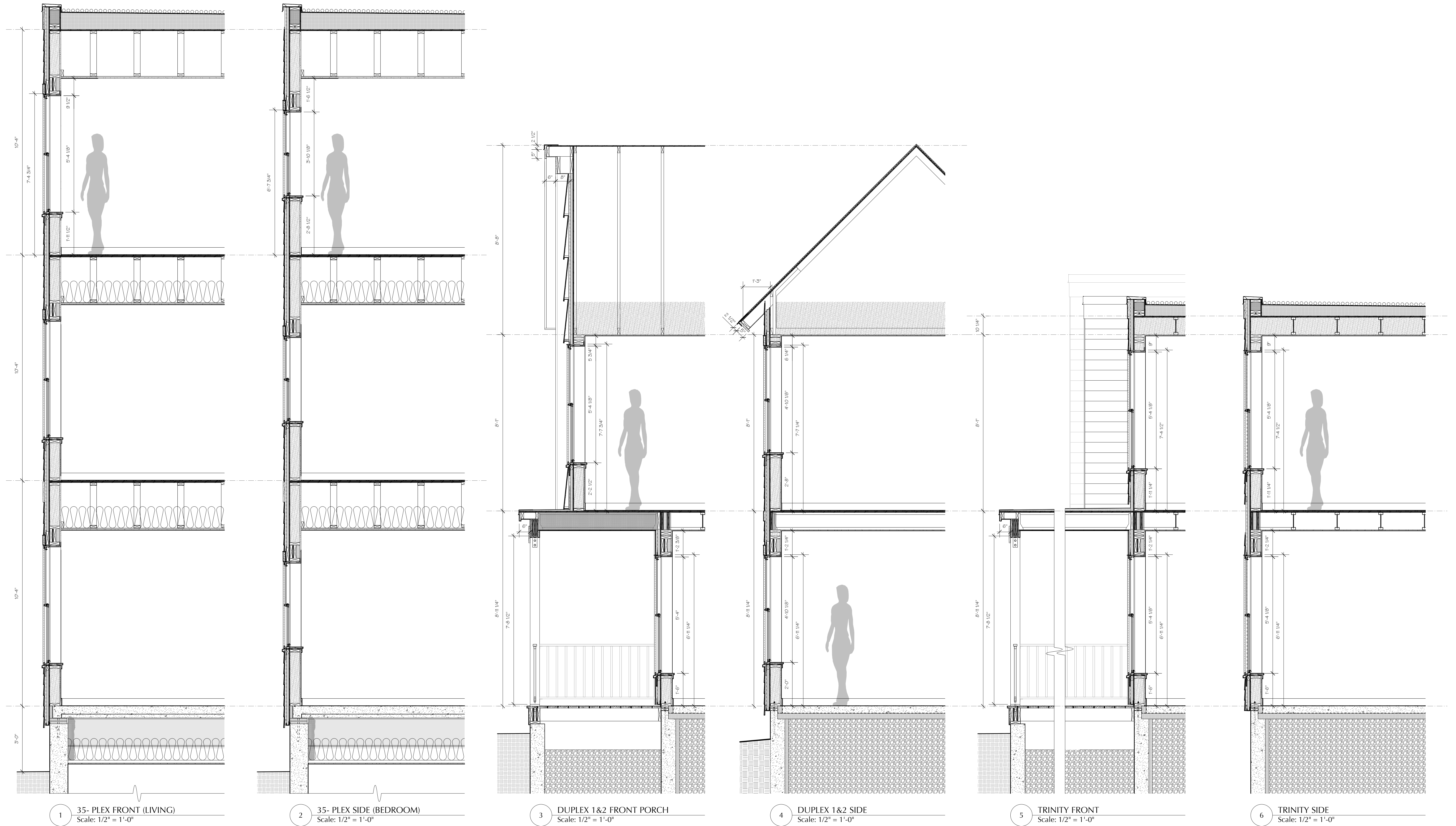


Certification

This survey is based on physical evidence found in the field and information abstracted from deeds and other pertinent records and this survey is consistent with that evidence. This plat conforms to 27 V.S.A. section 1403.

Ion A. Jewkes, L.L.S. #639

Date revised	Description	Checked	Date
Survey	RAK/RAW		
Drawn	RAW		
Checked	IAJ		
Scale	1" = 20'		
Date	October 4, 2013		
Project	13220		
Boundary Survey			
Lands of			
Champlaine Housing Trust Inc.			
Bright Street			
Burlington, Vermont			
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446			
104-464 © KREBS & LANSING 2013			



SCHEMATIC ARCHITECTURAL WALL CROSS SECTIONS

NOTE: WINDOW AND TRIM LOCATIONS AND SIZES WILL ADJUST DURING DESIGN DEVELOPMENT TO MATCH CLAPBOARD LAYOUT.

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BURLINGTON, VT

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PRELIMINARY PLAT

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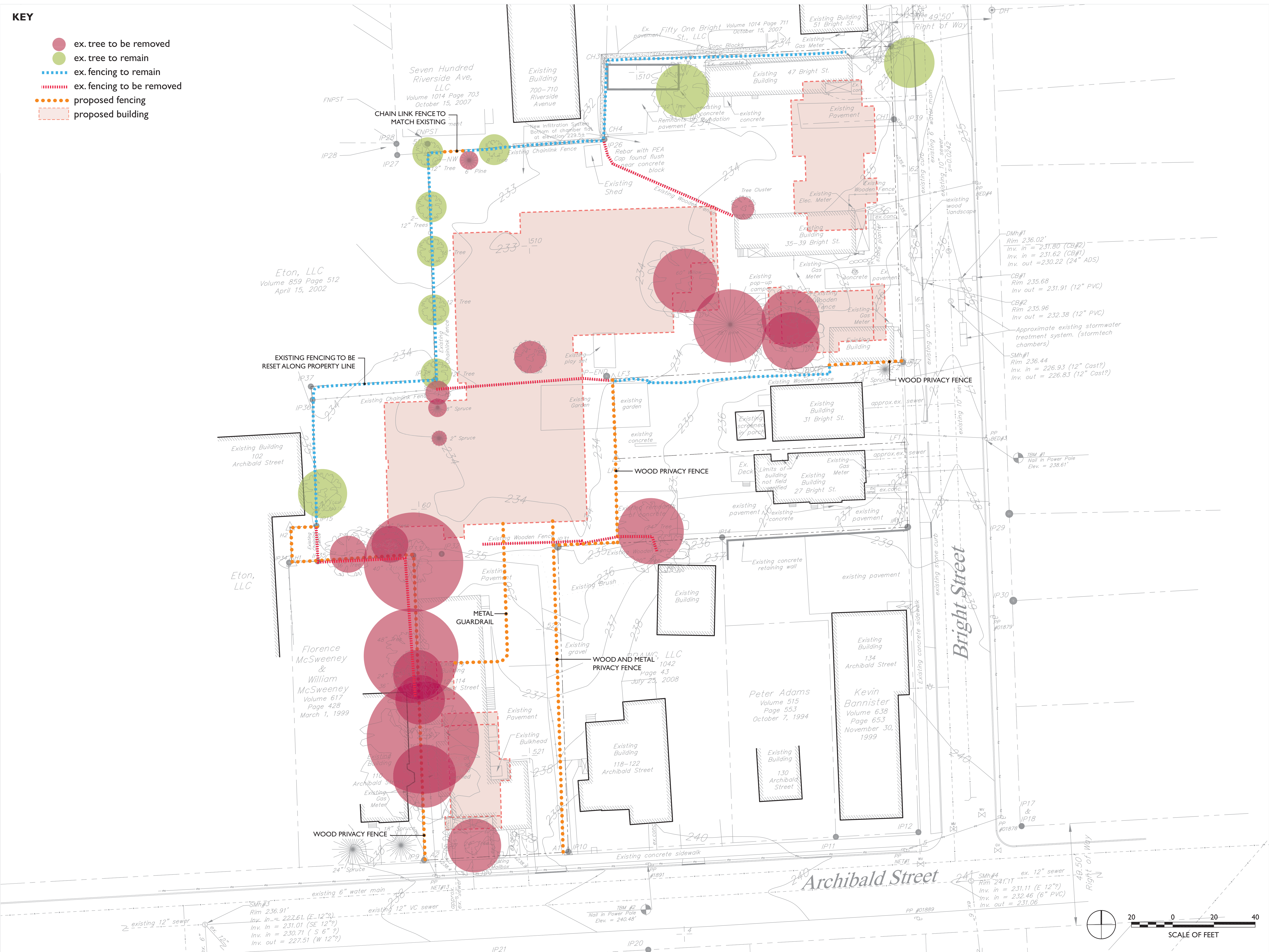
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 04.11.14

8.0

KEY

-  ex. tree to be removed
-  ex. tree to remain
-  ex. fencing to remain
-  ex. fencing to be removed
-  proposed fencing
-  proposed building



**BRIGHT
STREET
COOPERATIVE**

EXISTING TREE & FENCING DEMO DIAGRAM

REVISIONS

[illegible]



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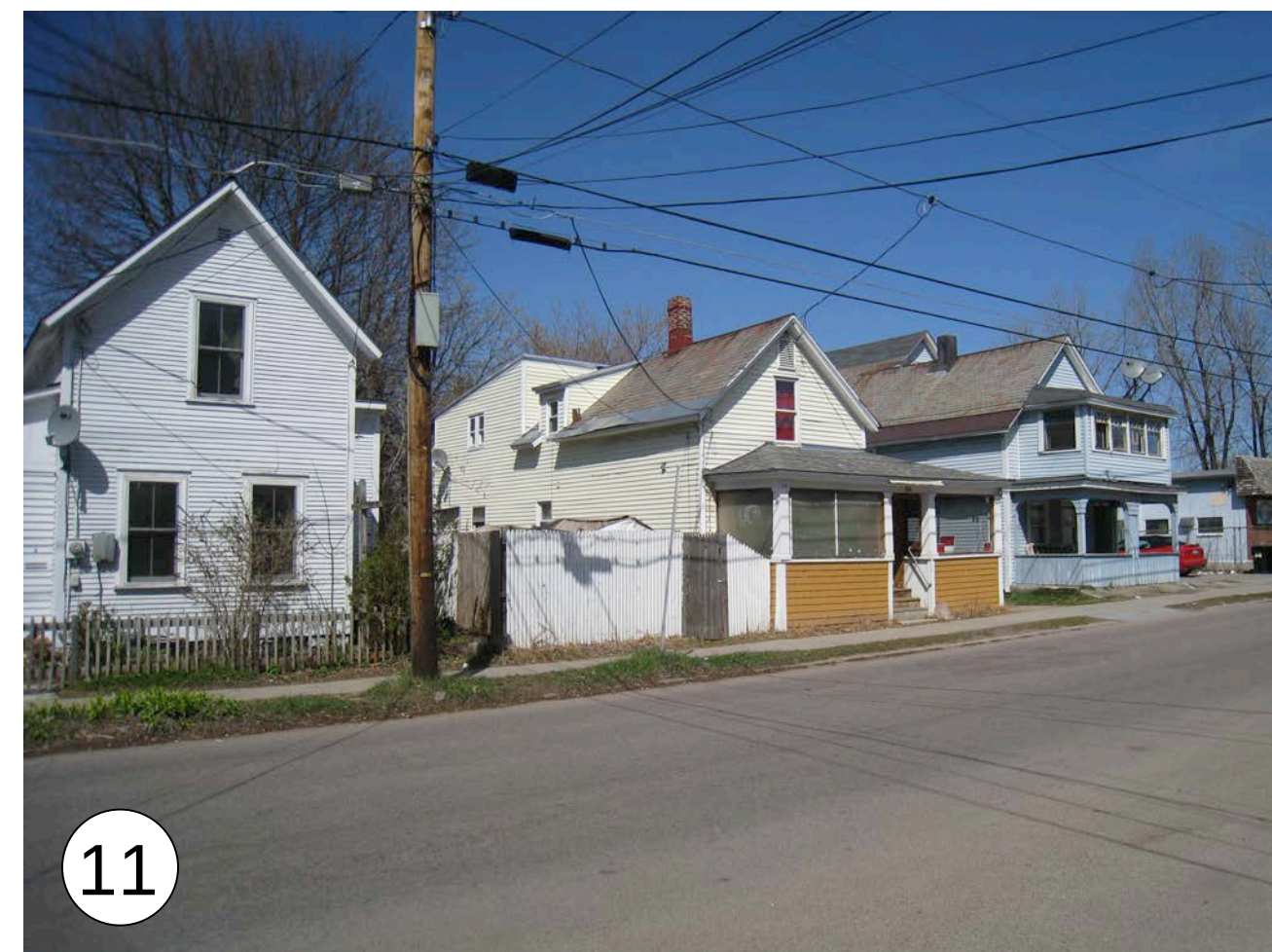
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4.0



EAST ELEVATION

Scale: 1/8" = 1'-0"



SOUTH ELEVATION

Scale: 1/8" = 1'-0"

NOTE: COLORS SHOWN INDICATE LIGHTNESS AND DARKNESS ONLY, HUE AND SATURATION TO BE DETERMINED.



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FINAL PLAT

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35-PLEX

DATE: 08.18.14

5.1



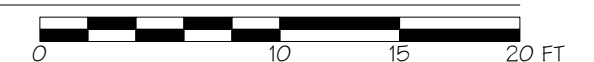
WEST ELEVATION

Scale: 1/8" = 1'-0"



NORTH ELEVATION

Scale: 1/8" = 1'-0"



NOTE: COLORS SHOWN INDICATE LIGHTNESS AND DARKNESS ONLY, HUE AND SATURATION TO BE DETERMINED.

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5.2



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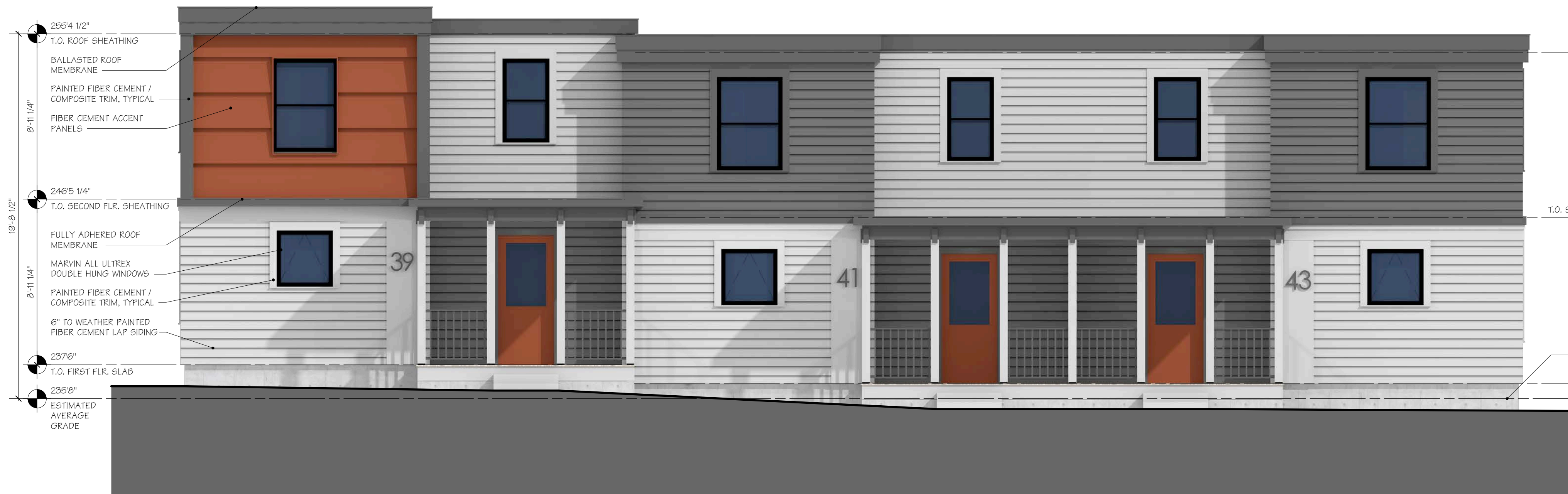
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35-PLEX

DATE: 08.18.14

5.3



FRONT ELEVATION

Scale: 1/4" = 1'-0"



RIGHT ELEVATION

Scale: 1/4" = 1'-0"



BACK ELEVATION

Scale: 1/4" = 1'-0"

NOTE: COLORS SHOWN INDICATE LIGHTNESS AND DARKNESS ONLY, HUE AND SATURATION TO BE DETERMINED.



LEFT ELEVATION

Scale: 1/4" = 1'-0"



WINDOW SCHEDULE					
MARK	DESCRIPTION	ROUGH OPNG	R.O. HEAD HT.	EXT. COLOR	TRIM
A	IPDR3050	3'0 1/2" x 5'0 1/2"	7'3 1/2"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL
B	IPDR3650	3'6 1/2" x 5'0 1/2"	7'3 1/2"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL
B'	IPDR3650	3'6 1/2" x 5'0 1/2"	7'1 1/4"	BLACK	---
C	IPDR2650	2'6 1/2" x 5'0 1/2"	7'1 1/4"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL
D	IPDR2646	2'6 1/2" x 4'6 1/2"	7'1 1/4"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL
E	IFAWN3030	3'0 1/2" x 3'0 1/2"	7'3 1/4"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL
F	IPDR2040	2'0 1/2" x 4'0 1/2"	6'7 1/4"	BLACK	5/4x4 JAMB TRIM / 5/4x6 HEAD TRIM / PVC SILL

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TRINITY

DATE: 08.18.14

6.0



WINDOW SCHEDULE						
MARK	DESCRIPTION	ROUGH OPNG	R.O. HEAD HT.	EXT. COLOR	TRIM	
A3	IPDH2250 3W	8'0 1/2" x 15'0 1/2"	6'11 1/4"	BLACK	5/4x5 JAMB TRIM / FIBER CEMENT PANEL AT HEAD & BELOW PCV SILL	
B	IPDH3250	3'6 1/2" x 15'0 1/2"	6'11 1/4"	BLACK	5/4x5 JAMB TRIM / 5/4x6 HEAD TRIM / PCV SILL	
B'	IPDH3250	3'6 1/2" x 15'0 1/2"	7'3 1/2"	BLACK	---	
C	IPDH2250	2'6 1/2" x 15'0 1/2"	7'3 1/2"	BLACK	5/4x5 JAMB TRIM / 5/4x6 HEAD TRIM / PCV SILL	
D	IPDH2246	2'6 1/2" x 4'6 1/2"	6'11 1/4"	BLACK	5/4x5 JAMB TRIM / 5/4x6 HEAD TRIM / PCV SILL	
D'	IPDH2246	2'6 1/2" x 4'6 1/2"	7'3 1/2"	BLACK	5/4x5 JAMB TRIM / 5/4x6 HEAD TRIM / PCV SILL	

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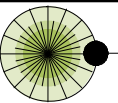
FINAL PLAT

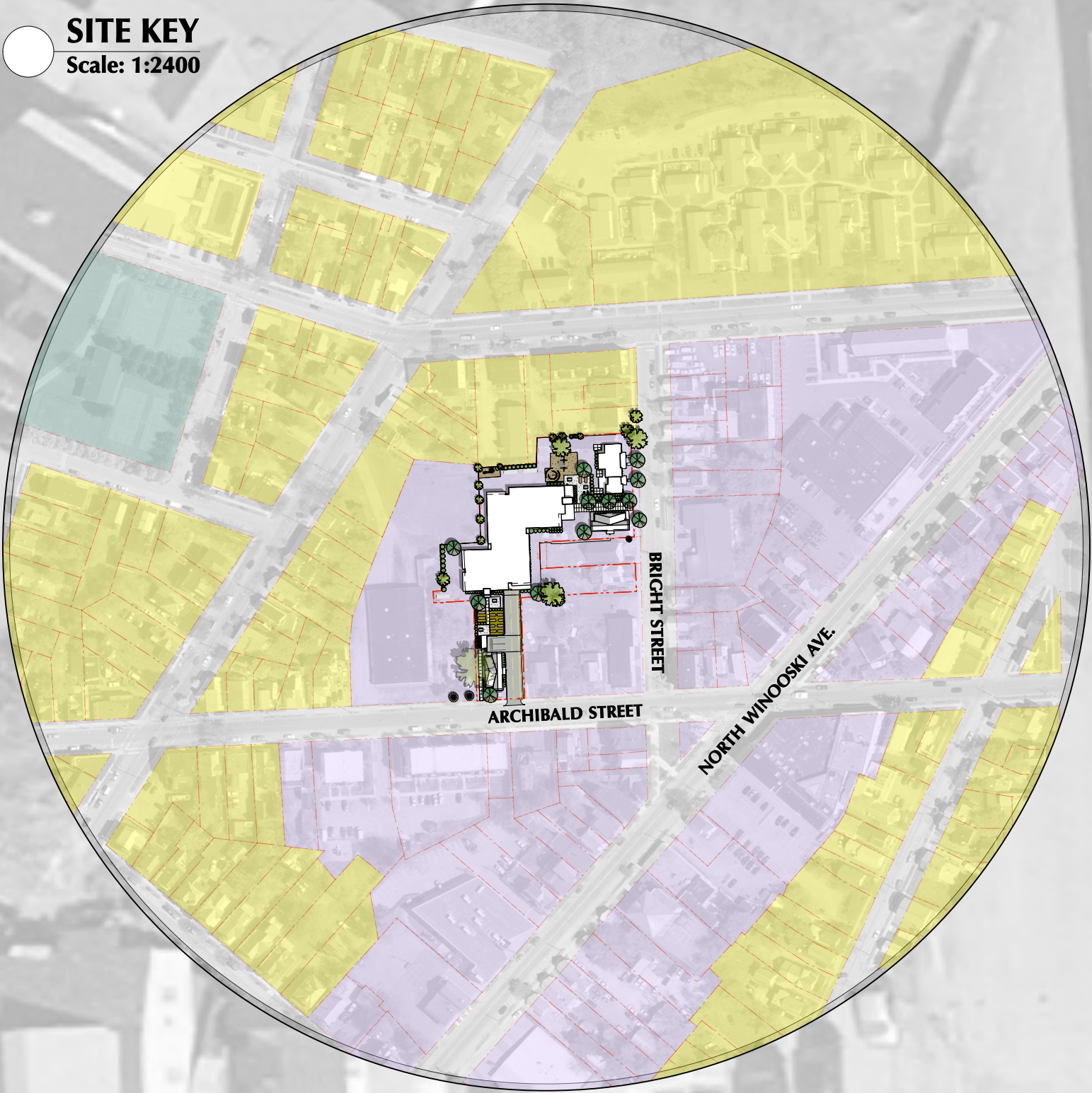
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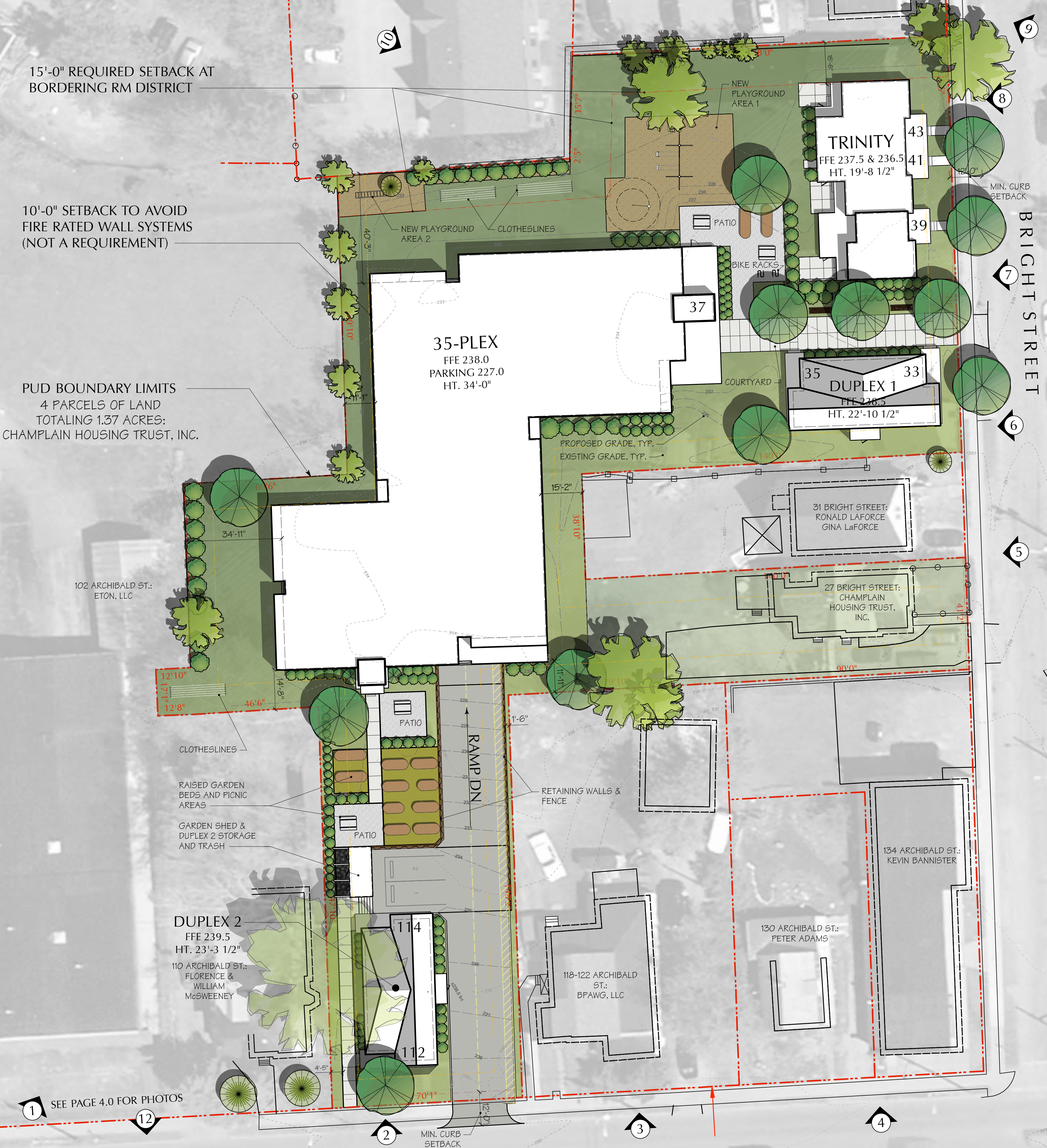
DATE: 08.18.14

7.0

BRIGHT STREET COOPERATIVE PUD	
NUMBER OF UNITS	COVERAGE CALC. TABLE
35-PLEX 42 LOWER LEVEL PARKING SPACES 12 = 1 BR DWELLING UNITS 20 = 2 BR DWELLING UNITS 3 = 3 BR DWELLING UNITS	53,970 SF LOT SIZE
TRINITY 2 = 3 BR DWELLING UNITS 1 = 4 BR DWELLING UNITS	EXISTING COVERAGE 3061 SF 112-114 ARCHIBALD ST 1401 SF 35-39 BRIGHT ST 943 SF 47 BRIGHT ST 950 SF MISC. FOUNDATIONS 4,934 SF VEHICULAR HARDSCAPE 87 SF PEDESTRIAN HARDSCAPE 11,376 SF <u>TOTAL AREA</u> 21.1 % PERCENTAGE COVERED
DUPLEX 1 2 = 2 BR DWELLING UNITS	PROPOSED COVERAGE 14,950 SF 35-PLEX 2,486 SF TRINITY 1,442 SF DUPLEX 1 1,442 SF DUPLEX 2 148 SF SHED 4,570 SF VEHICULAR HARDSCAPE 3,751 SF PEDESTRIAN HARDSCAPE 28,789 SF <u>TOTAL AREA</u> 58.5 % PERCENTAGE COVERED
DUPLEX 2 2 SURFACE PARKING SPACES 2 = 2 BR DWELLING UNITS	
PARKING	
42 PARKING GARAGE <u>2 SURFACE SPACES</u> 44 TOTAL	
27 BRIGHT STREET	
1 EX'G DUPLEX (2 UNITS) 4+/- EX'G PARKING SPACES	5,750 SF PROPOSED LOT 2,774 SF EXISTING LOT COVERED 48.2% PERCENTAGE COVERED
NOTES	KEY
1. BUILDING HTS. ARE BASED OFF AVERAGE GRADE AROUND FOUNDATION.	 EXISTING TREE
2. THIS PROPERTY FALLS INTO THE DESIGN REVIEW OVERLAY DISTRICT.	 PROPOSED TREE
	 PROPOSED BUSH

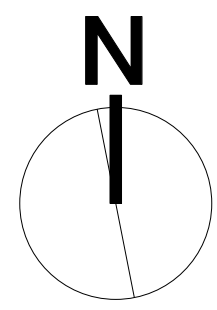


PROPOSED SITE PLAN
Scale: 1" = 20 ft



BRIGHT STREET COOPERATIVE

BURLINGTON, VT



Burlington Design Advisory Board

149 Church Street, City Hall

Burlington, VT 05401

www.burlingtonvt.gov/PZ/DAB

Phone: (802) 865-7188

Fax: (802) 865-7195

*Matthew Bushy, Chair
Todd Thomas, Vice Chair
Ron Wanamaker
Sean McKenzie
Steven Offenhartz
Philip Hammerslough, Alt.
Jeremy Gates, Alt.*



DESIGN ADVISORY BOARD Tuesday, September 23, 2014 Conference Room 12, City Hall, Burlington, VT MINUTES

Board Members Present: Matt Bushey, Sean McKenzie, Steve Offenhartz, Ron Wanamaker, Phil Hammerslough, Jeremy Gates

Board Members Absent:

Staff: Scott Gustin, Mary O'Neil, Ken Lerner

1. 15-0079CA: 281 Flynn Ave (RL, Ward 5) Sandra B. Vishnevsky

Add second story to existing single family dwelling.

Sandra Vishnevsky appeared.

A MOTION was made by SO and SECONDED by JG.
Recommend approval of the project as presented.

Vote: 3-2-0, motion carried.

2. 15-0254CA: 434-436 So. Winooski Ave (RM, Ward 6) Avery Rifkin/Nate Plasha

Repair rear 2-story porch with timber-frame style, install bark shingle siding on portion, install secondary rail on 2nd floor.

Avery Rifkin and Nate Plasha appeared.

A MOTION was made by RW and SECONDED by SM.
Recommend approval of the project with a change of materials – poplar bark shingles for the interior of 1st and 2nd floor porches; cedar shingles on porch exterior to match-in-kind. Timber detail acceptable.

Vote: 3-2-0, motion carried.

3. 15-0338PD: 112-114 Archibald St et al (NMU, Ward 2) Champlain Housing Trust

Final plat review to demolish 3 existing residential buildings (retain the duplex at 27 Bright Street) and construct 4 new residential buildings for 42 new units (total of 44 units) with associated site improvements.

Michael Wisniewski and Amy Demitrowitz appeared.

A MOTION was made by SM and SECONDED by SO.
Recommend approval to the Development Review Board per staff conditions.

Vote: 5-0-0, motion carried.

4. 15-0358CA: 82 University Pl (I, Ward 1) University of Vermont

Demolish Angel Hall and Cook Physical Science building; construct new STEM building with connecting bridge to Votey Hall.

Lani Ravin, Alex Halpern, Mike Willard, Bob Vaughn, and Ken Bean appeared.

A MOTION was made by MB and SECONDED by RW.
Recommend approval to the Development Review Board as presented.

Vote: 5-0-0, motion carried.