

Burlington Development Review Board

149 Church Street, City Hall

Burlington, VT 05401

www.burlingtonvt.gov/PZ/DRB

Phone: (802) 865-7188

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Austin Hart, Chair
Jonathan Stevens
Brad Rabinowitz
Israel Smith
A.J. LaRosa
Alexandra Zipparo
Geoff Hand
Jim Drummond (Alt.)



BURLINGTON DEVELOPMENT REVIEW BOARD

Tuesday, August 18, 2015

PUBLIC HEARING NOTICE

The Burlington Development Review Board will hold a meeting on **Tuesday, August 18, 2015 at 5:00 p.m. in Contois Auditorium, City Hall.**

1. **16-0007CA/MA & 16-0015CA; 351 North Ave & 329 North Ave (RM, Ward 4N) Eric Farrell**
Convert former orphanage & college building to 63 residential units and relocate college w/in building. Associated site improvements.
2. **10-1005CA/MA & 11-0570CU; 475 Lake St & 601 Lake St (DW-PT & UR, Ward 3) City of Burlington**
Time extension request for redevelopment of the Moran Plant into public-private uses and associated site works and car parking. Upgrades to bike path, increased green space and park amenities, children's splash area/seasonal refrigerated skating rink and a rebuilt skate park. Includes Community Sailing Center. Also includes related temporary construction staging area and temporary interim skating facility.
3. **16-0106CU; 177-179 South Winooski Ave (DT, Ward 3C) Champlain Housing Trust / COTS**
Establish temporary community home to operate a warming shelter during the winter season.

Plans may be viewed in the Planning and Zoning Office, (City Hall, 149 Church Street, Burlington), between the hours of 8:00 a.m. and 4:30 p.m.

Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Planning and Zoning office is considered public and cannot be kept confidential.

This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/pz/drbb/agendas or the office notice board, one week before the hearing for the order in which items will be heard.

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Department of Planning & Zoning at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).

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BURLINGTON DEVELOPMENT REVIEW BOARD Tuesday, August 18, 2015, 5:00 p.m. Contois Auditorium, City Hall, 149 Church Street, Burlington, VT AGENDA

I. Agenda

II. Communications

III. Minutes

IV. Public Hearing

1. **16-0007CA/MA & 16-0015CA; 351 North Ave & 329 North Ave (RM, Ward 4N) Eric Farrell**
Convert former orphanage & college building to 63 residential units and relocate college w/in building. Associated site improvements.
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V. Adjournment

VI. Other Business

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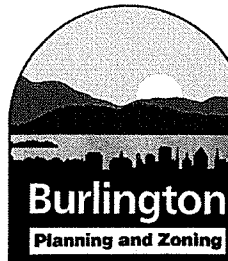
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Department of Planning and Zoning

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*David White, AICP, Director
vacant, Assistant Director
vacant, Comprehensive Planner
Jay Appleton, GIS Manager
Scott Gustin, AICP, Senior Planner
Mary O'Neil, AICP, Senior Planner
Anita Wade, Zoning Clerk
Elsie Tillotson, Department Secretary*



TO: Development Review Board
FROM: Scott Gustin
DATE: August 18, 2015
RE: 10-1005CA/MA; 475 Lake Street
10-1115CA; 0 Lake Street
11-0570CU; 601 Lake Street

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

Zone: DT-PT & UR Ward: 3 & 7

Owner/Applicant: City of Burlington

Request: Time extension for redevelopment of the Moran Plant (5 permits including amendments and associated properties) into public-private uses and associated site works and car parking. Upgrades to bike path, increased green space and park amenities, children's splash area/seasonal skating rink, and a rebuilt skate park. Includes Community Sailing Center and staging area in Urban Reserve.

Applicable Regulations:

Article 3 (Applications, Permits, & Project Review)

Background Information:

The applicant is seeking approval for a second 1-year time extension for redevelopment of the Moran Plant and associated site and infrastructure improvements and the Community Sailing Center. The requested time extension also pertains to the related construction staging area in the Urban Reserve. No project changes are included in this extension request.

Recommendation: Consent approval as per, and subject to, the following findings and conditions:

I. Findings

Article 3: Applications and Reviews

Sec. 3.2.9, Zoning Permits

(d) Time Limit on Zoning Permits:

This project involves 5 zoning permits: 2 for the original project approval (10-1005CA/MA & 10-1115CA; 475 & 0 Lake Street, respectively), 2 amendments to the original project approval (same permit numbers), and 1 for the temporary construction staging in the Urban Reserve (11-0570CU; 601 Lake Street). The project was originally approved August 17, 2010. The amendments were approved September 19, 2011. The construction staging permit was approved March 3, 2011. As

noted in criterion (f) below, commencement of construction was delayed due to mandatory federal permit requirements and Act 250 related litigation. As a result of the federal permit requirements and Act 250 related litigation, the effective date of the zoning permits was not until September 17, 2012 (the end of Act 250 related litigation). Construction activity commenced on September 13, 2013 with some onsite demolition, stormwater work, and brownfield activities. Since then, construction has continued through to the present; however, it is not yet complete.

A 1-year time extension was sought and obtained August 22, 2014. That extension pushed the permit expiration date to September 17, 2015. Construction presently underway will not be complete by September 17, 2015, hence the second permit extension request. Insofar as construction activity commenced within 1 year of the effective date of the zoning permits, and the extension request has been filed prior to expiration of the extended permit, the requested 1 year extension may be approved. Development Review Board precedent allows for up to 3 permit extensions (i.e. such as Stratos and 53 Birchcliff Parkway). Construction must be complete by September 17, 2016. **(Affirmative finding)**

(f) Exceptions to Permit Time Limits

This criterion tolls the start time for zoning permits subject to other state or federal permitting jurisdiction and/or appeals. Specifically, it states: "For projects subject to additional state or federal permitting jurisdiction, the date of decision [i.e. the effective date] shall be deemed to be the latest date of decision of the state or federal permitting authority. For projects under appeal pursuant to the requirements of Article 12, the date of decision shall be deemed to be the date of the decision adjudicating such appeal." This project required a U.S. Army Corps of Engineers permit and was also the subject of litigation relative to Act 250 jurisdiction. The Army Corps permit was issued December 8, 2011 and litigation relative to Act 250 concluded September 17, 2012 (Act 250 jurisdiction was found not to apply). With the conclusion of litigation on September 17, 2012, the 1 year start time for the zoning permits began. **(Affirmative finding)**

II. Conditions of Approval

1. Except as specifically modified in this approval, all conditions of the original zoning permits (10-1005CA/MA, 10-1115CA, & 11-0570CU) and as amended shall remain in effect.
2. Standard permit conditions 1 -15 (including construction completion date no later than September 17, 2016).



COMMUNITY & ECONOMIC DEVELOPMENT OFFICE

149 CHURCH STREET • ROOM 32 • CITY HALL • BURLINGTON, VT 05401
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JUL 21 2015

MEMORANDUM

DEPARTMENT OF
PLANNING & ZONING

To: Burlington Planning & Zoning Development Review Board

From: *KMS*
Kirsten Merriman Shapiro, Senior Projects and Policy Specialist, CEDO

CC: Scott Gustin, AICP, CFM, Senior Planner, Dept. of Planning & Zoning

Date: July 17, 2015

Re: Moran Center - 10-1005CA/MA & 11-0570 CU

This memo is a request for a one year extension on the following permits 10-1005CA/MA & 11-0570 CU. The project is currently under construction, but will not be finished by September 17, 2015.

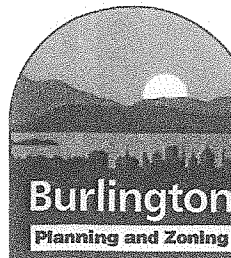
I can attend you August 18, 2015 meeting to answer any questions you may have.

Thank you for your consideration.

Department of Planning and Zoning

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Burlington Development Review Board

Minutes/Findings of Fact
August 17, 2010

In RE: 10-1005CA/MA & 10-1115CA; 475 & 0 Lake St. (Ward 3, DW-PT) (Tax Lot No. 043-4-007-001 & 043-4-004-000)

Owner/Applicant: City of Burlington

Request: Redevelopment of the Moran Plant into public-private uses and associated site works and car parking. Upgrades to bike path, increased green space and park amenities, children's splash area/seasonal refrigerated skating rink and a rebuilt skate park. Project includes Community Sailing Center.

Members Present:

Michael Long
Jonathan Stevens
Brad Rabinowitz
Bob Schwartz
Kevin Stapleton
Paul Henninge

Evidence Presented:

The Board examined the materials submitted in support of this request.

I. FINDINGS

Background Information:

The applicant is requesting approval for the comprehensive redevelopment of the Moran Plant into a mixed use public-private space with associated site work and parking. Site work includes, but is not limited to, bike path upgrades, a children's splash area/seasonal refrigerated skating rink, and a reconstructed skate park. The Community Sailing Center building and site work that includes outdoor boat storage is also part of this application.

Property boundaries have been adjusted to result in a single lot containing the Moran building, the sailing center, and site improvements. The boundary line adjustment was filed under separate application. The project site plans reflect the adjusted property boundaries.

Some minor site work extends into the adjacent city property to the south. As required, a separate zoning permit application has been filed. The work is incorporated into these findings.

The Design Advisory Board reviewed this project on June 8 and again on July 13, 2010. On a 3-1 vote, the DAB recommended forwarding the project to the Development Review Board. The

single major concern of the DAB was the design of the proposed sailing center building. As a largely unarticulated metal box, Board members were concerned that the proposed building reflected only its utilitarian function as a boat warehouse and missed the opportunity to contribute positively to the built environment along this highly visible portion of the downtown waterfront. The DAB felt that the other aspects of the project should not be held up because of the sailing center building and recommended the following condition:

1. Greater thought and articulation for the building design is strongly recommended. Development at this site is an unparalleled opportunity; one that recognizes absolute and unmatched visibility from Lake Champlain, accompanied by direct public access from Lake Street, the bike path, and the Urban Reserve. The Community Sailing Center will be a public building in the most public of places. A plan that acknowledges this unrivaled public access, and responds to that visual exposure in function, beauty and high design, is strongly encouraged. Any building at this site has the potential to be a visual landmark. This development is not just an opportunity; it is an obligation to the public. While anticipated resource and functional use appear to have limited the overall building design, to minimize both the building appearance and the site's potential is shortsighted and a missed opportunity. This structure could and should reflect the importance inherent in mission, location, and community vision, especially for Burlington's waterfront development and future use.

Slightly revised building elevations depicting some additional dimensions and details have been provided; however, the proposed building remains essentially unchanged.

The Conservation Board reviewed the proposal on July 12 and on August 2, 2010. The Board recommended approval subject to the following conditions:

- 1) Recalculate bike parking to include the parks, restaurant, and parking lot uses.
- 2) Relocate the short term bike parking for the Moran to the building's main entrance. Doing so may entail relocation of the long term parking elsewhere onsite, which is acceptable.
- 3) Provide only the minimum number of required vehicle parking spaces.
- 4) Keep the Conservation Board involved in the wetlands Individual Permit process with the U.S. Army Corps of Engineers and allow for Board comment.
- 5) Lighting for the Sailing Center shall be directed away from the wetland.
- 6) Coordinate with the Department of Parks & Recreation on pedestrian access (both formal and informal) into the Urban Reserve.

As the Board recommendation came just 1 day before the DRB hearing, revised plans have not been submitted to address these recommendations. The applicant is amenable to the recommendations, except for #3.

Previous zoning actions for this property are noted below.

- 6/25/09, Approval (non-applicability form) for interior clean-up of Moran building
- 5/1/09, Approval to install a seasonal tent for sailing classes
- 5/24/09, Approval of parallel sign for sailing center
- 5/9/08, Approval to relocate sailing center from Moran to DPW Pumping Station
- 7/29/02, Approval of parallel sign for sailing center
- 4/19/01, Approval to install portable restroom and fencing at skate park
- 5/21/00, Approval to install signage at skate park
- 8/26/99, Approval to install fishing pier

- 4/5/99, Approval of skate park
- 1/23/97, Approval to remove nonstructural ladder from Moran
- 7/14/94, Approval to modify access into the sailing center
- 5/27/93, Approval of sailing center
- 8/9/90, Approval to remove “car shaker” structure and replace with fill and grade
- 6/14/90, Approval for Moran site work
- 6/14/90, Approval of temporary International Sculpture Symposium

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Sec. 3.5.6, Review Criteria

(a) Conditional Use Review Standards

1. The capacity of existing or planned community facilities;

The renovated Moran and the new sailing center building will be served by the municipal water and wastewater systems. Adequate reserve capacity is available; however, written confirmation from the Department of Public Works is required before a state wastewater permit can be issued. **(Affirmative finding as conditioned)**

2. The character of the area affected;

The project site is located at the northern end of the Downtown Waterfront and adjacent to and just south of the Urban Reserve. The area contains the Coast Guard facility, BED and Water Department buildings, a public boat launch, fishing pier, the skate park, and the current sailing center. Waterfront Park is located just to the south of the subject site. The proposed site renovations will effectively serve as additional public parkland while the renovations to the Moran building will bring about several new uses including a museum, indoor recreational facility, restaurant, and café. The sailing center is already present onsite but will be relocated into a new building with outdoor storage area at the northern end of the site. The project is heavily geared towards public access and serves to strengthen this end of the Downtown Waterfront. **(Affirmative finding)**

3. Traffic on roads and highways in the vicinity;

A traffic study has been provided and addresses traffic volumes, intersection impacts, and parking capacity. The completed project is expected to generate 59 AM peak hour vehicle trips and 77 PM peak hour trips during weekdays and 71 Saturday peak hour trips. Level of service (LOS) at the three analyzed intersections (College St/Lake St, Battery St/College St, and Battery St / Main St) changes little between the build versus no-build scenarios. Queue lengths at these intersections are expected to experience minimal impacts with the projected addition of 1 more vehicle 33% of the time. Anticipated traffic impacts are surprisingly minor; however, the engineering division at the Department of Public Works has reviewed the study and concurs with its findings. See Article 8 of these findings for parking. **(Affirmative finding)**

4. Bylaws then in effect;

As per the findings herein and as conditioned, the project is in compliance with all applicable zoning bylaws. **(Affirmative finding)**

5. Utilization of renewable energy resources;

The Moran building will utilize lake water for its climate control needs. Doing so will save considerable energy, particularly for cooling. Beyond the utilization of this renewable resource,

emphasis has been placed on energy efficiency within the building. LEED certification will be sought. No renewable energy resources will be utilized by the sailing center building beyond the use of passive solar lighting. **(Affirmative finding)**

6. Cumulative impacts of the proposed use;

The most significant cumulative impact associated with this proposal is likely vehicular traffic. There is presently one way into the site and one way out of it. The submitted traffic analysis indicates that, while the number of vehicle trips generated by the project will be substantial, impacts on the existing roadway network will be modest. **(Affirmative finding)**

7. Functional family;

Not applicable.

8. Vehicular access points;

Lake Street will be upgraded along the length of the project site and will provide four points of access; two to the Moran and two to the sailing center. Given the anticipated traffic volumes, the four access points are reasonable. **(Affirmative finding)**

9. Signs;

Building elevations depict parallel signage for both the Moran building and the sailing center building. The existing "City of Burlington" parallel sign on the south elevation of Moran will be restored. Conceptually, the signage is acceptable but is subject to a separate zoning permit. **(Affirmative finding as conditioned)**

10. Mitigation measures;

The proposed use will not generate noise or glare sufficient to warrant mitigation. The sailing center and the skate park, two active outdoor uses, are present onsite already. Noise levels are expected to be as typically associated with a city park. Lighting is addressed under Sec. 5.5.2. **(Affirmative finding)**

11. Time limits for construction;

The project will be phased as reflected in the application's delineation of twelve separate components. No time frame has been specified for the individual phases; however, the applicant anticipates construction to take less than 2 years and can fit within the standard 2-year time frame for zoning permits. The proposed phasing is acceptable, but each phase needs to be clearly depicted on the project plans. **(Affirmative finding as conditioned)**

12. Hours of operation and construction;

The proposed hours of operation are 6:00 AM – 2:00 AM, 7 days per week. These hours are the maximum span for hours of operation; not all uses associated with this project will be open for business 20 hours per day. Given the variety of uses proposed and the Downtown Waterfront location, the proposed hours of operation are acceptable. Hours of construction need not be specified in this location and will be restricted by the city's noise ordinance. **(Affirmative finding)**

13. Future enlargement or alterations;

In the event of future enlargement or alteration, permits would be required and reviewed under the regulations then in effect. **(Affirmative finding)**

14. Performance standards;

Performance standards relating to outdoor lighting and erosion control are addressed under Article 5 of these findings.

15. Conditions and safeguards;

Approval of this project will be conditioned to implement the purposes of the zoning regulations.
(Affirmative finding)

(b) Major Impact Review Standards

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

Stormwater management will be substantially improved as part of this application. See Sec. 5.5.3 for details. Air and noise pollution will be as expected for typical recreational, restaurant, or museum uses. **(Affirmative finding)**

2. Have sufficient water available for its needs;

See Sec. 3.5.6 (a) 1.

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

See Sec. 3.5.6 (a) 1.

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

A comprehensive erosion prevention and sediment control plan has been submitted along with a stormwater management plan. The plans have been reviewed and approved by the Conservation Board. Approval by the Stormwater Administrator per Chapter 26 is pending. **(Affirmative finding as conditioned)**

5. Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;
See Sec. 3.5.6 (a) 3 for traffic impacts. The project is not expected to cause unreasonable congestion or unsafe conditions on nearby sidewalks or bikeways. Pedestrian access throughout the site will be upgraded substantially, and the bike path will be reconstructed along the length of the subject site. The interaction between vehicle, pedestrian, and bike routes onsite appears to invite the possibility of congestion, particularly at the northeastern end of the site where Lake Street will end and the bike path continues. Revised plans to mitigate this apparent congestion, particularly at the northeast corner of the site are needed. **(Affirmative finding as conditioned)**

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

This mixed use project contains no residential component and will have no adverse impact on the city's ability to provide educational services. **(Affirmative finding)**

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

The project is, in part, an expansion and enhancement of city recreational facilities. Demands on municipal services are expected to be relatively moderate and will not be unreasonably burdensome. Impact fees will be paid to help offset what impacts there are on municipal services. **(Affirmative finding as conditioned)**

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*
See Sec. 6.2.2 (a) & 6.3.2 (b).

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

The project constitutes redevelopment of a vacant municipal power plant into a mixed use recreational and cultural facility. It will serve to substantially strengthen this portion of the Downtown Waterfront. The project will have no adverse impact on the city's present or future growth patterns. **(Affirmative finding)**

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

The proposed development can be found to be in substantial conformance with the MDP, as per the following:

The proposed development will transform a vacant municipal power plant into a mixed use recreational and cultural facility within the city's Downtown Improvement District (pg. I-10, Downtown Improvement District).

The project includes a comprehensive stormwater management plan that collects and attenuates stormwater runoff prior to offsite discharge. In addition to innovative on-the-ground measures such as constructed gravel wetlands and water quality swales, portions of the Moran roof will be renovated into green roofs (pg. II-5, Urban Ecosystems).

The Moran building is historically significant and will be renovated in such a way as to protect the existing form and features of the building (pg. IV-1, City Policies).

Renovation of the vacant Moran building and establishment of the proposed uses will contribute to Burlington's status as a regional growth center and will bring additional jobs and economic vitality into Burlington's downtown waterfront (pg. VI-3, Regional Growth Center & pg. VI-5, Creating New Jobs).

Redevelopment of the Moran is cited in the Economic Development Action Plan (pg. VI-13, Economic Development Action Plan).

The renovated and new structures included in this proposal will meet or exceed the city's current energy efficiency standards. The renovated Moran is one of the few projects to actually incorporate a renewable resource into its climate control system (pg. VIII-1, City Policies).
(Affirmative finding)

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

This project contains no residential component and will have no adverse impact on the present or projected housing needs of the city. **(Affirmative finding)**

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

Much of the proposal constitutes an expansion and upgrade of city parkland and facilities. No undue adverse impacts on city parkland are anticipated as a result of this project. Parks impact fees may be waived for this project based on the value of proposed capital improvements associated with this project.

Although not included in this proposal, existing informal pedestrian paths from the Urban Reserve extend into the development site. As recommended by the Conservation Board, the applicant is encouraged to work with the Parks and Recreation Department on coordinating pedestrian access into the Urban Reserve. **(Affirmative finding as conditioned)**

Article 4: Maps & Districts

Sec. 4.4.1, Downtown Mixed Use Districts:

(a) Purpose

(4) Downtown Waterfront – Public Trust District (DW-PT)

The subject property is located in the Downtown Waterfront – Public Trust District. This zone is intended to enhance and diversify commercial and residential development in the downtown waterfront area with an emphasis on enhanced community access to the lakeshore. This project will enhance community parkland along the waterfront and will incorporate a variety of recreational and cultural uses, both indoors and out. Two of the uses, the sailing center and the maritime museum, directly relate to the property's waterfront location. The project appropriately relates to the intent of this district. **(Affirmative finding)**

(b) Dimensional Standards & Density

A FAR of 2 is allowed in the DW-PT zone. The 8+ acre property allows 723,380 sf building area. A total of 57,488 sf building area (or 0.159 FAR) is proposed and is acceptable.

There is no lot coverage limit in the DW-PT zone. The project will result in 60% lot coverage.

No setbacks apply to this site except for a 50' setback from the lakeshore. The proposed sailing center building complies with this setback requirement.

The overall height of the Moran building will remain unchanged; however, some additions to the building will project above 35'. The proposed sailing center building will be 35' tall to the top of the warehouse component and 37' to the top of the classroom and office space component. The height limit in the DW-PT zone is 35'; however, construction above this limit may be allowed per Sec. 5.2.6 (b) *Exceptions to Height Limits*, 1. This exception allows new construction to exceed the district's height limit on parcels with existing buildings (in this case, the Moran) that exceed the height limit. The new construction cannot exceed the height of the existing structure. Both the additions to the Moran and the new sailing center building remain below the existing height of the Moran building. **(Affirmative finding)**

(c) Permitted & Conditional Uses

See Sec. 4.4.1 (d) 2, *Public Trust Restrictions, A, Permitted Uses: North of Main Street*.

(d) District Specific Regulations

1. Use Restrictions

A. Ground Floor Residential Uses Restricted

No residential use is included in this proposal. **(Affirmative finding)**

B. Residential/Nonresidential Mix Required

As noted above, no residential use is included in this proposal. Office use is accessory to the proposed primary uses and accounts for far less than 75% of the total use, the maximum allowable in the DW-PT zone. **(Affirmative finding)**

2. Public Trust Restrictions

A. Permitted Uses: North of Main Street

The proposed uses – indoor and outdoor recreation, museum, restaurant, café, and sailing center – are permitted in this portion of the DW-PT zone. **(Affirmative finding)**

3. Facades and Setbacks on Side and Rear Property Lines

Not applicable.

4. Building Height Setbacks

Not applicable.

5. Lake Champlain Waterfront Setbacks

The Moran building sits within the waterfront setback; however, the degree of encroachment will not change. The proposed sailing center building complies with the 50' waterfront setback. Site improvements such as walkways, patios, benches, etc. associated with the project are permitted encroachments per criterion C of this section. **(Affirmative finding)**

6. Development Bonuses/Additional Allowances

Not applicable.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.1 (b) above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5, Setbacks

See Sec. 4.4.1 (b) above.

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.1 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.1 (b) above.

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.

Information included within a study provided to the city in 2005 offers the following information:
“Analysis was given regarding the feasibility of listing the properties[Moran complex] individually

or as a district onto the National Register of Historic Places. The finding of this study is that all of the electricity generating buildings on the waterfront are historically significant and would likely qualify for individual listing, although the application will be stronger if they are listed as a district. The finding of the significance stems from the age of the buildings, the importance of their purpose to the community, and the growing rarity of buildings of these configurations.”¹ This supports eligibility requirements for the Moran structure as defined by this section of the ordinance.

(b) Standards and Guidelines:

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.*

The application, while proposing new use, strives to maintain those building details, massing, and materials that are characteristic of the power generating facility. **(Affirmative finding)**

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.*

Significant effort has been made to retain massing, spatial relationships, and materials associated with the Moran building. If historic tax credits are sought, extensive review and compliance with these criteria will be essential to secure funding. **(Affirmative finding)**

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.*

Alterations proposed for the Moran building are distinctly identifiable, and distinguishable from the original structure. No conjectural features are proposed. **(Affirmative finding)**

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

Significant effort has been made to assure the retention of important and character defining features of the Moran building in order to allow reasonable interpretation of the structure by the public in its proposed new use. **(Affirmative finding)**

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

See above.

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*

¹ New England Preservation Collaborative, Inc., *Assessment of Historic Electricity Generating Facilities on the Burlington Waterfront*. Essex Junction, 2005, p. 2.

for an efficient contemporary use. Replacement of missing features will be substantiated by documentary and physical evidence.

Project proponents have diligently committed their efforts toward building repair, component replacement, and commemorative acknowledgement of original building details. The original building superstructure will be clearly evident in project implementation, with exposed steel, brick veneer infill, and window replacement. **(Affirmative finding)**

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.*

Abatement of asbestos and lead paint as well as other hazardous materials has required significant attention, but no actions are proposed that will affect the integrity of the building mass.

(Affirmative finding)

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

None identified.

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.*

The plan reflects considerable and attentive analysis of the qualities of the existing vacant electric generating facility and the thoughtful re-use of the structure. There is clear discernment between the original building mass and details and the proposed alterations that will both inform the public of what is old and new and present a pleasing and highly functional new structure. **(Affirmative finding)**

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.*

Although unlikely, it is possible to imagine the proposed improvements to be reversible. As it now exists, the Moran structure is an empty, looming hulk of a building. **(Affirmative finding)**

Sec. 5.4.9, Brownfield Remediation

While this site is included on the Vermont DEC's Hazardous Site List, no waivers under this section are sought for the development.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

An outdoor lighting plan has been submitted and includes fixture cutsheets, location, and a photometric analysis. Fixtures will utilize acceptable metal halide bulbs and, possibly, LED. All fixtures are cutoff.

Building entry illumination levels are below the maximum permissible 5.0 footcandles. Parking and circulation area illumination levels are acceptable with maximum illumination levels below 4.0 footcandles and a 20:1 uniformity ratio. New lighting will be installed along Lake Street subject to BED standards. Walkway lighting levels exceed the standards for walkways under this Section; however, they are an integral part of an outdoor recreation facility. As such, walkway lighting levels can be viewed under the standards for Outdoor Recreational Facility Lighting and are acceptable. Point-by-point photometric data is available for the sailing center building and storage yard. As recommended by the Conservation Board, illumination is not projected towards the adjacent wetland to the north. Illumination levels are acceptable as Security Lighting under this criterion. **(Affirmative finding)**

Sec. 5.5.3, Stormwater and Erosion Control

Significant stormwater improvements are proposed. These consist of several onsite measures, including two constructed gravel wetlands, a water quality swale, and green roofs. The measures will serve to collect and attenuate stormwater runoff prior to discharge. Discharge will occur in reduced volumes at reduced rates with cleaner water. The proposed stormwater measures have been reviewed and approved by the Conservation Board. Approval by the Stormwater Administrator per Chapter 26 of the City Code of Ordinances is pending. **(Affirmative finding as conditioned)**

Article 6: Development Review Standards:

Part 1, Land Division Design Standards

Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The site contains no significant natural areas as identified in the Open Space Protection Plan. While the site is along the Lake Champlain waterfront, it (and the rest of the downtown waterfront) is not included in the Riparian and Littoral Conservation Zone.

A wetland has developed within the site of a former fuel storage tank at the northern end of the project site and will be impacted by the proposed sailing center building. As a class 3 wetland, it is not subject to review under the wetlands criteria of the Natural Resource Protection Overlay District; however, an Individual Permit from the U.S. Army Corps of Engineers is required. The Conservation Board has requested that it be involved in that process and be allowed to comment, particularly on proposed mitigation measures.

Several trees will be removed; however, none are specimen trees or otherwise significant. Tree loss will be offset by the 120 new trees included in the landscaping proposal. **(Affirmative finding as conditioned)**

(b) Topographical alterations

The existing site is generally flat and will remain so. An existing elevated parking lot behind the Water Department pump station will be removed and leveled as part of a new, larger parking area.

A portion of the class 3 wetland will be filled as part of the sailing center construction. Stormwater management will also entail some grading, particularly for swales. Topographical alterations are insignificant. **(Affirmative finding)**

(c) Protection of important public views

There are significant public views from the project site across the lake and towards the Adirondacks. There are also significant public views across the site from Battery Park. Existing public views will not be adversely impacted by the renovated Moran or by the new sailing center building. **(Affirmative finding)**

(d) Protection of important cultural resources

The project site is located on fill soils. The site has no archaeological significance. The Moran building is historically significant as noted under Sec. 5.4.8 (above) and 6.3.2 (b) below. **(Affirmative finding)**

(e) Supporting the use of alternative energy

No alternative energies will be incorporated into the site design. Potential remains for incorporation thereof in the future. Alternative energy usage in the buildings is addressed in Sec. 6.3.2 (f). **(Affirmative finding)**

(f) Brownfield sites

The site is included on the Vermont DEC Hazardous Site List. The Existing Conditions Plan outlines areas of contaminated soils onsite, tied largely to the property's former status as a coal-fired power plant. A corrective action plan (CAP) has been established and implemented for the interior of the Moran building. Such a plan has not been executed for the site; however, it is anticipated that the corrective action will amount to capping contaminated soils in place. A state-approved CAP for the site is required. **(Affirmative finding as conditioned)**

(g) Provide for nature's events

See Sec. 5.5.3 for stormwater management. There is sufficient room onsite for snow storage. Meltwater will be handled by the stormwater system. Building entries are sheltered. **(Affirmative finding)**

(h) Building location and orientation

The location of the Moran building will not change. What is effectively a rear entryway facing Lake Street will be completely overhauled as the primary entrance into the structure. The proposed changes result in a clearly articulated main entrance facing the public street. The new sailing center building will also have a front entry facing the public street. This front entry is reasonably well articulated with signage, logo, and overhang. **(Affirmative finding)**

(i) Vehicular access

As noted previously, four points of vehicular access will be provided into the site. Curb cuts and turn radii are designed to accommodate standard passenger vehicles as well as vehicles pulling trailers. Service access for the Moran will be located on the south side of the building with another exhibit loading space on the north elevation. Overhead doors will provide service and boat access into the sailing center building. **(Affirmative finding)**

(j) Pedestrian access

As required, pedestrians will be provided with a direct walkway connection between the public sidewalk and the Moran's main entrance. The parking areas have direct access to walkways providing a pedestrian link to the building. Striping is proposed where the sidewalk crosses the two driveways. The sailing center's front entrance will have direct access to the new public sidewalk extended along Lake Street. **(Affirmative finding)**

(k) Accessibility for the handicapped

Several handicap parking spaces are depicted on the plans. They are located immediately adjacent to walkways linking to the Moran's main entrance. It is the applicant's responsibility to comply with all applicable ADA requirements. **(Affirmative finding as conditioned)**

(l) Parking and circulation

The existing Moran building is set close to the lake and relatively far from the road. As a result, space for parking is available between the building and the road. This parking will serve the sailing center as well. As proposed, all of the new parking will be provided between Lake Street and the Water Department pump station. No off-street parking will be located between the Moran or the sailing center and Lake Street. A row of honey locust trees will be planted between the eastern edge of the parking area and Lake Street. Fencing and/or additional plantings, especially shrubbery, should be installed to enhance screening of the parking area. Offstreet parking is split into several areas separated by landscaping, although the two largest parking areas exceed the 20 space limit recommended by this criterion. The reconstructed Lake Street will contain parallel and angled parking and will be lined with new street trees.

Interior parking spaces and associated site circulation are laid out such that vehicles will not back out onto Lake Street. Angled parking spaces along Lake Street obviously will require backing out. Vehicles backing out at the northern end of Lake Street will likely conflict with the nearby bike path. As noted previously, this potential circulation problem needs to be addressed and corrected. All parking areas appear to be curbed.

As noted previously, 120 new trees are proposed in and around the parking areas and reconstructed Lake Street. As recommended by this criterion, 30% shading of the parking areas will be achieved with the newly planted trees. The interior parking area, containing 71 parking spaces, requires 1 shade tree per every 5 parking spaces. More than the required 14 shade trees are proposed. Proposed caliper size at the time of planting (2.5" – 3.5") is acceptable as is the anticipated mature canopy diameter of 35'. **(Affirmative finding as conditioned)**

(m) Landscaping and fences

A comprehensive landscaping plan has been provided and consists of a variety of trees, shrubs, and flowers. Some elements of the landscaping plan provide screening whereas others are integrated into the stormwater management system. Other elements provide visual interest to the site and help to define distinct spaces within the site. As noted previously, additional screening of the parking areas from the street is needed. The street trees proposed along Lake Street are subject to review and approval by the City Arborist. **(Affirmative finding as conditioned)**

(n) Public plazas and open space

The site is open to the public and essentially will function as a city park. Much of the site receives ample solar exposure and provides access to the lakefront. Plazas and walkways throughout facilitate pedestrian circulation and utilization of the site. A large fountain will serve as a summer

time splash area and a winter time skating rink. Details on hardscaping elements such as benches, sitting walls, and outdoor furniture have been provided and are similar to those used elsewhere in city parks. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

No new ground-mounted mechanical equipment is proposed. The ground floor plan depicts a large mechanical room. A dumpster enclosure located along the northern side of the BED building will serve the Moran. A dumpster enclosure for the sailing center will be located at the northeastern end of the storage yard. While not an ideal location close to the bike path, the dumpster will be enclosed and screened. The orientation of the enclosure is to be modified to face the north elevation of the building. This revision needs to be depicted on the site plans. Any new utility lines must be buried. The existing electrical transformer station will be removed as part of this project. **(Affirmative finding as conditioned)**

Part 3, Architectural Design Standards (Moran Plant)

Sec. 6.3.2, Review Standards

(a) Relate development to its environment

1. Massing, Height, and Scale

The massing, height, and scale of the existing structure – originally a power plant – will remain largely unchanged. A new entryway enclosure will be added to the east elevation, and two upper story additions will be constructed on existing building decks. A small ground level addition will be constructed at the northwest corner of the building. The steel apparatus on the north elevation will be removed; however, some new steel beams will be installed in its place. The changes to the building mass are relatively modest and do not significantly affect the overall scale of the structure. **(Affirmative finding)**

2. Roofs and Rooflines

The existing building is a multi-level flat roof structure. Proposed additions will also have flat roofs. **(Affirmative finding)**

3. Building Openings

Most of the windows in the existing structure are broken or boarded-up. All windows will be replaced within the existing window openings. The few additions to the structure will have extensive glazing. While window styles differ somewhat, they are sympathetic to the industrial nature of the building. As noted previously, a new primary entrance will be constructed on the building's eastern elevation. The proposed entrance is well articulated and easily identifiable from Lake Street. Because it is enclosed, the entrance will provide shelter from the weather. **(Affirmative finding)**

(b) Protection of important architectural resources

The existing building is not included on any historic register; however, it is eligible for listing. The building is clearly industrial in appearance. The proposed renovations respect the essential form and appearance of the structure. Additions to the structure are clearly not part of the original building but are stylistically sympathetic. See also Sec. 5.4.8. **(Affirmative finding)**

(c) Protection of important public views

See 6.2.2 (c) above.

(d) Provide an active and inviting street edge

The existing building was constructed as a power plant standing alone at the northern end of the downtown waterfront. It was not constructed as an active, pedestrian oriented facility. The proposed renovations do much to improve the attractiveness and pedestrian-friendliness of the building. Site work draws people into the building and associated amenities. The eastern elevation will be transformed from a rather bleak, faceless façade into the primary entrance.

(Affirmative finding)

(e) Quality of materials

The existing brick sheathing will remain. Additions to the structure will be clad in a variety of materials such as copper siding, wood, and some fiber cement panels. New windows will be metal framed. These materials are durable and of acceptable quality. **(Affirmative finding)**

(f) Reduce energy utilization

As noted previously, the building has significant solar exposure. Ample sunlight will penetrate the interior of the building. The renovated building will comply with the city's current energy efficiency requirements. **(Affirmative finding)**

(g) Make advertising features complimentary to the site

See Sec. 3.5.6 (9).

(h) Integrate infrastructure into the building design

No rooftop mechanical equipment is proposed. Only a rooftop hatch and an elevator vent are depicted on the top roof deck. **(Affirmative finding)**

(i) Make spaces safe and secure

Revamped building entrances are clearly visible and will be acceptably ventilated. The building appears to be readily accessible by emergency vehicles as demonstrated on access and circulation plans. Written approval of the Fire Marshal regarding the building's accessibility by emergency service vehicles is required. **(Affirmative finding as conditioned)**

Part 3, Architectural Design Standards (Community Sailing Center)

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

A minimalist aesthetic appears to be fundamental inspiration for the sailing center, which remains an unadorned box with little or no articulation on three facades despite input by the Design Advisory Board. The applicant has expressed the subordinate design as an intentional effort to play off the larger Moran building. As visually articulated, the structure in scale and presentation remains the minor key in the overall development. While the DAB took specific issue with the building design of the sailing center, the Development Review Board acknowledges the building's utilitarian intent and its consistency with the industrial history of the downtown waterfront. Design emphasis has been placed on the classroom/office section of the building whereas the warehouse component of the building is clearly secondary in appearance. **(Affirmative finding)**

2. Roofs and Rooflines

A flat roof with skylights is proposed. Flat roofs are common at this end of the downtown waterfront. A couple of small vents for restroom facilities are also depicted. **(Affirmative finding)**

3. Building Openings

Vehicle and pedestrian doors are proposed for the east elevation (off Lake Street and the bike path), with another vehicle opening and ground level entrance on the west. There will be a doorway from the third floor onto an observation deck on the south façade, as well as an opening on the upper level of the “lifeguard tower” on the west. Depiction is needed. **(Affirmative finding as conditioned)**

(b) Protection of Important Architectural Resources:

None identified onsite relative to the CSC. **(Not applicable.)**

(c) Protection of Important Public Views:

The development of this site will enhance the public’s opportunity to enjoy the spectacular views and vista from the waterfront. **(Affirmative finding)**

(d) Provide an active and inviting street edge:

The proposed structure is largely plain and simple; the design reflects its utilitarian storage function. The exception is the southern classroom and office component. Insofar as this component is visible from the public street and an entrance therein directly faces the street, the structure’s street edge can be deemed acceptable. **(Affirmative finding)**

(e) Quality of materials:

The proposed siding is vertical corrugated steel with a 35-year Kynar exterior finish. Spandrels on the porch area will be steel with aluminum and PVC trim. Fiber cement is proposed for canopy and tower trim, observation deck spandrel panels, and fascia. While not exceptionally durable or high quality, the proposed materials are acceptable for new construction. **(Affirmative finding)**

(f) Reduce energy utilization:

The proposed building must comply with the city’s current energy efficiency requirements. The proposed skylights will reduce the need for artificial lighting within the warehouse. **(Affirmative finding as conditioned)**

(g) Make advertising features complementary to the site:

A simplified logo graphic is presented for the lakeside and easterly facade. Without lettering, it is not considered a sign. Revised elevations illustrate minor building identification signage on the eastern entry. Any signage (with specific lettering) will require a separate sign permit. **(Affirmative finding as conditioned)**

(h) Integrate infrastructure into the building design:

No ground mounted mechanical equipment is proposed. Utility meters must be depicted and screened. As noted previously, a dumpster will be provided and will be screened. **(Affirmative finding as conditioned)**

(i) Make spaces secure and safe:

All development will be required to meet building and life safety code, as articulated by the Building Inspector and the Fire Marshal. The sailing center building appears to be readily accessible by emergency vehicles; however, written approval of the Fire Marshal regarding the building's accessibility by emergency service vehicles is required. **(Affirmative finding as conditioned)**

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located in the Downtown parking district. The total parking requirement for the mixed use project is 69 spaces. Total parking proposed for the project, not including new onstreet spaces along Lake Street, is 74 spaces. As recommended by the Conservation Board, the number of parking spaces must be reduced to 69. An additional 35 parking spaces serve exiting nearby uses (BED, Water Department, and Fishing Pier). **(Affirmative finding as conditioned)**

Sec. 8.1.10, Off-Street Loading Requirements

As noted previously, loading areas have been designated for both the Moran and the sailing center. **(Affirmative finding)**

Sec. 8.1.11, Parking Dimensional Requirements

All parking spaces and circulation isles are of adequate dimensions. **(Affirmative finding)**

Sec. 8.1.12, Limitations, Location, Use of Facilities

(a) Off-Site Parking Facilities

Not applicable.

(b) Downtown Street Level Setback

As noted previously, due to the locations of the Moran and Lake Street, parking will be placed between Moran and the street. As proposed, the parking will be set back somewhat from the front property line and the street. **(Affirmative finding)**

(c) Front Yard Parking Restricted

Not applicable.

(d) Shared Parking in Neighborhood Parking Districts

Not applicable.

(e) Single Story Structures in Shared Use Districts

Not applicable.

(f) Joint Use of Facilities

The proposed parking will serve all uses onsite as well as nearby uses. **(Affirmative finding)**

(g) Availability of Facilities

The parking to be constructed as part of this development will be for the exclusive use of employees and visitors. It will not be used for the storage or display of vehicles or materials. **(Affirmative finding)**

(h) Compact Car Parking

Not applicable.

Sec. 8.1.13, Parking for Disabled Persons

A number of handicap parking spaces are proposed and comply with the minimum dimensional requirements and location next to access isles of 5' width. These spaces shall be marked and signed as required for handicap spaces. **(Affirmative finding as conditioned)**

Sec. 8.1.14, Stacked and Tandem Parking Restrictions

Not applicable.

Sec. 8.1.15, Waivers from Parking Requirements/Parking Management Plans

Not applicable.

Sec. 8.2.5, Bicycle Parking Requirements

Both short term and long term bicycle parking is required. The proposal includes 12 long term spaces and 30 short term spaces. The Conservation Board found that the proposed bicycle spaces are inadequate and do not account for the complete variety of uses onsite. In addition to the already-accounted-for uses, bike parking needs to account for parks, restaurant, and parking lot uses onsite. The Board also found that insufficient short term bike parking would be provided by the Moran's main entry. Additional short term bike parking is needed here. Relocation of the long term bike parking elsewhere onsite is acceptable if needed in order to provide additional short term bike parking by the main Moran entrance. The proposed bike parking needs to be recalculated and depicted on revised plans. Confirmation that the recalculated bicycle parking complies with Public Works' "Bicycle Parking Guidelines" is also needed. **(Affirmative finding as conditioned)**

II. MINUTES

The meeting minutes will be distributed separately upon review and approval by the Development Review Board.

III. MOTION

Motion: Brad Rabinowitz

I move that the Board grant Certificate of Appropriateness and Major Impact approval for redevelopment of the Moran Plant into public-private uses and associated site works and car parking, including upgrades to the bike path, increased green space and park amenities, children's splash area/seasonal refrigerated skating rink, a rebuilt skate park, and new sailing center facility, located at 475 Lake Street in the DW-PT zone in accordance with Articles 3, 4, 5, 6, and 8. The Board adopts the findings set forth above. Approval is subject to the following conditions:

1. **Prior to release of the zoning permit**, revised plans and/or additional materials shall be submitted, subject to staff review and approval. Revisions and/or additional materials shall include:
 - a) Confirmation of adequate wastewater capacity from the Department of Public Works;

- b) Recalculated bike parking requirements to account for all onsite uses, depiction on the site plans, and confirmation of compliance with Public Works' "Bicycle Parking Guidelines;"
 - c) Placement of additional short term bike parking by the Moran's main entry, associated relocation of long term bike parking is acceptable if needed to accommodate the additional short term bike parking;
 - d) Depiction of just 69 vehicle parking spaces for the new uses (retention of 35 for the existing uses is acceptable);
 - e) Additional screening of the onsite parking area as viewed from Lake Street, including vegetation and/or fencing;
 - f) The reoriented sailing center dumpster enclosure;
 - g) Written approval of the Fire Marshal regarding the Moran's and sailing center's accessibility by emergency service vehicles; and,
 - h) Depiction of the sailing center's doorway from the third floor onto the observation deck on the south façade, as well as the opening on the upper level of the "lifeguard tower" on the west.
2. **Prior to release of the zoning permit**, site circulation (particularly between the bike path, pedestrians, and vehicular circulation isles/drives) shall be revised in coordination with the City's Bicycle & Pedestrian Planner. Emphasis shall be placed on resolving the conflict between vehicles backing out of onstreet parking spaces at the northern end of Lake Street and the close proximity of the bike path. The current circulation proposal does not appear to address the actual needs of the pedestrians and cyclists using the area. Revised circulation shall be subject to Development Review Board review and approval.
 3. This approval incorporates the 12 construction phases articulated in the applicant's July 21, 2010 memorandum to Planning & Zoning and shall allow separate zoning permits and/or certificates of occupancy to be issued to allow for incremental (i.e. phase-by-phase) occupancy of the project. **Prior to release of the zoning permit**, plans explicitly outlining each phase shall be submitted, subject to staff review and approval.
 4. **EPSC Pre-release Condition:** Prior to release of the zoning permit, the applicant shall obtain written approval of the Erosion Prevention and Sediment Control Plan from the Stormwater Administrator. At all times after the initiation of land disturbance, this project must comply with the Chapter 26: Erosion Prevention and Sediment Control conditions of approval (to be obtained prior to the release of the zoning permit). Verification of compliance with these conditions must be obtained from the DPW Stormwater Program prior to the issuance of a Final CO.
 5. **Stormwater Management Plan Pre-release condition:** Prior to the release of the zoning permit, the applicant shall obtain the written approval of the Stormwater Management Plan from the Stormwater Administrator. This project and property must comply with the Chapter 26: Stormwater Management Plan conditions of approval (to be obtained prior to the release of the zoning permit), including any on-going requirements for post-construction operation and maintenance. Verification of compliance with the conditions must be obtained from the DPW Stormwater Program prior to the issuance of a Final CO.
 6. **Prior to construction**, the applicant shall develop an Erosion Prevention Sediment Control plan (EPSC), subject to staff review and approval in consultation with the Department of Public Works. The EPSC shall seek to:
 - a) Prevent erosion and the transport of sediment off lot, onto the public streets and sidewalks, into the municipal stormwater system, and/or waters of the State;

- b) Prevent parking of any construction or construction related vehicles on City owned green space. Damage to green space shall be immediately addressed;
 - c) Take any and all steps necessary to abate erosion and to clean up all resulting sediment deposited, discharged or found to exist off lot, on City streets and sidewalks, and/or in the City stormwater system;
 - d) Maintain project erosion prevention and sediment control devices/measures and perform requisite cleanup of resulting sedimentation. This may include, but is not limited to, daily sweeping of streets and sidewalks and cleaning City stormwater catch basins;
 - e) Specify appropriate seed and fertilizer applications that are ecologically sound and site specific;
 - f) Specify an appropriate mulch when and where needed and adequate anchoring measures to prevent blow away;
 - g) Specify an effective grass re-vegetation program. Turf replacement is recommended in areas where re-vegetation of grass proves difficult with seeding and mulch. To reestablish all existing and proposed green space and where practical consider porous (pervious) pavers;
 - h) Engage the contractor to be proactive in planning and executing construction phase activities with the goal of preventing erosion and controlling sediment;
 - i) Identify the parties to the EPSC plan and clearly define their respective roles and responsibilities including, but not limited to, the contractor, the onsite coordinator, those responsible for project adherence to the EPSC, and those participating in inspections and acceptance of final site stabilization; and,
 - j) Define the overall strategy for the EPSC plan by:
 - a. Limiting actual disturbance area and time of disturbance;
 - b. Employing proper site stabilization (addressing soil preparation for final seeding and landscaping, seed, pesticide/herbicide use, and mulch);
 - c. Specifying stone and/or grass swale lining where appropriate;
 - d. Specifying where necessary to employ erosion control blankets or mats;
 - e. Specifying locations for silt fence and construction barrier fence; and,
 - f. Specifying catch basin inlet protection during construction clean up and maintenance and after construction system operation and maintenance.
7. **Prior to and during construction**, erosion control measures shall be installed and maintained in accordance with EPSC plan established with this permit approval. At a minimum, the project EPSC plan shall:
- (a) identify the contractor who is responsible for installing, implementing, and maintaining the EPSC plan and measures;
 - (b) identify the onsite contractor who is responsible for the day-to-day monitoring, oversight, and inspections required by the EPSC plan;
 - (c) assure that any amendments to the project EPSC plan are filed with the Department of Public Works and the Development Review Board;
 - (d) provide that the erosion control measures remain in place until vegetation has become established on all disturbed surfaces and clearly identify under what conditions final site stabilization has occurred; and,
 - (e) provide a process whereby the Department of Public Works and/or the Department of Planning & Zoning participate in the final site stabilization program.
8. **Prior to issuance of a certificate of occupancy**, the project engineer must certify in writing that, among other things, the project EPSC plan as approved by the Department of

Public Works has been complied with and final site stabilization has occurred. This certification shall be filed with the Department of Planning & Zoning.

9. At least 7 days prior to the issuance of a certificate of occupancy, the applicant shall pay to the Treasurer's Office the impact fee as calculated by staff based on the net new and/or converted square footage of the proposed development.
10. The applicant shall meet with the Conservation Board to address the wetlands Individual Permit process with the U.S. Army Corps of Engineers and shall allow for Board comment prior to issuance of the Individual Permit.
11. The applicant shall coordinate with the Department of Parks & Recreation on pedestrian access (both formal and informal) into the Urban Reserve.
12. A State of Vermont wastewater permit is required.
13. A State of Vermont approved Corrective Action Plan for the site is required.
14. All new utility lines shall be buried.
15. All outdoor signage is subject to a separate zoning permit.
16. The proposed structure shall comply with Burlington's current energy efficiency standards and with Burlington's current ingress and egress requirements as established by Burlington Electric Department and Burlington Public Works, respectively.
17. It is the applicant's responsibility to comply with all applicable ADA requirements. Handicap parking spaces shall be marked and signed as required.
18. This property is subject to all applicable nuisance regulations and performance standards in the Burlington Code of Ordinances.
19. Standard permit conditions 1 -18.

Seconded: Jonathan Stevens

Vote: 6-0-0, motion carried

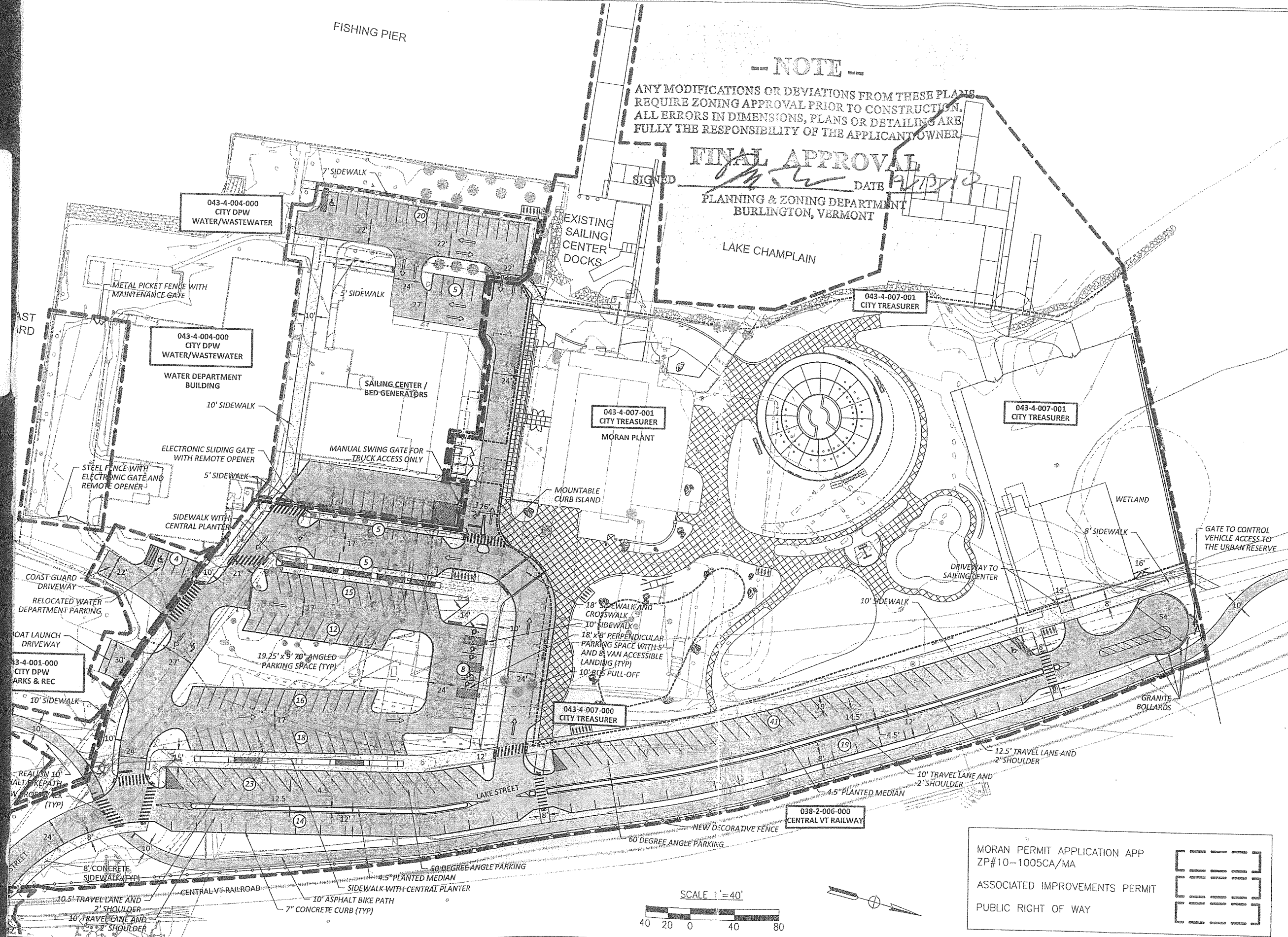
Dated at Burlington, Vermont, this 17th day of August, 2010.

Respectfully Submitted,


Michael Long, Acting Development Review Board Chair

Please note that an interested person may appeal a decision of the Development Review Board to the Vermont Superior Court Environmental Division. (Zoning Ordinance Article 17, Section 17.1.7, Appeals of Development Review Board Decisions: An interested person may appeal a decision of the Development Review Board to the Vermont Superior Court Environmental Division. The appeal shall be taken in such a manner as the supreme court may by rule provide for appeals from state agencies governed by Sections 801 through 816 of Title 3). The Court rules may require that such an appeal be commenced within Thirty (30) days of the Board's decision.

MORAN JUNIOR
Full plan set



-- NOTE --
ANY MODIFICATIONS OR DEVIATIONS FROM THESE PLANS
REQUIRE ZONING APPROVAL PRIOR TO CONSTRUCTION.
ALL ERRORS IN DIMENSIONS, PLANS OR DETAILING ARE
FULLY THE RESPONSIBILITY OF THE APPLICANT/OWNER.

FINAL APPROVAL

SIGNED *[Signature]* DATE *12/12/10*
PLANNING & ZONING DEPARTMENT
BURLINGTON, VERMONT

Waterfront
WATERFRONT ACCESS /
LAKE STREET EXTENSION
STP5000 (17) C-5
BURLINGTON, VERMONT

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VT AGENCY OF TRANSPORTATION
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FEDERAL HIGHWAY ADMINISTRATION
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Burlington, VT 05401
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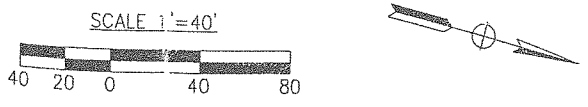
SE GROUP - LANDSCAPE ARCHITECT
131 Church Street
Burlington, VT 05401
Ph: (802) 862-0098

REVISIONS		
DATE	DESCRIPTION	BY

ZONING APPLICATION SITE PLAN

SCALE: 1" = 40' SHEET 1
DESIGNED BY: JDA
DRAWN BY: CDM
CHECKED BY: JDS
DATE: 09/02/10
PROJ. NO.: STP5000 (17) C5

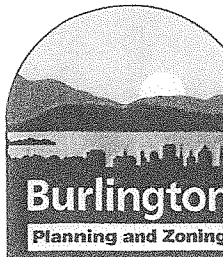
MORAN PERMIT APPLICATION APP
ZP#10-1005CA/MA
ASSOCIATED IMPROVEMENTS PERMIT
PUBLIC RIGHT OF WAY



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
Ken Lerner, Assistant Director
Sandrine Thibault, AICP, Comprehensive Planner
Jay Appleton, GIS Manager
Scott Gustin, AICP, Senior Planner
Mary O'Neil, AICP, Associate Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



Burlington Development Review Board

Minutes/Findings of Fact
September 19, 2011

In RE: 10-1005CA/MA & 10-1115CA; 475 & 0 Lake St. (Ward 3, DW-PT) (Tax Lot No. 043-4-007-001 & 043-4-004-000)

Owner/Applicant: City of Burlington

Request: Site amendments to previous approval for the redevelopment of the Moran Plant into public-private uses and associated site works, road work, and car parking.

Members Present:

Michael Long
Jonathan Stevens
Brad Rabinowitz
Bob Schwartz
Kevin Stapleton

Evidence Presented:

The Board examined the materials submitted in support of this request.

I. FINDINGS

Background Information:

The applicant is requesting approval for site amendments to the previous approval for the redevelopment of the Moran Plant into public-private uses and associated site works, road work, and car parking. The scope and character of the project remain essentially unchanged. The requested amendments pertain largely to parking and landscaping modifications. As two properties are involved, the requested amendment entails two permits. They are addressed together in these findings.

Previous zoning actions for this property are noted below.

- 4/29/11, Approval to relocate boat storage yard fence
- 8/17/10, Approval for comprehensive site redevelopment and installation of sailing center, skate park, and associated recreational facilities
- 8/2/10, Approval of lot line adjustment
- 6/25/09, Approval (non-applicability form) for interior clean-up of Moran building
- 5/1/09, Approval to install a seasonal tent for sailing classes
- 5/24/09, Approval of parallel sign for sailing center
- 5/9/08, Approval to relocate sailing center from Moran to DPW Pumping Station
- 7/29/02, Approval of parallel sign for sailing center

- 4/19/01, Approval to install portable restroom and fencing at skate park
- 5/21/00, Approval to install signage at skate park
- 8/26/99, Approval to install fishing pier
- 4/5/99, Approval of skate park
- 1/23/97, Approval to remove nonstructural ladder from Moran
- 7/14/94, Approval to modify access into the sailing center
- 5/27/93, Approval of sailing center
- 8/9/90, Approval to remove “car shaker” structure and replace with fill and grade
- 6/14/90, Approval for Moran site work
- 6/14/90, Approval of temporary International Sculpture Symposium

Article 6: Development Review Standards:

Part 1, Land Division Design Standards

Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The site contains no significant natural areas as identified in the Open Space Protection Plan. A class 3 wetland onsite will be impacted by the proposed sailing center building; however, impacts are not affected by the proposed site amendments. **(Affirmative finding)**

(b) Topographical alterations

The existing site is generally flat and will remain so. The proposed site amendments entail some changes to stormwater drainage, particularly the constructed gravel wetland in the center island of the Moran parking lot. Rather than being long and linear, the constructed wetland will now be short and rectangular. The change is the result of a shallow water main nearby. In general, grading changes are insignificant. **(Affirmative finding)**

(c) Protection of important public views

There are significant public views from the project site across the lake and towards the Adirondacks. There are also significant public views across the site from Battery Park. The proposed site changes do not impact these important public views. **(Affirmative finding)**

(d) Protection of important cultural resources

The project site is located on fill soils. The site has no archaeological significance. The proposed site changes have no impact on any cultural resources. **(Affirmative finding)**

(e) Supporting the use of alternative energy

No alternative energies were incorporated into the original site design. None are included in the amendments. Potential remains for future implementation. **(Affirmative finding)**

(f) Brownfield sites

The site is included on the Vermont DEC Hazardous Site List; however, the proposed site changes have no bearing on the associated Corrective Action Plans (CAP) for the property. **(Affirmative finding)**

(g) Provide for nature's events

As noted previously, the proposed site changes include modification to the proposed gravel wetland in the center island of the Moran parking lot. The revised design is subject to review and approval by the Stormwater Administrator per Chapter 26 of the City Code of Ordinances. **(Affirmative finding as conditioned)**

(h) Building location and orientation

The proposed site changes do not affect the location or orientation of buildings. **(Affirmative finding)**

(i) Vehicular access

The proposed site changes have virtually no impact on vehicular access. One small change entails the replacement of a gate with removable bollards north of the Water Department/BED parking row. **(Affirmative finding)**

(j) Pedestrian access

As with vehicular access, pedestrian access remains almost entirely unchanged; however, the originally proposed crosswalk across the railroad has been deleted. The sidewalk along Lake Street will continue to lead up to the tracks and will continue towards Moran on the other side; however, the applicants have been unable to obtain permission from the railroad to actually construct a cross walk across the tracks. As with similar crossings, the rubber pad between the tracks will remain and will provide a smooth surface for pedestrians to walk across. **(Affirmative finding)**

(k) Accessibility for the handicapped

Handicap accessibility remains essentially unchanged. **(Affirmative finding)**

(l) Parking and circulation

The proposed site revisions entail a number of changes to parking layout and location. A strip of parking spaces along the eastern side of Lake Street has been deleted. Parking spaces have been re-angled along the western side of Lake Street. Four parking spaces will be added to the Moran parking lot, and four existing parking spaces at the southern end of the fishing pier parking lot will be retained. All of these modifications result in a net loss of just 4 parking spaces. Onsite parking remains acceptable per the standards of Article 8, *Parking*. As the modifications entail the addition of 4 parking spaces to the Moran parking lot, the applicants are requesting the deletion of condition 1 (d) from the original approval that required a limit of just 69 spaces in this parking lot. Given the overall reduction in surface parking associated with this amendment, the increase of 4 spaces in Moran's parking lot is acceptable. **(Affirmative finding)**

(m) Landscaping and fences

Landscaping changes are limited mostly to tree plantings. Along with the reconfiguration of the constructed gravel wetland in the center island of the Moran parking lot, 6 trees will be deleted due to the shallow water main underneath. Two trees will be added near the Coast Guard driveway. The number of new street trees along Lake Street will be reduced. The modified street tree plan for Lake Street is subject to review and approval by the City Arborist. Some fencing changes are proposed and entail the deletion of a fence and gate in the rear Water Department parking lot. **(Affirmative finding as conditioned)**

(n) Public plazas and open space

Public plazas and open space onsite will remain largely unchanged. Note that the skate park area will increase to 19,700 sf. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

There are no significant changes to mechanical equipment, utilities, dumpsters, or similar features. **(Affirmative finding)**

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

Not applicable.

II. MINUTES

The meeting minutes will be distributed separately upon review and approval by the Development Review Board.

III. MOTION

Motion: Brad Rabinowitz

I move that the Board grant approval for site amendments to the previous approval for the redevelopment of the Moran Plant into public-private uses and associated site works, road work, and car parking, located at 475 & 0 Lake Street in the DW-PT zone in accordance with Article 6. Approval is subject to the following conditions:

1. Except as specifically modified in this amendment, all conditions of the August 17, 2010 approval for zoning permits 10-005CA/MA and 10-1115CA remain in effect.
2. **Prior to release of the zoning permit:**
 - a. The amended stormwater management system shall be reviewed and approved by the Stormwater Administrator.
 - b. The amended Lake Street tree planting plan shall be reviewed and approved by the City Arborist.
 - c. A revised site plan shall be submitted that depicts the sidewalk at the northern turnaround of Lake Street placed outside of the roadway circle as per the site circulation plan approved by the DRB on September 13, 2010.
3. Standard permit conditions 1-18.

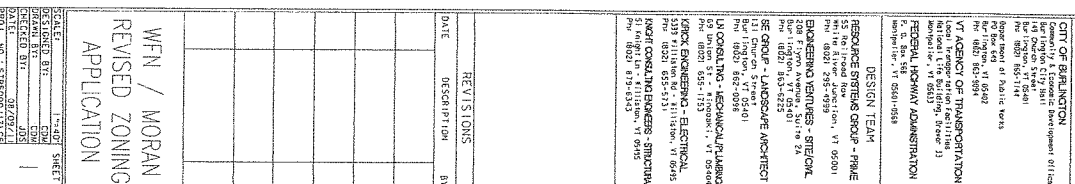
Seconded: Jonathan Stevens

Vote: 5-0-0, motion carried

Please note that an interested person may appeal a decision of the Development Review Board to the Vermont Superior Court Environmental Division. (Zoning Ordinance Article 17, Section 17.1.7, Appeals of Development Review Board Decisions: An interested person

may appeal a decision of the Development Review Board to the Vermont Superior Court Environmental Division. The appeal shall be taken in such a manner as the supreme court may by rule provide for appeals from state agencies governed by Sections 801 through 816 of Title 3). The Court rules may require that such an appeal be commenced within Thirty (30) days of the Board's decision.

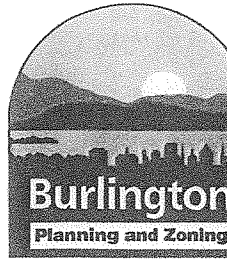
Received by CM Shepino
Date: 9/2/11



Department of Planning and Zoning

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Mary O'Neil, AICP, Associate Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



Burlington Development Review Board

Minutes/Findings of Fact
March 2, 2011

In RE: 11-0570CA/CU; 0 Lake St. (Ward 3, UR) (Tax Lot No. 038-2-006-000)

Owner/Applicant: City of Burlington / CEDO

Request: Use area for temporary construction staging during Waterfront North and Moran construction, including temporary interim skating facility.

Members Present:

Austin Hart
Jonathan Stevens
Kevin Stapleton
Paul Henninge

Evidence Presented: The Board examined the materials submitted in support of this request.

I. FINDINGS

Background Information:

The applicant is seeking approval to use two portions of the urban reserve for staging and soil storage areas for the construction of the Waterfront North and associated Moran redevelopment projects. Temporary chain link fencing to enclose the staging and stockpile areas and a temporary skating rink are also included in the proposal. The duration of the requested activity is 2 years.

The Conservation Board reviewed and approved this project February 7, 2011, with the following conditions:

1. Recreational access to the Urban Reserve should be continuous.
2. Dust control measures should be used during construction.
3. Parking areas associated with construction activity should be clarified and delineated.

Condition 1 pertains to keeping the bike path open and to retaining access to the network of informal trails in the Urban Reserve. This condition will be addressed in construction documents and may also include onsite signage.

Condition 2 is aimed at controlling dust as it may impact users of the bike path and other public users of the Urban Reserve. Dust control measures will be incorporated into construction documents.

Condition 3 is aimed primarily at keeping parked vehicles off of the bike path. It should be reflected in a revised site plan that clearly depicts where contractors and associated workers should park during project construction.

Previous zoning permit actions for this site.

- 1/1910, 2-year approval for winter snow storage for the Dept. of Public Works

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

(1) The capacity of existing or planned community facilities;

The temporary staging and stockpile areas will have limited impact on existing community facilities and will facilitate the construction of new community facilities. As recommended by the Conservation Board, measures are needed to ensure that the bike path (and other informal trails) remains open to continuous public use and free from unreasonable dust and contractor vehicle parking. Care must also be taken to keep dirt from construction vehicles off of the bike path. To ensure the safety of users, a specific plan is needed that details how construction vehicles and activities will be separated from the temporary skating rink and from the bike path. **(Affirmative finding as conditioned)**

(2) The character of the area affected;

The sites are bordered primarily by vacant former industrial land in the Urban Reserve. The lake lies to the west. The proposed use is temporary and will have no long term impact on the character of the area. **(Affirmative finding)**

(3) Traffic on roads and highways in the vicinity;

Traffic associated with the proposed use will be limited to construction and contractor vehicles. Use of this site close to construction activity will limit the amount of construction traffic on Lake Street. Traffic impacts will be temporary and associated exclusively with the construction of the Waterfront North and Moran redevelopment projects. **(Affirmative finding as conditioned)**

(4) Bylaws then in effect;

As conditioned, the activity complies with all applicable zoning bylaws. **(Affirmative finding)**

(5) Utilization of renewable energy resources;

(Not applicable)

(6) Cumulative impacts of the proposed use;

The proposed use is temporary in nature and will generate no substantial cumulative impacts. **(Affirmative finding)**

(7) Functional family;

(Not applicable)

(8) Vehicular access points;

The two sites are accessed by existing driveways from Lake Street extension. These driveways are sufficient for the temporary use. **(Affirmative finding)**

(9) Signs;

Some directional signage may be installed; however, doing so has not yet been confirmed. Any new signage will be subject to a separate sign permit. **(Affirmative finding as conditioned)**

(10) Mitigation measures;

The proposed use will result in three primary impacts: construction vehicle traffic, dust, and noise. The applicant must submit a plan for separating construction traffic and activity from the skating rink and the bike path. Dust control measures must be implemented during construction activity. Dirt must be kept off of the bike path as well. Noise impacts will be subject to the city's noise ordinance. No activity is proposed beyond the daylight hours. **(Affirmative finding as conditioned)**

(11) Time limits for construction;

The proposed use is temporary and cannot exceed 2 years without an additional zoning permit. **(Affirmative finding as conditioned)**

(12) Hours of operation and construction;

Hours of operation will be tied directly to the hours of construction of the Waterfront North and Moran redevelopment projects. Approval of those projects tied hours of construction to the city's noise ordinance. **(Affirmative finding as conditioned)**

(13) Future enlargement or alterations;

Any future enlargement or alterations will require additional permit review in accordance with the regulations in effect at that time. **(Affirmative finding)**

(14) Performance standards;

See Sec. 5.5.3 for erosion control measures to be implemented around the soil stockpiles.

(15) Conditions and safeguards;

As conditioned, the proposed use complies with the applicable requirements of the Comprehensive Development Ordinance. **(Affirmative finding)**

Article 4: Maps & Districts

Sec. 4.4.7, Urban Reserve District:

(a) Purpose

The proposed use is temporary in nature and, as such, avoids making any permanent changes within the Urban Reserve. It is identified as one of several uses that may be allowed in the urban reserve. **(Affirmative finding)**

(b) Dimensional Standards & Density

The proposed use does not include any residential density, FAR, or additional lot coverage. **(Affirmative finding)**

(c) Permitted & Conditional Uses

The temporary staging of off-site construction projects on adjacent properties with no other suitable access is allowed as a conditional use. The temporary skate rink as proposed can be viewed as part of the construction staging area given the need to relocate the existing skate park temporarily to allow improvements to the bike path and satisfaction of funding grant conditions. No new impervious surface will be created. **(Affirmative finding)**

(d) District Specific Regulations

1. Any and all improvements in this district shall be consistent with any and all development and use restrictions and easements as may otherwise be applicable to the property.

The Urban Reserve has been used for construction staging in the past (i.e. for the breakwater). Using it again for temporary staging appears to be consistent with restrictions and easements affecting the property. Written confirmation from the City Attorney's office is needed.

(Affirmative finding as conditioned)

2. Any authorization granted by the DRB shall include a prescribed duration for the activity after which such authority and all related permits shall expire. The DRB may consider an extension of this time period if such a request has been made prior to expiration. No permit should remain in effect for more than 2 years without reapplication and review pursuant to this section.

This zoning permit approval is valid for 2 years. If the use is to continue beyond that time frame, an additional permit will be needed. **(Affirmative finding as conditioned)**

3. As a condition of any approval by the DRB for projects involving temporary construction staging or seasonal snow storage, the site shall be restored to its prior condition once the temporary activity has been completed for which the DRB may require a bond or other necessary surety in a form satisfactory to the city attorney.

Following completion of the use, the site must be cleaned of any trash, debris, or leftover soils (from the stockpiles). The fence shall be removed. No financial surety is required. **(Affirmative finding as conditioned)**

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

(Not applicable)

Sec. 5.2.4, Buildable Area Calculation

(Not applicable)

Sec. 5.2.5, Setbacks

(Not applicable)

Sec. 5.2.6, Building Height Limits

(Not applicable)

Sec. 5.2.7, Density and Intensity of Development Calculations

(Not applicable)

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. The city's noise ordinance will govern noise impacts. **(Affirmative finding as conditioned)**

Sec. 5.5.2, Outdoor Lighting

(Not applicable)

Sec. 5.5.3, Stormwater and Erosion Control

No new impervious area is included. The soil stockpiles are located relatively far from the lakeshore; however, preventative erosion control measures will be needed in order to ensure that sediment does not reach the lake. Such erosion control measures shall be provided and will be subject to review and approval by the Stormwater Administrator. The potentially contaminated soils to be stored are part of a site that is currently being managed pursuant to a corrective action plan approved by the Vermont Department of Environmental Conservation. The applicant shall comply with the requirements of the corrective action plan, as it may be revised with the approval of the DEC. **(Affirmative finding as conditioned)**

II. MINUTES

The meeting minutes will be distributed separately upon review and approval by the Development Review Board.

III. MOTION

Motion: Austin Hart

I move that the Board grant Conditional Use and Certificate of Appropriateness approval for temporary construction staging during Waterfront North and Moran construction, located at 0 Lake Street in the UR zone in accordance with Articles 3, 4, and 5. Approval is subject to the following conditions:

1. **Prior to release of the zoning permit**, written verification from the City Attorney that there are no legal restrictions precluding the proposed use shall be provided, subject to staff review and approval.
2. **Prior to release of the zoning permit**, a revised site plan clearly depicting contractor vehicle parking areas shall be submitted, subject to staff review and approval.
3. **Prior to release of the zoning permit**, a specific plan showing how construction vehicles and construction activities will be separated from the temporary skating rink and from the bike path shall be submitted, subject to staff review and approval.
4. **Prior to release of the zoning permit**, an erosion control plan shall be submitted, subject to review and approval by the Stormwater Administrator.
5. Following completion of the use, all fencing, debris, trash and leftover soils shall be removed from the site, and the site shall be returned to its original condition.
6. Measures to control dust and to keep dirt from construction vehicles off of the bike path shall be implemented during construction. **Such measures shall be subject to review and approval by the Department of Public Works.**
7. Continuous public access to the bike path and informal trails within the Urban Reserve shall be provided for the duration of construction activity.
8. All outdoor signage is subject to a separate zoning permit.
9. Noise associated with this use shall be subject to the city's Noise Ordinance.
10. The applicant shall comply with the corrective action plan for the site as approved by the Vermont Department of Environmental Conservation.
11. **This permit approval is valid for 2 years only.** Continued use of the site for construction staging and soil stockpiling beyond 2 years will require a new zoning permit per Sec. 4.4.7 (d), *District Specific Regulations*, of the Comprehensive Development Ordinance.
12. Standard conditions 1-18.

Seconded: Jonathan Stevens

Vote: 4-0-0, motion carried

Dated at Burlington, Vermont, this 2nd day of March, 2011.

Respectfully Submitted,

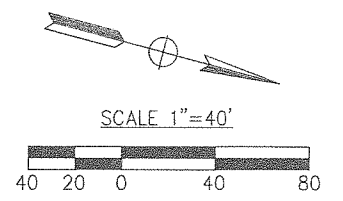
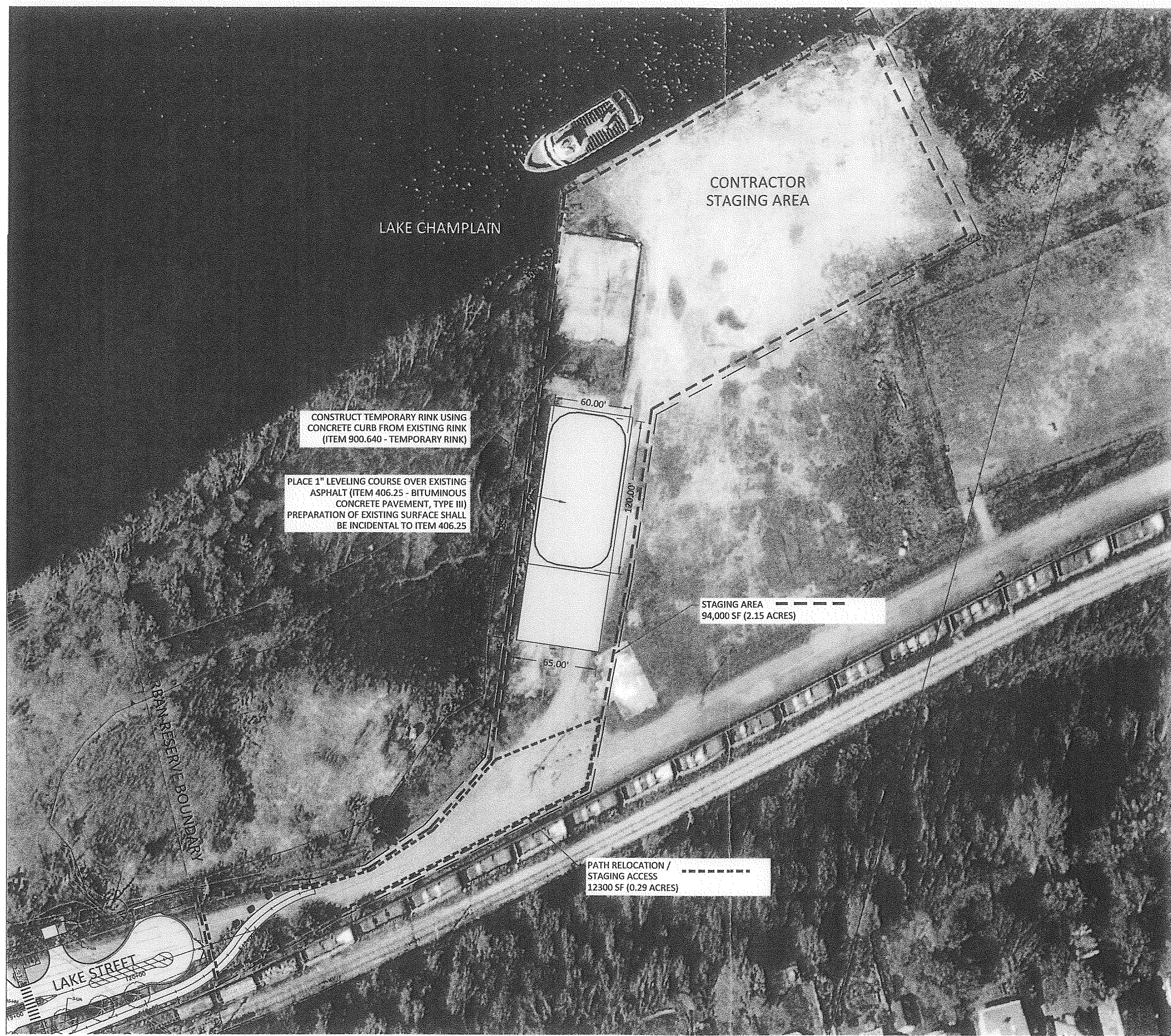

Austin Hart, Development Review Board Chair

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Recvd 3/3/11 b7



MATCHLINE - SEE SHEET C10.2 / C10.4



LEGEND	
SIGN	
DETECTABLE WARNING SURFACE	
NEW ASPHALT SURFACE	
NEW CONCRETE	
BENCH	
BIKE RACK	
SWING GATE	
CATCH BASIN	
NEW STREET LIGHTING	
PARKING PAYMENT UNIT	
FENCE	
CONSTRUCTION LIMITS	
RIGHT-OF-WAY	
SECTION 6F IMPROVEMENTS	
STAGING BOUNDARY	

WATERFRONT ACCESS
LAKE STREET EXTENSION
STP5000 (17) C-5
BURLINGTON, VERMONT

CITY OF BURLINGTON
Community & Economic Development
Burlington City Hall
149 Church Street
Burlington, VT 05401
Ph: (802) 865-7144

Department of Public Works
PO Box 649
Burlington, VT 05402
Ph: (802) 863-9094

VT AGENCY OF TRANSPORTATION
Local Transportation Facilities
National Life Building, Drawer 33
Montpelier, VT 05633

FEDERAL HIGHWAY ADMINISTRATION
P. O. Box 568
Montpelier, VT 05601-0568

DESIGN TEAM

RESOURCE SYSTEMS GROUP - PROJECT
55 Railroad Row
White River Junction, VT 05797
Ph: (802) 295-4999

ENGINEERING VENTURES - SITE/CIVIL
208 Flynn Avenue, Suite 2A
Burlington, VT 05401
Ph: (802) 863-6225

SE GROUP - LANDSCAPE ARCHITECTURE
131 Church Street
Burlington, VT 05401
Ph: (802) 862-0098

REVISIONS	
DATE	DESCRIPTION

LAYOUT SHEET 6

SCALE: 1" = 40'

DESIGNED BY: CDM

DRAWN BY: CDM

CHECKED BY: JDS

DATE: 1/20/14

PROJ. NO.: STP5000 (17) C5

Department of Planning and Zoning

149 Church Street
Burlington, VT 05401
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(802) 865-7195 (FAX)
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David White, AICP, Director
vacant, Assistant Director
vacant, Comprehensive Planner
Jay Appleton, GIS Manager
Scott Gustin, AICP, Senior Planner
Mary O'Neil, AICP, Senior Planner
Anita Wade, Zoning Clerk
Elsie Tillotson, Department Secretary



TO: Development Review Board
FROM: Scott Gustin & Mary O'Neil, Senior Planners
DATE: August 18, 2015
RE: 16-0007CA/MA; 351 North Avenue
16-0015CA; 329 North Avenue

=====

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

Zone: WRM Ward: 4N

Owner/Applicant: Burlington College / EF Farrell, LLC

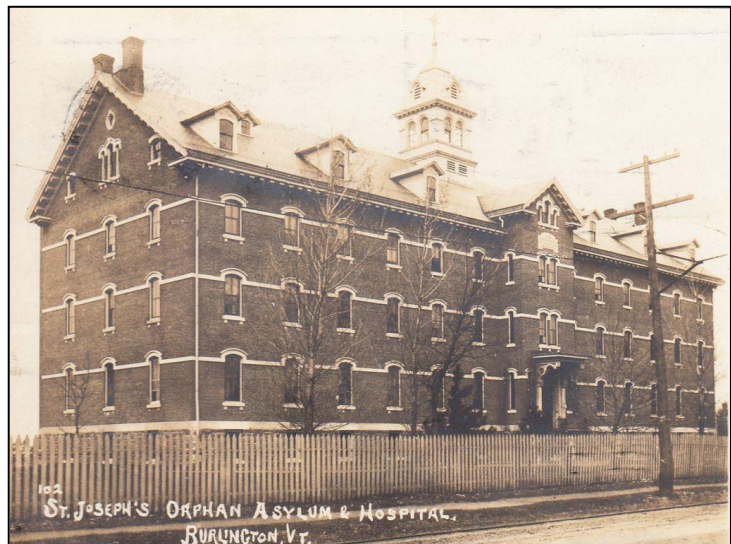
Request: Convert former orphanage and college building to 63 residential units and relocate college within building. Associated site improvements.

Applicable Regulations:

Article 3 (Applications and Reviews), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines), Article 8 (Parking), Article 9 (Inclusionary and Replacement Housing), and Article 11 (Planned Unit Development)

Background Information:

The applicant is seeking approval for the proposed conversion of the former orphanage building (AKA St. Joseph's/ Providence Orphan Asylum) at 351 North Avenue into multi-family housing. A total of 63 apartments would be created within the building, all studio and 1-bedroom units. The college currently occupying the building would be retained but condensed into 29,000 sf in the newer southern wing of the building. Limited site work is proposed and amounts to converting some existing vehicular circulation to pedestrian circulation and a new parking area. Two parcels of land are involved in this project; therefore, there are two applications (for 351 North Avenue and 329 North Avenue) reviewed concurrently.



This application underwent sketch plan review with the Conservation Board June 1, 2015 and with the Development Review Board June 16, 2015. In light of the deep sandy soils and ample open space, the Conservation Board advised the applicant to pursue as much infiltration of stormwater

onsite as possible. The Development Review Board encouraged the applicant to more effectively delineate the two uses – residential and college – onsite and to more aggressively pursue alterations on the west side of the building, particularly to maximize western views for residents.

Following sketch plan review, this permit application was submitted July 2, 2015. The Conservation Board reviewed the application July 6, 2015, and the Design Advisory Board reviewed it July 28, 2015. The Conservation Board recommended approval of the project as proposed, supported the requested parking waiver, and commended the applicant for the bicycle-friendly aspects of the project (storage, maintenance, cleaning, etc). The Design Advisory Board also recommended approval of the project. The DAB recommended the following conditions:

1. Skylights on east elevation be vertically aligned with the dormers, except for 2 located out of roof valley. The two outer skylights on the lower row be moved horizontally to be aligned with dormer above. Two skylights on upper row split so all skylights are the same size. Skylights on the west elevation are acceptable.
2. The DAB recommends that the metal pipe canopy at the front entrance be revised to inform and reflect massing of original historic canopy.
3. Paved access and paved handicapped parking spaces on northerly parking area, connecting to pavement/walkway.
4. The DAB accepts the rooftop treatment to western wing as proposed. Either the flat roof or gable terrace roof cover is acceptable.

Revised project plans have been submitted. They address the recommendations of the DAB except that there is no apparent revision to the front entrance.

Previous zoning actions for this property are noted below.

- Zoning Permit 15-0702LL; Lot line adjustment with 329 North Avenue. Approved December 2014. [Plat recorded 1/16/2015; Plat file 509C.]
- Zoning Permit 14-1286CA; Installation of CCTA bus shelter on Burlington College property. Approved June 2014.
- Zoning Permit 12-0706SN; replace existing non-conforming freestanding sign with new freestanding sign for Burlington College – Main Campus. Approved March, 2012.
- Zoning Permit 12-0121CA; Install rooftop air handler, five ac units, bike racks, and remove walls from garage. Approved August 11, 2011.
- Zoning Permit 11-0282CU; convert existing institutional office use and group home use to post-secondary school. No site or exterior building changes proposed. Approved November 2010.
- Zoning Permit 09-526CA; Demolish single car garage. Approved February 2009.
- Non-applicability of zoning permit requirements; continued use of existing group home. June 1998.
- Zoning Permit 92-096 / COA 092-016; Removal of existing wooden cross with installation of fiberglass statuary of St. Mary on top of Diocese building. Overall height to be 104' with exterior illumination to surround statue. Approved September 1991.
- Notice of selective landscape removal on west. No change in grade of site or drainage of runoff water. December 1991.

- Zoning Permit 79-352; install septic tank and seepage bed. July 1979.
- Zoning Permit 77-03; renovation of existing structure “St. Josephs Child Center” into office space and three apartments for Bishop and two priests. Approved January 1977.
- Zoning Permit 77-628; Convert St. Joseph’s Child Center into office building, three apartments and three guests’ rooms. Remove some windows and brick up openings. Install new windows. Erect 28’6” x 30’ addition and 32’ x 66’ addition. December 1976.

Recommendation: **Major Impact & Certificate of Appropriateness approval** as per, and subject to, the following findings and conditions:

I. Findings

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Sec. 3.5.6, Review Criteria

(a) Conditional Use Review Standards

1. The capacity of existing or planned community facilities;

The proposed development will be served by municipal water and sewer. The conversion of the building to 63 residential units will increase demands on existing water and sewer service. There is adequate reserve of water and sewer capacity. Written verification from the Department of Public Works will be required for a state wastewater permit. **(Affirmative finding as conditioned)**

2. The character of the area affected as defined by the purpose or purposes of the zoning district(s) within which the project is located, and specifically stated policies and standards of the municipal development plan;

The subject properties are 2 of 3 contiguous parcels, formerly comprising Burlington College, stretching from North Avenue to Lake Champlain. Almost all of the proposed development is located within 351 North Avenue. Only a new driveway is located on the adjoining 329 North Avenue. The properties are zoned waterfront medium density residential (WRM). This zone is primarily intended for medium density residential development in the form of single-detached dwellings and attached multi-family apartment buildings. This zone entails greater consideration of views from the lake and stormwater runoff. To the south lies the urban reserve, and to the north is Lakeview Cemetery in the RCO-RG zone. The proposed multi-family apartments are consistent with the intent of the WRM zone. **(Affirmative finding)**

3. Traffic on roads and highways in the vicinity evaluated in terms of increased demand for parking, travel during peak commuter hours, safety, contributing to congestion, as opposed to complimenting the flow of traffic and/or parking needs; if not in a commercial district, the impact of customer traffic and deliveries must be evaluated;

A traffic analysis has been done and submitted with the application. The analysis takes into account existing and anticipated traffic volumes along North Avenue and details build and no-build scenarios. The 63 new residential units are projected to generate 505 total weekday trips, including 35 AM peak hour trip ends and 52 PM peak hour trip ends. The analysis considers dispersion of these trips through nearby intersections and impacts thereto. The intersections included in the analysis are North Ave/Institute Rd/City Bluffs, project entrance/North Ave, North Ave/Washington St, and North Ave/North St. In no case does the anticipated traffic adversely

affect existing levels of service (LOS) at these intersections. In all cases, existing and anticipated levels of service are acceptable at LOS C – A. The analysis considers warrants for exclusive turn lanes into the development (both left turn and right turn). The analysis finds that no right turn lane is warranted. A left turn lane may be warranted but is not recommended. The analysis states that traffic volumes at the project site/North Ave intersection are significantly less than other signalized intersections along North Avenue and that alternate methods for the left turn lane analysis do not support installation of a left turn lane.

The traffic analysis has been provided to the Department of Public Works. Comments have not yet been received; however, they are anticipated prior to the public hearing for this application. Received comments will be conveyed to the applicant and Development Review Board and incorporated into these findings as appropriate. **(Affirmative finding)**

4. Any standards or factors set forth in existing city bylaws and city and state ordinances;
As conditioned, the application is in compliance with all applicable zoning bylaws. **(Affirmative finding)**

5. Utilization of renewable energy resources;
No renewable energy resources will be incorporated into this project. Proposed skylights will introduce sunlight into previously dark interior spaces. The proposed development does not preclude future use of renewable energy resources. **(Affirmative finding)**

6. Cumulative impacts of the proposed use. For purposes of residential construction, if an area is zoned for housing and a lot can accommodate the density, the cumulative impact of housing shall be considered negligible;
This project is residential, and, as noted in Article 4 below, the property is sufficiently sized to accommodate the proposed density. **(Affirmative finding)**

7. Functional family;
There is no request to exceed the 4-unrelated adult occupancy limit in any of the proposed dwelling units. **(Affirmative finding)**

8. Location and number of vehicular access points to the property, including the erection of parking barriers;
See Sec. 6.2.2 (i).

9. Signs;
No outdoor signs are included in this application. **(Not applicable)**

10. Mitigation measures, including landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area;
The proposed residential development is not expected to generate offsite noise or glare substantial enough to require mitigation. **(Affirmative finding)**

11. Time limits for construction;
No construction schedule beyond the standard 2-year time frame for all zoning permits has been requested. As just a single building is involved, no phasing schedule is proposed either. As a result, all construction must be complete within 2 years. **(Affirmative finding as conditioned)**

12. Hours of operation and construction;

Hours of operation need not be specified for this residential development. Days and hours of construction; however, need to be specified. The application contains no proposal. So as to limit impacts associated with construction, other projects in residential areas are limited to Monday – Saturday, 7:00 AM – 6:00 PM. No construction activity allowed on Sunday. Construction of this project will be limited likewise. **(Affirmative finding as conditioned)**

13. Future enlargement or alterations;

In the event of future enlargement or alteration, permits would be required and reviewed under the regulations then in effect.

14. Performance standards;

Performance standards relating to outdoor lighting and erosion control are addressed under Article 5 of these findings.

15. Conditions and safeguards;

See conditions of approval.

(b) Major Impact Review Standards

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

The application includes a stormwater management plan that entails handling most stormwater runoff onsite. Given the sandy soils onsite, stormwater captured by the proposed improvements will be infiltrated into the ground. See Sec. 5.5.3 for additional details. No significant air or noise pollution is expected with this residential development. **(Affirmative finding)**

2. Have sufficient water available for its needs;

See Sec. 3.5.6 (a) 1.

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

See Sec. 3.5.6 (a) 1.

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

A comprehensive erosion prevention and sediment control plan has been submitted. See Sec. 5.5.3 for details. **(Affirmative finding)**

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

See Sec. 3.5.6 (a) 3.

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

It is possible that some school-age children will reside in the proposed apartments; however, given the mix of just 1-bedroom and studio units, numbers are expected to be small. Impact fees will be paid to help offset impacts on the school system. **(Affirmative finding as conditioned)**

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

The proposed development will generate additional impacts on city services. Review and comment by the Departments of Public Works, Fire, Parks & Recreation, Schools, CEDO, Police, and Burlington Electric was solicited via the Technical Review Committee meeting that took place June 11, 2015. Comments from the various departments were collected and provided to the applicant. None asserted unreasonable burden on the city's ability to provide municipal services. Impact fees will be paid to help offset what impacts there may be on city services. **(Affirmative finding as conditioned)**

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

The subject property contains no rare natural communities, wetlands, or significant natural areas as identified in the 2014 Open Space Protection Plan or the Natural Resource Protection Overlay district. Open space on the property as identified in the Open Space Protection Plan is comprised of forestland (hemlock/hemlock white pine) and large mowed lawn. The limited site work included in this proposal will not affect the forested portions of the property, nor will they result in undue adverse impacts to the scenic or natural beauty of the area. See Sec. 5.4.8 for historic significance. **(Affirmative finding)**

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

The proposed development will introduce multi-family housing units to an area zoned for it. Any necessary infrastructure improvements will be performed at the expense of the applicant. **(Affirmative finding)**

10. Be in substantial conformance with the city's municipal development plan;

The applicant demonstrates substantial conformance with the Municipal Development Plan.

The property is located within an area identified as a center for growth and development (Future Land Use Map – Centers for Growth and Development). The introduction of 63 attached multi-family units is consistent with the city policy to support the development of additional housing opportunities within identified activity centers (Land Use Plan, pg. I-2 & Housing Plan, pg. IX-1).

The existing historic structure will be retained and renovated (Built Environment, pg. III-1) as part of the conversion to apartments.

The project will handle almost all of its stormwater onsite utilizing the available green spaces and sandy soils for infiltration (Natural Environment Action Plan, pg. II-12).

The development will provide inclusionary housing units (City Policies, pg. IX-1) as required by the Comprehensive Development Ordinance.

The project will be readily accessible by bus and includes far more than the minimum requirement for bike storage and maintenance facilities (Stressing Other Modes of Travel, pg. V-12).

(Affirmative finding)

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

This project would bring 63 housing units to an area of the city zoned for residential development and specifically identified as a growth center. Unlike most new development, the units in this proposal are all small – just 1-bedroom and studio units. The proposal will have no undue adverse impact on housing needs within the city. **(Affirmative finding)**

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

Residents of the newly created dwelling units will likely utilize nearby city parks and related infrastructure such as the bike path. Impact fees will be paid to help offset these impacts.

(Affirmative finding as conditioned)

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(4) Waterfront Residential Medium Density (WRL)

The subject property is located in the WRL zone. This zone is primarily intended for medium density residential development in the form of single-detached dwellings and attached multi-family apartment buildings. Relative to the RM zone, this waterfront zone entails greater consideration of views from the lake and stormwater runoff. The proposed development entails relatively little site work and will be largely imperceptible as viewed from the lake. Most stormwater runoff will be retained and infiltrated onsite. **(Affirmative finding)**

(b) Dimensional Standards & Density

The 6 acre property at 351 North Avenue has well over the minimum required 30' road frontage. The 63 proposed residential units are well under the 25-unit/acre density limit (with inclusionary units) of 150 dwelling units. Every 1,500 sf of remaining college space accounts for 1 dwelling unit for density calculations. The college will occupy 29,000 sf and will, therefore, amount to the equivalent of 19 dwelling units. The total density remains below the 150-unit maximum permissible. Per Sec. 5.2.4, *Buildable Area Calculation*, unit density must be based on "buildable area." Areas of 30% or greater slope are eliminated, and areas of 15% - 30% slope may be calculated at up to 50% of density. The applicant has provided information relative to < 30% slopes. About 2/3 of an acre (29,456 sf) is deducted. Assuming 5.32 acres of buildable area, 133 units could be permissible; however, no figure has been provided for slopes of 15% - 30% and must be. As the proposed density is so far below the maximum permissible, it likely remains acceptable but confirmation is needed.

Lot coverage at 351 North Avenue will increase from 39.2% to 41%. These percentages account for (i.e. remove) steep slopes in excess of 30%. As with unit density, slopes of 15% - 30% must be accounted for and have not been. Coverage likely remains acceptable, as 72% is the maximum permissible; however, confirmation is needed. Lot coverage on neighboring 329 North Avenue will increase to just 0.29%, but there is no indication that steep slopes have been accounted for.

Building setbacks will remain largely unchanged. Removal of the existing front entry will open up the front yard. The existing front and rear driveways will be reconfigured to pedestrian circulation and will continue to meet the minimum required 5' side and rear yard setbacks.

Building height will remain unchanged. **(Affirmative finding as conditioned)**

(c) Permitted & Conditional Uses

The proposed multi-family housing is a permitted use in the WRM zone; however, the number of units requires “major impact” review. The remaining college use is conditional. **(Affirmative finding)**

(d) District Specific Regulations

1. Setbacks

No setback encroachments are sought.

2. Height

No height exceptions are sought.

3. Lot Coverage

No lot coverage exceptions are sought.

4. Accessory Residential Structures and Uses

No new accessory residential structures or uses are included in this proposal.

5. Residential Density

All of the proposed residential units are subject an occupancy limit of 4 unrelated adults or a family as defined in the CDO. **(Affirmative finding)**

6. Uses

Not applicable.

7. Residential Development Bonuses

No development bonuses are sought in this proposal; however, the required inclusionary housing affords greater development intensity under this provision. Specifically, allowed residential density increases to 25 dwelling units/acre, and lot coverage increases to 72%. As noted previously, density and lot coverage appear to remain below the maximum allowable. **(Affirmative finding)**

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.5 (b) above.

Sec. 5.2.4, Buildable Area Calculation

As the subject property is located within the WRM zone and is greater than 2 acres in size, this criterion applies. The applicant has provided information relative to slopes of < 30% but nothing relative to 15% - 30% slopes. The project plans do not depict areas of steep slopes and must.

The applicant continues to argue incorrectly that the 15% - 30% slope limitation is not actually a standard. While this criterion could (and probably should) be clarified, it remains a standard to be adhered to. Elimination of < 30% slopes from density and lot coverage is clear, and the project plans account for it. Areas of 15%-30% slope may be used for half density (i.e. 12.5 units/acre) and lot coverage. Specifically, the provision reads: “The DRB may under conditional use criteria allow *up to 50%* [emphasis added] of the maximum building density or lot coverage to be calculated on lands with a slope between 15-30% if the applicant can demonstrate that the

additional density or lot coverage will be compatible with the existing scale and intensity of the surrounding neighborhood, and not have an undue negative impact on sensitive natural features.”

Given the limitation of this Section to residential properties of 2+ acres, it is infrequently applied. When it has been applied, most recently to the SD Ireland redevelopment at 140 Grove Street, it has been applied as written. Slopes < 30% are eliminated from density and coverage calculations, and slopes of 15% - 30% are counted at 50% for density and coverage calculations. **(No finding possible)**

Sec. 5.2.5, Setbacks

See Sec. 4.4.5 (b) above.

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.5 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.5.5 (b) above.

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.

St. Joseph's/Providence Orphan Asylum is listed on the Vermont State Register of Historic Places. Therefore, the following standards apply.

(b) Standards and Guidelines:

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.*

Constructed as a residential facility for children and the aged in 1884, the main structure will continue to serve in a residential capacity with the proposed use. The westerly addition housed the convent for the Order of the Sisters of Providence, who staffed the care facility. The southerly addition, constructed later than the orphanage (c. 1940) was intended to serve a burgeoning population with additional dormitory space, classrooms, a nursery and a gymnasium. That area is proposed to continue to serve Burlington College. As the Diocese utilized the space for offices, there is minor deviation from original or evolving use. The Design Advisory Board has recommended approval of the alterations to the roof to accommodate skylights and a westerly roof deck. **(Affirmative finding)**

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.*

Rear porches and a vehicular carport are proposed to be removed, however they were later additions. Their loss will not impact the historic integrity and importance of the structure. The 1960s era main entrance portico is also proposed for removal, which will restore an original appearance to the building. A porte-cochere in front of the modern southern wing is also proposed for removal; its replacement will accommodate handicap accessibility for that wing. With all elements of the development as submitted, the historic character of the property will be retained (in some instances, restored and enhanced.) **(Affirmative finding)**

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.*

No conjectural features are proposed. **(Affirmative finding)**

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

The modern entrance portico design is closely emblematic of a more modern design aesthetic; however it has not reached an age where its merit is acknowledged and valued. That entrance structure and the porte-cochere have not acquired historic significance in their own right.

(Affirmative finding)

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

The minor dormers are features that characterize the property; observable not just from North Avenue but from within the building and from the grounds to the west, south and east. Their removal is not supported by this standard; however, the Design Advisory Board felt that this alteration was acceptable in light of the overall renovation of the building. **(Affirmative finding)**

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.*

The applicant proposes replacement of the existing slate roof on the orphanage building. Windows are intended to be replaced with aluminum clad single hung sash. Historic photographs provide a glimpse of the original front entry; one that will be referenced in the newly constructed entrance canopy. The Design Advisory Board recommended that the metal pipe canopy be revised to better inform and reflect the massing of the original, feeling that the plan proposed to substitute one replacement modern component with another. The applicant has chosen to remain with their initial plan rather than attempt a reconstruction (see Plan A3.1.) The design chooses to reference the original, but is articulated with new materials. Absent detailed construction plans of the original and in avoidance of a conjectural entry feature, the submitted plan meets this standard. **(Affirmative finding)**

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.*

None are identified in submission materials. **(Affirmative finding)**

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

No archaeological resources have been identified at this location; however given the site history and proposed site work on the westerly side of the building, the potential remains for new resources to be unearthed. Any discovery will require the notification, identification and appropriate treatment by qualified personnel. **(Affirmative finding as conditioned)**

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.*

The proposed new lobby and courtyard entrance on the west are clearly modern in design and are appropriately situated on a secondary elevation. Both are reversible, and could be removed in the future without adverse impact to the historic structure.

A newly proposed rooftop viewing deck is clearly a modern addition. Its inclusion will require the removal of 5 characteristic dormers. The Design Advisory Board has recommended approval of the alterations to the roof to accommodate skylights and a westerly roof deck.

(Affirmative finding)

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.*

See above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

Lighting information has been submitted in Plans L-102 and L-201. Walkway lighting exceeds the standards provided in Section 5.5.2 f. (2) for average light levels (.82 provided, should not exceed 0.5 fc.) The plan (L 102) provides a note that light levels follow IESNA guidance for illuminance levels specific to Intermediate area classification; those that have moderately heavy nighttime pedestrian activity. Even those standards provide a minimum light level of .5 for walkways. The DRB may support the modestly higher illuminance provided in the plan. Alternatively, light levels would need to be adjusted at walkways to meet an average illumination of .5 footcandles.

(Affirmative finding)

Sec. 5.5.3, Stormwater and Erosion Control

Some existing runoff east of the building will continue running into city catch basins. All other stormwater runoff will be captured onsite and infiltrated into the ground. Two retention areas are proposed along with a swale for conveyance. As noted previously, the Conservation Board reviewed this stormwater management plan and recommended approval. Final approval from the Stormwater Administrator is pending.

A comprehensive erosion prevention and sediment control plan has been provided. It, too, has been reviewed by the Conservation Board. As with the post-construction stormwater management plan, final approval by the Stormwater Administrator is pending. **(Affirmative finding as conditioned)**

Article 6: Development Review Standards:

Sec. 6.1.2 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 submitted site plans do not define any significant natural features, other than the grade change. Existing landscaping is proposed to be augmented with additional plantings. **(Affirmative finding)**

(b) Topographical Alterations

The immediate grounds west of the existing structure remain at a level grade, with a continuous and precipitous drop as the site falls away toward the bike path and lake. The proposed westerly patio/walkway is illustrated at the 226 elevation. An existing paved area at the westerly edge of the parcel is offered for continued use as a parking area under this proposal. **(Affirmative finding)**

(c) Protection of Important Public Views:

Distant terminal views of Lake Champlain and the mountains to the east and west, and important public and cultural landmarks, framed by public rights-of-way or viewed from public spaces shall be maintained through sensitive siting and design to the extent practicable. This shall not be construed to include views from exclusively private property.

This remains a private property; however, those spectacular views from the west elevation of the structure will remain; to be supplemented by views from the proposed entry courtyard and the rooftop deck. The removal of rear porches will also introduce uninterrupted views from the interior of the structure to views of the lake and westerly mountains. **(Affirmative finding)**

(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.

(e) Supporting the Use of Renewable Energy Resources:

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

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

As the structure is existing, most energy gain will result from improved energy efficiency of thermal systems on-site. A significant use of passive solar via skylight and sun tunnel is included in the plan. No part of this application will prevent the use of passive solar, wind, geothermal, water, or other alternative energies. **(Affirmative finding)**

(f) Brownfield Sites:

None are identified.

(g) Provide for nature's events:

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

The Conservation Board reviewed at sketch plan and on July 6, 2015 as a regular application; observing the sandy soils and recommended site infiltration in so far as practicable. The submission includes an EPSC which will require approval and acceptance by the Stormwater engineering staff. This was forwarded for their review July 3, 2015.

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated. The proposed westerly portico will provide covered entry for residents and visitors alike. It will also minimize the potential for injury due to ice and snow slide from the steeply pitched roof(s). A covered entry is also provided on the northerly west entrance; as well as a reconstructed entrance canopy on the east (front) elevation respectful of the original. **(Affirmative finding)**

(h) Building Location and Orientation:

This is an existing building which has a monumental street presence. No change to the building or its orientation is proposed with the new use. **(Affirmative finding)**

(i) Vehicular Access:

An existing vehicular access south of the structure and situated at the parking lot is proposed for continuation. That parking lot has 51 identified parking spaces. A new gravel parking lot is illustrated on the north, with a curb cut proposed for parcel immediately adjacent (329 North Avenue.) As recommended by the DAB, the southwesterly corner of that parking area will be paved to provide accessible and easily navigable spaces from the lot to the building. A proposed emergency vehicle access entrance is illustrated, with collapsible bollards. See Plan L-100 and L-103. **(Affirmative finding)**

(j) Pedestrian Access:

A broad network of sidewalks that intersect with public walkways is included. Pedestrians are free to move from the public right-of-way into the building, around the site, and to access the plaza area on the west. Revised plans inform of a walkway intended to connect the building to the lower/west parking area; a concern particularly when considering its extended use during winter weather and/or during evening hours. **(Affirmative finding)**

(k) Accessibility for the Handicapped:

Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled. Two new elevators are proposed; one to serve Burlington College within the southerly building, and one for the residential use in the former orphanage building.

Plan L100 illustrates 4 h/c parking spaces in the northerly lot. Per the direction of the Design Advisory Board, these spaces are now paved, to provide an easily accessible path to the pedestrian network and building entry. The building inspector has jurisdiction for determining adequate accessibility per ADA standards. **(Affirmative finding)**

(I) Parking and Circulation:

To the extent possible, parking should be placed at the side or rear of the lot and screened from view from surrounding properties and adjacent public rights of ways. Any off-street parking occupying street level frontage in a Downtown Mixed Use District shall be setback from the edge of the front property line in order to provide space for active pedestrian-oriented uses. Where street-level parking is provided within an existing structure, the cars shall be screened from the sidewalk and the area shall be activated with landscaping, public art, or other design amenities. Parking areas of more than 20 spaces should be broken into smaller areas separated by landscaping.

There is an existing parking lot on the south of the collective connective structures. The site plan illustrates 51 parking spaces. As this is an existing parking lot which is not “new or substantially improved”, there is no requirement to meet the shading requirement of this section, but the effort is broadly encouraged.

A new parking area is proposed west of the existing structure; this is intended to meet the obligation associated with the new use, however intended to be “temporary” in that future development will likely absorb the vehicles. This project must, however, stand on its own merit, so parking must be provided. The application is accompanied with a parking management plan and request for a parking waiver.

A shading plan is provided for the northerly and westerly lots have been provided (see Plan L-100 and L-104).

The new parking lot, with 26 spaces has been broken up with the addition of a small landscaped “thumb” on the east of the lot to meet this standard.

Attempts to link adjacent parking lots or provide shared parking areas which can serve neighboring properties simultaneously shall be strongly encouraged.

The proposed new parking area north of the site will have access from the adjacent parcel (329 North Avenue.) As noted, this is not anticipated to be a permanent lot, but an answer to parking obligation associated with this particular development proposal. Future buildout of the site is expected to enhance and increase parking opportunities for uses on the site as they are advanced. At such time any application is submitted and only after appropriate review, this northerly parking lot may be removed and replaced.

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

The site offers an existing paved lot. There is an established circulation pattern that provides connectivity with pedestrian paths. A new gravel lot north of the building will connect to existing pedestrian paths and building entrances, providing much needed handicap access at grade.

Concrete curb stops are illustrated at the perimeter of parking areas; their detail provided on Plan L202.

The circulation pattern, as illustrated on Plan L-103 has met preliminary approval of the fire marshal for emergency access. In that plan, knock-down bollards are utilized at the street entrance to eliminate regular vehicular circulation. See Plan L-202 for detail on collapsible bollard.

Surface parking and maneuvering areas should be shaded in an effort to reduce their effect on the local microclimate, air quality, and stormwater runoff with an objective of shading at least 30% of the parking lot. Shading should be distributed throughout the parking area to the greatest extent practical, including within the interior depending on the configuration. New or substantially improved parking areas with 15 or more parking spaces shall include a minimum of 1 shade tree per 5 parking spaces with a minimum caliper size of 2.5”-3” at planting. Up to a 30% waiver of the tree planting requirement may be granted by the development review board if it is found that the standard requirement would prove impractical given physical site constraints and required compliance with minimum parking requirements. All new shade trees shall be: of a species appropriate for such planting environments, expected to provide a mature canopy of no less than 25-feet in diameter, and selected from an approved list maintained by the city arborist. Existing trees retained within 25-feet of the perimeter of the parking area (including public street trees), and with a minimum caliper size greater than 3-inches, may be counted towards the new tree planting requirement.

The southerly parking area is neither new nor substantially improved; however the applicant is encouraged to provide additional plantings/trees to reduce the effects of stormwater runoff, air quality, and the local microclimate on the parking area.

Plan L-101 defines a robust planting plan, including Maple and Zelkova “Greenvase” trees surrounding the westerly parking lot, with Hackberry and Maples surrounding the northerly lot. Plan L-104 illustrates parking lot shading for the westerly and northerly lots in excess of 50%; meeting this standard.

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

The parking lot is linked to the pedestrian path network that leads to both the public right-of-way and the building complex. A defined and illuminated walkway is proposed to accompany the lower parking area to provide safe and comfortable access between that lot and the residential structure. Lighting for that path is illustrated on Plan L-102.

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

Bicycle parking is identified on the site plan (C2.0) Landscaping Plan L 100 and within floor plans (A1.1.) Exterior racks are within the northerly parking area abutting a pedestrian path; adjacent to the entranceway to the south of the buildings, and at the rear lobby entrance area. The type of bike

rack is identified on Plan L202, and consistent with the *City of Burlington Bicycle Parking Guidelines*. Significant accommodation is made for interior bicycle storage as well. See Article 8 for bike parking requirements. **(Affirmative finding)**

(m) Landscaping and Fences:

A significant amount of landscaping is proposed, particularly with new tree plantings surrounding and adjacent to the pedestrian walkways. See Plans L-100-200. The fence illustrated is available for detail inspection on Plan L-202.

Existing retaining/stone walls along the western periphery will be removed for completion of the patio area. **(Affirmative finding)**

(n) Public Plazas and Open Space:

A large plaza is illustrated on the westerly side of the existing structure. It is pleasantly centered on a rear entrance area, and integrated into a larger landscaping and site plan. Additionally, the reclaimed circular front entry will provide a dramatic and beautiful forecourt area for pedestrian circulation and enhancement of the overall site. **(Affirmative finding)**

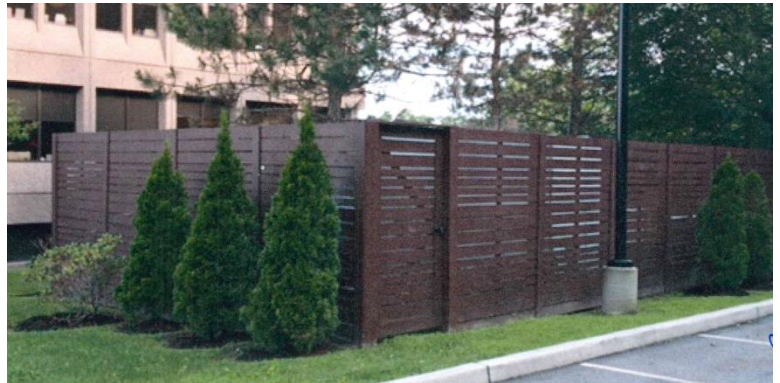
(o) Outdoor Lighting:

See Sec. 5.5.2.

(p) Integrate infrastructure into the design:

Dumpsters are proposed along the westerly edge of the existing south parking lot, and adjacent to the access entrance to the north parking lot. Detailed information has been submitted about dumpster enclosures.

Mailboxes are identified on the interior (Plan A1.1, Mail room east of Lobby.) New rooftop mechanical equipment is proposed to replace Burlington College's existing equipment; see Plan A2.1. New



code-compliant elevators are proposed for both the college and residential use.

No other utility or mechanical infrastructure is identified on plans. If any other exterior connections or equipment are proposed (cable, gas, electric, generators, etc), they should be identified and forwarded for review.

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

Two dumpster locations are identified on Plan L-100; an example of an enclosure submitted separately but an image included (above.)

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

neighboring properties and the environment pursuant to the requirements of Article 5, Part 4 Performance Standards.

There is no information about HVAC, potential antenna or mechanical installation other than replacement of rooftop equipment for the college. Any equipment proposed for the exterior must be integrated with the building design, sited and/or screened to minimize visual impact of any equipment. **(Affirmative finding as conditioned)**

Part 3: Architectural Design Standards

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

Proposed buildings and additions shall be appropriately scaled and proportioned for their function and with respect to their context. They shall integrate harmoniously into the topography, and to the use, scale, and architectural details of existing buildings in the vicinity.

The following shall be considered:

1. Massing, Height and Scale:

The application is for the proposed re-use of an existing structure. From the streetscape, there is no change in massing, height or overall scale of the building. An increased rooftop projection on the orphanage building for an elevator shaft can be identified on the west elevation; as on a rear elevation, it is acceptable. See Plan A2.1. A new elevator is proposed for the college as well, and is similarly located on the westerly (rear) elevation of the flat roofed southerly building. It remains of little consequence relative to the overall massing of the structure. **(Affirmative finding)**

2. Roofs and Rooflines.

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

New roofs proposed are on the rear, with flat roofed additions on the lower floor. The central (westerly) rear addition mimics the current vehicular carports, and therefore is of little divergence from existing. The other, on the north/westerly side provides an additional entry with lobby and feature wall. As it is on a minor elevation and in a modern design vocabulary, it is an appropriate option for new construction.

There exist rooftop dormer penetrations, unique to the building and informing of interior use that required natural light. Five of the minor but unique dormer windows are proposed to be removed on the westerly elevation to accommodate a new rooftop veranda. The application proposes the insertion of skylights to maximize interior habitable area in the uppermost floor. The Design Advisory Board has recommended acceptance of both alterations

.

See previous comments about potential HVAC/mechanical equipment.

Replacement of rooftop mechanicals on the flat roofed section occupied by the college is consistent and acceptable.

Solar panels, light colored ballast or roof membranes, split roof clerestories, planted or “green” roof technologies (with a clearly articulated maintenance plan) and “gray water” collection are encouraged. Active rooftop uses are also encouraged to add to the visual complexity and activity of the city’s skyline, and afford public access to otherwise unseen views of the city and surrounding landscape.

The Design Advisory Board has recommended approval of the proposed skylights and sun tunnels, although they recommended those on the east elevation be vertically aligned with the dormers. The exception was for the 2 located out of the roof valley. The two outer skylights on the lower row were recommended to be moved horizontally to be aligned with the dormer above. Two skylights on the upper row were recommended to be split so all skylights are the same size. Revised plans reflect these recommendations. **(Affirmative finding)**

3. Building Openings

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

The primary entrance from North Avenue is proposed to be altered, with removal of the 1960-1970s era chalet and glass entrance enclosure. Historic photographs inform of a simpler entrance; with a minor but articulated roof canopy accessed from dual arcing (granite?) steps. A simple handrail connected to elaborate entrance posts, which faced a landscaped island. This plan replicates that original configuration that at one time featured statuary of St. Joseph. No new central element has been defined or proposed.

The location for snow storage has been defined in several locations (Plan L 100). It can be noted that there is ample space to push snow to the west of the existing parking lot and away from pedestrian walkways.

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

No awnings are proposed in the plan.

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

Not applicable. **(Affirmative finding)**

(b) Protection of Important Architectural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Where the proposed development involves buildings listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8. The introduction of new buildings to a historic district listed on a state or national register of historic places shall make every effort to be compatible with nearby historic buildings.
See Section 5.4.8.

(c) Protection of Important Public Views:

Development shall preserve distant terminal views of Lake Champlain and the Adirondack Mountains and important public and cultural landmarks from public places and along east-west public rights-of-way to the extent practicable. This shall not be construed to include similar views from exclusively private property.

Although this will remain private property, the views of the lake and Adirondacks will be retained and preserved with the redevelopment as proposed. **(Affirmative finding)**

(d) Provide an active and inviting street edge:

The plan includes the removal of a 1960s era chalet-style entrance portico, and construction of an entrance canopy similar to the original. The curving pair of entrance stairs will be re-instituted. The site will be dramatically enhanced with plantings, pedestrian paths, and fencing that will demonstrate respect for previous site features, and offer a welcoming extension to residents and the community.

A modern porte-cochere in front of the more modern southern addition will be removed; an accessible entry to commercial space via a new pedestrian path is proposed. **(Affirmative finding)**

(e) Quality of materials:

New construction is relegated to the rear of the structure. The courtyard entry is a tinted glass enclosure with cedar clad columns set on concrete pads; the lobby entry illustrated with a glass and aluminum storefront entrance enclosure; the structure in brick veneer with a concrete base. The slate roof is proposed to be replaced on the orphanage structure. Replacement windows are aluminum clad single hung wood windows; skylights aluminum clad fixed units. **(Affirmative finding)**

(f) Reduce energy utilization:

All new construction is required to meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

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

The number of existing window openings and their size will offer an opportunity for passive solar gain for interior spaces proposed. The Design Advisory Board has recommended approval of the roof windows as revised for alignment.

Although the principle building is large, it is surrounded by green space and is not likely to have adverse shadow impacts on any neighboring property. **(Affirmative finding as conditioned)**

(g) Make advertising features complementary to the site:

No signage is included in the application. Any signage will require a separate sign permit.
(Affirmative finding as conditioned)

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p.)

(i) Make spaces secure and safe:

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

The applicant has expressed the intent to sprinkle the building, which will allow greater flexibility in design and use while meeting current building and life safety code. All standards relative to ingress and egress as defined by the building inspector and fire marshal shall govern.

As a multi-unit residential building, an intercom system is recommended for resident safety.

Lighting at entrances shall be appropriate to assure resident security and adequate lighting.
(Affirmative finding as conditioned)

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located in the neighborhood parking district. As a result, each of the 63 dwelling units requires 2 parking spaces – a total of 126 parking spaces in this case. As proposed, 69 parking spaces will be provided for the residences. A 57-space parking waiver is sought. See Sec. 8.1.15 below for details.

The college, when it was approved in 2010, received a 73-space (45%) parking waiver. As proposed, the college would be reduced to just 29,000 sf. That area would require a total of 58 spaces (2 per 1,000 sf). A continuation of the 45% parking waiver would result in 26 required parking spaces. The existing 51-space parking lot south of the building will continue to serve the college. **(Affirmative finding)**

Sec. 8.1.15, Waivers from Parking Requirements/Parking Management Plans

The applicant is seeking a 45% parking waiver for the residences. This percentage is within the 50% permissible limit. The parking management plan cites a number of factors in support of the requested waiver.

Perhaps most importantly, the management plan notes the small unit types – just 1-bedroom and studios. The 69 proposed parking spaces exceed the number of bedrooms included in the proposal. The units will most likely be occupied by single individuals or possibly couples. The management plan also cites dual use with the onsite college parking lot during off-peak hours to provide guest parking for the residences if need be. Dual use of parking resources is specifically enabled by Sec.

8.1.12, *Limitations, Location, Use of Facilities*. The property is served by a bus stop with service to the nearby Ethan Allen Shopping Center and downtown. The property is also within walking or biking distance to North Street and downtown. This combination of factors is expected to result in limited parking demand.

The parking management plan goes on to refer to a nearby Carshare VT location at the intersection of North Street and North Avenue and includes a statement anticipating a future Carshare VT location on the subject property as it is built out in the future. The management plan, however, does not commit to use of Carshare VT or to provision of bus passes of residents. Item (d) of this criterion requires the parking management plan to identify strategies that the applicant will use to reduce or manage the demand for parking into the future including things such as implementing a car-share program, using shuttles, and/or providing public transit subscriptions. The management plan does not commit to any of these items. It must make a commitment to these, or similar, strategies. **(Affirmative finding as conditioned)**

Sec. 8.2.5, Bicycle Parking Requirements

Onsite bike lockers, bike parking, and a bike wash for residents will be provided. The apartments will require at least 16 long term bike parking spaces (such as lockers) and 6 short term spaces. As proposed, every dwelling unit will have provision for long term bike storage, and 8 outdoor short term spaces will be provided within a bike rack. **(Affirmative finding)**

Article 9: Inclusionary and Replacement Housing

Sec. 9.1.5, Applicability

As the proposed development includes more than 5 new dwelling units, it is subject to the inclusionary housing provisions of this Article. Twenty-five percent of the total unit count must be inclusionary (25% of 63 is 16 dwelling units) in this waterfront zone. The application indicates that these units will be provided. Note that inclusionary housing units must be included onsite – the offsite option is not allowed within any waterfront zone. Final approval from the manager of housing trust fund is required. **(Affirmative finding as conditioned)**

Article 11: Planned Unit Development

As a single building with more than 5 residential units, this project qualifies as a minor Planned Unit Development and is exempt from the requirements and standards of this Article. The project is, however, subject to inclusionary housing requirements per Article 9 above. **(Affirmative finding)**

II. Conditions of Approval

Assuming the traffic analysis satisfies the Department of Public Works as presented or with conditions, and also assuming that 15% - 30% slopes are accounted for, the following conditions of approval are recommend.

1. **Prior to release of the zoning permit**, revised project plans depicting the following shall be submitted, subject to staff review and approval:
 - a. Any additional exterior connections or equipment (cable, gas, electric, generators, etc), shall be identified on site plans and/or elevations as appropriate to be assessed for visual impact and screening requirement.
 - b. Areas of steep slopes (15% - 30%, and < 30% slopes) noted on the site plan(s) and accounted for in lot coverage and density calculations. 15% - 30% slopes shall be

afforded up to 50% of the standard lot coverage and density. < 30% slopes shall be eliminated from lot coverage and density calculations. Steep slopes shall be accounted for on both properties included in this application.

2. **Prior to release of the zoning permit**, a revised parking management plan shall be submitted, subject to staff review and approval. The revised plan shall specifically identify strategies that the applicant will use to reduce or manage the demand for parking into the future including, but not limited to, things such as implementing a car-share program, using shuttles, and/or providing public transit subscriptions.
3. **Prior to release of the zoning permit**, the applicant shall receive written verification of adequate wastewater capacity from the Department of Public Works.
4. **Prior to release of the zoning permit**, the inclusionary housing proposal included in this application shall be subject to the review and written approval of the manager of the city's Housing Trust Fund.
5. As a multi-unit residential building, an intercom system is recommended for resident safety.
6. At least **7 days prior to the issuance of a certificate of occupancy**, the applicant shall pay to the Planning & Zoning Department the impact fee as calculated by staff based on the converted square footage of the proposed development.
7. Days and hours of construction shall be limited to Monday – Saturday, 7:00 AM – 6:00 PM. No construction activity shall be allowed on Sunday.
8. In the event that archaeological resources are discovered during construction, the VT Division for Historic Preservation shall be notified.
9. A State of Vermont wastewater permit may be required.
10. All new utility lines shall be buried.
11. It is the applicant's responsibility to comply with all applicable ADA requirements.
12. All new construction is required to meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.
13. Any signage will require a separate sign permit.
14. Standard Conditions 1-14.

DRAFT MEMO

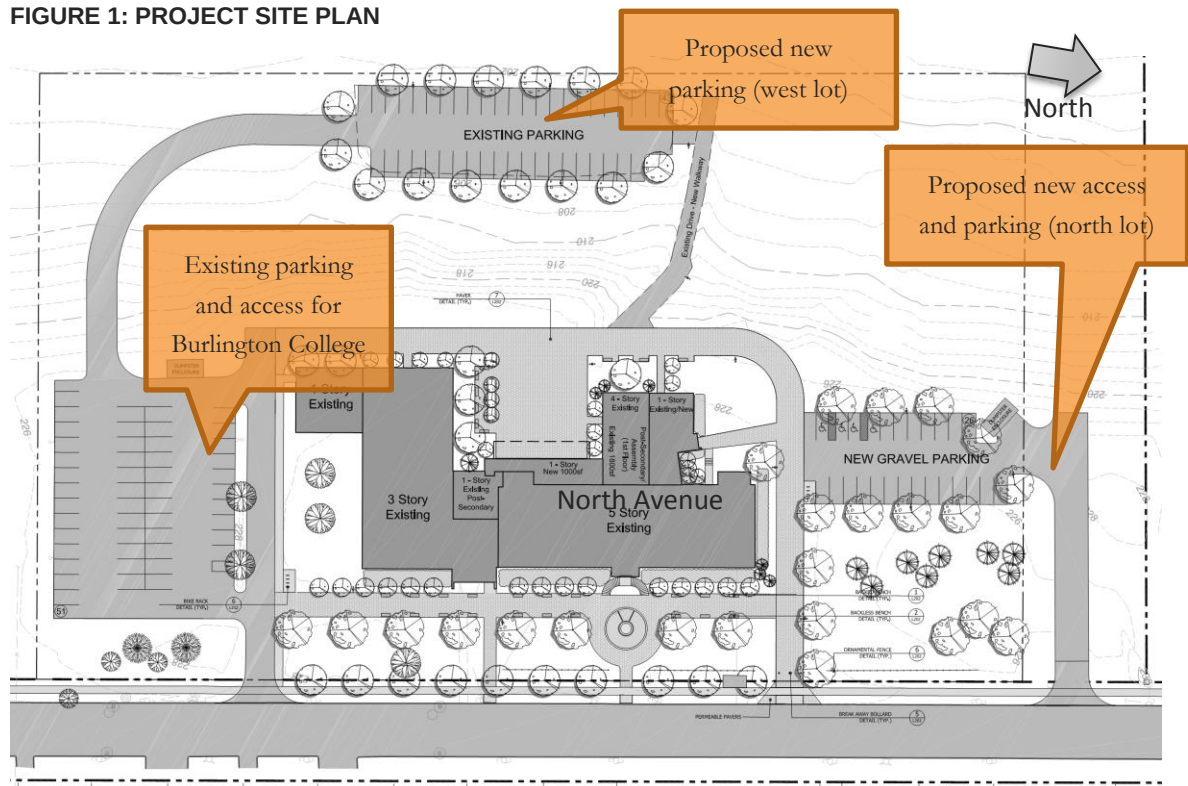
TO: Eric Farrell
FROM: Mark Smith, PE.
DATE: July 10, 2015
SUBJECT: 351 North Avenue – Traffic Assessment

RSG has conducted the following analysis of traffic operations, lane warrants, and safety proximate to the proposed apartment redevelopment project on North Avenue in Burlington, Vermont.

1.0 PROJECT DESCRIPTION

This study evaluates the traffic and potential infrastructure impacts associated with this development. As shown in Figure 1, the proposed project will have one access point off North Avenue, ½ mile south of Institute Road. The project entails the redevelopment of 63 apartments in an existing 5-story building (the former Catholic Diocese orphanage), adjacent to the Burlington College administration building. Parking and access for the apartments are to the north and west, as shown in Figure 1.

FIGURE 1: PROJECT SITE PLAN



This study relies upon design standards and analysis procedures documented in the 2010 Highway Capacity Manual,¹ Trip Generation,² A Policy on Geometric Design of Highways and Streets,³ Manual on Uniform Traffic Control Devices (MUTCD),⁴ Traffic Impact Evaluation: Study and Review Guide,⁵ and the Vermont State Design Standards,⁶ which are the generally accepted traffic analysis references relied upon by traffic engineering professionals and VTrans for projects of this type in Vermont.

2.0 PROJECT SCOPE

VTrans guidelines specify that a traffic study should be considered if the proposed development will generate 75 or more peak hour trips. The geographic scope of the study should also include the immediate access points and those intersections or highway segments receiving 75 or more project-generated peak hour trips.⁷ We project no intersections will meet the 75 vehicle per hour trip generation threshold. At the request of Burlington planning staff this study also looks at adjacent intersections on North Avenue to determine what if any impacts are realized.

3.0 NORTH AVENUE CORRIDOR STUDY

This project falls within the study area of the North Avenue Corridor Study, performed for the City in cooperation with the Chittenden County Regional Planning Commission. The study was published in September of 2014.

Recommendations in the study in the area of this project include:

- A new crosswalk nearby Burlington College (short term)
- Restriping North Street within the existing curbing limits for new lane and shoulder widths, to include bike lanes in either direction (short term).
- An expanded street cross section to include protected (“buffered”) bike lanes (long term).

It should be noted that the existing right of way is sufficient to include these recommendations.

Findings of the study show excellent Levels of Service in both Peak Hours at all study intersections, including those discussed in this traffic impact study. Please see sections 4-5 for details of the congestion effects of this project.

¹ Transportation Research Board, National Research Council, *Highway Capacity Manual* (Washington, DC: National Academy of Sciences, 2010).

² Institute of Transportation Engineers, *Trip Generation* 9th Edition (Washington, D.C.: Institute of Transportation Engineers, 2012).

³ American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 6th Edition (Washington DC: AASHTO, 2011).

⁴ American Traffic Safety Services Association (ATSSA), ITE, and AASHTO, *Manual on Uniform Traffic Control Devices*, 2009 Edition (Washington DC: FHWA, 2009).

⁵ Vermont Agency of Transportation, Development Review Section, *Traffic Impact Evaluation Study and Review Guide* (October 2008).

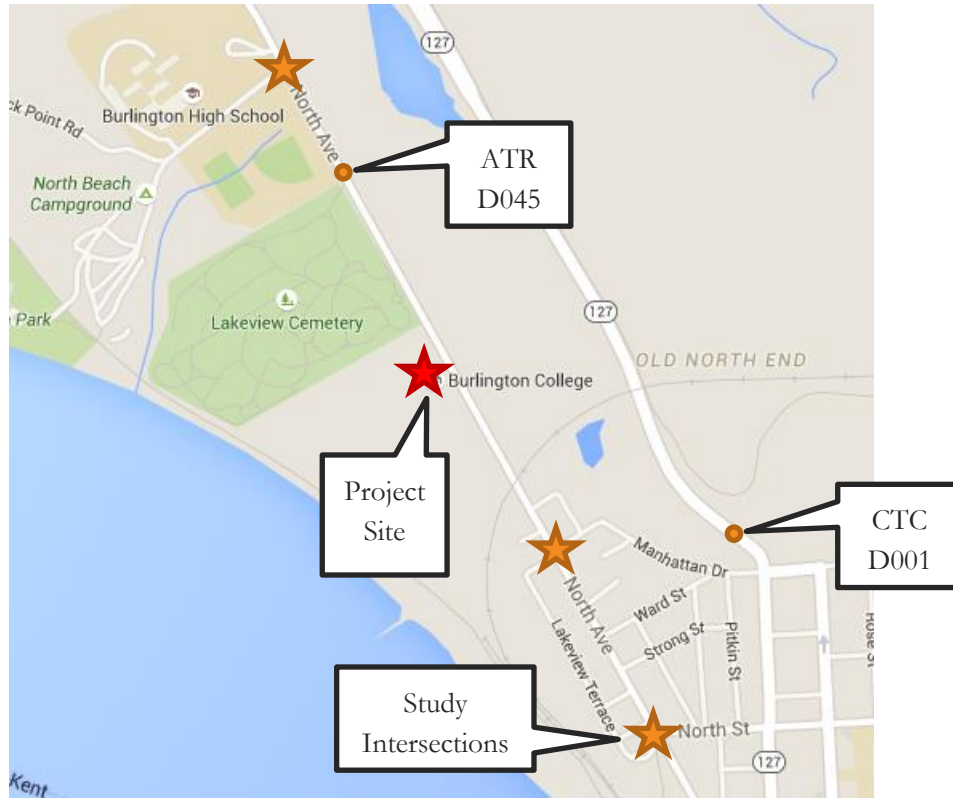
⁶ State of Vermont Agency of Transportation, *Vermont State Standards* (Montpelier: VTrans, 1 July 1997).

⁷ Vermont Agency of Transportation, Development Review Section, *Traffic Impact Evaluation Study and Review Guide* (January 2003).

4.0 LOCAL TRAFFIC

North Avenue is a two-lane minor arterial, posted at 25 miles per hour. In 2013, VTrans recorded an Annual Average Daily Traffic Volume (AADT) of 11,600 vehicles per day along North Avenue at station D045, located 0.1 mile south of Institute Road.

FIGURE 2: PROJECT LOCATION AND STUDY AREA INTERSECTIONS



5.0 ANALYSIS TRAFFIC VOLUMES

This analysis examines AM and PM design hour vehicle delays at the project entrance.

Vehicle delays are examined first with baseline, **No Build** scenario traffic volumes, which represent the anticipated design hour conditions in the target study years without the proposed development in place. In this case, the project access is new, therefore only through traffic on North Avenue is needed to define the base condition.

Once baseline conditions are established, anticipated traffic associated with the proposed development is added to the No Build scenario volumes to create **Build** scenario traffic volumes, which are in turn used to project intersection delays and levels of service with the proposed development in place.

A detailed description of the elements that contribute to the No Build and Build scenario traffic volumes is presented below.

5.1 | BACKGROUND TRAFFIC VOLUMES AND ADJUSTMENTS

RSG obtained the most recent CCRPC turning movement count data for intersections in the influence area of the project, counted in May of 2011.

Following VTrans traffic study guidelines, raw peak hour traffic volumes were adjusted to represent the design hour volume (DHV)⁸ in 2016 and 2021⁹ using two adjustment factors:

1. Design hour adjustment factors are based on VTrans Continuous Count Station D001 on VT127 near Manhattan Drive and Automatic Traffic Recording station D045, which is located along VT127 just north of the project area (see Figure 2). The 2013 DHV at D001 was compared to the peak hour volumes on the date of each turning movement count to formulate DHV adjustments. DHV adjustments increased the raw count volumes by 7%.
2. An annual adjustment factor, which represents general background traffic growth, is based on historic count data at VTrans permanent count station P6D001 on VT127 near Manhattan Drive, as presented in the 2014 VTrans Red Book. Traffic volumes on VT127 decreased by 4% from 2009 to the 2014 condition. The long term trend in traffic on North Avenue is also negative, decreasing 2% since 2005. Consequently, projections for traffic growth in this area are negative, and as a conservative measure we assume background volumes to be the same in the 2016 build year and 2021 future planning time frame.

5.2 | OTHER DEVELOPMENT VOLUMES

Other development volumes (ODVs) represent trips generated by anticipated developments in the study area. Trips generated by ODVs are included in every scenario (both No Build and Build) because we assume they are already present on the road network in the analysis years.

Through communications with City Planning and Zoning staff, it was determined that the only planned project expected to affect traffic in the project area is the COTS project at the corner of North Avenue and North Street. New trips expected from this project were added to the base condition used for this analysis.

5.3 | PROJECT TRIP GENERATION

Trip generation refers to the number of new vehicle trips originating at or destined for a particular development. To estimate the number of new vehicle trips for the project, we examined trip generation rates presented in the Institute of Transportation Engineer's *Trip Generation Manual*.¹⁰ Applying trip generation rates for ITE Land Use Code 220 (Apartment), we calculate the project will generate approximately 35 trips during the weekday AM peak hour, and 52 new vehicle trips during the PM peak hour. Figure 3 presents the projected trip generation in the weekday peak hours. There are expected to be 505 total weekday trips from the development. Note that based on the parking

⁸ The DHV is the 30th highest hour of traffic for the year and is used as the design standard in Vermont.

⁹ VTrans requires analysis during the year project construction is expected to be complete and in a future year scenario 5 years after project completion.

¹⁰ Institute of Transportation Engineers, *Trip Generation* 9th Edition (Washington, D.C.: Institute of Transportation Engineers, 2012).

configuration proposed, approximately 63% of these trips are expected to use the existing (southern) access point, along with the existing Burlington College traffic.

FIGURE 3: PROJECT PEAK HOUR TRIP GENERATION SUMMARY

ITE Land Use	Size	AM PEAK		PM PEAK	
		Enter	Exit	Enter	Exit
Apartments (LUC 220)	63 units	7	28	34	18
total peak hour trips		35		52	

Note that the above estimate is for a generic apartment land use, which includes multi-bedroom suburban examples, and does not take in to account other mitigating circumstances such as the expected higher use of alternate transportation modes (biking, transit, walking) typically found in an urban setting such as this, nor the fact that some significant portion of apartment users are expected to attend or work at Burlington College.

5.4 | BURLINGTON COLLEGE TRAFFIC VOLUMES

As Burlington College is not in full operation during the summer months, this analysis assumes ITE trip generation estimates for existing traffic at the southern entrance. Figure 4 presents the projected trip generation in the weekday peak hours.

FIGURE 4. BURLINGTON COLLEGE PEAK HOUR TRIP GENERATION SUMMARY¹¹

ITE Land Use	students	AM PEAK		PM PEAK	
		Enter	Exit	Enter	Exit
College/University (LUC 550)	216 students	29	8	12	25
		37		37	

It should be noted that recent studies of Burlington College traffic have shown this estimate to be very conservative.¹²

5.5 | SCENARIO VOLUME GRAPHICS

Figure 5 represents the peak hour traffic generated by the project, and subsequent trips through adjacent intersection on North Avenue. Note the graphics assume all project trips are combined at one entrance, for the purpose of simplicity.

¹¹ US News and World Report, 2014-15 enrollment

¹² 9/21/2010 Burlington College Traffic Impact Assessment by Lamoreaux and Dickenson

FIGURE 5: PROJECT PEAK HOUR TRAFFIC

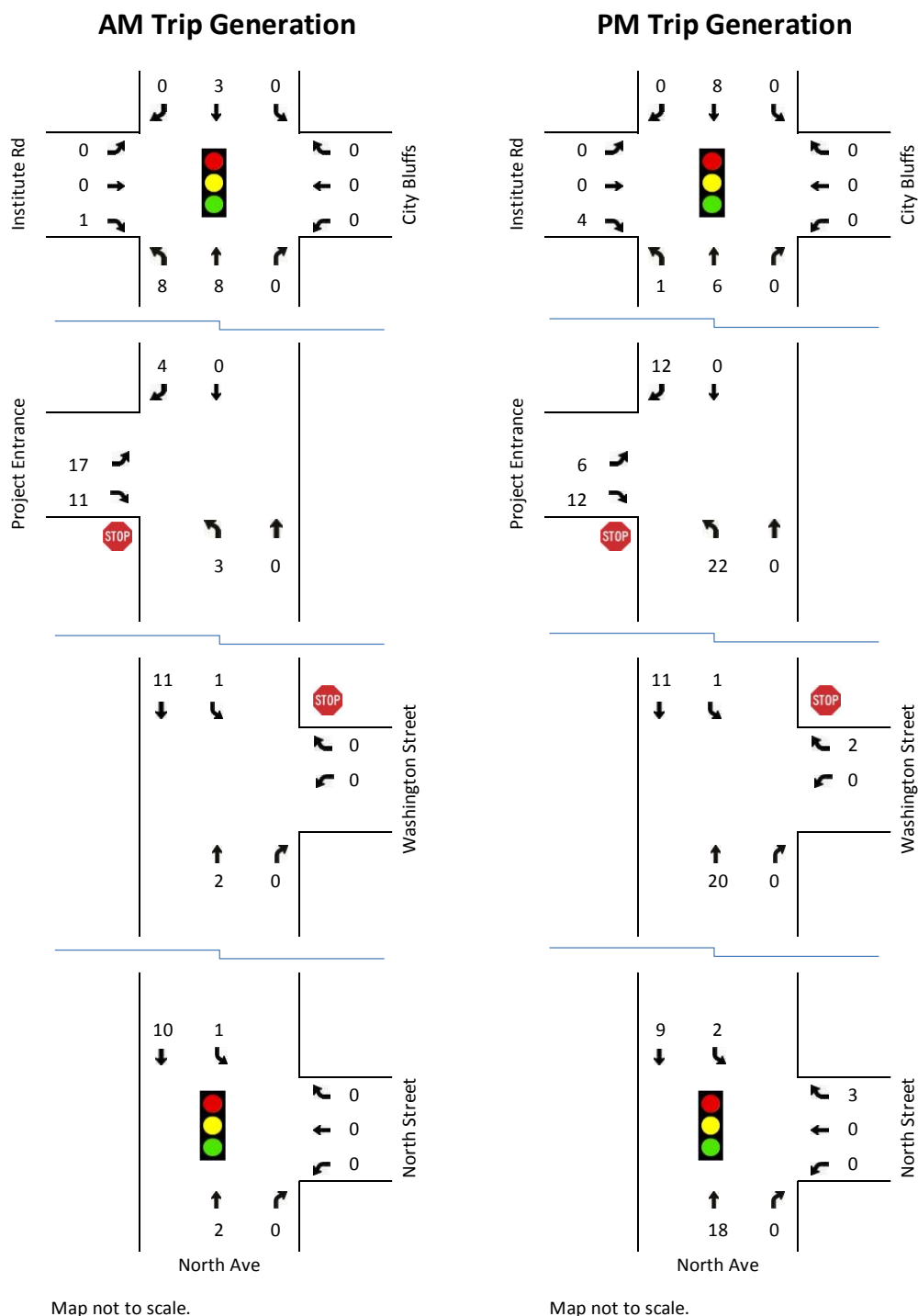
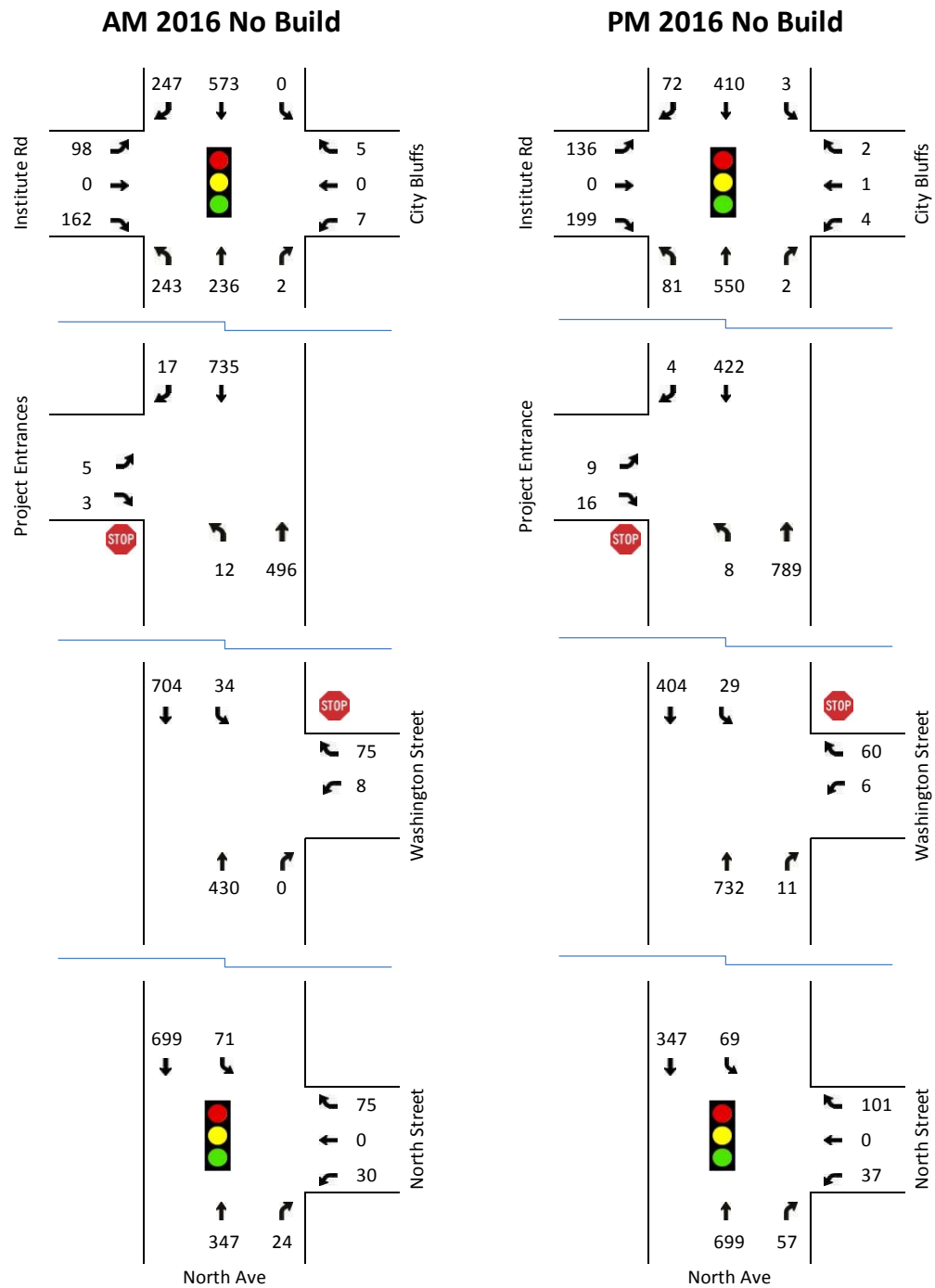


Figure 6 and 7 present the No Build and Build scenario traffic volumes at the study intersection, respectively. No Build traffic volumes include the raw count volumes, adjusted to design hour conditions, and projected traffic from recently permitted developments in the area (ODVs, if applicable). Build scenario volumes represent the addition of project-generated traffic to the No Build traffic volumes.

With the addition of site-generated traffic, volumes entering and exiting the project site increase in the Build scenario and these trips are carried out through the neighboring intersections, where applicable.

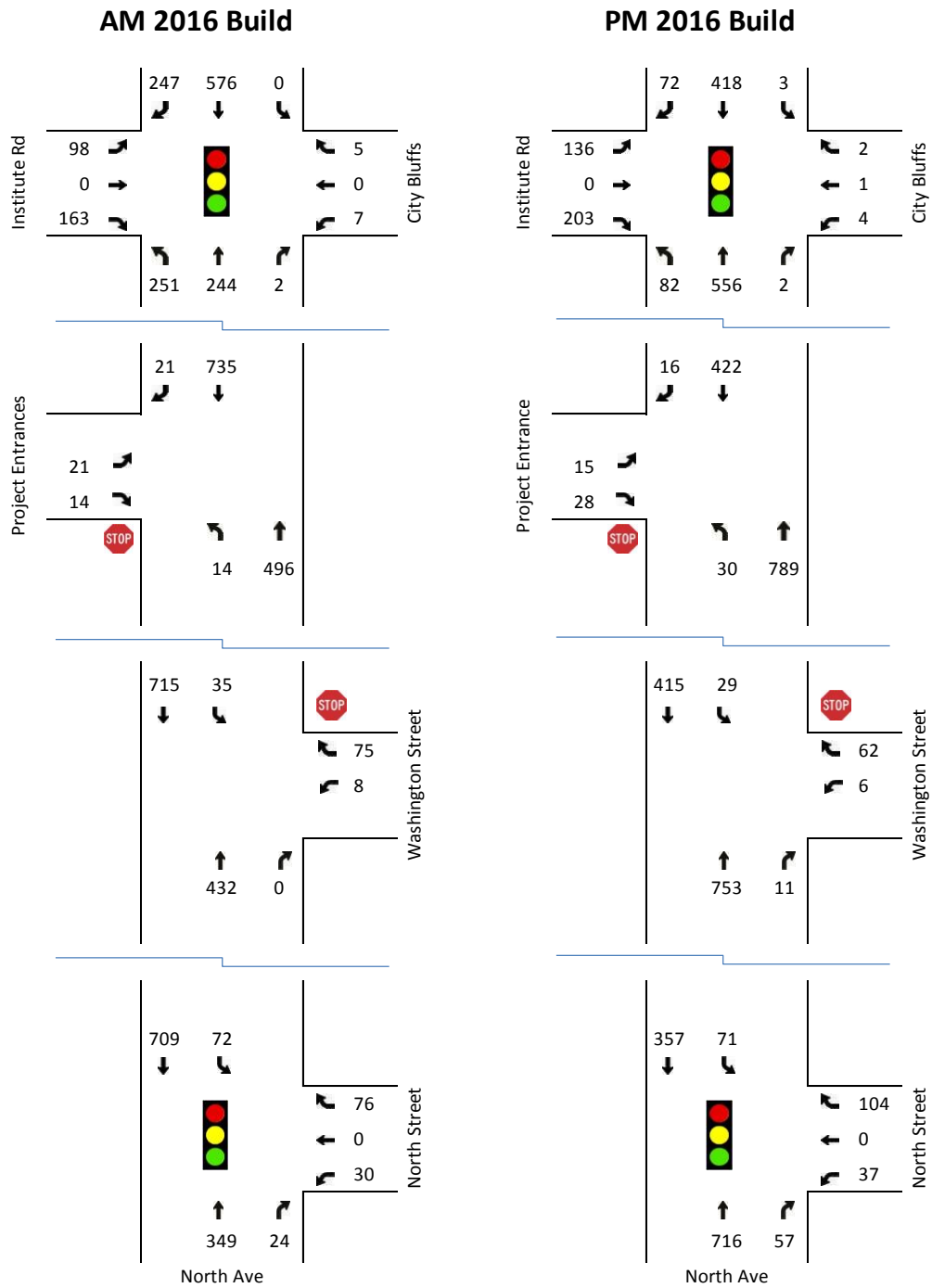
FIGURE 6: PEAK HOUR NO-BUILD TURNING MOVEMENT VOLUMES



Map not to scale.

Map not to scale.

FIGURE 7: PEAK HOUR BUILD TURNING MOVEMENT VOLUMES



Map not to scale.

Map not to scale.

6.0 CONGESTION ANALYSIS

6.1 | LEVEL-OF-SERVICE DEFINITION

Level-of-service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is calculated using the procedures outlined in the 2000 and 2010 Highway Capacity Manuals.¹³ In addition to traffic volumes, key inputs include the number of lanes at each intersection, traffic control type (signalized or unsignalized), and the traffic signal timing plans (if applicable).

The 2010 Highway Capacity Manual defines six qualitative grades to describe the level of service at an intersection. Level-of-Service is based on the average control delay per vehicle. Figure 8 shows the various LOS grades and descriptions for signalized and unsignalized intersections.

FIGURE 8: LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS

LOS	CHARACTERISTICS	UNSIGNALIZED TOTAL DELAY (SEC)	SIGNALIZED TOTAL DELAY (SEC)
A	Little or no delay	≤ 10.0	≤ 10.0
B	Short delays	10.1-15.0	10.1-20.0
C	Average delays	15.1-25.0	20.1-35.0
D	Long delays	25.1-35.0	35.1-55.0
E	Very long delays	35.1-50.0	55.1-80.0
F	Extreme delays	> 50.0	> 80.0

The delay thresholds for LOS at signalized and unsignalized intersections differ because of the driver's expectations of the operating efficiency for the respective traffic control conditions. According to HCM procedures, an overall LOS cannot be calculated for two-way stop-controlled intersections because not all movements experience delay. In signalized and all-way stop-controlled intersections, all movements experience delay and an overall LOS can be calculated.

The VTrans policy on level of service is:

- Overall LOS C should be maintained for state-maintained highways and other streets accessing the state's facilities
- Reduced LOS may be acceptable on a case-by-case basis when considering, at minimum, current and future traffic volumes, delays, volume to capacity ratios, crash rates, and negative impacts as a result of improvement necessary to achieve LOS C.
- LOS D should be maintained for side roads with volumes exceeding 100 vehicles/hour for a single lane approach (150 vehicles/hour for a two-lane approach) at two-way stop-controlled intersections.

Detailed Synchro LOS worksheets are attached at the end of this memo.

¹³ The HCM 2010 does not provide methodologies for calculating intersection delays at certain intersection types including signalized intersections with exclusive pedestrian phases and signalized intersections with non NEMA-standard phasing. Because of these limitations, HCM 2000 methodologies are employed where necessary.

6.2 | LEVEL-OF-SERVICE RESULTS

The Highway Capacity Manual congestion reports within Synchro (v8), a traffic analysis software package from Trafficware, routinely relied upon by transportation engineering professionals, were used to assess traffic congestion at the study intersections.

Figure 9 presents the LOS, delay (seconds/vehicle), and volume/capacity ratio¹⁴ (v/c) results during the weekday AM and PM peak hour. Since VTrans growth projections in this area are negative, the Build +5 year results are expected to be the same or less. For simplicity the traffic analysis conservatively assumes all new trips will use the existing access to be shared with Burlington College.

These results assume current traffic signal timings where applicable, obtained from the Burlington Department of Public Works,

FIGURE 9: AM AND PM PEAK HOUR LOS RESULTS

Signalized Intersections	AM Peak Hour						PM Peak Hour					
	Base Year No Build			Base Year Build			Base Year No Build			Base Year Build		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
 North Ave & Church / 127 Connector												
Overall	B	12	0.66	B	12	0.67	B	19	0.68	B	20	0.68
EB, Alliance Church	C	28	-	C	28	-	C	27	-	C	27	-
WB, VT127 Connector	C	28	-	C	28	-	C	30	-	C	30	-
NB, along North Ave	B	10	-	B	10	-	C	22	-	C	22	-
SB, along North Ave	A	9	-	A	9	-	A	8	-	A	8	-
 North Ave & Institute Rd / City Bluffs												
Overall	B	12	0.54	B	12	0.55	B	12	0.49	B	12	0.50
EB, along Institute	C	24	-	C	24	-	C	26	-	C	26	-
WB, exiting City Bluffs	C	26	-	C	26	-	C	25	-	C	25	-
NB, along North Ave	A	5	-	A	5	-	A	5	-	A	5	-
SB, along North Ave	B	12	-	B	12	-	A	10	-	A	10	-
 North Ave & 351 North Ave												
EB, exiting project	C	20	0.03	C	23	0.15	C	16	0.07	C	17	0.13
NB, along North Ave	A	0	-	A	1	-	A	0	-	A	<1	-
SB, along North Ave	A	0	-	A	0	-	A	0	-	A	<1	-
 North Ave & Washington St												
WB, along Washington St	B	13	0.15	B	13	0.16	C	16	0.17	C	17	0.18
NB, along North Ave	A	0	-	A	0	-	A	0	-	A	<1	-
SB, along North Ave	A	1	-	A	1	-	A	1	-	A	1	-
 North Ave & North St												
Overall	A	10	0.52	A	10	0.53	B	12	0.57	B	12	0.59
WB, along North St	C	30	-	C	30	-	C	28	-	C	28	-
NB, along North Ave	A	6	-	A	6	-	B	12	-	B	12	-
SB, along North Ave	A	9	-	A	9	-	A	7	-	A	7	-

¹⁴ v/c, also referred to as the degree of saturation is the fraction of actual volume (v) to theoretical capacity to process vehicles for the given study period (c), thus a v/c value of 1.0 or greater indicates the traffic movement or intersection is at or over capacity.

7.0 SIGHT DISTANCE OBSERVATIONS

As defined in the *2011 Policy on Geometric Design of Highways and Streets*, sight distance is the “the length of roadway ahead that is visible to the driver.”¹⁵ Sight distances of sufficient length are necessary at all points along a roadway to ensure vehicles can safely stop or avoid colliding with potential obstructions on the roadway.

Two types of sight distance are routinely examined to ensure safe operations. The first is referred to as Stopping sight distance, and is the distance along a given roadway between a driver’s eye and any potential obstruction on the roadway. The second is referred to as intersection corner sight distance and is the distance available between the driver’s eye of an intersecting vehicle waiting to join mainline traffic and the driver’s eye of an approaching mainline vehicle.

The provision of adequate stopping sight distance is critical for safe operations and design standards are defined based on roadway speed and gradient. For the section of North Avenue proximate to the site access, the minimum design stopping sight distance is 150 feet.

To ensure safe operation, intersection sight distances must also equal the design minimum stopping sight distance (150 feet) but longer intersection sight distances are desirable to improve overall intersection operations and minimize major route deceleration events. The *2011 Policy on Geometric Design of Highways and Streets* states that, “If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.”¹⁶ The target desirable intersection corner sight distance for a 25 mph roadway is presented to be 275 feet.

The available stopping sight distance approaching the project entrance was measured to be more than 400 feet from either approach. Similarly, corner sight distance from the project access exceeds 400 feet.

8.0 CRASH HISTORIES

VTrans maintains a statewide database of all reported crashes along all state highways and federal aid road segments. Crash histories were reviewed for the most recent 5 years of available data (January 2008 - December 2012). Within this 5 year period, 3 crashes were reported on North Avenue within the design stopping sight distance (150 feet at 25 mph) of the project entrance (North Avenue mile marker 0.78).

¹⁵ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Fifth Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2011). Page 3-2.

¹⁶ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Fifth Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2011). Page 9-29.

The Vermont Agency of Transportation maintains a list of high crash locations (HCL), which are intersections and roadway segments that have high crash rates over five years compared to other intersections or segments with similar functional classification and traffic levels. In order to be classified as a High Crash Location, an intersection or road segment (0.3 mile segments) must have more than 5 crashes in 5 years and must have an actual crash rate higher than the critical crash rate calculated by VTrans for similar roadways.

There are no high crash locations in the immediate vicinity of this project. The closest HCL is the segment of North Avenue from Sherman Street to North Avenue (mm 0-0.3).

9.0 TURN LANE WARRANT ANALYSIS

In assessing the site access, we conducted a turn lane warrant analysis to determine if projected peak hour traffic volumes are sufficient to meet warrant thresholds for construction of dedicated turn lanes into the project site. We found that a dedicated southbound right turn lane is not warranted in either the AM or PM peak hour build scenarios. Using the Harmelink methodology for evaluating left turn lanes at unsignalized intersections, as suggested in VTrans' *Traffic Impact Evaluation: Study and Review Guide*, a northbound left turn lane does meet the warrants in the PM peak hour. However, alternate methods for evaluating this warrant¹⁷, which modify the Harmelink Method with more recent queuing theory, does not support this finding. Furthermore, the volumes proposed at the project intersection are significantly less than other existing adjacent unsignalized intersections in the North Avenue corridor (e.g. Washington St. – see Figure 7) which are not experiencing operational issues (see Section 6.2). Given that the VTrans methodology is also suited to more high speed and generally rural applications, we do not recommend a turn lane at this location.

10.0 CONCLUSIONS

The project as proposed will include 63 new studio and one bedroom apartments with associated parking, and one new access point off North Avenue serving a small portion of the new parking. Based on ITE guidelines, we project this project will generate approximately 35 trips during the weekday AM peak hour, and 52 trips in the PM Peak Hour. This estimate, as well as the estimate for existing college traffic should be noted as conservative, for reasons stated in sections 5.3 and 5.4.

The main project entrance, and several adjacent intersections were evaluated for capacity and performance, and were found to meet VTrans guidelines for acceptable levels of service. In addition, no meaningful change in delay or capacity at any study intersection was realized due to the project.

After a review of warrants for additional auxiliary lanes at the project intersection, no additional lanes are recommended for the build condition.

Based on the analysis presented above we conclude that the proposed redevelopment of apartments at 351 North Avenue, as proposed, will not cause unreasonable congestion or unsafe conditions on the local roadway network and will not adversely impact the public investment in roadway infrastructure in the adjacent area.

¹⁷ Kikuchi and Chakroborty Methodology 1991

END OF MEMO

Attachment: Synchro traffic analysis worksheets:

- 2016 AM Peak No-build
- 2016 AM Peak Build
- 2016 PM Peak No-build
- 2016 PM Peak Build

(20 pages total)



HCM Signalized Intersection Capacity Analysis

1: North Ave & Church/127 Connector

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	7	2	34	11	182	1	237	20	524	671	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Flt		0.98			1.00	0.85		0.99		1.00	1.00	
Flt Protected		0.98			0.96	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1795			1795	1583		1843		1770	1862	
Flt Permitted		0.89			0.77	1.00		1.00		0.53	1.00	
Satd. Flow (perm)		1622			1434	1583		1841		996	1862	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	7	2	34	11	182	1	237	20	524	671	1
RTOR Reduction (vph)	0	2	0	0	0	161	0	3	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	45	21	0	255	0	524	672	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		7.8			7.8	7.8		35.6		46.7	46.7	
Effective Green, g (s)		7.8			7.8	7.8		35.6		46.7	46.7	
Actuated g/C Ratio		0.11			0.11	0.11		0.52		0.68	0.68	
Clearance Time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)		183			162	178		949		742	1260	
v/s Ratio Prot										c0.06	0.36	
v/s Ratio Perm		0.01			c0.03	0.01		0.14		c0.42		
v/c Ratio		0.07			0.28	0.12		0.27		0.71	0.53	
Uniform Delay, d1		27.3			28.0	27.5		9.4		7.5	5.6	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.9	0.3		0.7		3.1	1.6	
Delay (s)		27.5			29.0	27.8		10.1		10.7	7.3	
Level of Service		C			C	C		B		B	A	
Approach Delay (s)		27.5			28.0			10.1			8.8	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		11.7						HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		69.0						Sum of lost time (s)		17.0		
Intersection Capacity Utilization		66.6%						ICU Level of Service		C		
Analysis Period (min)		60										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

2: North Ave & Institute Rd/City Bluffs

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	0	162	7	0	5	242	236	2	0	573	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.94		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.97		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1708		1770	1860			1863	1583
Flt Permitted		0.75	1.00		0.83		0.30	1.00			1.00	1.00
Satd. Flow (perm)		1397	1583		1455		560	1860			1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	98	0	162	7	0	5	242	236	2	0	573	246
RTOR Reduction (vph)	0	0	121	0	10	0	0	0	0	0	0	112
Lane Group Flow (vph)	0	98	41	0	2	0	242	238	0	0	573	134
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA			NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		9.7	17.9		9.7		50.3	50.3			38.1	38.1
Effective Green, g (s)		9.7	17.9		9.7		50.3	50.3			38.1	38.1
Actuated g/C Ratio		0.14	0.26		0.14		0.72	0.72			0.54	0.54
Clearance Time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Vehicle Extension (s)		4.0	3.0		4.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		193	404		201		544	1336			1014	861
v/s Ratio Prot			0.01				c0.05	0.13			c0.31	
v/s Ratio Perm		c0.07	0.01		0.00		0.27					0.08
v/c Ratio		0.51	0.10		0.01		0.44	0.18			0.57	0.16
Uniform Delay, d1		27.9	19.9		26.0		5.2	3.2			10.5	7.9
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		2.9	0.1		0.0		0.6	0.3			2.3	0.4
Delay (s)		30.8	20.0		26.0		5.7	3.5			12.8	8.3
Level of Service		C	C		C		A	A			B	A
Approach Delay (s)		24.1			26.0			4.6			11.5	
Approach LOS		C			C			A			B	
Intersection Summary												
HCM 2000 Control Delay			11.6				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			70.0				Sum of lost time (s)			14.0		
Intersection Capacity Utilization			67.7%				ICU Level of Service			C		
Analysis Period (min)			60									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

3: North Ave & 351 N Ave Apts

8/10/2015

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	4	3	11	496	735	17
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	3	11	496	735	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1262	744	752			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1262	744	752			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	185	415	858			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	7	507	752			
Volume Left	4	11	0			
Volume Right	3	0	17			
cSH	243	858	1700			
Volume to Capacity	0.03	0.01	0.44			
Queue Length 95th (ft)	2	1	0			
Control Delay (s)	20.3	0.4	0.0			
Lane LOS	C	A				
Approach Delay (s)	20.3	0.4	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization		49.7%		ICU Level of Service		A
Analysis Period (min)		60				

HCM Unsignalized Intersection Capacity Analysis

4: North Ave & Washington

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	74	429	0	34	704
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	74	429	0	34	704
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1201	429			429	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1201	429			429	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	96	88			97	
cM capacity (veh/h)	198	626			1130	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	81	429	738			
Volume Left	7	0	34			
Volume Right	74	0	0			
cSH	527	1700	1130			
Volume to Capacity	0.15	0.25	0.03			
Queue Length 95th (ft)	14	0	2			
Control Delay (s)	13.1	0.0	0.8			
Lane LOS	B		A			
Approach Delay (s)	13.1	0.0	0.8			
Approach LOS	B					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			76.3%	ICU Level of Service		D
Analysis Period (min)			60			

HCM Signalized Intersection Capacity Analysis

5: North Street & North Ave

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	75	346	24	70	698
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0		6.0	6.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Flt	0.90		0.99		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1658		1846		1770	1863
Flt Permitted	0.99		1.00		0.54	1.00
Satd. Flow (perm)	1658		1846		1001	1863
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	29	75	346	24	70	698
RTOR Reduction (vph)	68	0	1	0	0	0
Lane Group Flow (vph)	36	0	369	0	70	698
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Actuated Green, G (s)	5.9		42.9		42.9	42.9
Effective Green, g (s)	5.9		42.9		42.9	42.9
Actuated g/C Ratio	0.09		0.64		0.64	0.64
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		4.0		4.0	4.0
Lane Grp Cap (vph)	145		1176		638	1187
v/s Ratio Prot	c0.02		0.20			c0.37
v/s Ratio Perm					0.07	
v/c Ratio	0.25		0.31		0.11	0.59
Uniform Delay, d1	28.6		5.5		4.8	7.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.9		0.7		0.3	2.2
Delay (s)	29.5		6.2		5.1	9.2
Level of Service	C		A		A	A
Approach Delay (s)	29.5		6.2			8.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			9.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.52			
Actuated Cycle Length (s)			67.3		Sum of lost time (s)	16.0
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			60			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

1: North Ave & Church/127 Connector

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	7	2	34	11	182	1	244	20	524	674	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Frt		0.98			1.00	0.85		0.99		1.00	1.00	
Flt Protected		0.98			0.96	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1795			1795	1583		1843		1770	1862	
Flt Permitted		0.89			0.77	1.00		1.00		0.53	1.00	
Satd. Flow (perm)		1622			1434	1583		1841		986	1862	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	7	2	34	11	182	1	244	20	524	674	1
RTOR Reduction (vph)	0	2	0	0	0	161	0	2	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	45	21	0	263	0	524	675	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		7.8			7.8	7.8		35.6		46.7	46.7	
Effective Green, g (s)		7.8			7.8	7.8		35.6		46.7	46.7	
Actuated g/C Ratio		0.11			0.11	0.11		0.52		0.68	0.68	
Clearance Time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)		183			162	178		949		736	1260	
v/s Ratio Prot										c0.06	0.36	
v/s Ratio Perm		0.01			c0.03	0.01		0.14		c0.42		
v/c Ratio		0.07			0.28	0.12		0.28		0.71	0.54	
Uniform Delay, d1		27.3			28.0	27.5		9.4		7.6	5.7	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.9	0.3		0.7		3.3	1.6	
Delay (s)		27.5			29.0	27.8		10.2		10.9	7.3	
Level of Service		C			C	C		B		B	A	
Approach Delay (s)		27.5			28.0			10.2			8.9	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		11.8										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		69.0										
Intersection Capacity Utilization		67.2%										
Analysis Period (min)		60										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

2: North Ave & Institute Rd/City Bluffs

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	0	162	7	0	5	251	244	2	0	576	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.94		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.97		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1708		1770	1860			1863	1583
Flt Permitted		0.75	1.00		0.83		0.30	1.00			1.00	1.00
Satd. Flow (perm)		1397	1583		1455		555	1860			1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	98	0	162	7	0	5	251	244	2	0	576	246
RTOR Reduction (vph)	0	0	120	0	10	0	0	0	0	0	0	112
Lane Group Flow (vph)	0	98	42	0	2	0	251	246	0	0	576	134
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA			NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		9.7	18.0		9.7		50.3	50.3			38.0	38.0
Effective Green, g (s)		9.7	18.0		9.7		50.3	50.3			38.0	38.0
Actuated g/C Ratio		0.14	0.26		0.14		0.72	0.72			0.54	0.54
Clearance Time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Vehicle Extension (s)		4.0	3.0		4.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		193	407		201		542	1336			1011	859
v/s Ratio Prot			0.01				c0.05	0.13			c0.31	
v/s Ratio Perm		c0.07	0.01		0.00		0.28					0.08
v/c Ratio		0.51	0.10		0.01		0.46	0.18			0.57	0.16
Uniform Delay, d1		27.9	19.8		26.0		5.3	3.2			10.6	8.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		2.9	0.1		0.0		0.6	0.3			2.4	0.4
Delay (s)		30.8	19.9		26.0		5.9	3.5			12.9	8.4
Level of Service		C	B		C		A	A			B	A
Approach Delay (s)		24.0			26.0			4.7			11.6	
Approach LOS		C			C			A			B	
Intersection Summary												
HCM 2000 Control Delay			11.6				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			70.0				Sum of lost time (s)			14.0		
Intersection Capacity Utilization			67.8%				ICU Level of Service			C		
Analysis Period (min)			60									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

3: North Ave & 351 N Ave Apts

8/10/2015

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	21	14	14	496	735	21
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	14	14	496	735	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1270	746	756			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1270	746	756			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	97	98			
cM capacity (veh/h)	183	414	855			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	35	510	756			
Volume Left	21	14	0			
Volume Right	14	0	21			
cSH	235	855	1700			
Volume to Capacity	0.15	0.02	0.44			
Queue Length 95th (ft)	13	1	0			
Control Delay (s)	23.0	0.5	0.0			
Lane LOS	C	A				
Approach Delay (s)	23.0	0.5	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization		50.0%		ICU Level of Service		A
Analysis Period (min)		60				

HCM Unsignalized Intersection Capacity Analysis

4: North Ave & Washington

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	75	432	0	34	714
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	75	432	0	34	714
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1214	432			432	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1214	432			432	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	96	88			97	
cM capacity (veh/h)	194	624			1128	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	82	432	748			
Volume Left	7	0	34			
Volume Right	75	0	0			
cSH	525	1700	1128			
Volume to Capacity	0.16	0.25	0.03			
Queue Length 95th (ft)	14	0	2			
Control Delay (s)	13.1	0.0	0.8			
Lane LOS	B		A			
Approach Delay (s)	13.1	0.0	0.8			
Approach LOS	B					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			76.9%	ICU Level of Service		D
Analysis Period (min)			60			

HCM Signalized Intersection Capacity Analysis

5: North Street & North Ave

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	75	348	24	71	708
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0		6.0	6.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.90		0.99		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1658		1847		1770	1863
Flt Permitted	0.99		1.00		0.54	1.00
Satd. Flow (perm)	1658		1847		998	1863
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	29	75	348	24	71	708
RTOR Reduction (vph)	68	0	1	0	0	0
Lane Group Flow (vph)	36	0	371	0	71	708
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Actuated Green, G (s)	5.9		42.9		42.9	42.9
Effective Green, g (s)	5.9		42.9		42.9	42.9
Actuated g/C Ratio	0.09		0.64		0.64	0.64
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		4.0		4.0	4.0
Lane Grp Cap (vph)	145		1177		636	1187
v/s Ratio Prot	c0.02		0.20			c0.38
v/s Ratio Perm					0.07	
v/c Ratio	0.25		0.31		0.11	0.60
Uniform Delay, d1	28.6		5.5		4.8	7.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.9		0.7		0.4	2.2
Delay (s)	29.5		6.2		5.1	9.4
Level of Service	C		A		A	A
Approach Delay (s)	29.5		6.2			9.0
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			9.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			67.3		Sum of lost time (s)	16.0
Intersection Capacity Utilization			53.5%		ICU Level of Service	A
Analysis Period (min)			60			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

1: North Ave & Church/127 Connector

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	6	1	20	2	524	3	659	64	272	347	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Flt		0.99			1.00	0.85		0.99		1.00	1.00	
Flt Protected		0.98			0.96	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1804			1782	1583		1840		1770	1860	
Flt Permitted		0.90			0.77	1.00		1.00		0.27	1.00	
Satd. Flow (perm)		1657			1426	1583		1839		499	1860	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	6	1	20	2	524	3	659	64	272	347	3
RTOR Reduction (vph)	0	1	0	0	0	426	0	3	0	0	0	0
Lane Group Flow (vph)	0	11	0	0	22	98	0	723	0	272	350	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		9.8			9.8	9.8		35.7		46.8	46.8	
Effective Green, g (s)		9.8			9.8	9.8		35.7		46.8	46.8	
Actuated g/C Ratio		0.14			0.14	0.14		0.50		0.66	0.66	
Clearance Time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)		228			196	218		923		437	1224	
v/s Ratio Prot										c0.05	0.19	
v/s Ratio Perm		0.01			0.02	c0.06		c0.39		0.36		
v/c Ratio		0.05			0.11	0.45		0.78		0.62	0.29	
Uniform Delay, d1		26.6			26.8	28.2		14.5		8.2	5.1	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.3	1.5		6.9		2.8	0.6	
Delay (s)		26.7			27.1	29.7		21.5		11.0	5.7	
Level of Service		C			C	C		C		B	A	
Approach Delay (s)		26.7			29.6			21.5			8.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		19.4						HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.1						Sum of lost time (s)		17.0		
Intersection Capacity Utilization		87.0%						ICU Level of Service		E		
Analysis Period (min)		60										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

2: North Ave & Institute Rd/City Bluffs

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	0	198	4	1	2	81	550	2	3	410	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.96		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.97		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1741		1770	1862			1862	1583
Flt Permitted		0.75	1.00		0.84		0.42	1.00			1.00	1.00
Satd. Flow (perm)		1403	1583		1513		778	1862			1858	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	136	0	198	4	1	2	81	550	2	3	410	71
RTOR Reduction (vph)	0	0	149	0	2	0	0	0	0	0	0	32
Lane Group Flow (vph)	0	136	50	0	5	0	81	552	0	0	413	39
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		10.9	17.5		10.9		49.1	49.1			38.5	38.5
Effective Green, g (s)		10.9	17.5		10.9		49.1	49.1			38.5	38.5
Actuated g/C Ratio		0.16	0.25		0.16		0.70	0.70			0.55	0.55
Clearance Time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Vehicle Extension (s)		4.0	3.0		4.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		218	395		235		639	1306			1021	870
v/s Ratio Prot			0.01				0.01	c0.30				
v/s Ratio Perm		c0.10	0.02		0.00		0.08				0.22	0.02
v/c Ratio		0.62	0.13		0.02		0.13	0.42			0.40	0.04
Uniform Delay, d1		27.6	20.3		25.0		3.8	4.4			9.1	7.3
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		6.3	0.1		0.1		0.1	1.0			1.2	0.1
Delay (s)		34.0	20.5		25.1		3.9	5.4			10.3	7.4
Level of Service		C	C		C		A	A			B	A
Approach Delay (s)		26.0			25.1			5.2			9.9	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM 2000 Control Delay			11.6				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			70.0				Sum of lost time (s)		14.0			
Intersection Capacity Utilization			75.1%				ICU Level of Service		D			
Analysis Period (min)			60									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

3: North Ave & 351 N Ave Apts

8/10/2015

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	8	16	7	788	422	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	8	16	7	788	422	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1226	424	426			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1226	424	426			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	97	99			
cM capacity (veh/h)	196	630	1133			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	24	795	426			
Volume Left	8	7	0			
Volume Right	16	0	4			
cSH	362	1133	1700			
Volume to Capacity	0.07	0.01	0.25			
Queue Length 95th (ft)	5	0	0			
Control Delay (s)	15.6	0.2	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.6	0.2	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		57.0%		ICU Level of Service		B
Analysis Period (min)		60				

HCM Unsignalized Intersection Capacity Analysis

4: North Ave & Washington

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	59	732	10	28	403
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	59	732	10	28	403
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1196	737			742	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1196	737			742	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	86			97	
cM capacity (veh/h)	199	418			865	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	65	742	431			
Volume Left	6	0	28			
Volume Right	59	10	0			
cSH	380	1700	865			
Volume to Capacity	0.17	0.44	0.03			
Queue Length 95th (ft)	15	0	3			
Control Delay (s)	16.4	0.0	1.0			
Lane LOS	C		A			
Approach Delay (s)	16.4	0.0	1.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization		54.9%		ICU Level of Service		A
Analysis Period (min)		60				

HCM Signalized Intersection Capacity Analysis

5: North Street & North Ave

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	36	101	698	57	69	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0		6.0	6.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.90		0.99		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1656		1844		1770	1863
Flt Permitted	0.99		1.00		0.26	1.00
Satd. Flow (perm)	1656		1844		488	1863
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	101	698	57	69	347
RTOR Reduction (vph)	90	0	2	0	0	0
Lane Group Flow (vph)	47	0	753	0	69	347
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Actuated Green, G (s)	7.4		41.2		41.2	41.2
Effective Green, g (s)	7.4		41.2		41.2	41.2
Actuated g/C Ratio	0.11		0.61		0.61	0.61
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		4.0		4.0	4.0
Lane Grp Cap (vph)	182		1132		299	1143
v/s Ratio Prot	c0.03		c0.41			0.19
v/s Ratio Perm					0.14	
v/c Ratio	0.26		0.67		0.23	0.30
Uniform Delay, d1	27.3		8.5		5.8	6.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.8		3.1		1.8	0.7
Delay (s)	28.1		11.6		7.6	6.8
Level of Service	C		B		A	A
Approach Delay (s)	28.1		11.6			7.0
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.57			
Actuated Cycle Length (s)			67.1		Sum of lost time (s)	16.0
Intersection Capacity Utilization			67.2%		ICU Level of Service	C
Analysis Period (min)			60			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

1: North Ave & Church/127 Connector

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	6	1	20	2	524	3	664	64	272	355	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Flt		0.99			1.00	0.85		0.99		1.00	1.00	
Flt Protected		0.98			0.96	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1804			1782	1583		1840		1770	1860	
Flt Permitted		0.90			0.77	1.00		1.00		0.27	1.00	
Satd. Flow (perm)		1658			1428	1583		1839		494	1860	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	6	1	20	2	524	3	664	64	272	355	3
RTOR Reduction (vph)	0	1	0	0	0	424	0	3	0	0	0	0
Lane Group Flow (vph)	0	11	0	0	22	100	0	728	0	272	358	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		9.9			9.9	9.9		35.7		46.8	46.8	
Effective Green, g (s)		9.9			9.9	9.9		35.7		46.8	46.8	
Actuated g/C Ratio		0.14			0.14	0.14		0.50		0.66	0.66	
Clearance Time (s)		5.0			5.0	5.0		5.0		5.0	5.0	
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)		230			198	220		922		434	1222	
v/s Ratio Prot										c0.05	0.19	
v/s Ratio Perm		0.01			0.02	c0.06		c0.40		0.36		
v/c Ratio		0.05			0.11	0.45		0.79		0.63	0.29	
Uniform Delay, d1		26.6			26.8	28.2		14.7		8.2	5.2	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.2	1.5		7.2		2.9	0.6	
Delay (s)		26.7			27.1	29.6		21.8		11.1	5.8	
Level of Service		C			C	C		C		B	A	
Approach Delay (s)		26.7			29.5			21.8			8.1	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		19.5					HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.2					Sum of lost time (s)			17.0		
Intersection Capacity Utilization		87.3%					ICU Level of Service			E		
Analysis Period (min)		60										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

2: North Ave & Institute Rd/City Bluffs

8/10/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	0	202	4	1	2	82	555	2	3	418	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.96		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.97		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1741		1770	1862			1862	1583
Flt Permitted		0.75	1.00		0.84		0.41	1.00			1.00	1.00
Satd. Flow (perm)		1403	1583		1513		767	1862			1858	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	136	0	202	4	1	2	82	555	2	3	418	71
RTOR Reduction (vph)	0	0	152	0	2	0	0	0	0	0	0	32
Lane Group Flow (vph)	0	136	51	0	5	0	82	557	0	0	421	39
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		10.9	17.5		10.9		49.1	49.1			38.5	38.5
Effective Green, g (s)		10.9	17.5		10.9		49.1	49.1			38.5	38.5
Actuated g/C Ratio		0.16	0.25		0.16		0.70	0.70			0.55	0.55
Clearance Time (s)		5.0	4.0		5.0		4.0	5.0			5.0	5.0
Vehicle Extension (s)		4.0	3.0		4.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		218	395		235		632	1306			1021	870
v/s Ratio Prot			0.01				0.01	c0.30				
v/s Ratio Perm		c0.10	0.02		0.00		0.08				0.23	0.02
v/c Ratio		0.62	0.13		0.02		0.13	0.43			0.41	0.04
Uniform Delay, d1		27.6	20.3		25.0		3.9	4.5			9.2	7.3
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		6.3	0.1		0.1		0.1	1.0			1.2	0.1
Delay (s)		34.0	20.5		25.1		3.9	5.5			10.4	7.4
Level of Service		C	C		C		A	A			B	A
Approach Delay (s)		25.9			25.1			5.3			10.0	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM 2000 Control Delay			11.7				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.50									
Actuated Cycle Length (s)			70.0				Sum of lost time (s)			14.0		
Intersection Capacity Utilization			75.8%				ICU Level of Service			D		
Analysis Period (min)			60									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

3: North Ave & 351 N Ave Apts

8/10/2015

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	15	28	29	788	422	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	28	29	788	422	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1276	430	437			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1276	430	437			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	96	97			
cM capacity (veh/h)	179	626	1123			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	43	817	437			
Volume Left	15	29	0			
Volume Right	28	0	15			
cSH	335	1123	1700			
Volume to Capacity	0.13	0.03	0.26			
Queue Length 95th (ft)	11	2	0			
Control Delay (s)	17.3	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.3	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			74.9%	ICU Level of Service		D
Analysis Period (min)			60			

HCM Unsignalized Intersection Capacity Analysis

4: North Ave & Washington

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	61	752	10	29	414
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	61	752	10	29	414
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1229	757			762	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1229	757			762	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	85			97	
cM capacity (veh/h)	190	408			850	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	67	762	443			
Volume Left	6	0	29			
Volume Right	61	10	0			
cSH	370	1700	850			
Volume to Capacity	0.18	0.45	0.03			
Queue Length 95th (ft)	17	0	3			
Control Delay (s)	16.9	0.0	1.0			
Lane LOS	C		A			
Approach Delay (s)	16.9	0.0	1.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization		56.4%		ICU Level of Service		B
Analysis Period (min)		60				

HCM Signalized Intersection Capacity Analysis

5: North Street & North Ave

8/10/2015

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	36	103	716	57	70	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0		6.0	6.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.90		0.99		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1655		1844		1770	1863
Flt Permitted	0.99		1.00		0.25	1.00
Satd. Flow (perm)	1655		1844		466	1863
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	103	716	57	70	356
RTOR Reduction (vph)	92	0	2	0	0	0
Lane Group Flow (vph)	47	0	771	0	70	356
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Actuated Green, G (s)	7.4		41.0		41.0	41.0
Effective Green, g (s)	7.4		41.0		41.0	41.0
Actuated g/C Ratio	0.11		0.61		0.61	0.61
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		4.0		4.0	4.0
Lane Grp Cap (vph)	183		1130		285	1141
v/s Ratio Prot	c0.03		c0.42			0.19
v/s Ratio Perm					0.15	
v/c Ratio	0.26		0.68		0.25	0.31
Uniform Delay, d1	27.2		8.6		5.9	6.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.8		3.4		2.1	0.7
Delay (s)	28.0		12.0		8.0	6.9
Level of Service	C		B		A	A
Approach Delay (s)	28.0		12.0			7.1
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.59			
Actuated Cycle Length (s)			66.9		Sum of lost time (s)	16.0
Intersection Capacity Utilization			68.4%		ICU Level of Service	C
Analysis Period (min)			60			
c Critical Lane Group						

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MEMO ACCOMPANYING 351 NORTH AVENUE (FORMER ORPHANAGE)
COA LEVEL II/MAJOR IMPACT APPLICATION

DEPARTMENT OF
PLANNING & ZONING

TO: Scott Gustin + Mary O'Neil
Senior Planners, Burlington Planning + Zoning
FROM: Burlington College + EF Farrell, LLC
DATE: July 1, 2015
RE: COA Level II, Major Impact Application

Please accept the enclosed packet of documents for review of our proposed development consisting of 63 residential studio and 1-bedroom units and 3,800 square feet of assembly space, extensive landscaping and hardscaping to create a more inviting public/college "green" along North Avenue and assembly/plaza space to the west of the building, restoration of historic features of the former Orphanage and 69 parking spaces in the adaptive reuse of the former Catholic Diocese Orphanage located at 351 North Avenue, Burlington, VT.

Enclosed you will find:

1. Two (2) City of Burlington Applications
2. A check for \$10,520 for review fees
3. An Explanation/Description of Historic Window Replacements and Skylights
4. Parking Management Plan/Request for 45% parking waiver
5. Inclusionary statement
6. Erosion Control Plan (2)

The following drawings:

7. Overall Proposed Conditions Site Plan (C1.0)
8. Existing Conditions Site Plan (C1.1)
9. Proposed Site, Grading and Drainage (C2.0)
10. Erosion Control Plan (C3.0)
11. Erosion Control Notes and Details (C3.1)
12. Site Details (C4.0-4.1)
13. L-100-104: Site (L-100), Planting (L-101), Lighting (L-102), Fire Access (L-103) Plans, Shade Calculations (L-104)
14. L-200, 201, 203: Planting Details (L-200), Lighting Details (L-201), Site Details (L-203)
15. Architectural Plans including:
 - a. A0.1 - A0.3: skylight examples and details
 - b. A1.1 - A1.6: 1st, 2nd, 3rd, 4th, 5th/Attic, Mezzanine Floor Plans
16. A2.0 Existing Condition Building Photos
17. A2.1 Proposed Building Elevations
18. A3.0 Attic/Mezzanine Sections
19. A3.1 Entry Details
20. 6 Rendered Model Drawings

351 North Avenue – Burlington College Orphanage



Replacement Windows:

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PLANNING & ZONING

This submission includes the proposal to replace the existing counter-weighted double hung wood windows with new extruded aluminum clad single hung wood windows (Ultimate Single Hung by Marvin, E-Series Single Hung by Andersen, or approved equivalent).

The existing windows are 2 over 2 sash with square top sash fabricated to appear to be arched top sash (square top exposed on interior). Replacement units will be built the same way, with simulated divided lites with matching spacer bars in the void between panes of glass. Screens will fit the size of the lower sash only (single hung windows). Existing exterior simple rope molding will remain, and existing wood sub-sills will be repaired in place as necessary; any fully deteriorated sub-sills will be replaced to match.

Extruded aluminum substrate is significantly stronger than roll-form aluminum. Finish will be specified to AAMA 2605-11 70% PVDF standard for superior resistance to fading and chalking. All major clad components (frame, sash and divided lites system) will be fabricated from the same extruded aluminum, resulting in a more uniform look over time.

Interior finish will be painted wood. Given the average sill height of 36", and the overall height of the windows (they vary according to floor), the meeting rail of the windows is difficult to reach for many people. Step stools will be provided in each unit to facilitate the locking and unlocking of the sashes.

Skylights:

New skylights will be aluminum clad fixed units, as manufactured by Velux, or approved equivalent). The aluminum cladding is a soft gray color, which will blend very nicely with the newly installed slate roofing system. Skylight locations have been carefully selected to fall within the band created by the location of the larger dormers, and centered on the smaller dormers as feasible (the dormer framing does not necessarily fall on rafter framing). Skylight size has been selected to fall between existing rafter framing for most units; in some discrete locations the units have been doubled in width to span between two sets of rafters, thus reducing the overall number of roof penetrations. More skylights are being located on the west side, in deference to minimizing the number being installed on the east side. The mezzanine spaces for the fifth floor units all have skylights on the west side (refer to attic sections).

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Inclusionary Housing Statement

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25% requirement for Inclusionary Housing in WRM districts

Out of 63 studio and one-bedroom units, 16 (25% of 63) are proposed to be rented at a price which is affordable for a household with an annual income that is sixty-five percent (65%) of median income adjusted for household size. We will determine and verify the units with the Manager of the City's Housing Trust Fund.



Parking Management Plan for BC Orphanage

DEPARTMENT OF
PLANNING & ZONING

The following information constitutes our Parking Management Plan in support of our proposal to adaptively reuse the former Diocese Orphanage at 351 North Avenue for 63 studio and one-bedroom residential units. The Burlington College use of the attached 1940s administrative building has not changed and no substantial changes are proposed to their building, use or parking. Under current zoning in the WRM zoning district and Neighborhood Parking designation, we are required to provide 2 parking spaces per unit for a total of 126 parking spaces, with the potential for a 50% parking waiver at the discretion of the DRB based on the following Parking Management Plan. The residential re-use will have no employees, clients, shifts or deliveries, outside of what is usual and customary for a residential development – mail, pizza delivery, etc. We request that 57 of the 126 (45%) required parking spaces be waived, supported by the following information. We propose to provide 69 new parking spaces onsite.

Overall, our project addresses the goals of many aspects of the Municipal Development Plan in terms of development and parking, especially as reflected in the Land Use and Built Environment chapters. Our Parking Management Plan proposes to reduce parking provided onsite by 45% for a total of 69 onsite spaces, based on the specific needs/projected demographics of our proposed development, which effectively satisfy the intent of Article 8 of the Comprehensive Burlington Zoning Ordinance and the goals of the Municipal Development Plan in the following ways:

Limited Occupancy of Units/Structure:

1. With small studio and 1 bedroom units (dictated by the rhythm of openings in our adaptive reuse development) which range in size from 278sf to approx. 935sf, these units could never house more than 2 adults, and more likely 1 adult, given the size. Reducing the amount of impervious surface for parking that is likely not needed, is a goal of the MDP.
2. The current policy of Farrell Real Estate outlines contractual limitations of no more than 2 adults in any one unit.

Dual use:

3. Dual use with the 51 spaces that currently adequately serve the adjoining College suggests that their parking lot, which is vacant in the evenings and on weekends, can serve any guest parking associated with the apartments. Dual use is a policy goal of the MDP Land Use chapter.
4. Some of the residents of the Orphanage will be students at Burlington College (BC) and find that they do not need a car. BC has, in the past, scheduled trips (for students) to the grocery store in a school van during the winter months.

Available Transportation Alternatives:

5. **Bus:** There is a CCTA bus stop immediately in front of the project site. The North Avenue “7” bus line that runs along this route can take residents downtown or to the connector hub on Cherry Street to connect with multiple other lines. There are 29 daily “7” buses that constitute this route, running with approximately .5hr lead times, from

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approximately 6am until 10pm. From the stop in front of Burlington College/the project site, the bus takes no more than 5-10 minutes to the Ethan Allen Shopping Center where many shopping needs may be met, and no more than 5-10 minutes to the Cherry Street bus hub and downtown Burlington/connecting buses.

6. **Walking:** The project site is approximately .5mile from North Street, a local-scale commercial/shopping destination, and approx. 1 mile from Burlington's downtown district.
7. **Biking:** Because of our location proximate to the bike path and North Avenue, we expect that many users will walk and not only own, but use, bicycles. We are providing one free, indoor/covered secure space for each unit in addition to 8 outdoor bike parking spaces. There will also be free bike repair and bike cleaning facilities located within the building.
8. **Carshare:** There is a Carshare VT vehicle location at the COTS building, at the intersection of North Street and North Avenue, which is about a 10min walk from the project site. We believe that Carshare is not only viable, but that a Carshare car will be located on this or an adjacent parcel over the next few years, as development begins/proceeds on the adjacent parcels.
9. **Complete Streets:** Development at the site of the former Orphanage (351 North Avenue) complements the concept of "complete streets", as it adds more housing opportunities along an existing "complete streets" corridor and provides opportunities for walkers, bikers and public transit riders. Furthermore, the meanderings of residents in this otherwise dark stretch of North Avenue will encourage more walking and biking into the evening hours (of both residents and other users of the North Avenue corridor – similar to the presence of Waterfront Housing for users of the bikepath).

329 North Ave parcel:

Existing: No lot coverage

Proposed:

New Paving = 4,321 SF

Total Lot (based on CEA lot survey – not including bike path ROW) = 1,468,329 SF

Percent Coverage = 0.29%

351 North Ave:

EXISTING CONDITIONS

Bldg (all enclosed structures)= 28,397 SF

Paved = 67,975 SF (includes all patios and walkways)

Total Coverage = 96,372 SF

Lot size = 261,360 SF

Minus slopes in excess of 30% (see below) = 246,096SF

Percent Coverage = 39.16%

PROPOSED ORPHANAGE REDEVELOPEMENT

Bldg (all enclosed structures) = 26,082 SF

Paved = 74,431 SF (including 7,164 gravel lot) (includes all patios and walkways)

Total Coverage = 100,801 SF

Lot size = 261,360 SF

Minus slopes in excess of 30% (see below)= 246,096SF

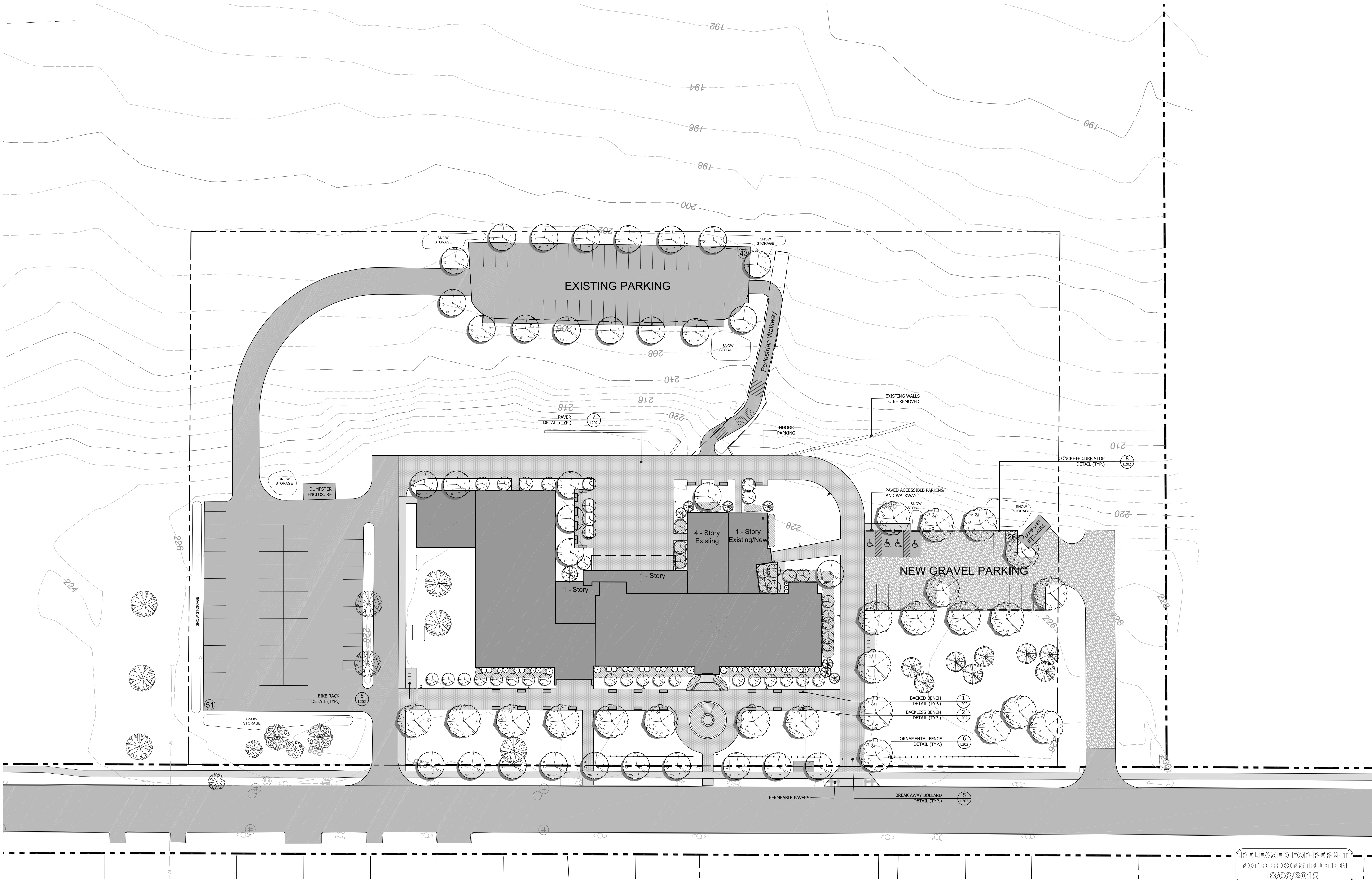
Percent Coverage = 40.96%

“Steep” Slopes

15%-30% slope = 29,456 SF – we still argue that there is no standard outlined for the use of this; the ordinance skips the standard, suggesting only that:

The DRB may under conditional use criteria allow up to 50% of the maximum building density or lot coverage to be calculated on lands with a slope between 15-30% if the applicant can demonstrate that the additional density or lot coverage will be compatible within the existing scale and intensity of the surrounding neighborhood, and not have an undue negative impact on sensitive natural features.

30% + slope = 15,264 SF



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NOT FOR CONSTRUCTION
8/06/2015

revisions	date	revisions	date
Sketch Plan Submission	2/26/15		
Preliminary Plat Submission	7/1/15		

T. J. Boyle Associates, LLC

landscape architects planning consultants
301 college street burlington vermont 05401 802 658 3555



MJB	TKD	7/1/2015
design by	drawn by	date
MJB		
checked by	scale	1" = 30'

351 North Ave
Site Plan

sheet no:
L-100



351 North Avenue - Planting Schedule

Trees		Scientific Name	Common Name	Size	Spec	Remarks	Notes
1	AN	ABIES nordmanniana	Nordmann Fir	12' Ht.	B&B		
10	AC	ACER campestre	Hedge Maple	2 1/2' Cal.	B&B		
11	AFAB	ACER xfreemani 'Autumn Blaze'	Autumn Blaze Maple	3' cal.	B&B		
12	AMEL	AMELANCHIER x.g. 'Autumn Brilliance'	Autumn Brilliance Serviceberry	6' Ht.	B&B		multi-stem, 3-4'
6	ASGM	ACER saccharum 'Green Mountain'	Green Mountain Sugar Maple	2 1/2' Cal.	B&B		
6	BNH	BETULAnigra 'Heritage'	Heritage River Birch	2 1/2' Cal.	B&B		single stem
5	CO	CELTIS occidentalis	Common Hackberry	2 1/2' Cal.	B&B		
5	GTH	GLEDITSIA l. 'Halka'	Halka Honeylocust	3' cal.	B&B		
8	PA	PICEA abies	Norway Spruce	8-10' Ht.	B&B		
19	PMR	PRUNUS domestica 'Mount Royal'	Mount Royal Plum	1 1/2' Cal.	15 Gal. Cont.		
4	MDW	MALUS Donald Wyman'	Donald Wyman Crabapple	2 1/2' Cal.	B&B		
9	MSC	MAGNOLIA stellata 'Centennial'	Centennial Star Magnolia	8' Ht.	B&B		
7	TON	THUJA occidentalis 'Nigra'	Techyn Arborvitae	12' Ht.	B&B		
8	UAP	ULMUS americana 'Princeton'	Princeton Elm	2 1/2' Cal.	B&B		
6	ZS	ZELKOVA serrata 'Greenvase'	Greenvase Zelkova	2 1/2' Cal.	B&B		

Shrubs							
Qty.	Code	Scientific Name	Common Name	Size	Spec	Remarks	Notes
4	AAB	ARONIA arbutifolia 'Brilliantissima'	Brilliant Red Chokeberry	4' Ht.	B&B	4' O.C. install w subside drain at time of transplant shock	
61	JSB	JUNIPERUS sabina 'Broadmoor'	Broadmoor Juniper	24" Ht.	#5 Cont.		
35	MD	MICROBIOTA decussata	Siberian Cypress	15" Ht.	#3 Cont.		
16	RCA	RHOODENDRON cat. 'Album'	White Catawba Rhododendron	3-4" Ht.	B&B		
29	SBAW	SPIRAEA x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	24"	B&B		
3	SJLP	SPIRAEA japonica 'Little Princess'	Little Princess Spirea	18"	#3 Cont.		
11	TME	TAXUS x m. 'Everlow'	Everlow Yew	36" Ht.	B&B		3.5' O.C.

Groundcovers, Ferns & Perennials							
Qty.	Code	Scientific Name	Common Name	Size	Spec	Remarks	Notes
8	DP	DENNSTAEDTIA punctiloba	May Scented Fern	Clump	#2 Cont.		
13	PD	PHLOX divoricata 'Mary Helen'	Mary Helen Phlox	Clump	#1 Cont.		
240	PT	PACHYSANDRA 'Green Sheen'	Green Sheen Pachysandra	Clump	Quart Cont.		15' O.C.
225	PM	PERENNIAL MIX		Clump	#2 Cont.		18' O.C.
180	WT	WALDSTEINIA ternata	Barren Strawberry		Quart Cont.		12' O.C.

LEGEND

1.00 LIGHT LEVEL

0.50 LIGHT LEVEL

0.1 LIGHT LEVEL

PROPOSED LED UNIVERSE
FIXTURE (14', 15' HEIGHT)
(ARROW INDICATES LUMINAIRE
INSTALLATION DIRECTION)

- GENERAL LIGHTING NOTES:**
1. ALL FIXTURES FULL CUT-OFF
 2. CRI MINIMUM OF 70
 3. ALL CALCULATIONS SHOWN IN FOOTCANDLES
 4. NEARBY EXISTING FIXTURES NOT INCLUDED IN CALCULATIONS

CALCULATION STATISTICS:

AREA	MAX	MIN	AVG	MAX / MIN	AVG / MIN
ROAD/PARKING	3.99	.30	1.00	13.09	3.28
SIDEWALKS	1.95	.21	.82	9.51	4.00
CANOPY	2.96	.52	1.76	5.73	3.40

LUMINAIRE SCHEDULE

LABEL	QTY	SYMBOL	MANUFACTURER/FIXTURE/ ORDERING INFO	LAMP	VOLTAGE	FINISH	POLE	ARM	FINISH	MOUNTING HT.
UL4	4	☉	BEACON - URBAN LARGE LED 3000K (TYPE 4) MRDS-26-24NB-27-3K-T4-UNV-NRNW-BBT	24 LED 3K	120*	BBT	SH04-S-14**-4M-OT-BBT	AA-44-S-4-B-BBT	BBT	25'
US3	17	☉	BEACON - URBAN SMALL LED 3000K (TYPE 3) MRDS-21-24NB-27-3K-T3-UNV-NRNW-BBT	24 LED 3K	120*	BBT	SH06-S-25-6Q-OT-BBT	AA-44-S-6-B-BBT	BBT	12.5'
C	14	☼	PRESCOLITE - LITEFRAME 6" LED OPEN DOWNLIGHT LF6LEDGR ALL CAN LIGHTS TO BE DIMMED TO 35 OR 40%		120*	BLK				8' - 14'

NOTE:
* VOLTAGE TO BE VERIFIED BY ELECTRICAL ENGINEER PRIOR TO ORDERING
** CUT POLE TO 12.5'

NOTE: Walkway Lighting - Light levels for pedestrian areas meet IESNA recommendation per (IESNA) *Lighting for Exterior Environments* (RP-33-99), which recommends a MINIMUM maintained average horizontal illuminance level of 0.5 footcandles and a 4:1 horizontal average to minimum ratio. Light levels are specific to the Intermediate area classification, which is defined as "those areas of a municipality often characterized by moderately heavy nighttime pedestrian activity such as in block having libraries, community recreation centers, large apartment building, industrial buildings, or neighborhood retail stores."

revisions	date	revisions	date
Submission for Preliminary Plat	07/01/2015		
Released for Permit	08/06/2015		

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date
6/29/2015
scale
1" = 30'

351 North Ave
Lighting Layout Plan

sheet no:

L-102

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LANDSCAPE LEGEND

LARGE DECIDUOUS TREE

SMALL DECIDUOUS TREE

FLOWERING/ORNAMENTAL TREE

LARGE CONIFEROUS TREE

SMALL CONIFEROUS TREE/SHRUB

SMALL SHRUB

PERENNIAL/SMALL SHRUB

GROUND COVER/PERENNIAL MASSING

SHADE CALCULATIONS: Plant Sizes and Shadow Offset			
Trees	Mature Height	Mature Canopy Size	Shadow Offset
Large Deciduous	65'	33'	25.0'
Medium Deciduous	50'	40'	19.2'
Small Deciduous	30'	25'	11.5'
Ornamental Deciduous	15-20'	10'	7.5'
Large Coniferous	65'	30'	25.0'
Medium Coniferous	40'	15'	15.4'
Small Coniferous	20'	5-10'	7.5'
All non-conifer tree shadows calculated at a limbed up height of 20'			

SUN ANGLE CALCULATION DATA FOR PROJECT LOCATION

LONGITUDE: 73 D 13' 53" WEST
LATITUDE: 44 D 29' 33" NORTH
CALCULATION DATE: JUNE 21, 2015
ELEVATION: 222
TIME: SOLAR NOON (11:54 AM EST)

RESULTING SUN ALTITUDE ANGLE: 64.57°

EXAMPLE:

SUN ANGLE

MATURE MEDIUM SHADE TREE
APPROXIMATELY 50' TALL X 35' WIDE

SHADE EXTENDS DUE NORTH 23' FROM CENTER OF TREE

64.57°

23'

MATURE HEIGHT OF SHADE TREE

SHADED AREA

SHADE CALCULATION TOTALS

TOTAL IMPERVIOUS SURFACE IN PARKING LOT 1	= 8,006 SF
TOTAL SHADE FROM MATURE TREE HEIGHTS LOT 1	= 4,940 SF
TOTAL SHADE	= 61.7%
TOTAL IMPERVIOUS SURFACE IN PARKING LOT 2	= 12,180 SF
TOTAL SHADE FROM MATURE TREE HEIGHTS LOT 2	= 7,600 SF
TOTAL SHADE	= 62.4%
TOTAL SHADE REQUIRED	= 30%

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revisions	date		
Preliminary Plat Submission	7/1/15		

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scale

07/1/2015
date
1" = 20'

351 North Ave
Shade Calculations Plan

sheet no:
L-104

TREE PROTECTION NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL TREE PRESERVATION MEASURES MUST BE IMPLEMENTED.
2. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS.
3. TREE PROTECTION FENCING SHALL REMAIN INTACT THROUGHOUT ALL CONSTRUCTION ACTIVITY.
4. PRIOR TO THE SITE VISIT ALL TREE PRESERVATION AREAS SHALL BE STAKED OUT ON SITE BY SURVEY.
5. NO MATERIALS OR EQUIPMENT SHALL BE STORED, STOCKPILED OR OPERATED WITHIN TREE PROTECTION AREAS.
6. TREE PROTECTED AREAS WILL BE LEFT AS NATURAL AS POSSIBLE.
7. THE CONTRACTOR CHOSEN FOR THIS WORK WILL BE AN EXPERIENCED TREE SERVICE FIRM THAT HAS SUCCESSFULLY COMPLETED TREE PROTECTION, ROOT PRUNING, AND TRIMMING WORK, SIMILAR TO THAT REQUIRED FOR THIS PROJECT.
8. IN AREAS OF EXCAVATION NEAR TREE, IDENTIFY AND CUT ROOTS IN CONSULTATION WITH OWNER.
9. REMOVE POORLY ATTACHED AND RUBBING LIMBS, CLEAN THE CROWN OF DEAD, DISEASED AND WEAK LIMBS, THINNING OF HEALTHY LIMBS IS NOT RECOMMENDED AT THIS TIME.
10. ANY NECESSARY TRENCHING SHALL BE IMMEDIATELY BACKFILLED WITH REMOVED SOIL OR OTHER HIGHLY ORGANIC SOIL.
11. AN AIR SPADE IS TO BE USED TO EXCAVATE DOWN TO MINIMUM OF 2'. SEE DETAIL 8BAL200.
12. THERE WILL BE NO EXCAVATION FOR PROPOSED SITE WORK WITHIN FENCED AREA.

GENERAL PLANTING NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK (ANSI) PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR EQUAL.
5. PLANTS SHALL BE INSTALLED SUCH THAT THE ROOT FLARE IS AT OR SLIGHTLY ABOVE FINAL GRADE (DUE TO NURSERY PRACTICES THIS MAY REQUIRE REMOVING SOIL FROM THE TOP OF THE ROOT BALL TO LOCATE THE ROOT FLARE).
6. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING.
7. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
8. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR EQUAL.
9. LANDSCAPE ARCHITECT MAY REQUIRE ALL PLANTS BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS AFTER PLANTING. IN TEMPERATE ZONES, ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
10. ALL PLANT BEDS MUST HAVE A MINIMUM PLANT BED DEPTH OF 18" WITH A 2/3 TOPSOIL TO 1/3 COMPOST MIX. REMOVE SUBGRADE AND OTHER FILL IN PLANTING AREAS ON SITE.
11. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS.
12. STAKING PLANTS IS AT THE DISCRETION OF THE CONTRACTOR. ONLY STAKE PLANTS AS SPECIFIED BY LANDSCAPE ARCHITECT.
13. THE LANDSCAPE CONTRACTOR SHALL PROVIDE AMENDED BACKFILL AS PER THE CONTRACT SPECIFICATIONS.
14. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY, IF NECESSARY, DURING THE FIRST GROWING SEASON.
15. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
16. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS RELATED TO THE TIME OF PLANTING.

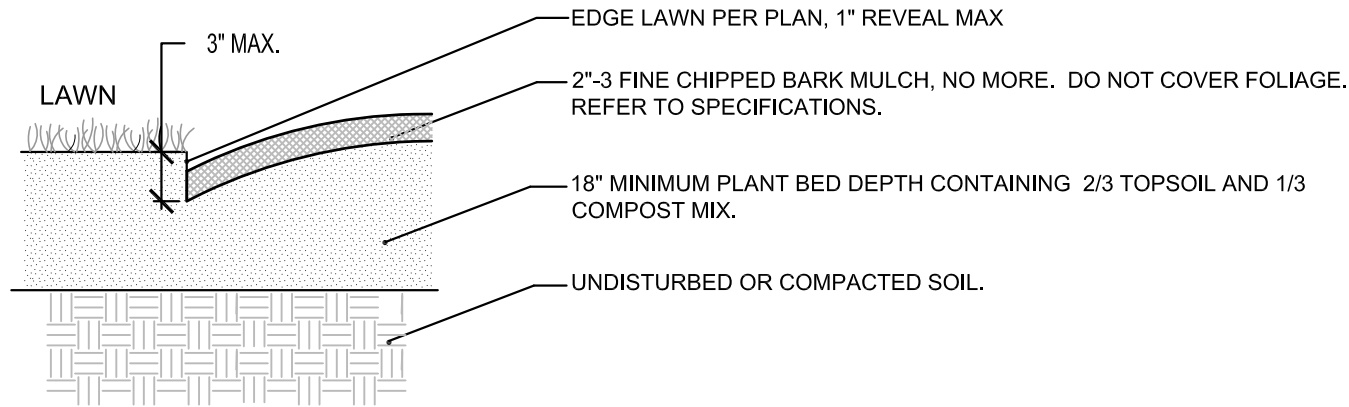
PLANT SPACING CHART

Spacing 'D'	Row 'A'	Number of Plants	Area Unit
6" O.C.	5.2"	4.61	1 SQ. FT.
8" O.C.	6.93"	2.6	
10" O.C.	8.66"	1.66	
12" O.C.	10.4"	1.15	
15" O.C.	13.0"	7.38	10 SQ. FT.
18" O.C.	15.6"	5.12	
24" O.C.	20.8"	2.91	
30" O.C.	26.0"	1.55	
36" O.C.	30.0"	1.25	100 SQ. FT.
4' O.C.	3.46'	7.25	
5' O.C.	4.38'	4.61	
6' O.C.	5.2'	3.2	
8' O.C.	6.93'	1.8	
10' O.C.	8.66'	1.16	1000 SQ. FT.
12' O.C.	10.4'	8	
15' O.C.	13.0'	5	
20' O.C.	17.3'	2.88	
25' O.C.	21.65'	1.85	10,000 SQ. FT.
30' O.C.	26.0'	1.29	
40' O.C.	34.6'	7.22	10,000 SQ. FT.

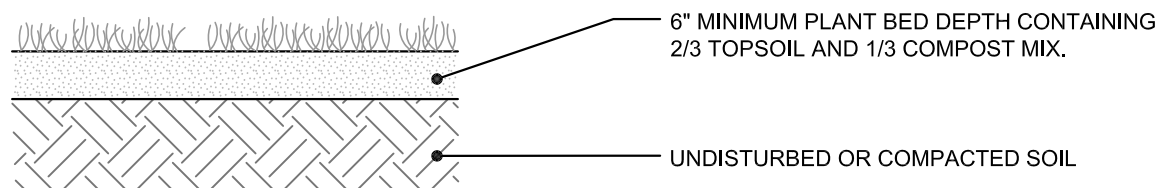
O.C. = ON CENTER
FOR USE WHEN PLANTS ARE SHOWN EQUIDISTANT FROM EACH OTHER (AS SHOWN)

PLANT SPACING CHART

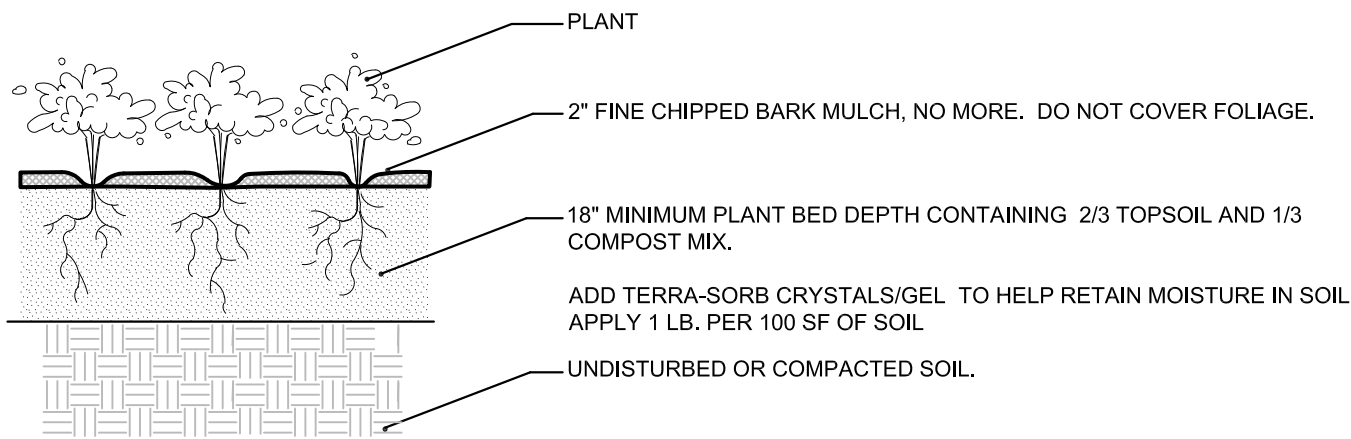
7 PLANT SPACING CHART DETAIL
L200 NTS



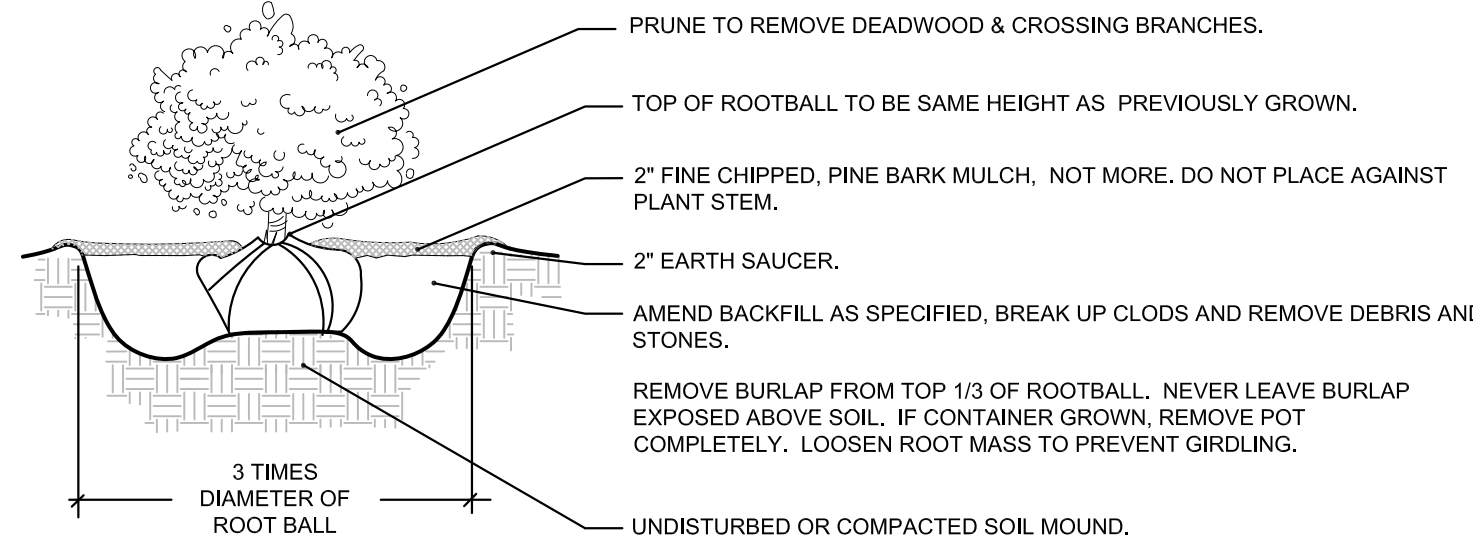
6 TYPICAL PLANT BED/PLANTING AREA DETAIL
L200 NTS



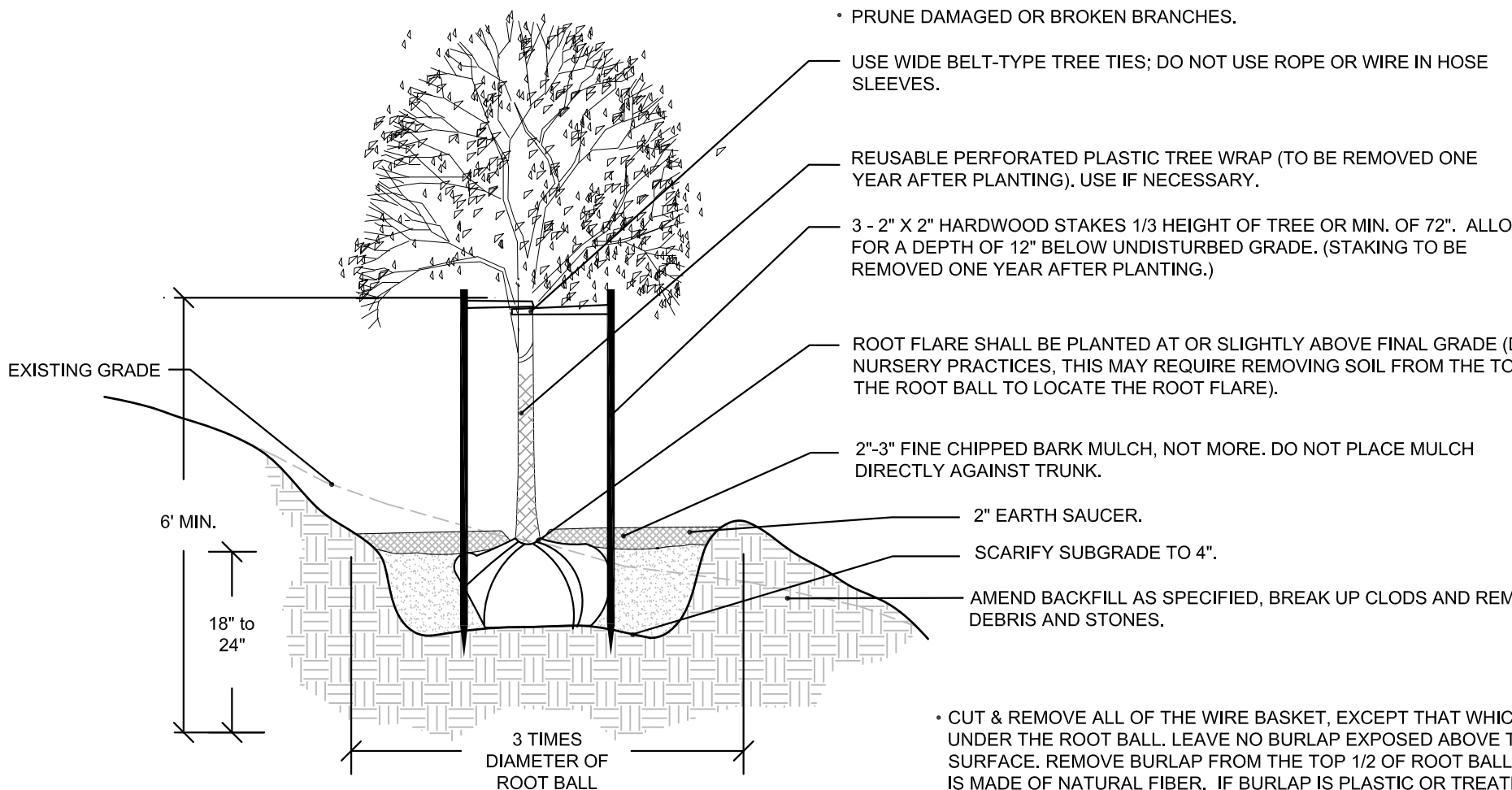
5 LAWN AREA/TOPSOIL & SEEDING DETAIL
L200 NTS



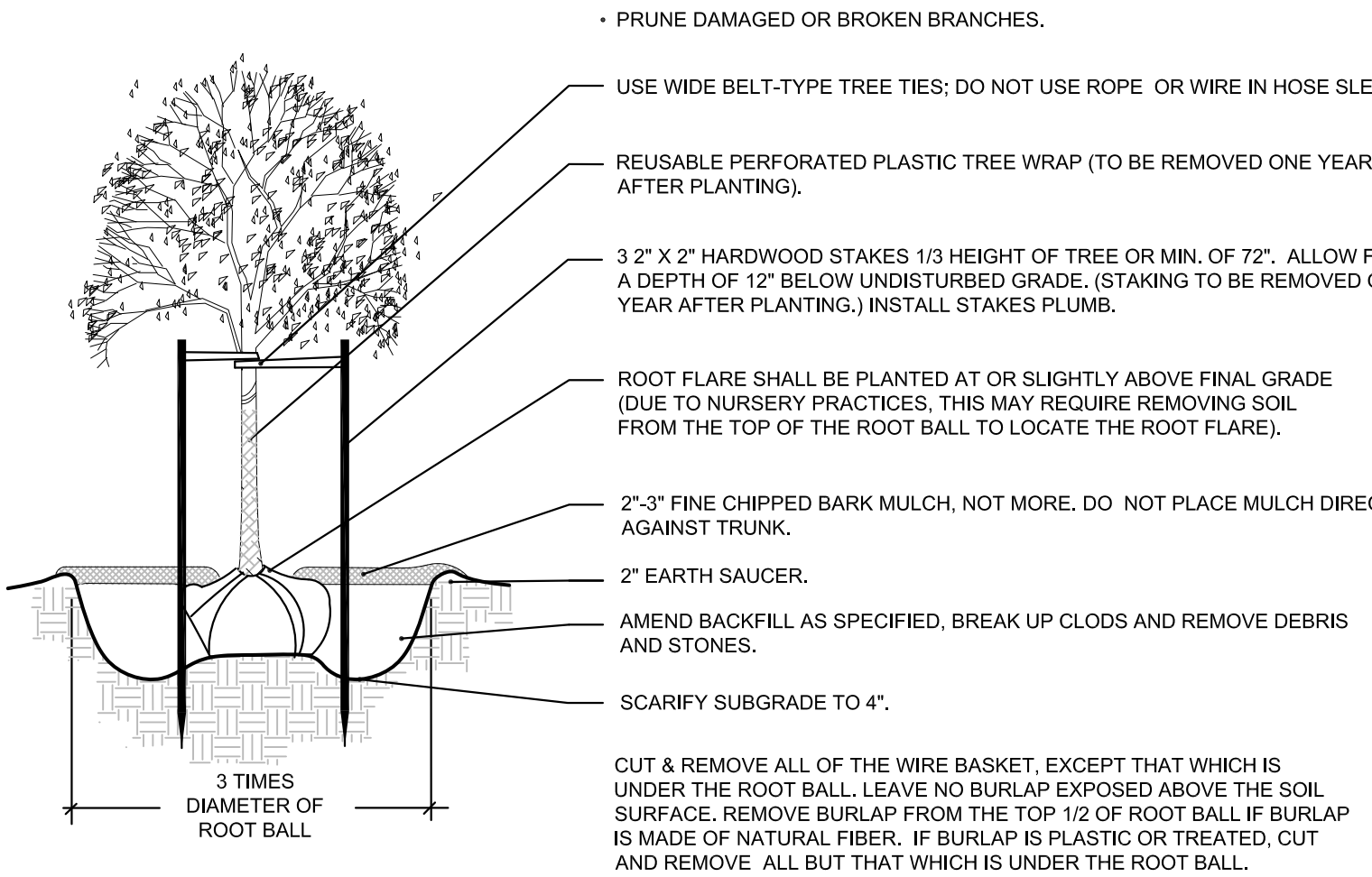
4 TYPICAL GROUNDCOVER PLANTING
L200 NTS



3 SHRUB PLANTING
L200 NTS



2 TREE PLANTING ON SLOPE DETAIL
L200 NTS



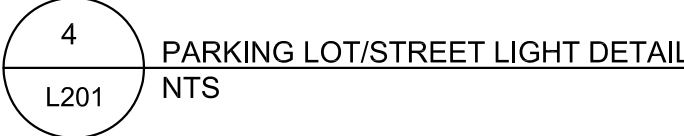
1 TREE PLANTING DETAIL
L200 NTS

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4 PEDESTRIAN POLE, 12.5' MOUNTING HEIGHT
L201

4 PEDESTRIAN POLE, 12.5' MOUNTING HEIGHT
L201

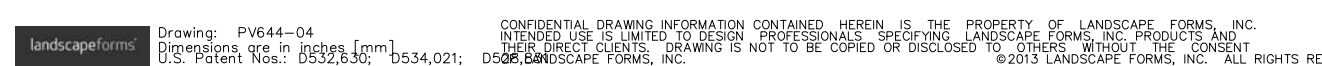
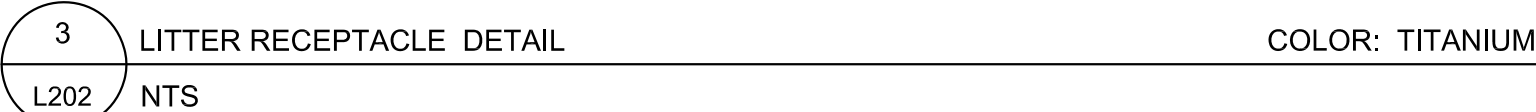
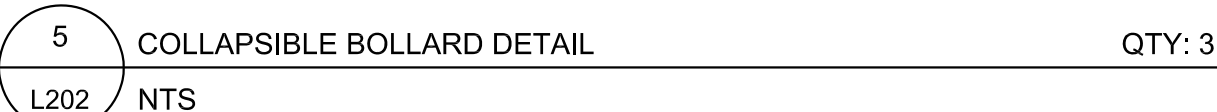
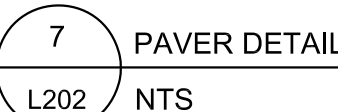
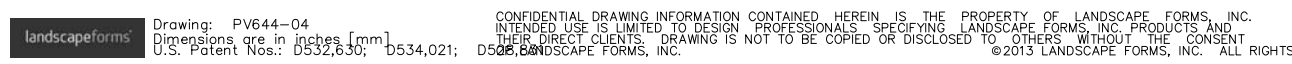
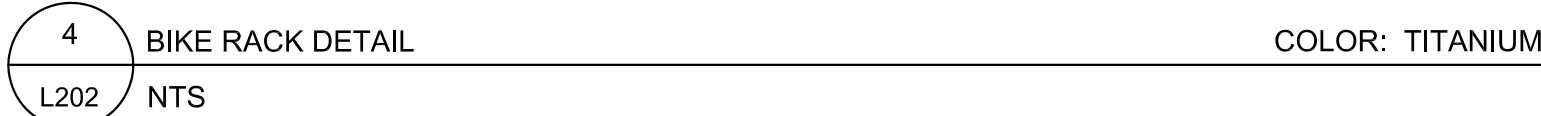
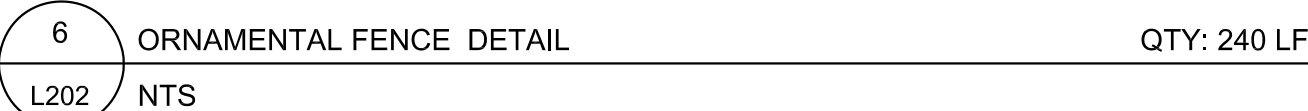
2 LED SITE FIXTURE - BEACON URBAN (SMALL)
L201



5 SITE POLE, 25' MOUNTING HEIGHT
L201

3
L201 SITE AND PEDESTRIAN POLE ARM (SINGLE ARM)

1 LED SITE FIXTURE - BEACON URBAN (LARGE)
L201



Set no: **L202**

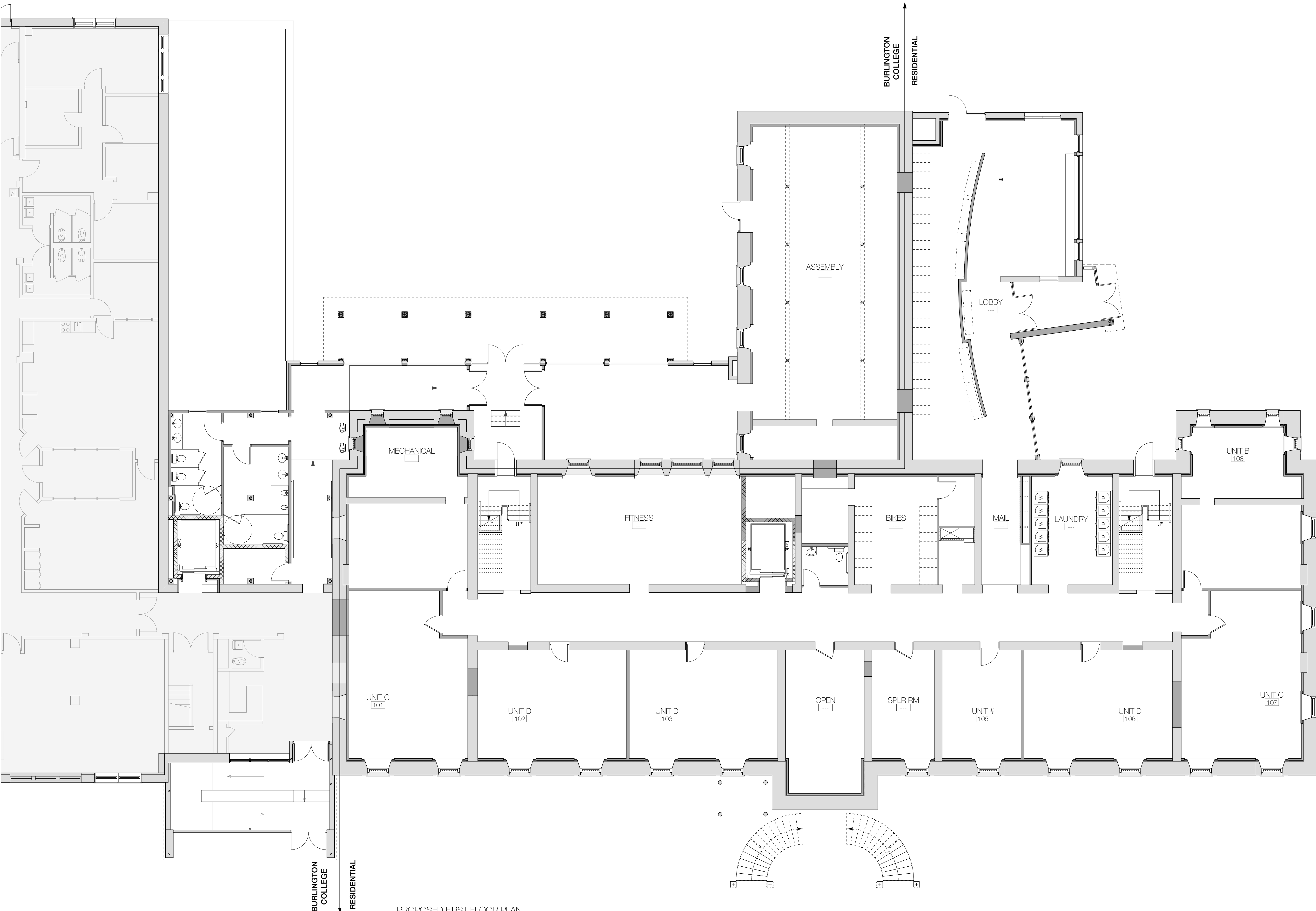












PROPOSED FIRST FLOOR PLAN
Scale: 1/8" = 1'-0"

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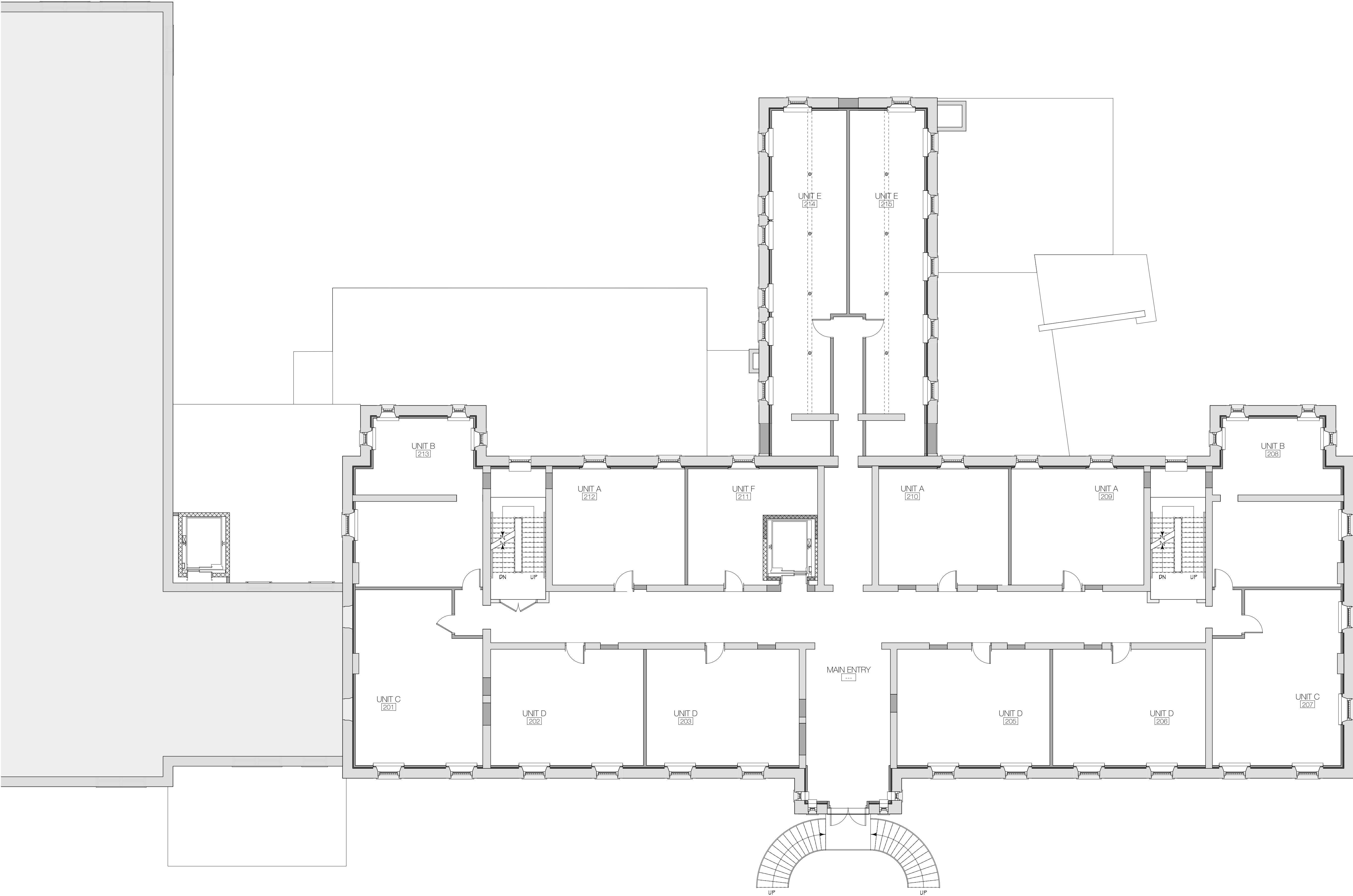
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A1.1



PROPOSED SECOND FLOOR PLAN
Scale: 1/8" = 1'-0"

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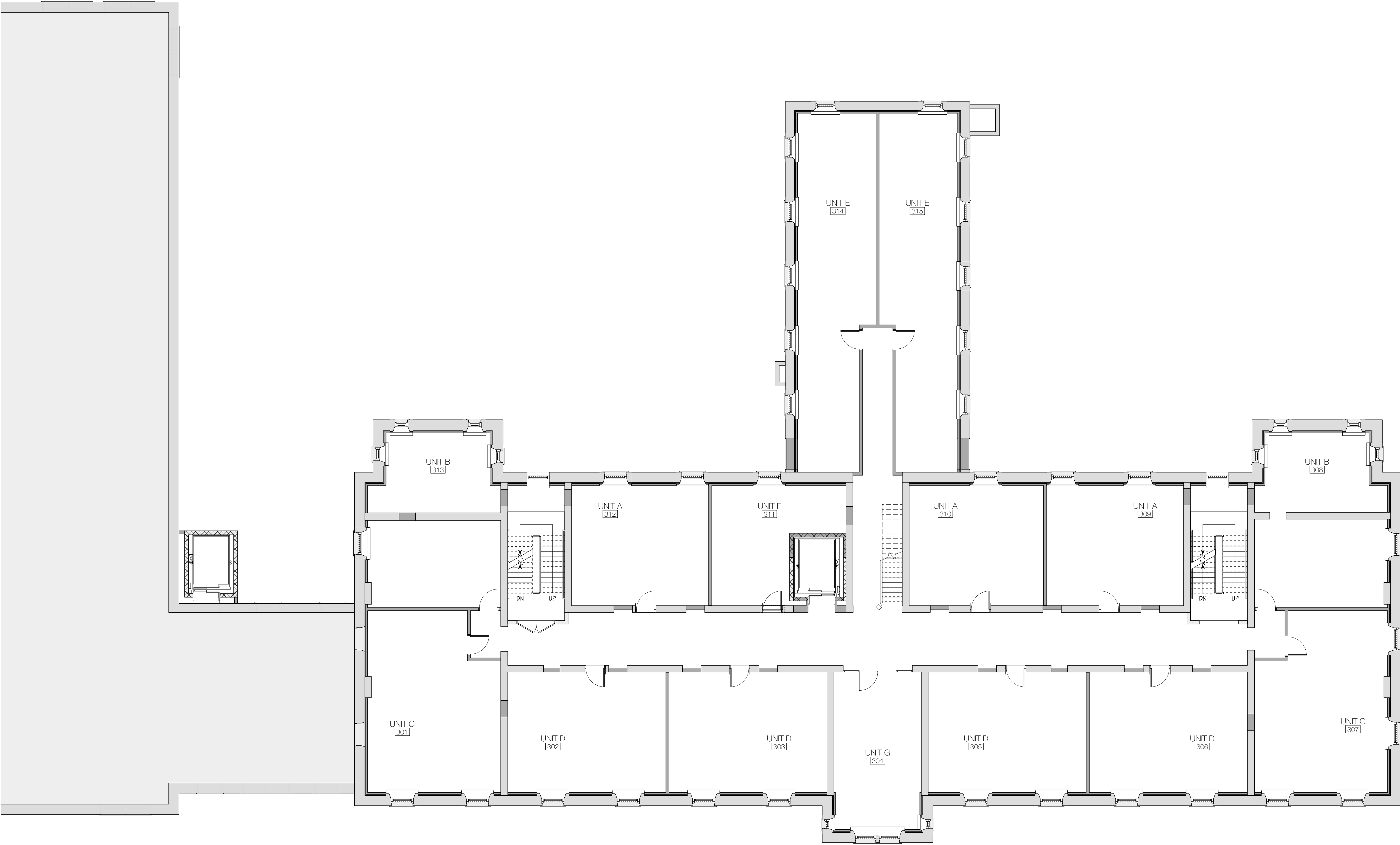
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PROPOSED THIRD FLOOR PLAN
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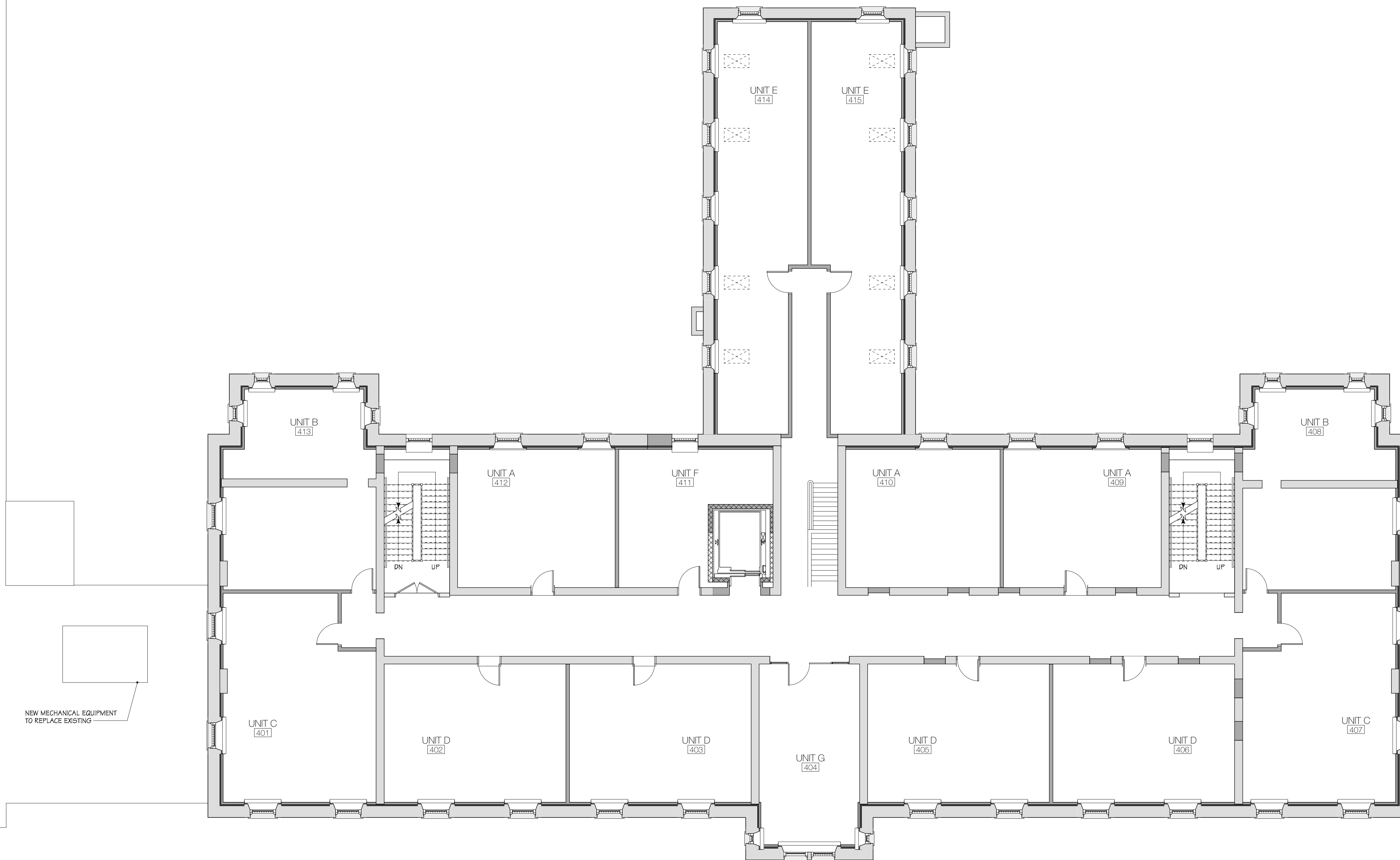
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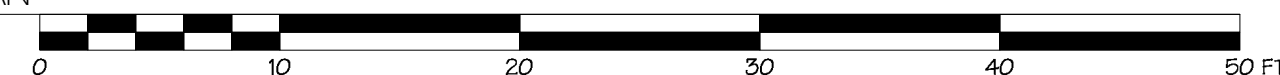
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PROPOSED FOURTH FLOOR PLAN
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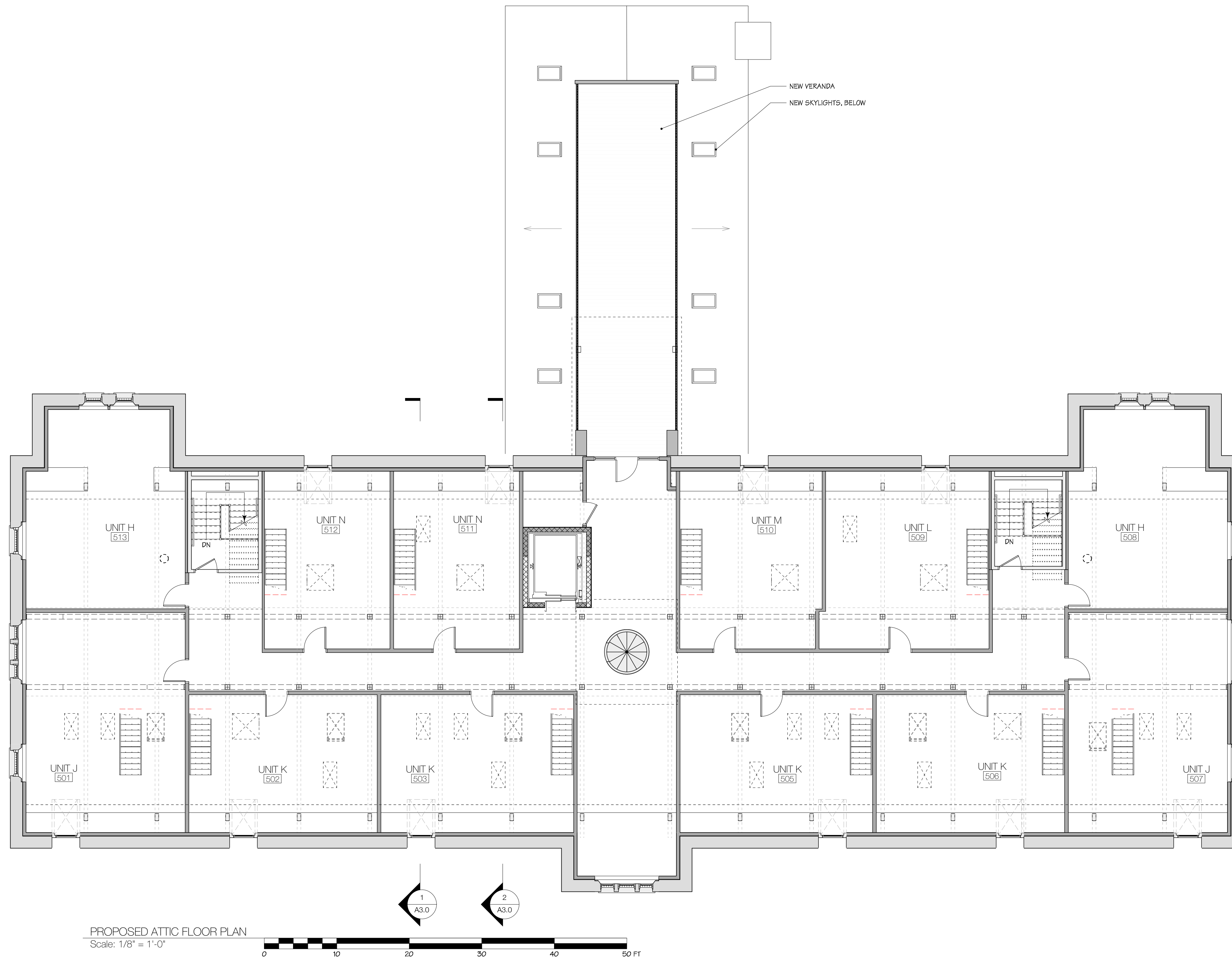
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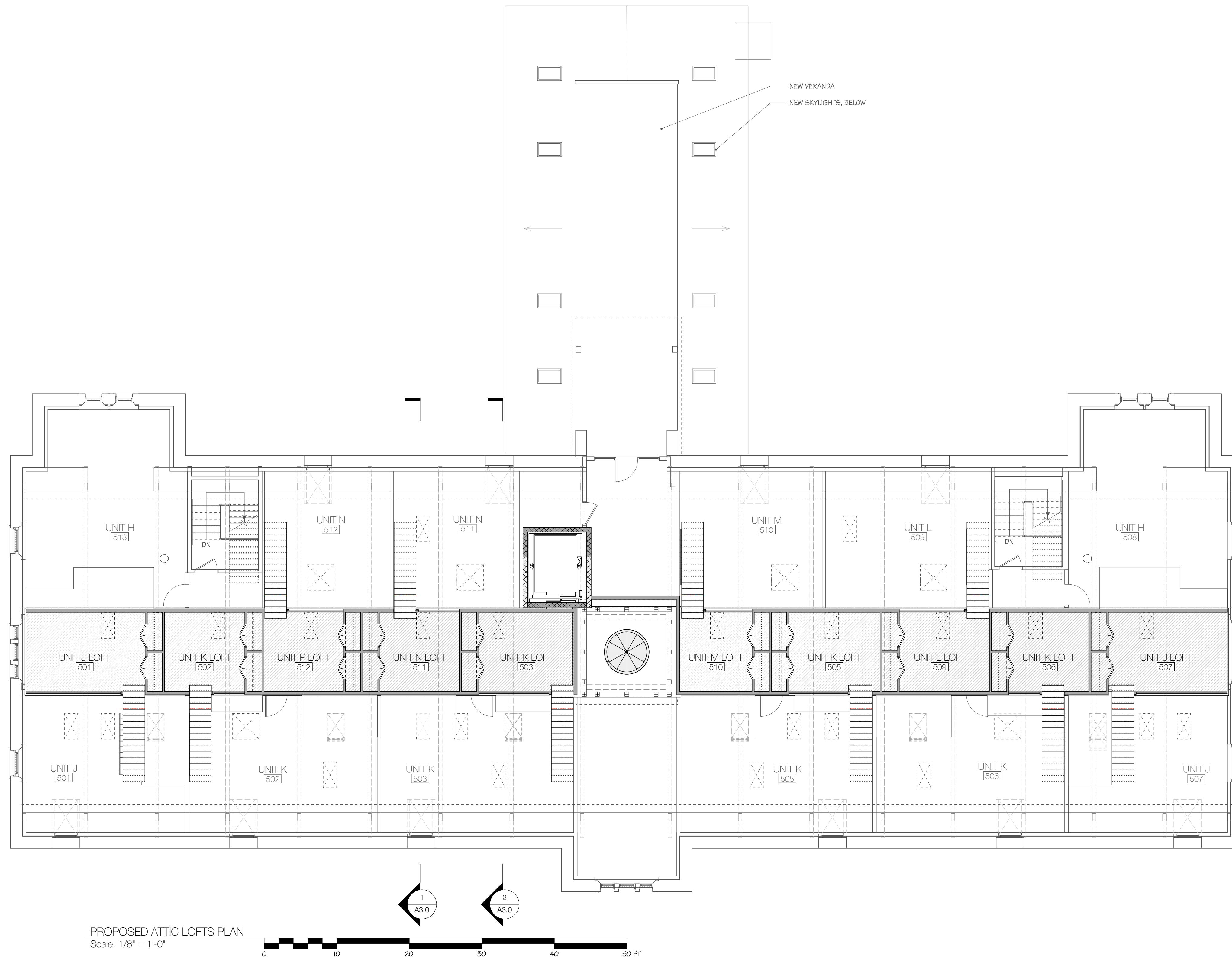
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A1.6



BURLINGTON COLLEGE ENTRY



VIEW FROM EAST



VIEW FROM NORTHWEST



VIEW FROM SOUTHWEST

351 NORTH AVE
BURLINGTON, VERMONT

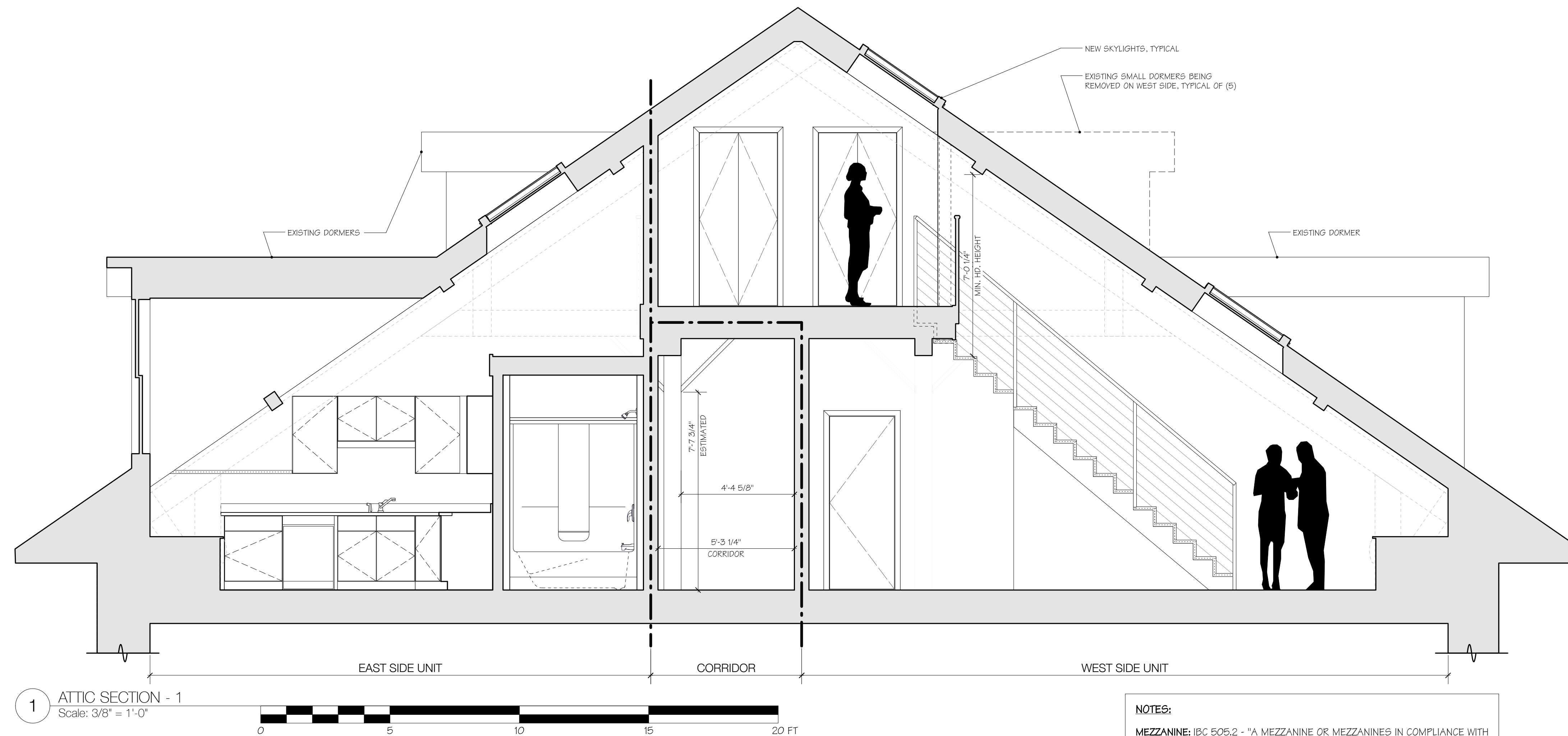
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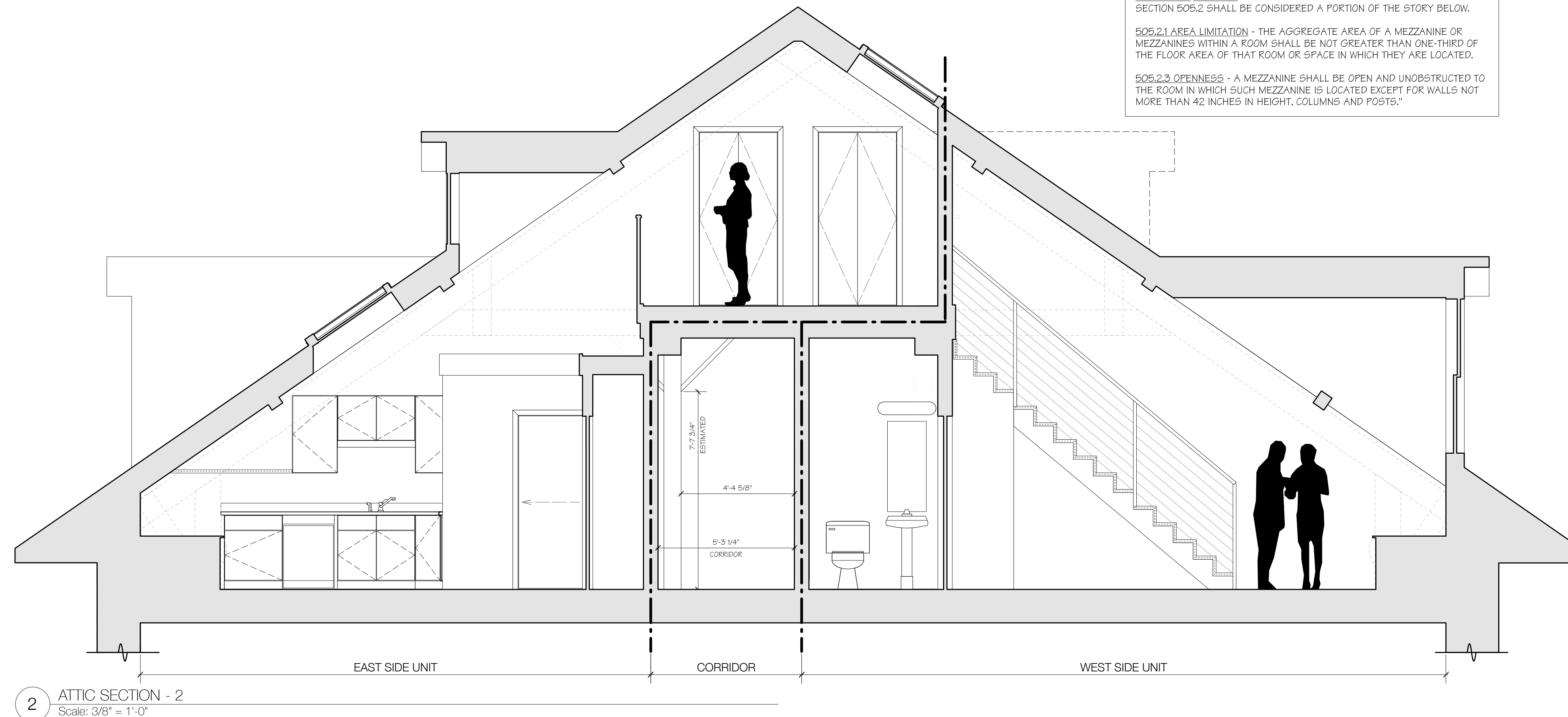


NOTES:

MEZZANINE; IBC 505.2 - "A MEZZANINE OR MEZZANINES IN COMPLIANCE WITH SECTION 505.2 SHALL BE CONSIDERED A PORTION OF THE STORY BELOW.

505.2.1 AREA LIMITATION - THE AGGREGATE AREA OF A MEZZANINE OR MEZZANINES WITHIN A ROOM SHALL BE NOT GREATER THAN ONE-THIRD OF THE FLOOR AREA OF THAT ROOM OR SPACE IN WHICH THEY ARE LOCATED.

505.2.3 OPENNESS - A MEZZANINE SHALL BE OPEN AND UNOBSTRUCTED TO THE ROOM IN WHICH SUCH MEZZANINE IS LOCATED EXCEPT FOR WALLS NOT MORE THAN 42 INCHES IN HEIGHT, COLUMNS AND POSTS."



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A3.0

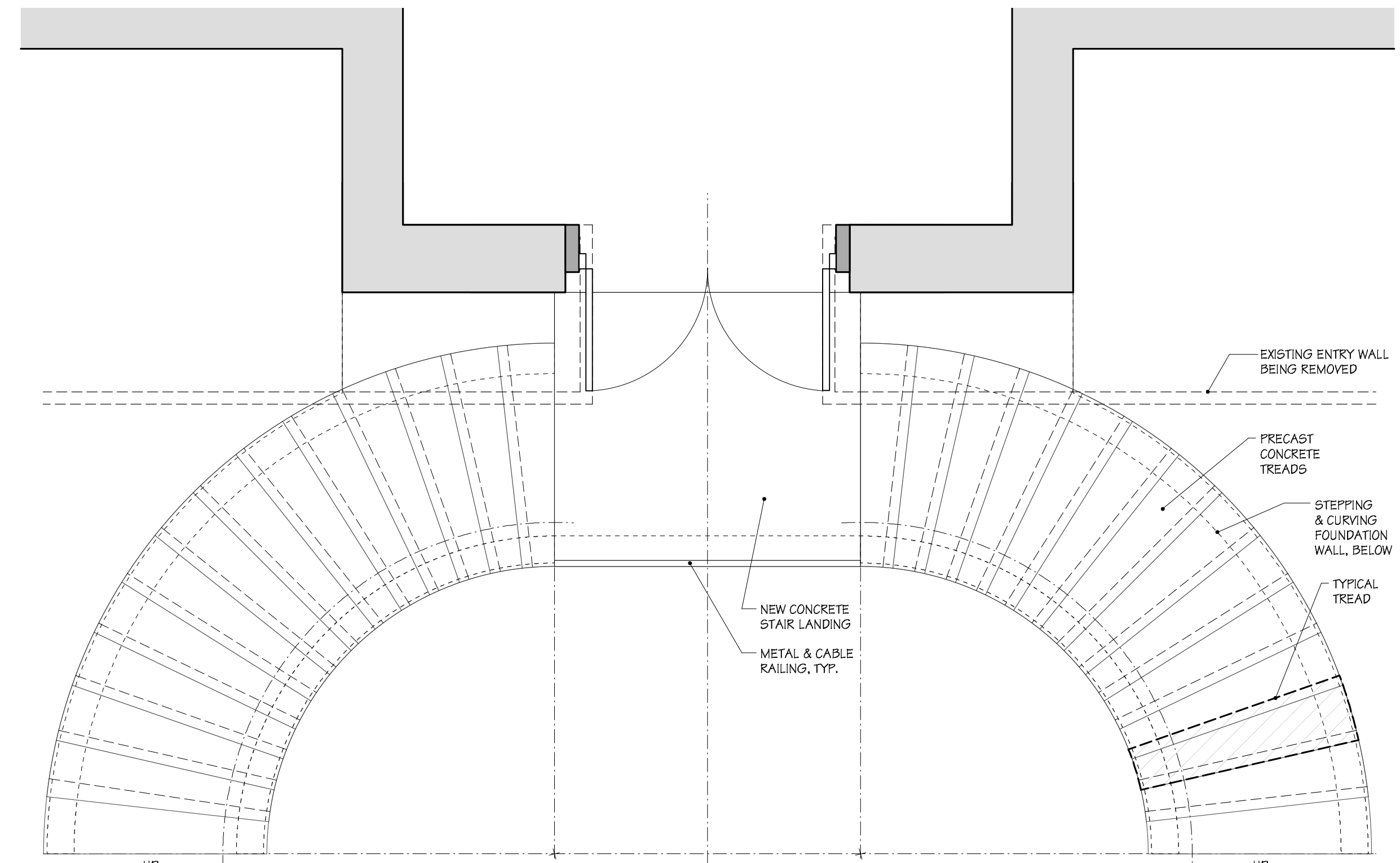
REMOVE EXISTING PORTE COCHERE AND
GABLE ROOF. CONSTRUCT NEW FLAT
ROOF FOR BURLINGTON COLLEGE ENTRY

NEW ALUMINUM STOREFRONT ENTRANCE



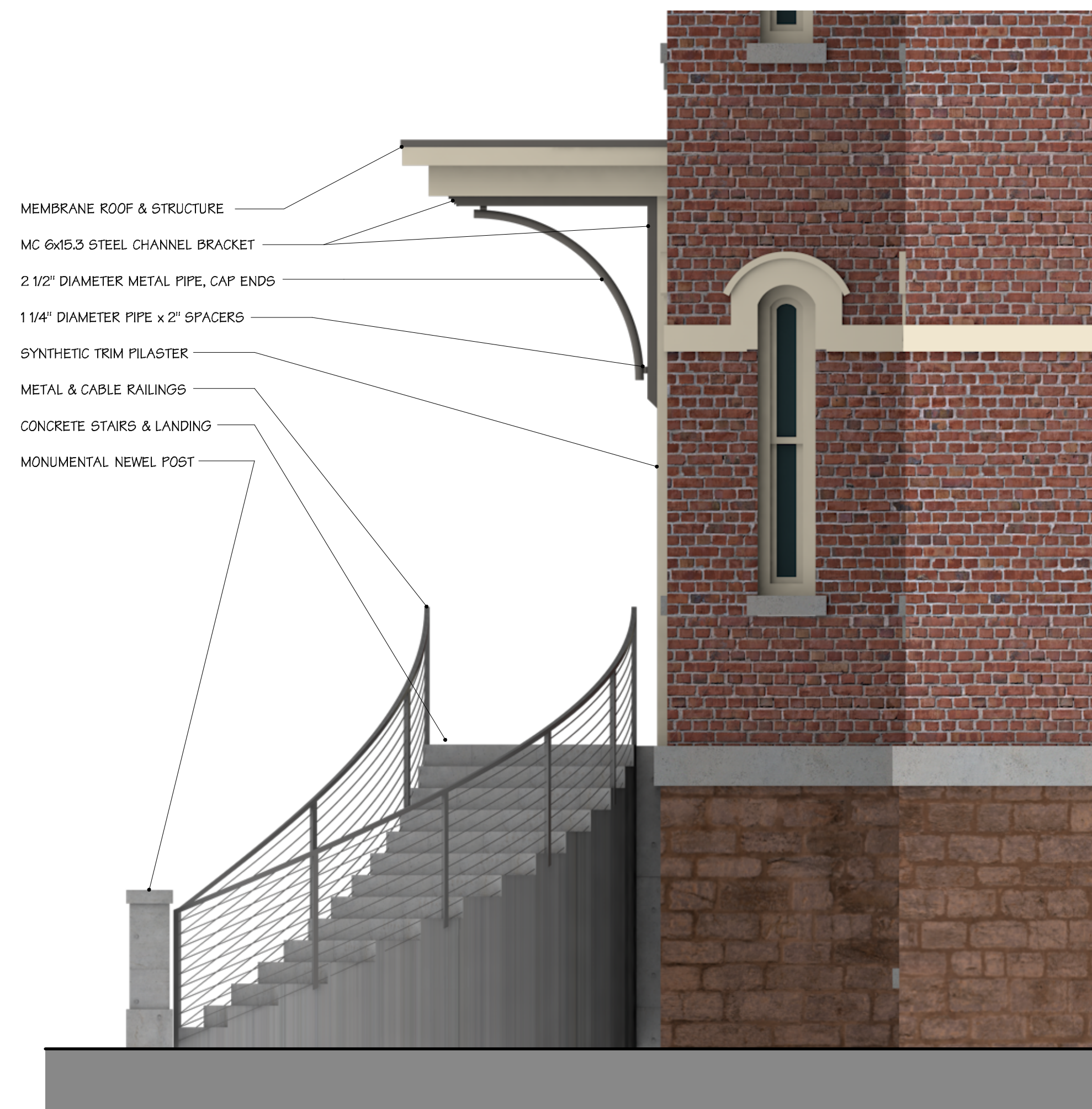
BURLINGTON COLLEGE ENTRY - EAST ELEVATION

Scale: 3/8" = 1'-0"



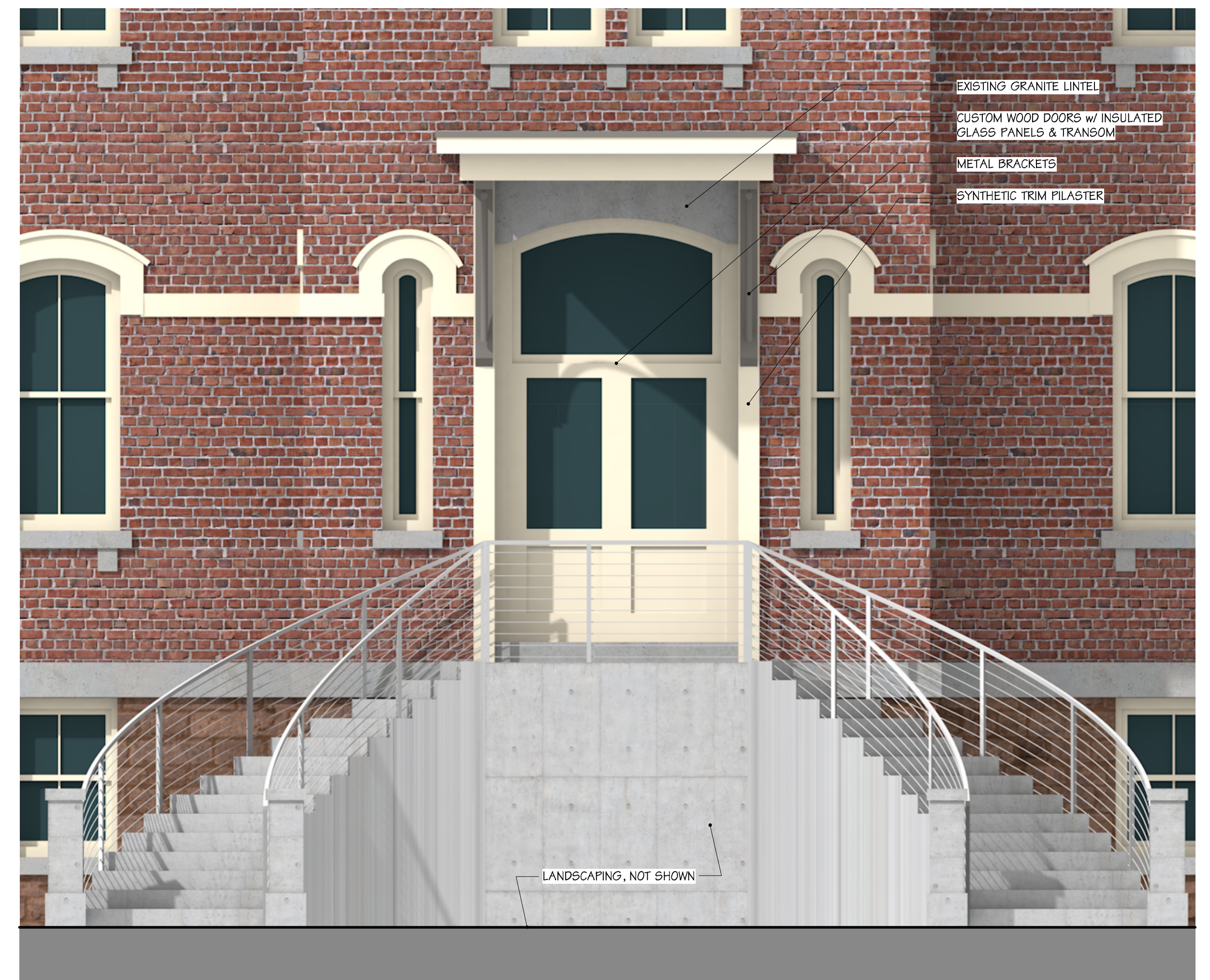
NORTH AVE. ENTRY STAIRS - PLAN

Scale: 3/8" = 1'-0"



NEW ENTRY STAIRS & CANOPY - NORTH ELEVATION

Scale: 3/8" = 1'-0"



NEW ENTRY STAIRS & CANOPY - EAST ELEVATION

Scale: 3/8" = 1'-0"

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A3.1





Orphan Asylum, Burlington, Vt.



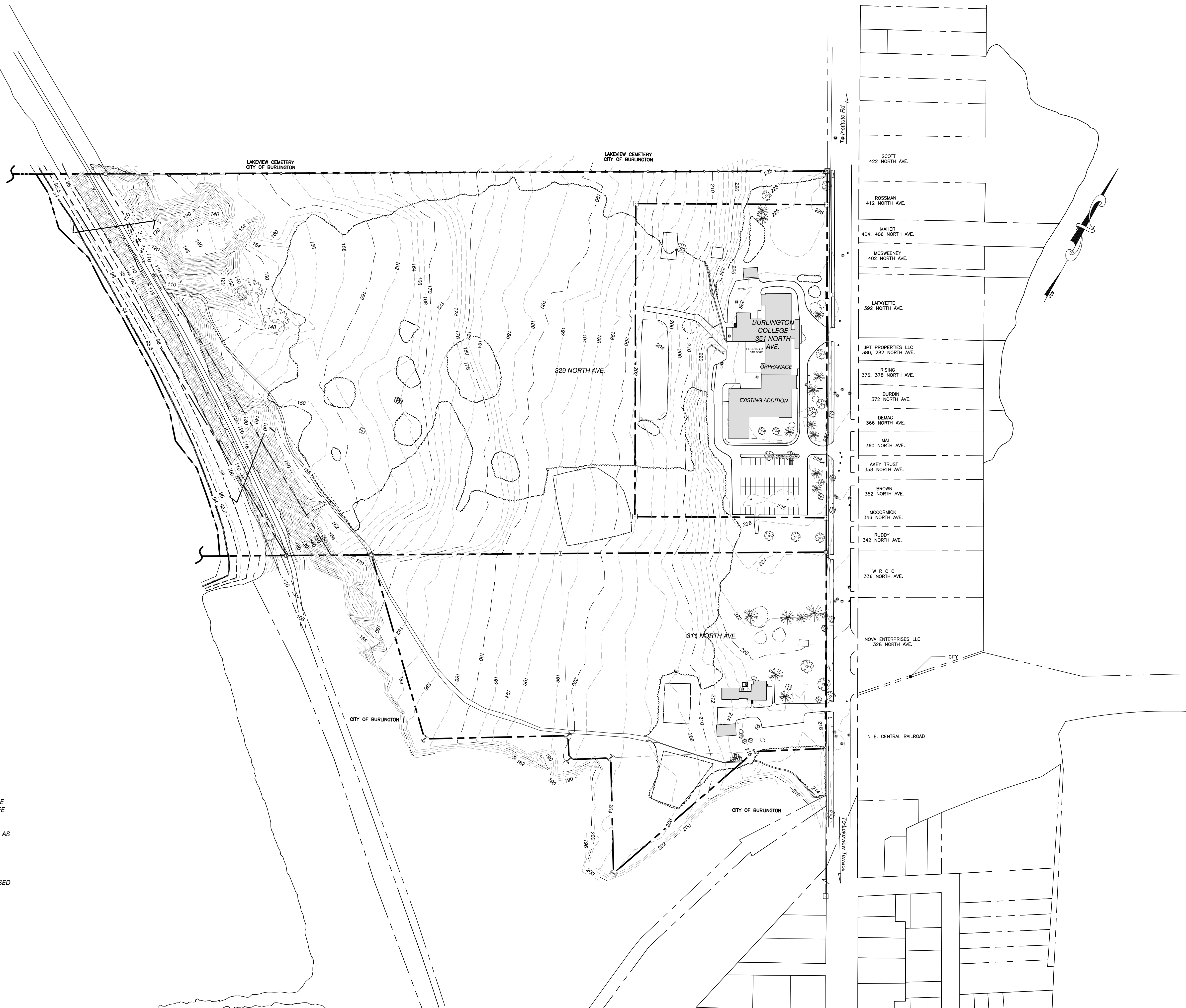
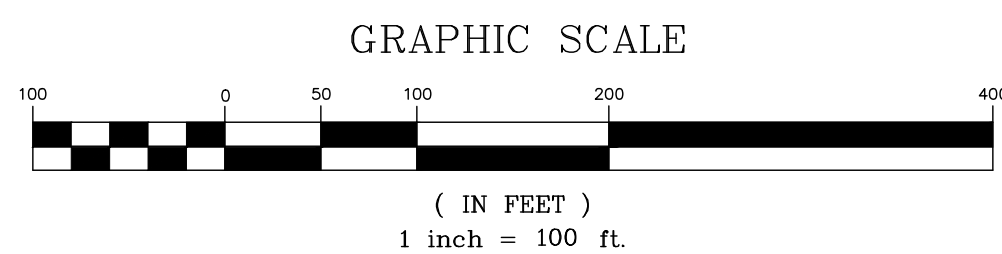
ST. JOSEPH'S ORPHANAGE, BURLINGTON, VERMONT.



ENTRANCE ST. JOSEPH'S ORPHAN ASYLUM BURLINGTON VT. 1175

	APPROXIMATE PROPERTY LINE
	APPROXIMATE SETBACK LINE
	EXISTING CONTOUR
	EXISTING CURB
	EXISTING CHAINLINK FENCE
	EXISTING WIRE FENCE
	EXISTING GRAVEL
	EXISTING PAVEMENT
	EXISTING GUARD RAIL
	EXISTING ELECTRIC
	EXISTING FORCEMAIN
	EXISTING GAS
	EXISTING STORM
	EXISTING GRAVITY SEWER
	EXISTING TELEPHONE
	EXISTING WATER
	EXISTING SWALE
	EXISTING SEWER MANHOLE
	EXISTING STORM MANHOLE
	EXISTING CATCH BASIN
	EXISTING WELL
	EXISTING HYDRANT
	EXISTING SHUT OFF
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING GUY WIRE/POLE
	EXISTING SIGN
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE
	EDGE OF BRUSH/WOODS
	IRON ROD/PIPE FOUND
	CONCRETE MONUMENT FOUND
	RAILROAD RAIL FOUND
	PROJECT BENCHMARK

1. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CONFLICTS. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL CONTACT DIG SAFE (888-344-7233) PRIOR TO ANY CONSTRUCTION.
2. THIS PLAN IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS ONE.
3. PROPERTY LINE INFORMATION IS BASED PLAT ENTITLED "LOT LINE ADJUSTMENT BETWEEN 329 & 351 NORTH AVE BURLINGTON COLLEGE" PREPARED BY CIVIL ENGINEERING ASSOCIATES, INC. DATED DECEMBER 18, 2014. THIS PLAN IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS ONE. MONUMENTATION RECOVERED IS CONSISTENT WITH RECORDED DOCUMENTS.
4. SITE INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY CIVIL ENGINEERING ASSOCIATES, INC. DECEMBER 2014. CIVIL ENGINEERING ASSOCIATES, INC. SURVEY ORIENTATION IS "GRID NORTH", VERMONT COORDINATE SYSTEM OF 1983 (HORIZONTAL) AND NAVD88 (VERTICAL) ESTABLISHED FROM GPS OBSERVATIONS ON SITE.



PROGRESS PLANS
07/28/2015

CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

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DRAWN

MAE

CHECKED

11. *U. M.*

JLIV

APPROVED

OWNER:

*BURLINGTON
COLLEGE*

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

**BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.**

BURLINGTON, VT



LOCATION MAP

 $1^{\circ} = 2000$ [illegible]

**EXISTING
CONDITIONS
OVERALL SITE
PLAN**

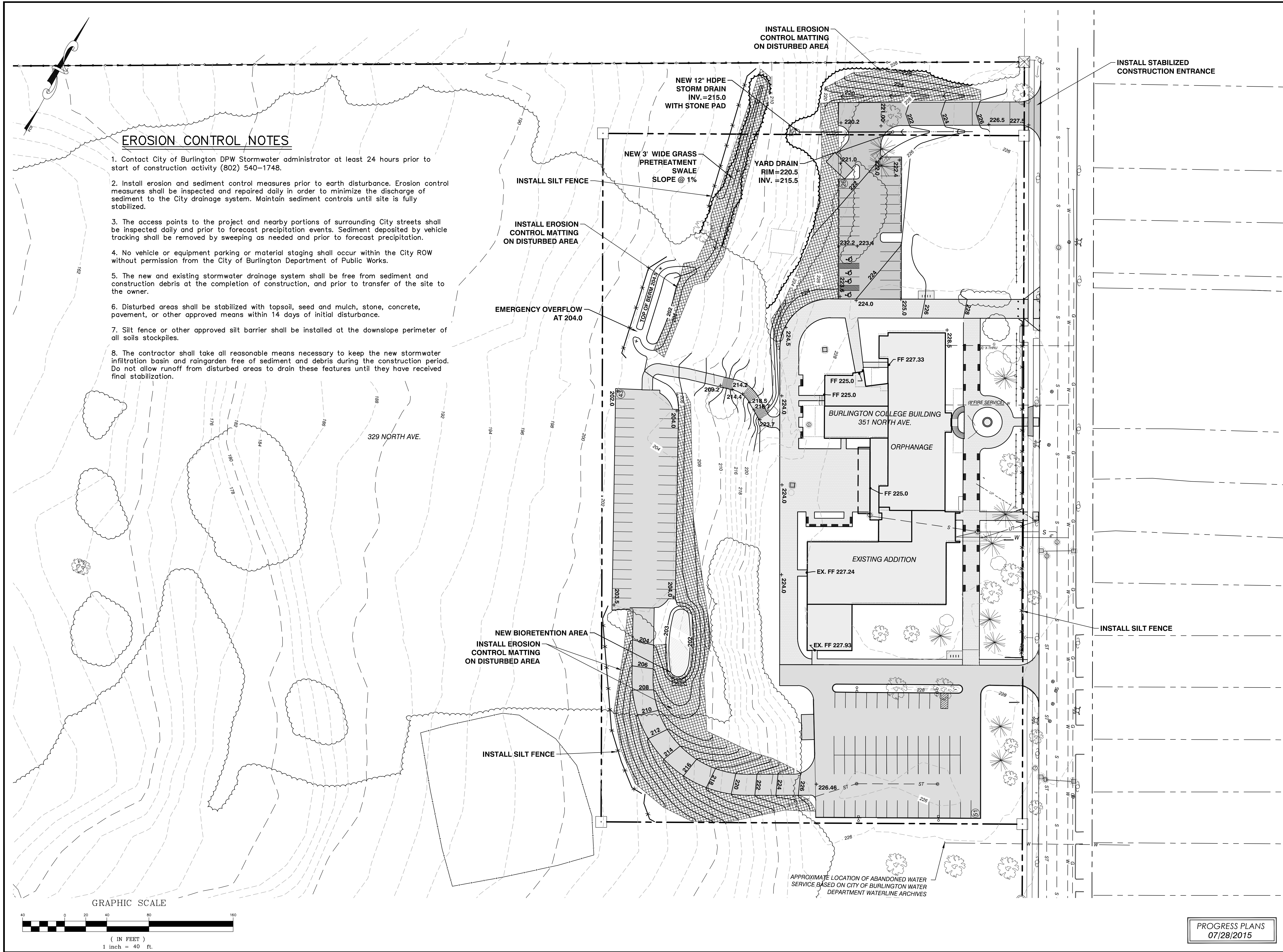
DATE _____

SCALE
 $1'' = 100'$

PROJ. NO.
14215

DRAWING NUMBER

C1.0



SITE ENGINEER:



CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
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OWNER:

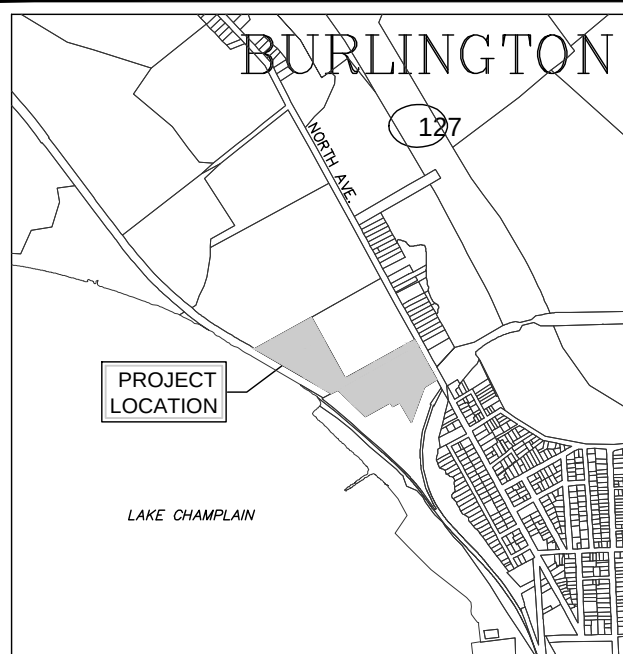
**BURLINGTON
COLLEGE**

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

**BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.**

BURLINGTON, VT



LOCATION MAP

1" = 2000'

DATE CHECKED REVISION

DATE	CHECKED	REVISION

**EROSION
CONTROL
PLAN**

DATE

SCALE

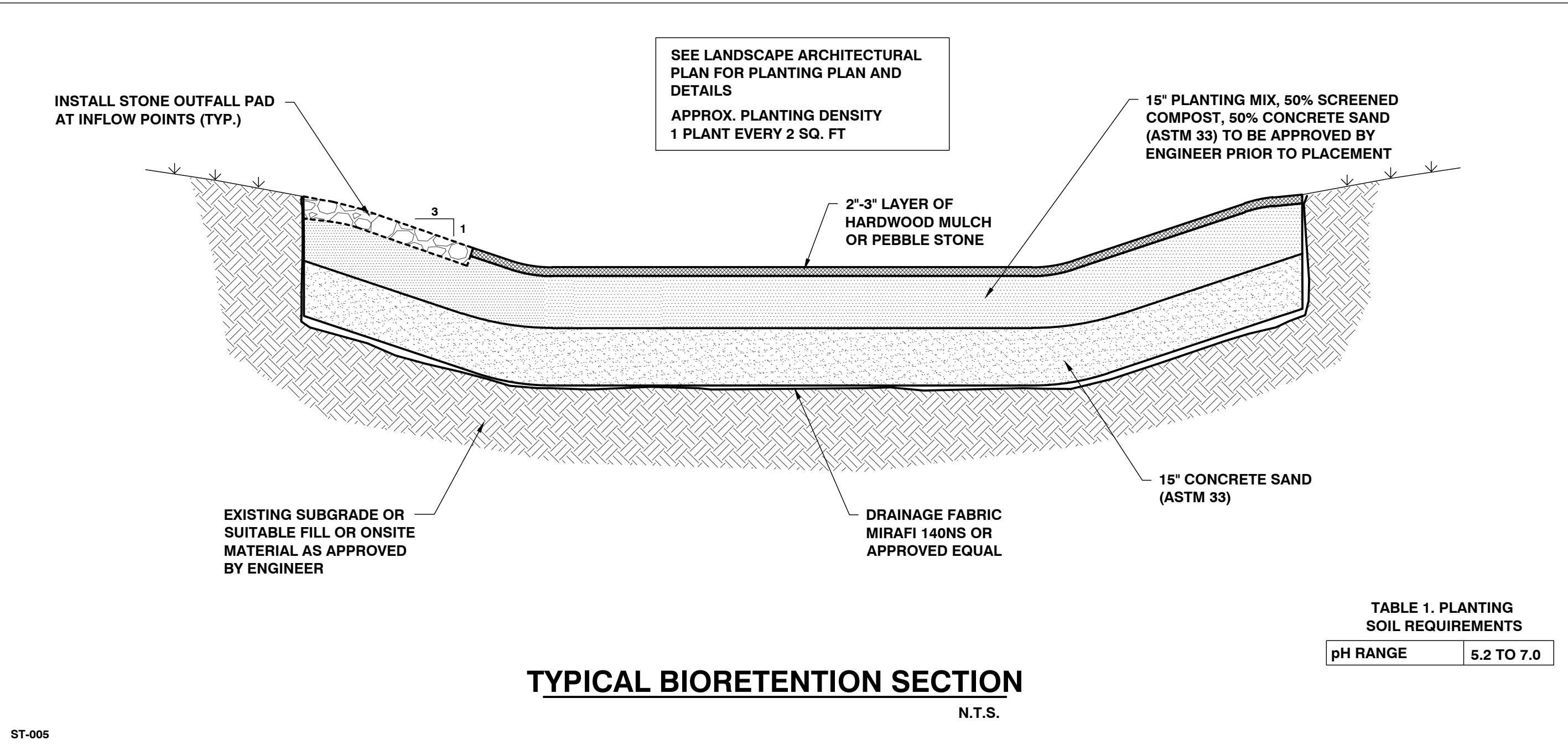
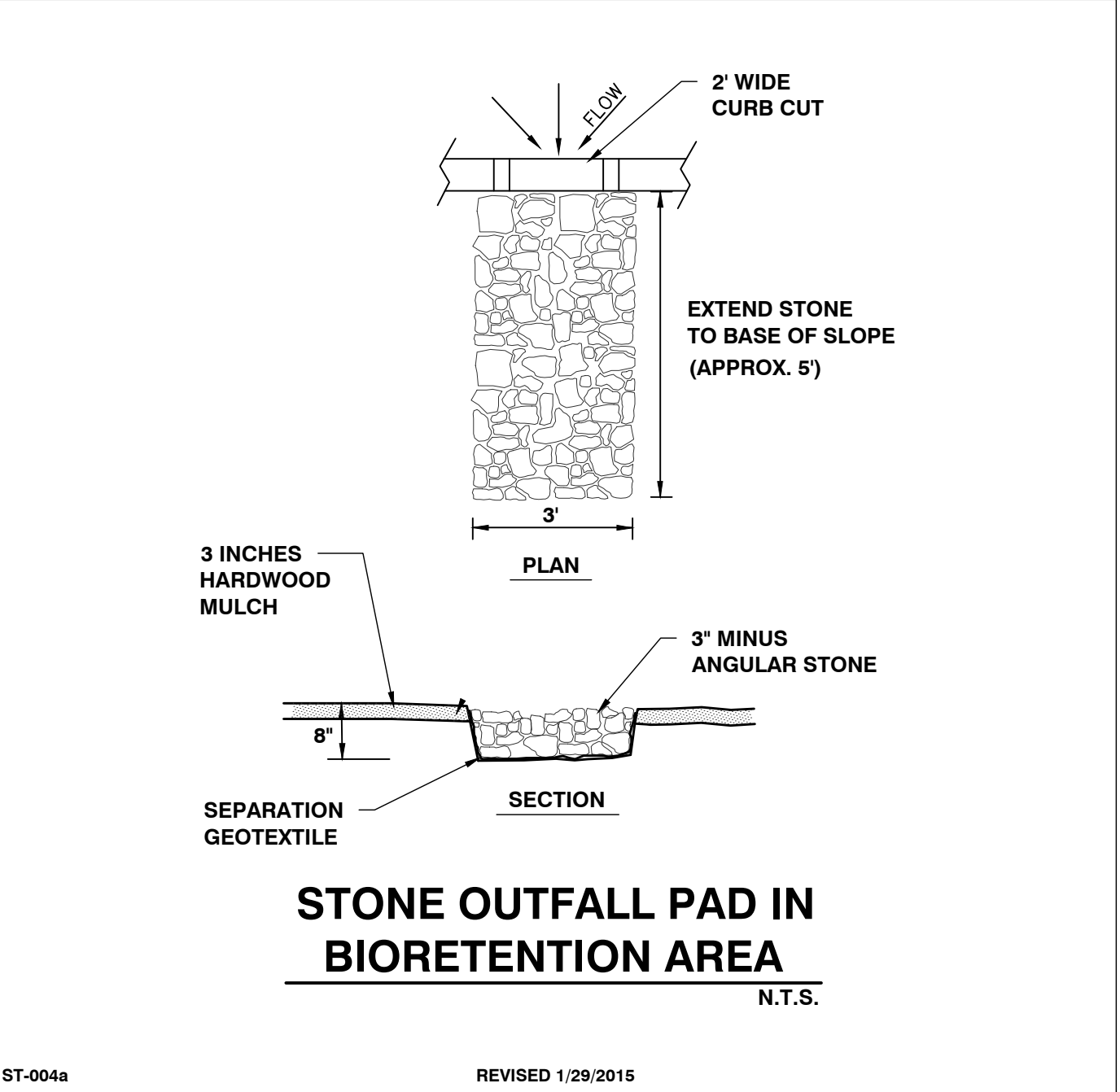
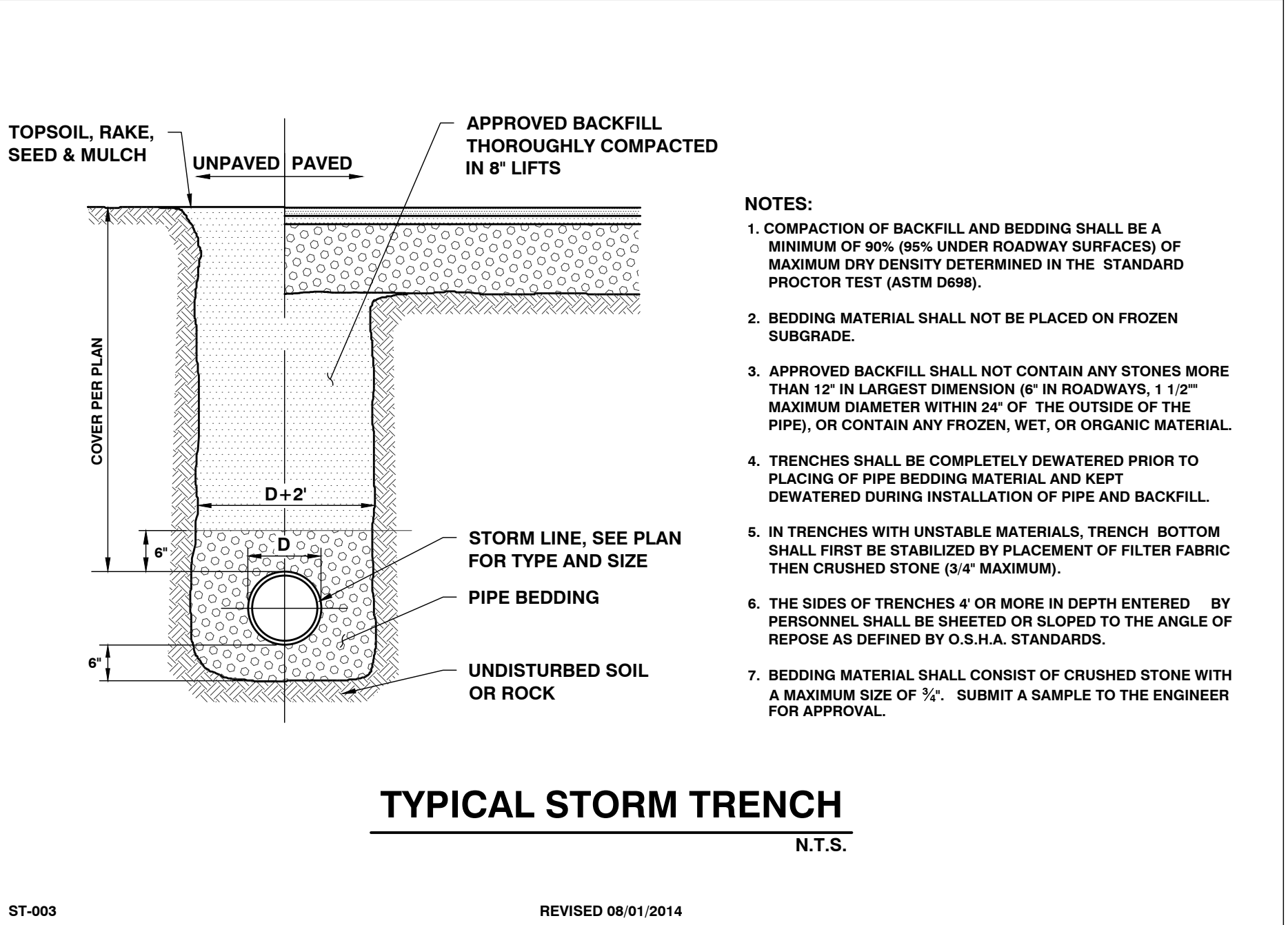
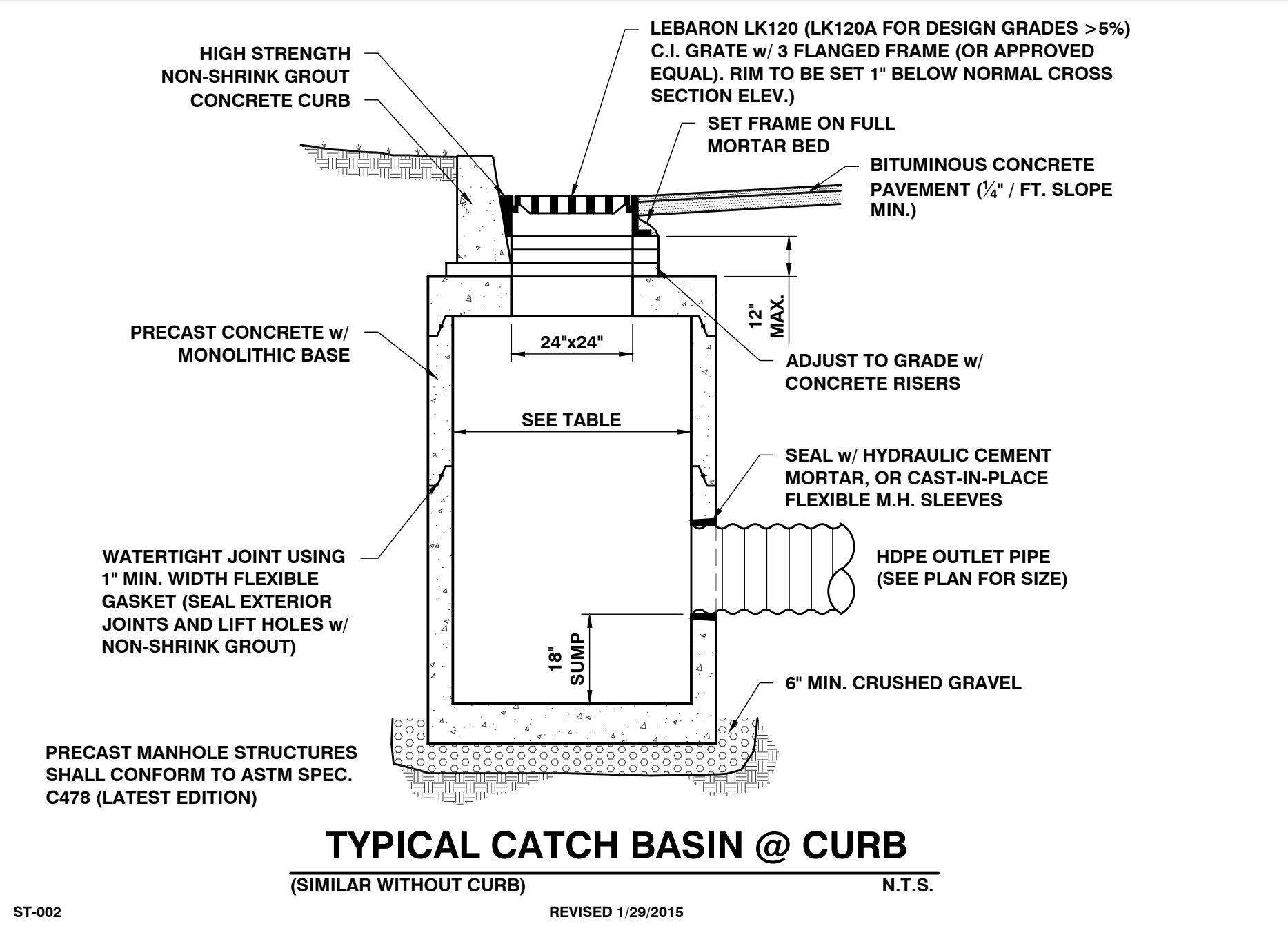
1" = 40'

PROJ. NO.

14215

DRAWING NUMBER

C3.0



SITE ENGINEER:

CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
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PBS

OWNER:
BURLINGTON COLLEGE

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:
BUILDING RENOVATION AND SITE IMPROVEMENTS
329, 351 NORTH AVE.
BURLINGTON, VT

DATE	CHECKED	REVISION

SITE DETAILS

DATE
--

SCALE
AS SHOWN

PROJ. NO.
14215

DRAWING NUMBER
C4.1

PROGRESS PLANS
7/28/2015



STARR HALL □ MIDDLEBURY COLLEGE □ MIDDLEBURY, VT



351 NORTH AVE
BURLINGTON, VERMONT

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DUNCAN • WISNIEWSKI ARCHITECTURE
A Professional Corporation

ZONING APPLICATION

**Duncan
Wisniewski** 
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 06.30.2015

A0.1









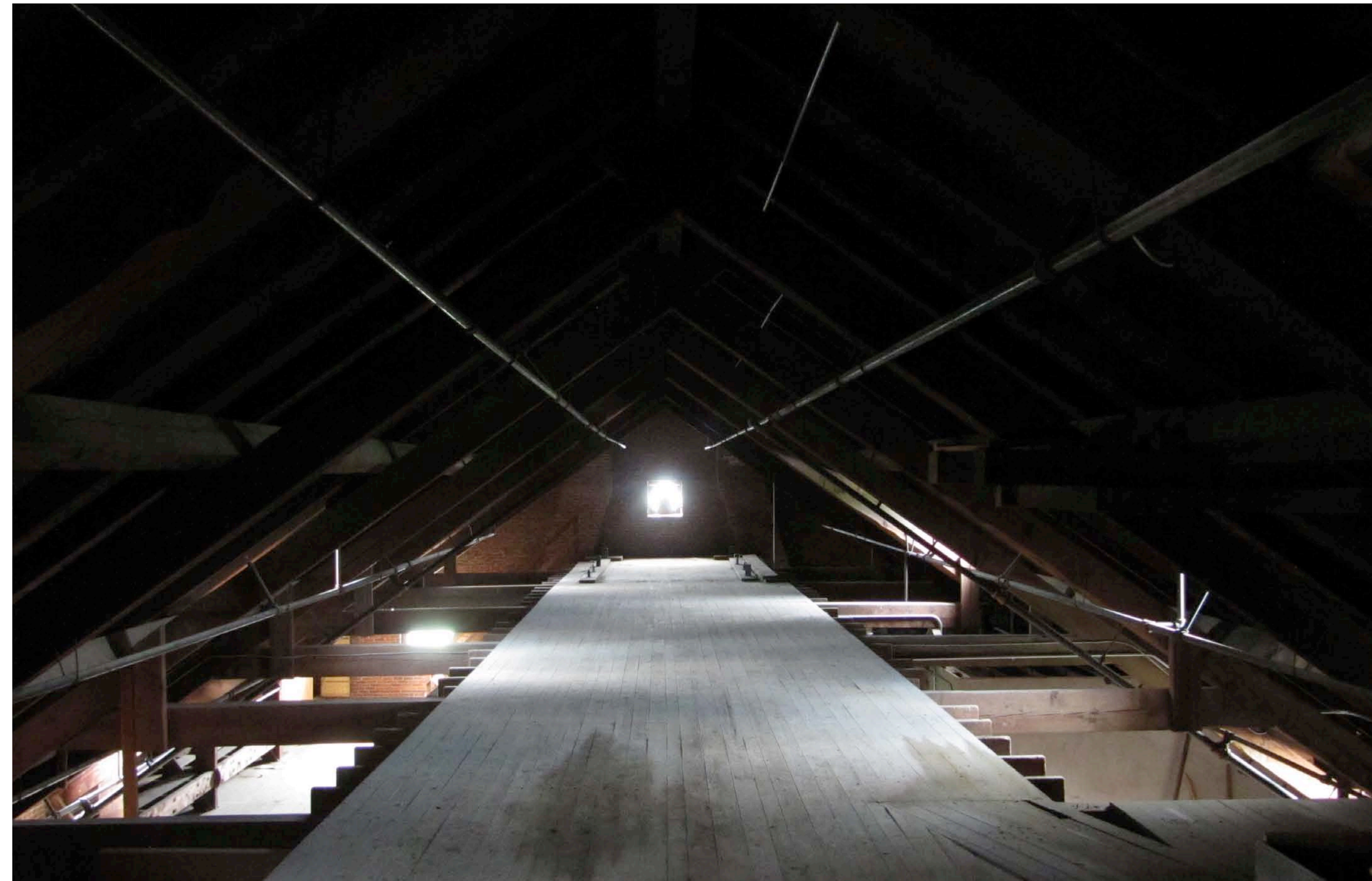




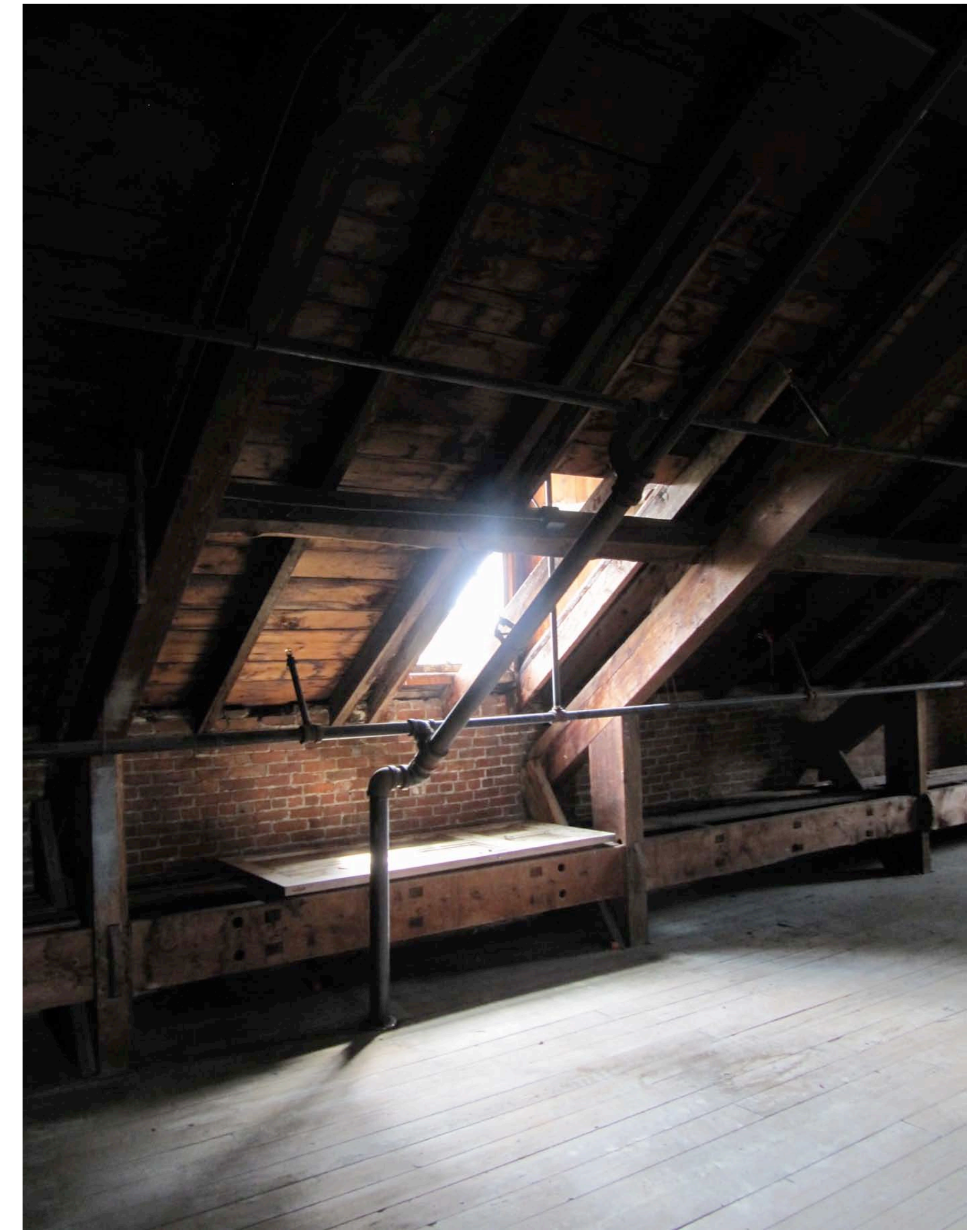
LINCOLN BROWN ILLUSTRATION



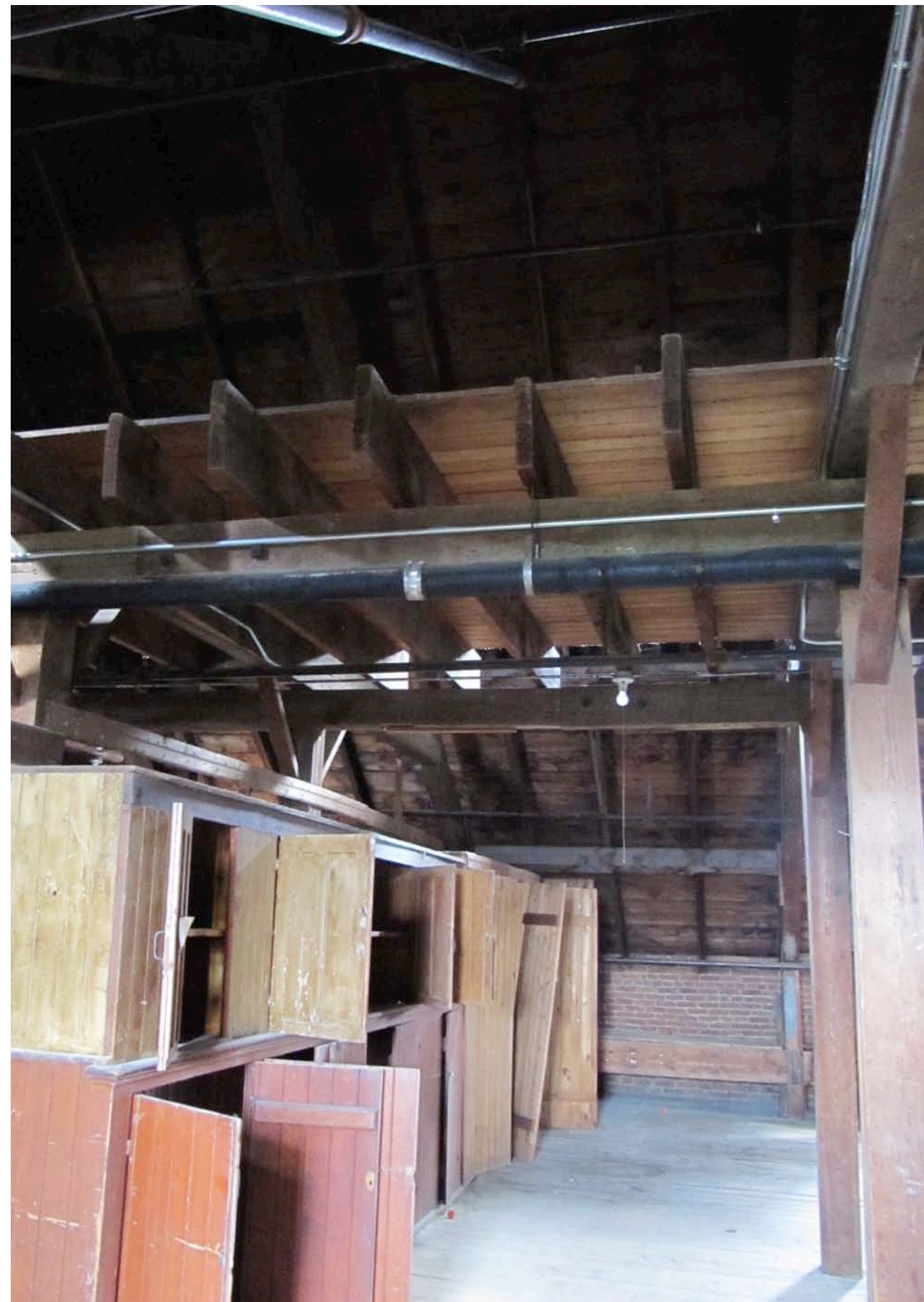
MEZZANINE LEVEL - HIGH DORMER



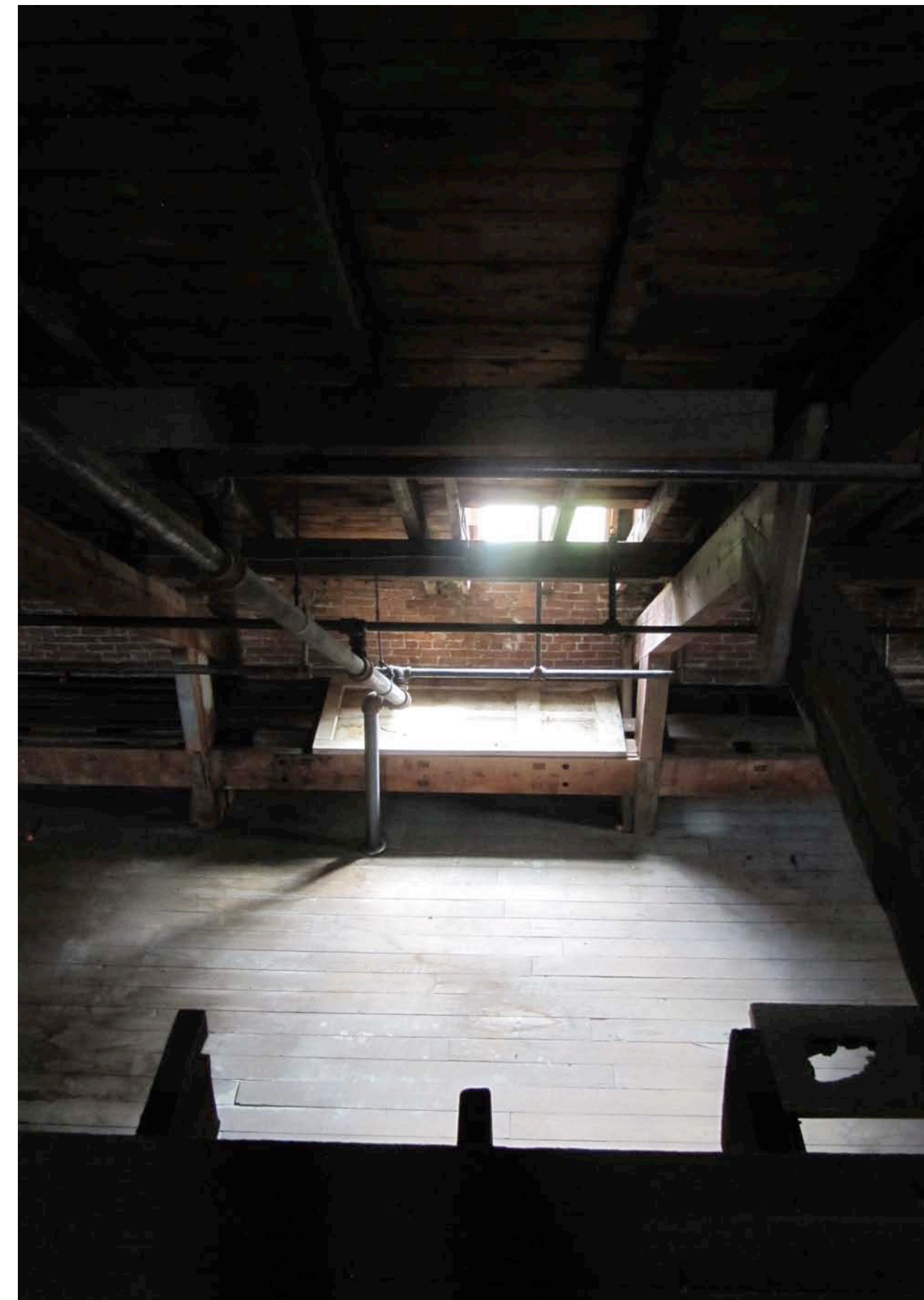
MEZZANINE LEVEL - LOOKING SOUTH



ATTIC LEVEL - LOW DORMER



ATTIC LEVEL - LOOKING UP TO MEZZANINE



MEZZANINE LEVEL - LOOKING DOWN TO ATTIC



MEZZANINE LEVEL - LOOKING NORTH



ATTIC LEVEL - BELOW MEZZANINE, NORTH END

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BURLINGTON, VERMONT

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A Professional Corporation

ZONING APPLICATION

Duncan
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BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 06.30.2015

A0.5





EAST PYNE HALL - PRINCETON UNIVERSITY - PRINCETON, NJ



FANUEIL HALL MARKETPLACE - BOSTON, MA



BLAIR HALL - PRINCETON UNIVERSITY - PRINCETON, NJ



VANDERBILT HALL - YALE UNIVERSITY - NEW HAVEN, CT

351 NORTH AVE
BURLINGTON, VERMONT

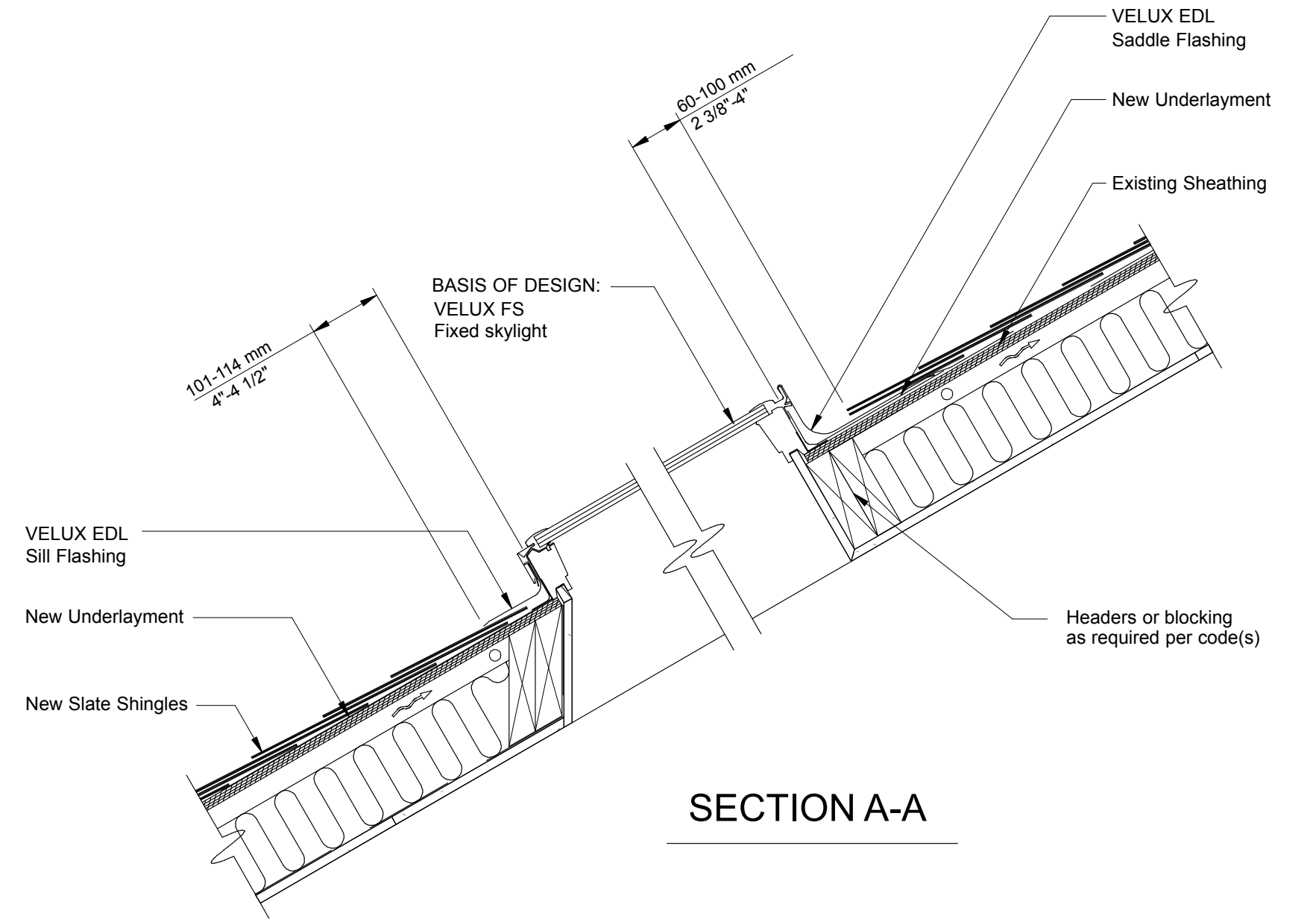
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A Professional Corporation

ZONING APPLICATION

**Duncan
Wisniewski** 
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 06.30.2015

A0.2



EXAMPLE: VELUX DECK MOUNTED SKYLIGHT



351 NORTH AVE
BURLINGTON, VERMONT

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BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 06.30.2015

A0.3

Department of Planning and Zoning

149 Church Street
Burlington, VT 05401

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

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

David E. White, AICP, Director
Vacant, Comprehensive Planner
Jay Appleton, Senior GIS/IT Programmer/Analyst
Scott Gustin, AICP, CFM, Interim Chief Administrative Officer
Mary O'Neil, AICP, Senior Planner
Elsie Tillotson, Department Secretary
Anita Wade, Zoning Clerk



MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Senior Planner
Date: August 18, 2015
RE: ZP16-0106CU; 177-179 South Winooski Avenue

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

File: ZP16-0106CU

Location: 177-179 South Winooski Avenue

Zone: DT **Ward:** 3C

Date application accepted: July 20, 2015

Applicant/ Owner: COTS/Champlain Housing Trust

Request: Change of use to Community House to operate a warming shelter this coming winter.

Background:

- Zoning Permit 14-0627CA; Change use of lower (basement) and upper (middle) levels to community center for all of King Street Youth Centers operations, including licensed child care programs. December, 2013.
- Zoning Permit 14-0301CA; Installation of concrete wall and railing on east side of building to replace existing concrete wall and railing. September 23, 2013.
- Zoning Permit 95-521; Replacement of existing chain link fencing with steel fencing along the northeast corner of the property. Use remains office. June 1995.
- Zoning Permit 93-293; Façade improvement and creation of courtyard for existing commercial office building. No change in use. December 1992.
- Zoning Permit 87-420; Erect a 25.5" x 19" parallel sign on front of building. August 1987.
- Zoning Permit 86-576 / COA 86-137; Exterior renovations to include stucco finish on the north, west and south elevations; new windows, new storefront glass on the east elevation, modify entrance on the west elevation, landscaping. Convert offices to condominiums. September 1986.
- Zoning Permit 84-520; Sign of carved wood to read Rent One Plus. November 1984.
- Zoning Permit 82-549; Construct a 37' x 6.5' covered entry to the basement level of the existing building on the north side. No additional lot coverage. December 1982.

- Zoning Permit 82-013; Finish off partially excavated, unfinished basement to provide additional office space. January 1982.
- Zoning Permit 78-174; Alter east elevation for new entrance similar to existing; no additional coverage, no additional non-compliance. October 1978.

Overview: The Committee on Temporary Shelter (COTS) seeks approval for a warming shelter on the middle and lower floors. This is the former site of COTS Daystation and case management services. The program will operate from 6:pm to 7:am on a seasonal basis from November through March. This will operate as a low-barrier facility.

Applicable regulations: Article 3 (Applications, Permits and Project Reviews); Article 4 (Zoning Maps and Districts); Article 5 (Citywide General Regulations); Article 8 (Parking); Article 13 (Definitions); Appendix A (Use Table.)

Recommendation: **Approval**, per the following findings and conditions:

I. Findings

Article 3: Applications, Permits, and Project Reviews

Part 3: Impact Fees

Article 3.3.2 Applicability

Any new development or additions to existing buildings which result in new dwelling units or in new nonresidential buildings square footage are subject to impact fees as is any change of use which results in an added impact according to Sec. 3.3.4.

Impact fees for the change-of-use to a Community House will be assessed; based upon square footage and calculated to give credit for the previous office use. **Affirmative finding as conditioned.**

Section 3.3.3 Exemptions and Waivers

(c) Affordable Housing Waivers

Any residential project containing newly constructed units or substantially rehabilitated housing units that are affordable for households as described in subsections (1), (2) or (3) below are eligible for a waiver of impact fees for that portion of the project. The terms, rules, and regulations used herein shall be the same as those defined and specified in this Ordinance pertaining to Inclusionary Zoning (Article 9).

3. 100% Waiver of Fees: One hundred percent of the fees will be waived for that portion of a residential project that initially sells or rents for a price that is affordable for households earning less than 50% of the median income and that remains continually affordable as defined above.

The applicability of any waiver of Impact Fees shall be determined by the Housing Officer in the Community and Economic Development Office.

It is anticipated that all clients of the Community House may meet income eligibility to qualify for a waiver of Impact Fees. The determination of the HTF manager will determine the amount of waiver.

Any such waiver, if determined, will be provided to staff (with the associated square foot measurement) so as to correct the calculated impact fee assessment. **Affirmative finding as Conditioned.**

Part 5: Conditional Use and Major Impact Review

Sec. 3.5.6 (a) Conditional Use Review Standards

1. Capacity of existing or planned community facilities.

The community house proposes to use the existing structure; one which previously was utilized as the Daystation. The clients utilizing the Community House are from within the local community, and not likely to increase demand on existing community facilities greater than at present. **Affirmative finding.**

2. The character of the area affected as defined by the purpose or purposes of the zoning district(s) within which the project is located, and specifically stated policies and standards of the municipal development plan.

The Downtown Transition District is intended to provide a balance and continuity in the character and scale of development on both sides of Main Street, Pearl Street and South Winooski Avenue creating a gateway into the urban core of Burlington. While no changes are proposed to the building, the use is intended to serve those in the city who are in need of warmth and shelter during the coldest months of the year.

The Municipal Development Plan (MDP) recognizes Housing as the Key to a Livable Community:

Burlington's housing policy is shaped around the concept of a "housing ladder of tenure," which represents a community housing system. The "housing ladder of tenure" provides housing options that offer increasing amounts of security and equity as one moves "up" the ladder. This ranges from shelters for the homeless at the lowest "rung", to fee-simple home ownership at the top of the ladder.¹

Burlington's homeless strategy is based on offering a "continuum of care" developed originally in 1984. Coordinated by the private, nonprofit COTA, non-profit housing and service providers collaborate with the City to provide a range of services that includes;

Prevention; Outreach, Intake and Assessment, Emergency Shelters and Shelter Services, Supportive Services, Transitional Housing, Permanent and Semi-permanent Supporting Housing.

The City will continue to work with non-profit housing and service providers to offer services and opportunities to meet the complex needs of the City's homeless population. This is the most important "first-rung" on the housing ladder of tenure.²

Affirmative finding.

3. Traffic on roads and highways in the vicinity evaluated in terms of increased demand for parking, travel during peak commuter hours, safety, contributing to congestion, as opposed to complementing the flow of traffic and/or parking needs; if not in a commercial district, the impact of customer traffic and deliveries must be evaluated;

¹ City of Burlington VT 2006 Municipal Development Plan, Housing Plan, Page IX-7.

² Ibid., Page IX-11.

Vehicle ownership is inconsistent with the population that utilizes the services of the proposed use. No change in traffic patterns or demand for parking is anticipated with the use. **Affirmative finding.**

4. *Any standards or factors set forth in existing City bylaws and city and state ordinances;*
No deficiencies or conflicts have been identified. **Affirmative finding.**

5. *The utilization of renewable energy resources;*
No part of the application prevents the use of alternative energy methods, including wind, solar, water, or biomass; however none of these opportunities is exercised within this permit application. **Affirmative finding.**

and,

In addition to the General Standards specified above, the DRB;

6. *shall consider the cumulative impact of the proposed use. For purposes of residential construction, if an area is zoned for housing and a lot can accommodate the density, the cumulative impact of housing shall be considered negligible;*

The Municipal Development Plan acknowledges the need to provide safe, affordable shelter for all Burlington residents. No site changes are proposed. The warming shelter is proposed for approximately 151 days a year (Nov-March) to provide safe housing for a vulnerable population. As this was previously a COTS location for more than 15 years (and the Daystation continues to operate there), little additional impact is anticipated. **Affirmative finding.**

7. *in considering a request relating to a greater number of unrelated individuals residing in a dwelling unit within the RL, RL-W, RM and RM-W districts than is allowed as a permitted use, in addition to the criteria set forth in Subsection (a) hereof, no conditional use permit may be granted unless all facilities within the dwelling unit, including bathroom and kitchen facilities are accessible to the occupants without passing through any bedroom. Additionally, each room proposed to be occupied as a bedroom must contain at least one hundred twenty (120) square feet. There must also be a parking area located on the premises at a location other than the front yard containing a minimum of one hundred eighty (180) square feet for each proposed adult of the dwelling unit in excess of the number of occupants allowed as a permitted use. All other green space standards must be observed.*

Not applicable.

8. *may control the location and number of vehicular access points to the property, including the erection of parking barriers.*

No site changes proposed. Not applicable.

9. *may limit the number, location and size of signs.*

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

10. *may require suitable mitigation measures, including landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area.*

The proposed Community House will utilize the middle and lower floors of the structure. COTS administrative offices and program services will utilize the top (South Winooski Avenue) floor. No impacts are anticipated that would require mitigation. **Affirmative finding.**

11. may specify a time limit for construction, alteration or enlargement of a structure to house a conditional use.

No construction is proposed. Not applicable.

12. may specify hours of operation and/or construction to reduce the impact on surrounding properties.

The Community House use is proposed from 6:00 pm until 7:00 am from November through March; the coldest months of the year. The applicant characterizes staffing as robust, professionally trained in rapid assessment, mental health and first aid. A security guard will be employed from 6:00 pm until midnight daily to monitor activities. **Affirmative finding.**

13. may require that any future enlargement or alteration of the use return for review to the DRB to permit the specifying of new conditions.

If approved, the Community House will operate for less than a year. Any structural or programmatic expansion of the Conditional Use will require a return to the DRB for review. **Affirmative finding as conditioned.**

14. may consider performance standards, should the proposed use merit such review.

This is at the discretion of the DRB.

15. may attach such additional reasonable conditions and safeguards, as it may deem necessary to implement the purposes of this chapter and the zoning regulations.

This is at the discretion of the DRB.

Article 4: Zoning Maps and Districts

Section 4.4.1 Downtown Mixed Use Districts

(b) Dimensional Standards and Density

No site changes proposed. Not applicable.

(c) Permitted and Conditional Uses

Community Houses are a Conditional Use in the DT zone.

(d) District Specific Regulations

1. Use Restrictions

Ground Floor Residential Uses Restricted:

In order to maintain an active streetscape for pedestrians and pedestrian-oriented businesses and activities, residential uses shall not be permitted on the ground floor of any structure as follows:

- ii) Any structure fronting on Pearl, South Winooski and Main Streets in the Downtown Transition (DT) district.)*

COTS administrative offices and program services will occupy the South Winooski Avenue level of the building. No residential use will occupy that level. The Daystation will occupy the middle floor; the lower floor will have the Daystation and Community House. Middle floor cots will be reserved for those who might have mobility issues to assure the safest exits from the building in case of emergency. **Affirmative finding.**

Article 5: Citywide General Regulations

Article 5: Citywide General Regulations

Sec. 5.1.1 Uses

(d) Conditional Uses

A Community House is a conditional use in the DT zone.

Part 2: Dimensional Requirements

Sec. 5.2.3 Lot Coverage Requirements

No change to lot coverage. Not applicable.

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5 Setbacks

No changes to setbacks. Not applicable.

Sec. 5.2.6 Building Height Limits

No changes to building height. Not applicable.

Sec. 5.2.7 Density and Intensity of Development Calculations

Density is calculated using Floor Area Ratio in the DT district. No change to the FAR is proposed for the Community House. **Affirmative finding.**

Sec. 5.4.4 Community House

Community houses shall be considered a conditional use in any residential district and subject to all applicable provisions of Article 3, Part 5 and the site and design review standards in Article 6. In addition to conditional use standards, proposals for new community houses shall also comply with the following requirements:

(a) Density shall not exceed 1 person per two hundred (200) square feet of gross floor area; The gross floor area of the middle and lower floors combined is 8589.5 sf. If the entire floor area is considered, 43 people may be accommodated. The applicant has provided floor plans illustrated the intended area. While 26 beds are illustrated, the applicant would like to house up to 40 individuals as need arises.

Based on the floor area and proposed number of individuals, the proposal falls within this limitation.

Affirmative finding.

(b) All dimensional standards for the underlying zoning per the requirements of Article 4 shall be applicable;
See Article 4, above.

and

(c) *The minimum distance (lot line to lot line) between any two community houses shall not exceed the following: [This is a misprint. The intention was to avoid a concentration of Community Houses in any one location. The corrected language is “shall not be less than...” This was confirmed by David E. White, Planning Director.]*

Total Occupancy (beds)	Distance (feet)
6 or less	0
7 – 12	500
13 – 20	1,000
21 or more	1,500

The application proposes the use of the middle and lowest floors for overnight accommodations during the winter months. The anticipated number of beds has not been provided. In mapping the location of Community Houses, one is in proximity: The Ronald McDonald House (formerly identified as 16 South Winooski Avenue). That use is approximately 1475’ from 177-179 South Winooski.. Given the limited number of residents at the Ronald McDonald House, and the parcel to parcel measurement, the proposed Community House would be sufficiently distanced from other approved Community Houses based on their occupancy and this standard. **Affirmative finding.**

Sec. 5.4.8 Historic Buildings and Sites

Not applicable.

Sec. 5.4.9 Brownfield Remediation

None identified. Not applicable.

Sec. 5.5.1, Nuisance Regulations

The applicant has many years experience working to address the issues associated with homelessness, and has presented an application that includes trained staff, security, associated services and case managers to support the use. COTS occupied this building from spring 1994 until more recently; the Daystation continues to operate within the structure. The applicant has shared that the state has made a commitment to staffing, particularly relative to mental health needs. As proposed with supporting information, no nuisance is presented. **Affirmative finding as conditioned.**

Sec. 5.5.2 Outdoor Lighting

None proposed. Not applicable.

Sec. 5.5.3 Stormwater and Erosion Control

Not applicable.

Sec. 5.5.4 Tree Removal

Not applicable.

Article 7: Signs

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

Article 8: Parking

Table 8.1.8-1, Minimum Off-Street Parking Requirements

Community House requires .5 parking space per dwelling unit in the Downtown Parking District.

The Community House counts as 1 dwelling unit. The previous use (offices) required 2 parking spaces per thousand in the Downtown Parking District. As this is a lesser requirement, it may be assumed that existing parking is sufficient to accommodate the proposed use. **Affirmative finding.**

Table 8.2.5-1 Bicycle Parking Requirements

Household Living, long term spaces, 1 per 4 units; short term, 1 per 10 units.

Temporary lodging: 1 per 20 rooms/sites; 2 per 20 rooms/sites.

A Community House is considered one residential unit. The bicycle parking requirement would be fractional. Given the proposed (seasonal) use proposed, however, it is unlikely that bicycle parking would be in demand. Facilities for bicycle parking are therefore encouraged, but not required.

Affirmative finding.

Article 13: Definitions

Community House: *A community house is a residential dwelling unit where individuals are not handicapped as per the Federal Fair Housing Act but where, due to the particular needs of the resident individuals, a joint living arrangement is necessitated and where the individuals are under sponsorship or care of a public, nonprofit, or for profit agency where the sponsor or caretaker provides, or arranges for, the provision of varying degrees of personal supervision and/or care in a residential environment, such as a halfway house, a personal care residence, a community transitional facility, or any other such facility that provides such services.*

The following are NOT considered community houses: group homes, fraternities, sororities, dormitories, convents, communes, apartments, boarding and room houses, tourist homes, and hotels and motels.

As the residents will be under the care of a nonprofit where COTS will provide personal supervision and or care in a residential environment, the proposed use meets the definition of Community House. **Affirmative finding.**

II. Conditions of Approval

1. The applicant shall confirm the area in square feet for the new use, on which to base Impact Fees and to confirm occupancy levels per Section 5.4.4.(a).
2. Occupancy shall not exceed the limitation defined in Section 5.4.4. (a)
3. Any signage will require a separate sign permit.
4. Impact fees, as calculated by staff and based upon area calculations for the new uses(s) shall be paid to the city's chief administrative officer/city treasurer prior to

the issuance of a zoning permit, or if a building permit is required, within thirty days of issuance of the building permit. Credit will be given for the previous uses in the final calculation.

5. The applicability of any waiver of Impact Fees shall be determined by the Housing Officer in the Community and Economic Development Office. Any such waiver, if determined, will be provided to staff (with the associated square foot measurement) so as to correct the calculated impact fee assessment.
6. Any structural or programmatic expansion of the Conditional Use will require a return to the DRB for review.
7. Standard Permit Conditions 1-15.

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

RECEIVED
JUL 20 2013

**179 Warming Shelter:
OPERATIONAL OUTLINE**

DEPARTMENT OF
PLANNING & ZONING

Project Summary

The proposed warming shelter will occupy the middle and lower floors of 179 South Winooski Ave; the former site of COTS Daystation and case management services. This program will operate from 6pm until 7am on a seasonal basis from November through March.

This shelter will operate as a low-barrier facility. There are no program or service requirements but all guests will be expected to follow basic safety rules and to meet the minimal criteria (detailed below).

Staffing

- ***Two well-trained staff*** on duty at all times.
- During the intake hours, there will be ***three staff and two volunteers***. One of these staff members will have expertise in MI/substance abuse.
- ***One security guard from 6pm until midnight*** every evening who will monitor both exterior and interior, patrolling exterior at 20 minute intervals. Wide view mirrors and security cameras will be installed and monitored by shelter staff.

Training

Mandatory

- All staff will have CPR and first aid training completed before working their first shifts.
- Staff and volunteers will be trained on building safety systems : alarm pads, fire pull stations, extinguisher locations, exits and evacuation procedures before working their first shifts.
- Staff will be trained by Act 1 on rapid assessment and by Howard Center on de-escalation.

Ideally

- All staff and volunteers will also receive training on Motivational Interviewing and the basics of Trauma informed care.

Shelter Admission Criteria

1. Must be homeless and 18 years of age or older
2. Must be able to walk/ move about safely on their own and do not require a higher level of care.
3. Must agree to be non-violent and to treat other guests, staff and volunteers respectfully.
4. Must agree not to bring, use or sell drugs, alcohol, or any illegal substances onto the property (inside or out).
5. Must agree to obey fire & safety regulations.

Arrival and Orientation Procedure

All shelter guests will meet with staff on their first night's stay to complete check-in forms and to be oriented to the layout and building exits, guest rules, and expectations. The intake will include:

- Guests will be asked if they have any weapons or tools that could be considered weapons and asked to turn them in until they leave the premises.
- The rules and guidelines will be read aloud and reviewed with guests. They will be asked to sign an agreement each night that they will abide by the rules.
- A brief intake questionnaire will be completed and guest will be provided with a Welcome Kit (shampoo, toothpaste, brush, fresh pair of warm socks, deodorant, etc)
- Bunk/cot will be assigned based on level of guest's coherence and mobility, the middle floor cots will be reserved for those who are incapacitated or might have difficulty on the stairs. This is to ensure the safest exit from the building in the event of fire or other emergency.
- Staff and volunteers will be introduced to the guests and roles clarified as needed.

Control of Entrance/Exit traffic

Once guests have registered for the night, they will be expected to remain in the building. Smoking breaks will be allowed once every hour, on the hour, for 15 minutes. These breaks will coincide with security guard patrolling exterior of the building.

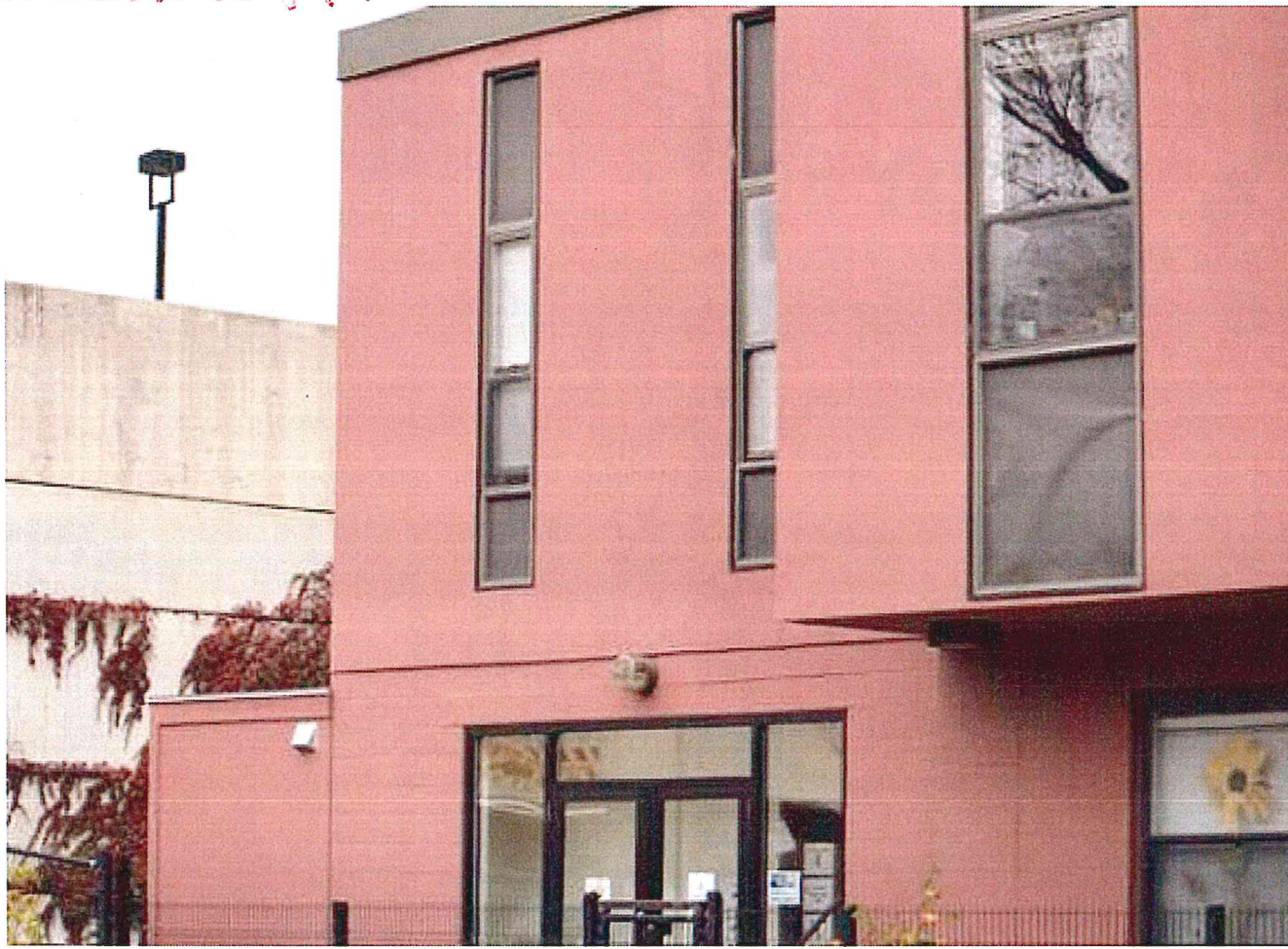
177-179 South Winooski Ave

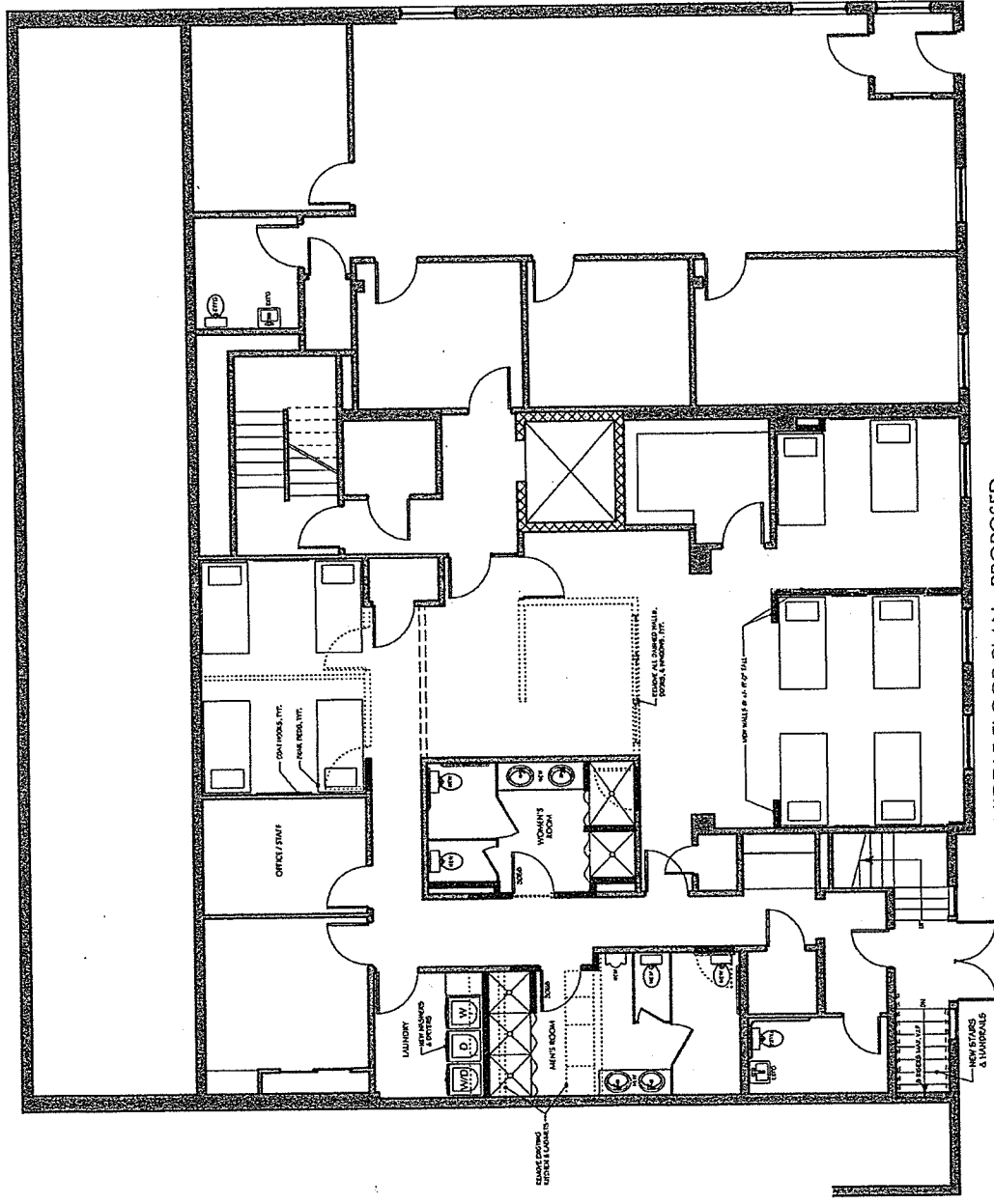


179 So Winos.

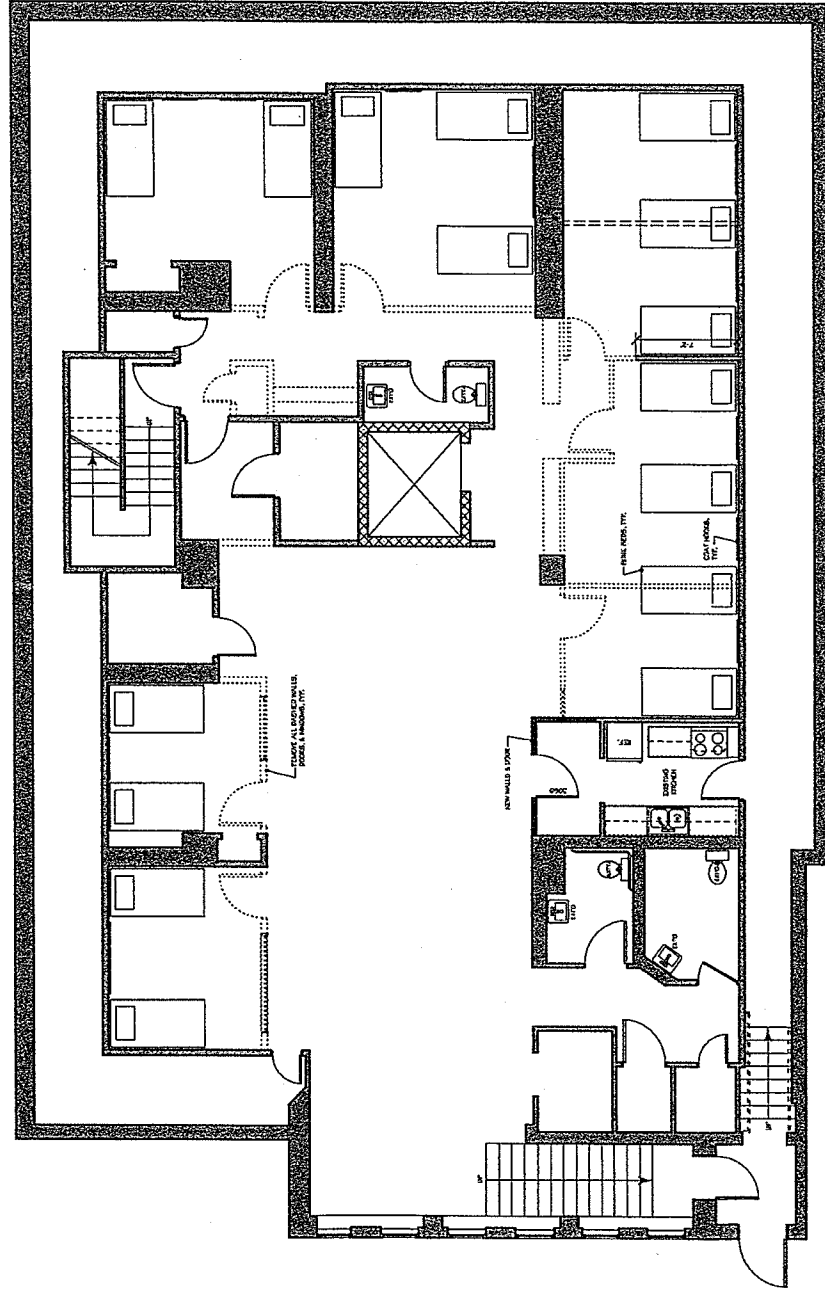


118 to 1140201





MIDDLE FLOOR PLAN - PROPOSED
Scale: 1/8" = 1'-0"



LOWER FLOOR PLAN - PROPOSED
Scale: 1/8" = 1'-0"

McCLURE BUILDING
BURLINGTON, VERMONT

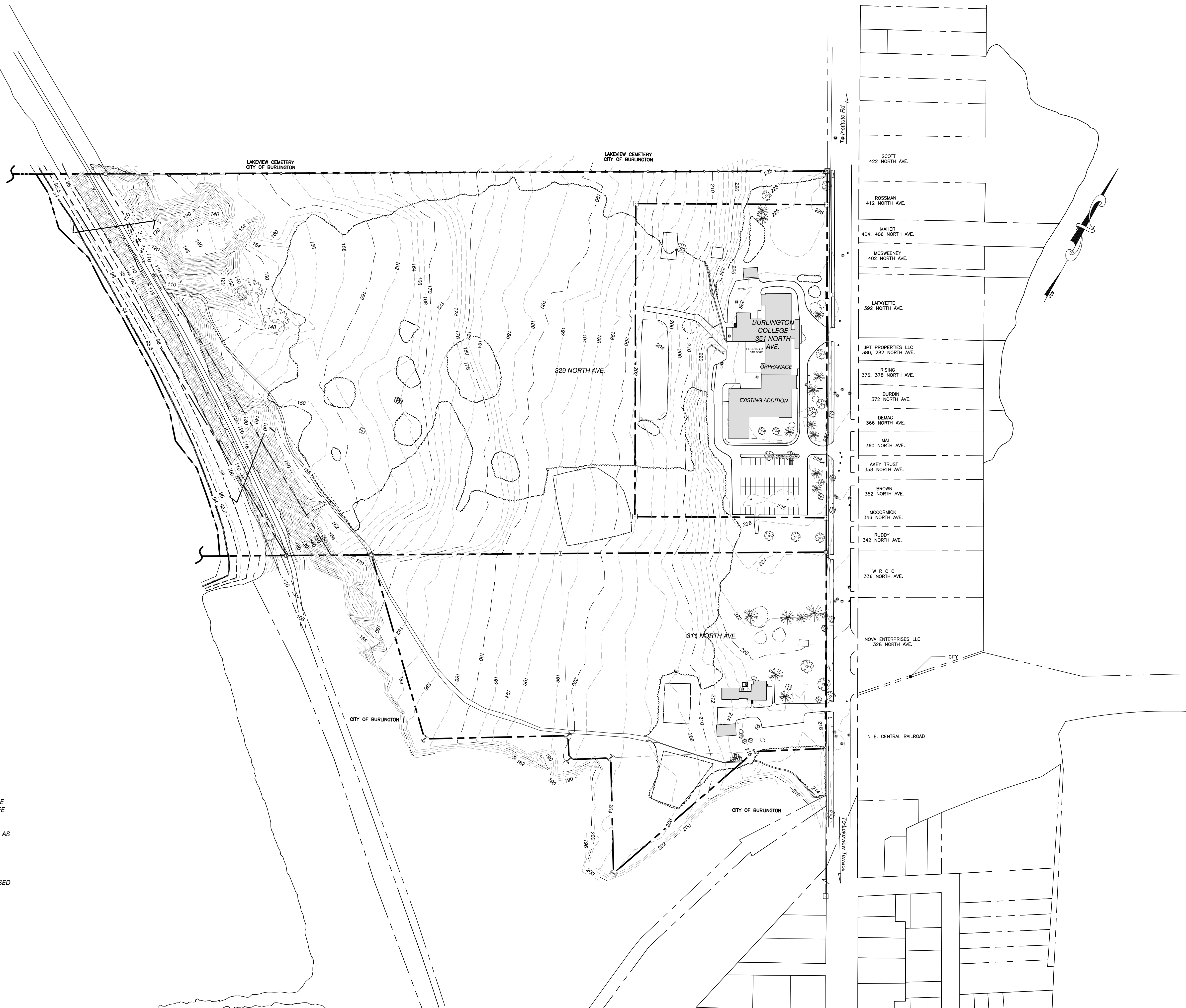
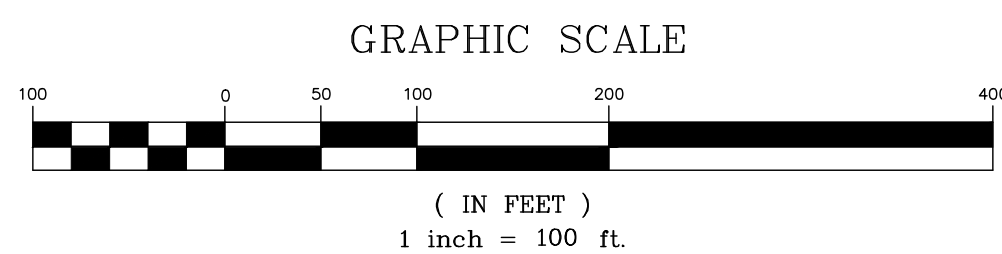
**Duncan
Wisniewski**
ARCHITECTURE

DATE: 08.15.13
A1.1

25507 MCCLURE BUILDING
BURLINGTON, VERMONT 05401
T: 802.254.1233

	APPROXIMATE PROPERTY LINE
	APPROXIMATE SETBACK LINE
	EXISTING CONTOUR
	EXISTING CURB
	EXISTING CHAINLINK FENCE
	EXISTING WIRE FENCE
	EXISTING GRAVEL
	EXISTING PAVEMENT
	EXISTING GUARD RAIL
	EXISTING ELECTRIC
	EXISTING FORCEMAIN
	EXISTING GAS
	EXISTING STORM
	EXISTING GRAVITY SEWER
	EXISTING TELEPHONE
	EXISTING WATER
	EXISTING SWALE
	EXISTING SEWER MANHOLE
	EXISTING STORM MANHOLE
	EXISTING CATCH BASIN
	EXISTING WELL
	EXISTING HYDRANT
	EXISTING SHUT OFF
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING GUY WIRE/POLE
	EXISTING SIGN
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE
	EDGE OF BRUSH/WOODS
	IRON ROD/PIPE FOUND
	CONCRETE MONUMENT FOUND
	RAILROAD RAIL FOUND
	PROJECT BENCHMARK

1. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CONFLICTS. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL CONTACT DIG SAFE (888-344-7233) PRIOR TO ANY CONSTRUCTION.
2. THIS PLAN IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS ONE.
3. PROPERTY LINE INFORMATION IS BASED PLAT ENTITLED "LOT LINE ADJUSTMENT BETWEEN 329 & 351 NORTH AVE BURLINGTON COLLEGE" PREPARED BY CIVIL ENGINEERING ASSOCIATES, INC. DATED DECEMBER 18, 2014. THIS PLAN IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS ONE. MONUMENTATION RECOVERED IS CONSISTENT WITH RECORDED DOCUMENTS.
4. SITE INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY CIVIL ENGINEERING ASSOCIATES, INC. DECEMBER 2014. CIVIL ENGINEERING ASSOCIATES, INC. SURVEY ORIENTATION IS "GRID NORTH", VERMONT COORDINATE SYSTEM OF 1983 (HORIZONTAL) AND NAVD88 (VERTICAL) ESTABLISHED FROM GPS OBSERVATIONS ON SITE.



PROGRESS PLANS
07/28/2015



CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

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JLIV

APPROV

OWNER:

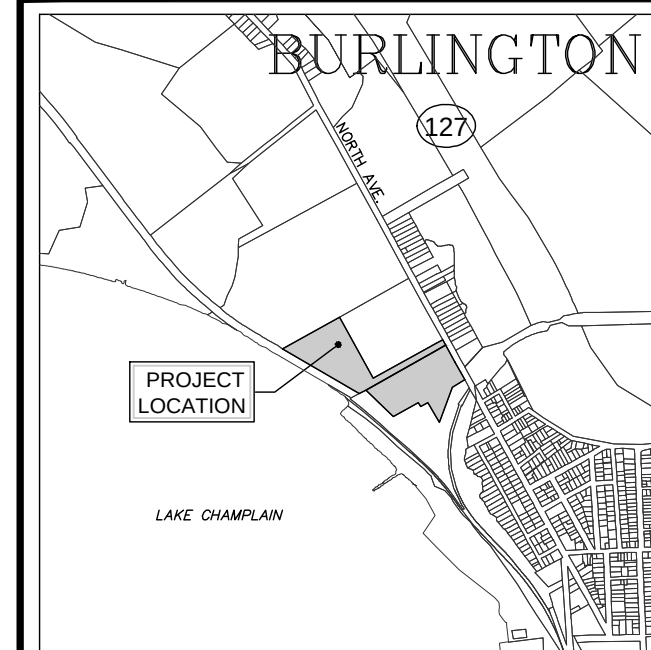
*BURLINGTON
COLLEGE*

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

**BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.**

BURLINGTON, VT



LOCATION MAP

$$1^{\circ} = 200$$
[illegible]

**EXISTING
CONDITIONS
OVERALL SITE
PLAN**

DATE _____

SCALE
 $1'' = 100'$

PROJ. NO.
14215

DRAWING NUMBER

C1.0



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OWNER:

**BURLINGTON
COLLEGE**

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

***BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.***

BURLINGTON, VT



LOCATION MAP

$$= 2000'$$
[illegible]

*EXISTING
CONDITIONS
SITE PLAN*

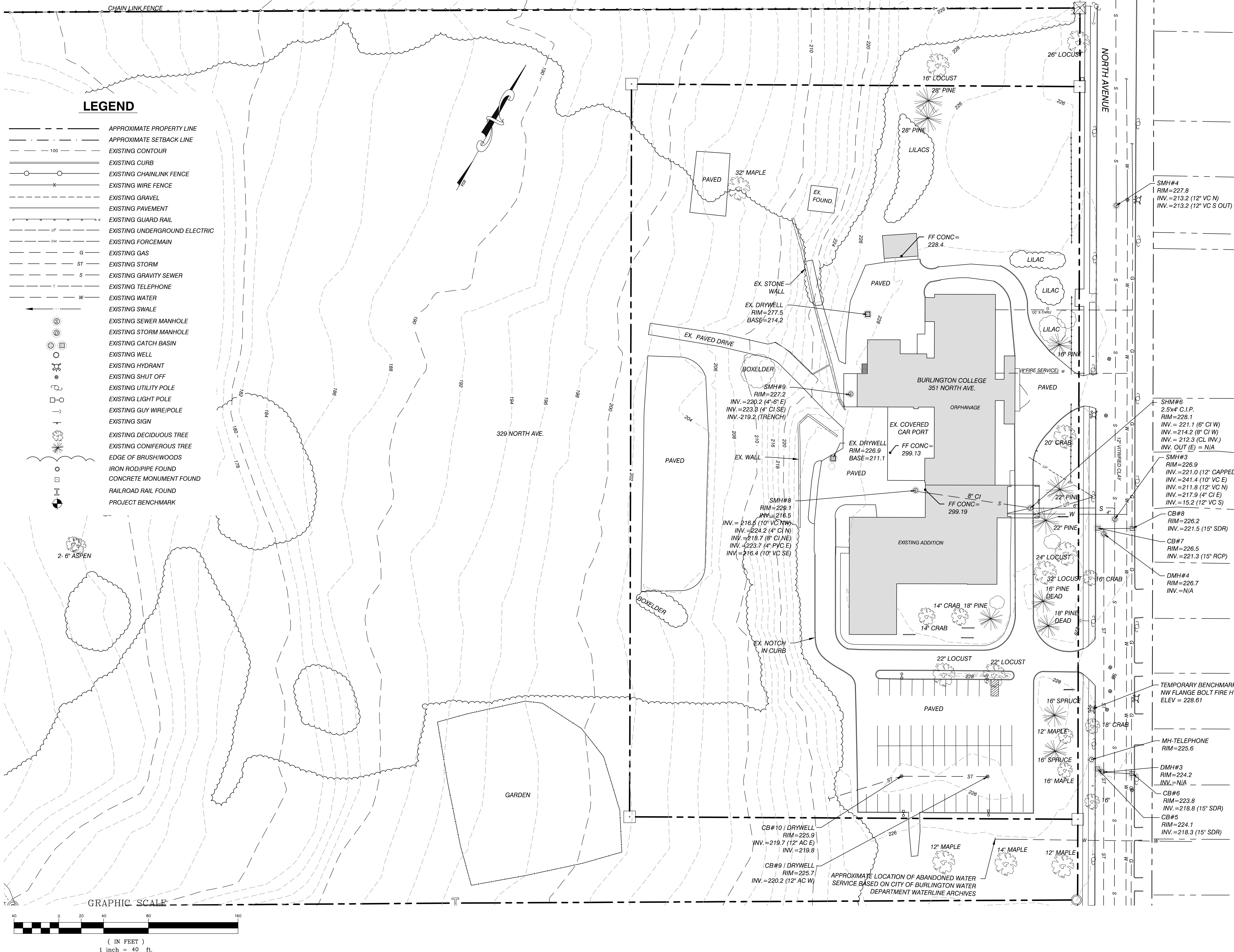
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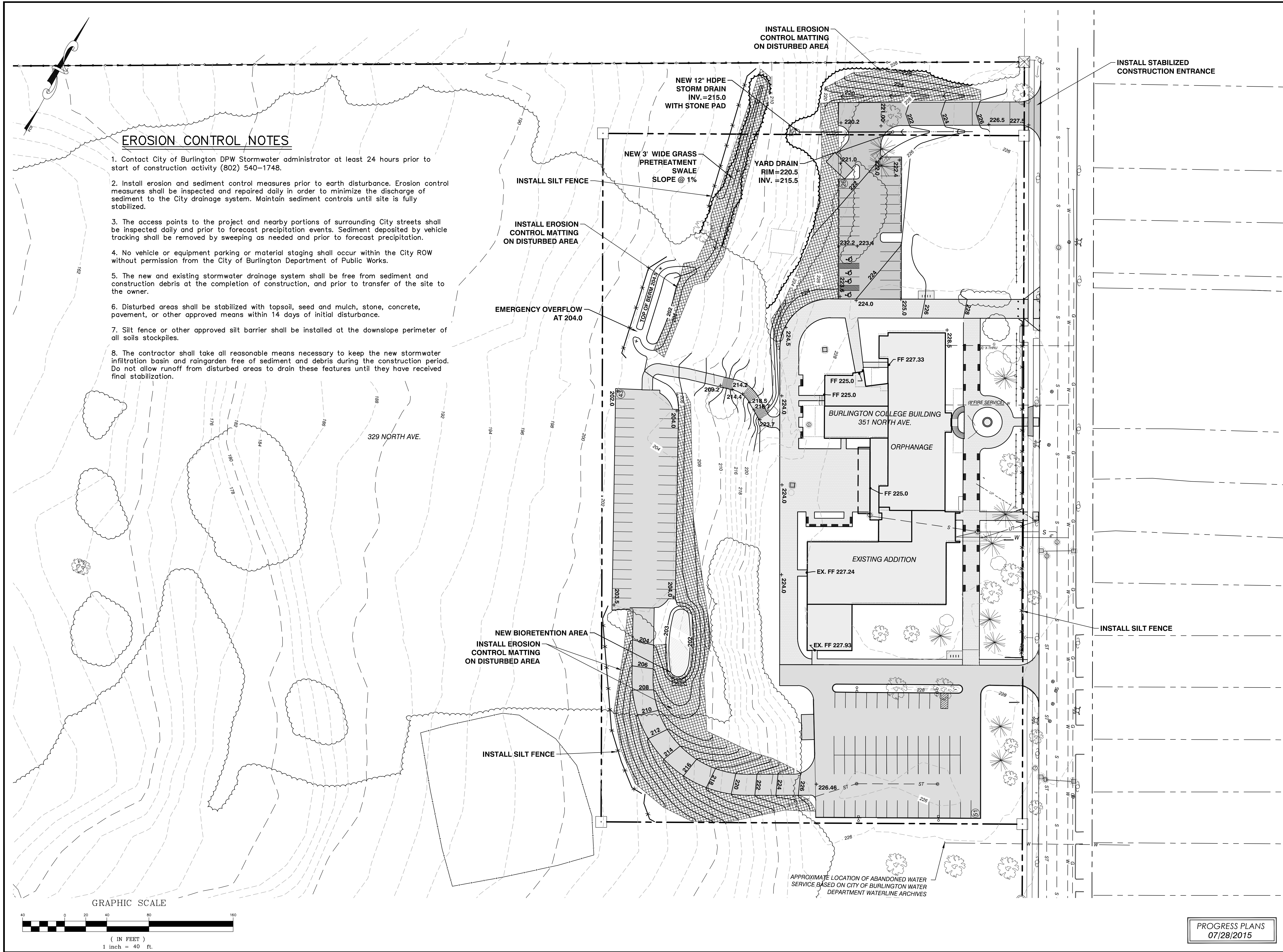
SCALE
1" = 40'

PROJ. NO.
14215

C1.1



PROGRESS PLANS
07/28/2015



SITE ENGINEER:



CIVIL ENGINEERING ASSOCIATES, INC.
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JLM

APPROVED

JLM

OWNER:

**BURLINGTON
COLLEGE**

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

**BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.**

BURLINGTON, VT



LOCATION MAP

1" = 2000'

DATE CHECKED REVISION

DATE	CHECKED	REVISION

**EROSION
CONTROL
PLAN**

DATE

SCALE

1" = 40'

PROJ. NO.

14215

DRAWING NUMBER

C3.0

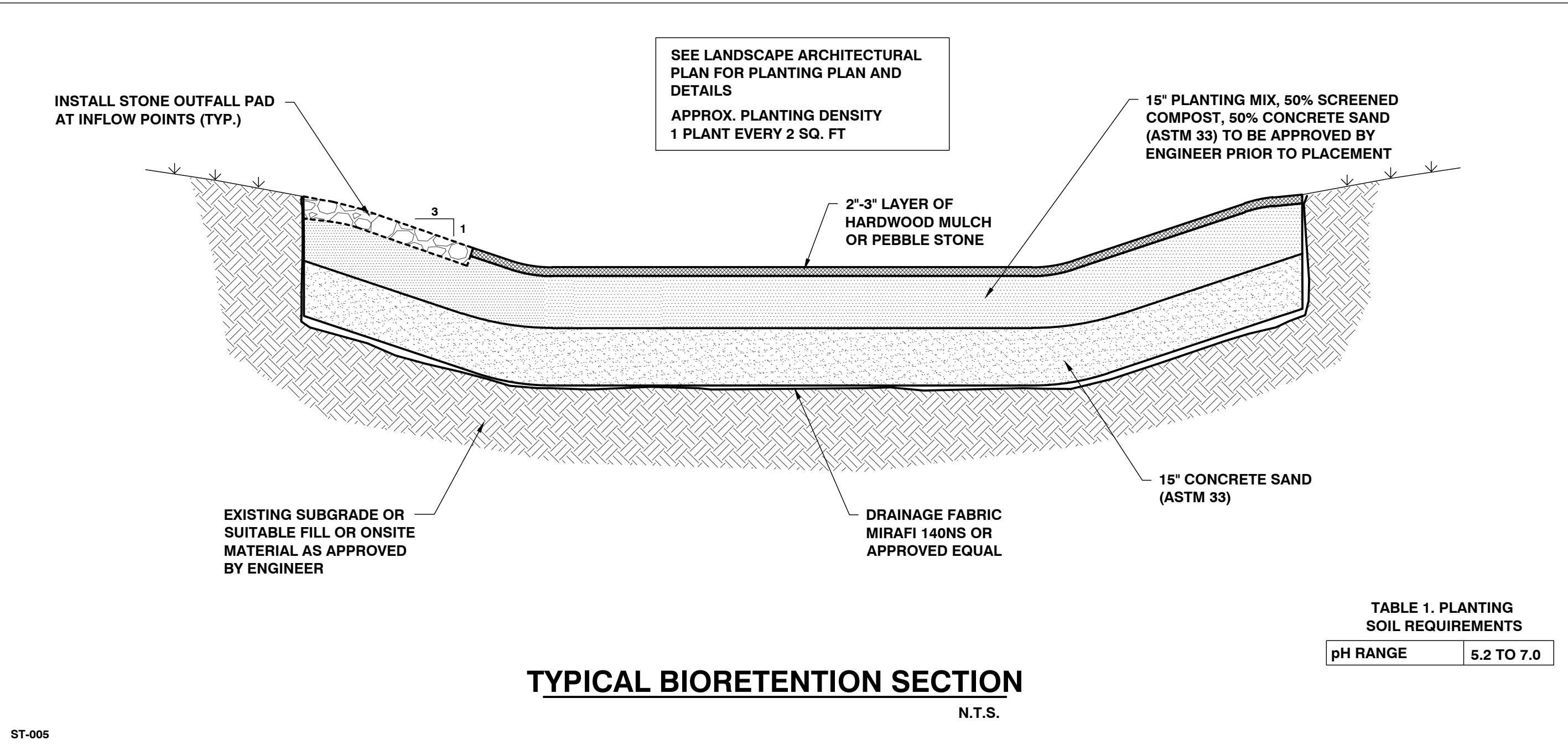
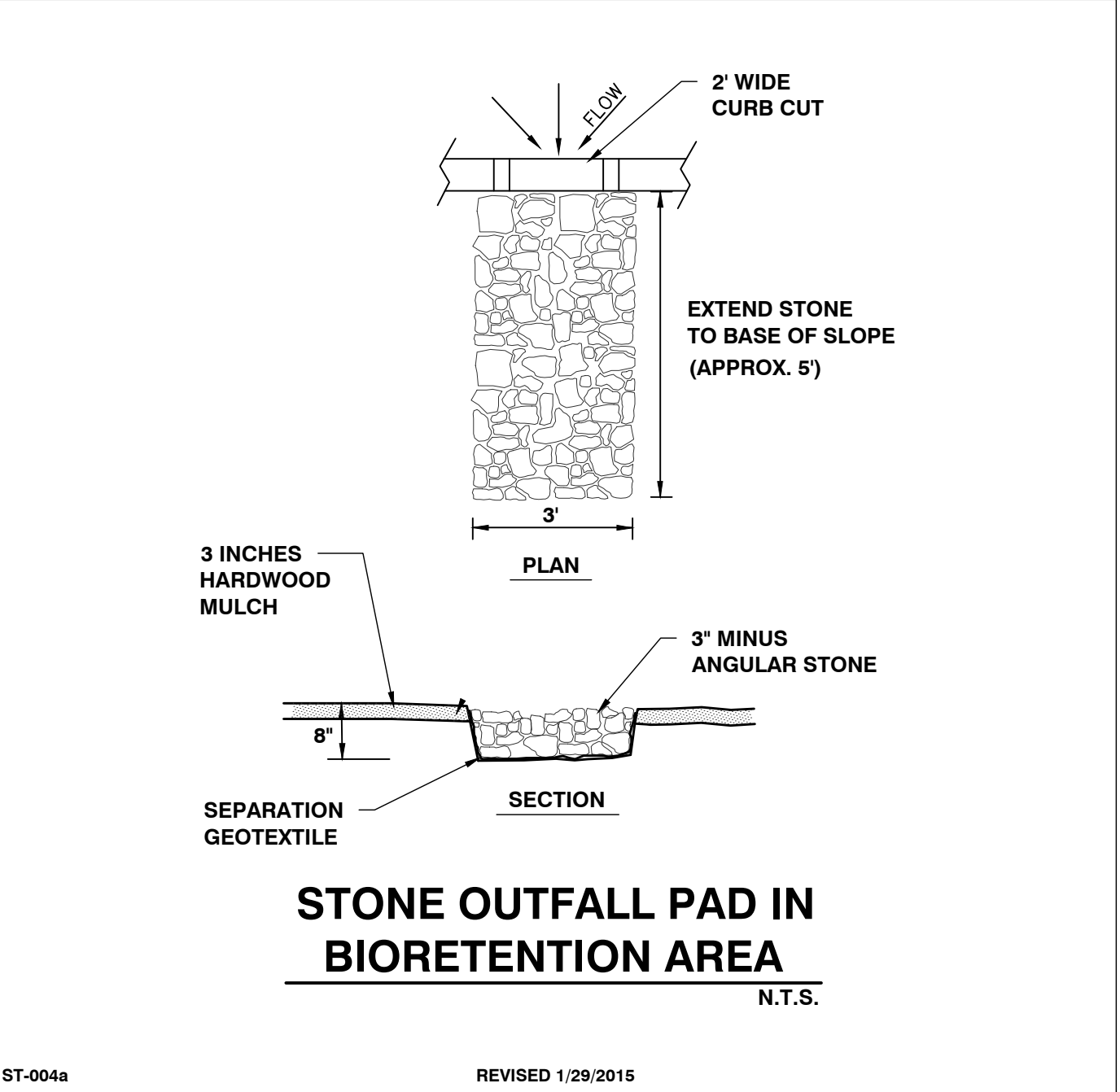
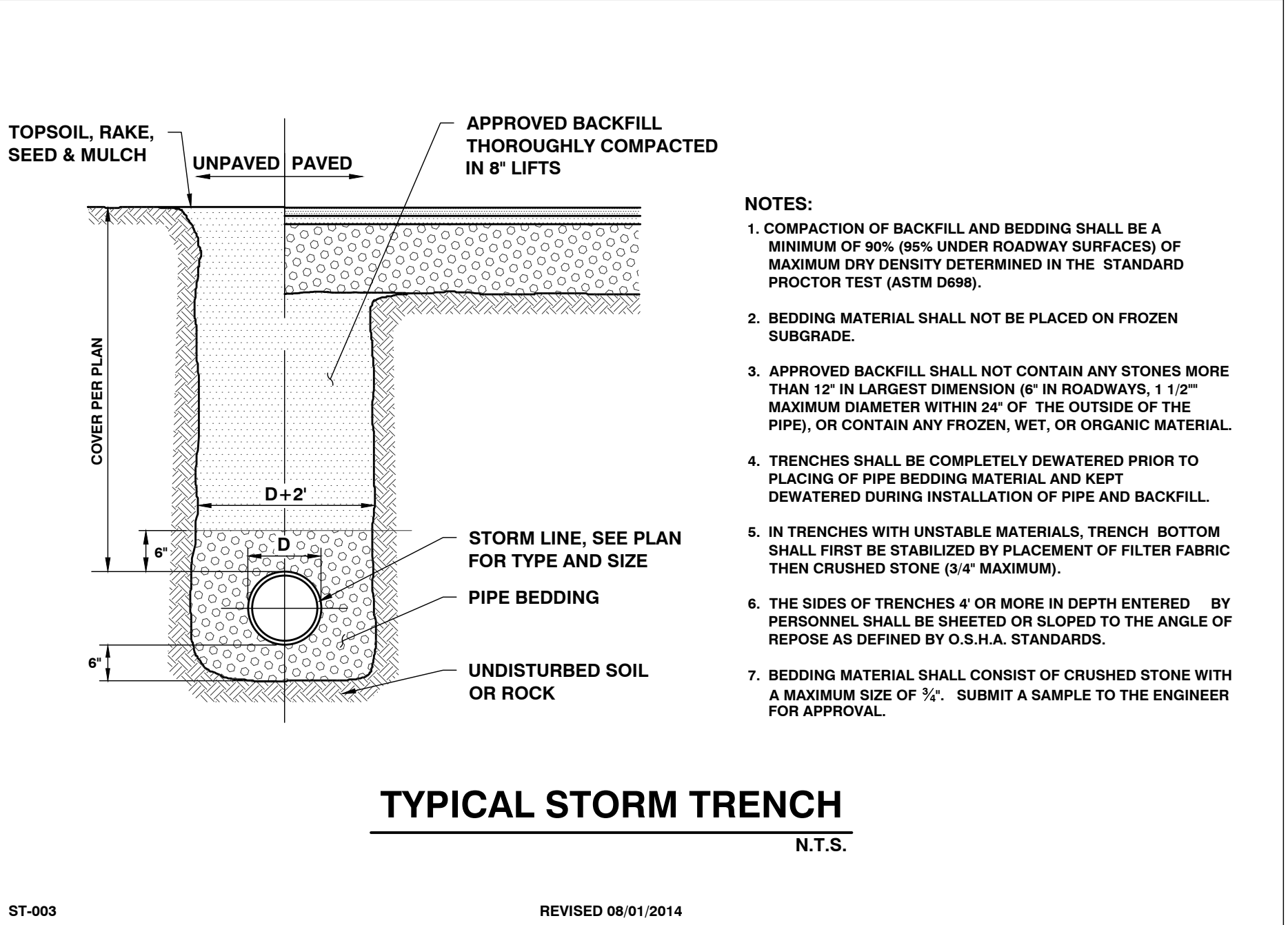
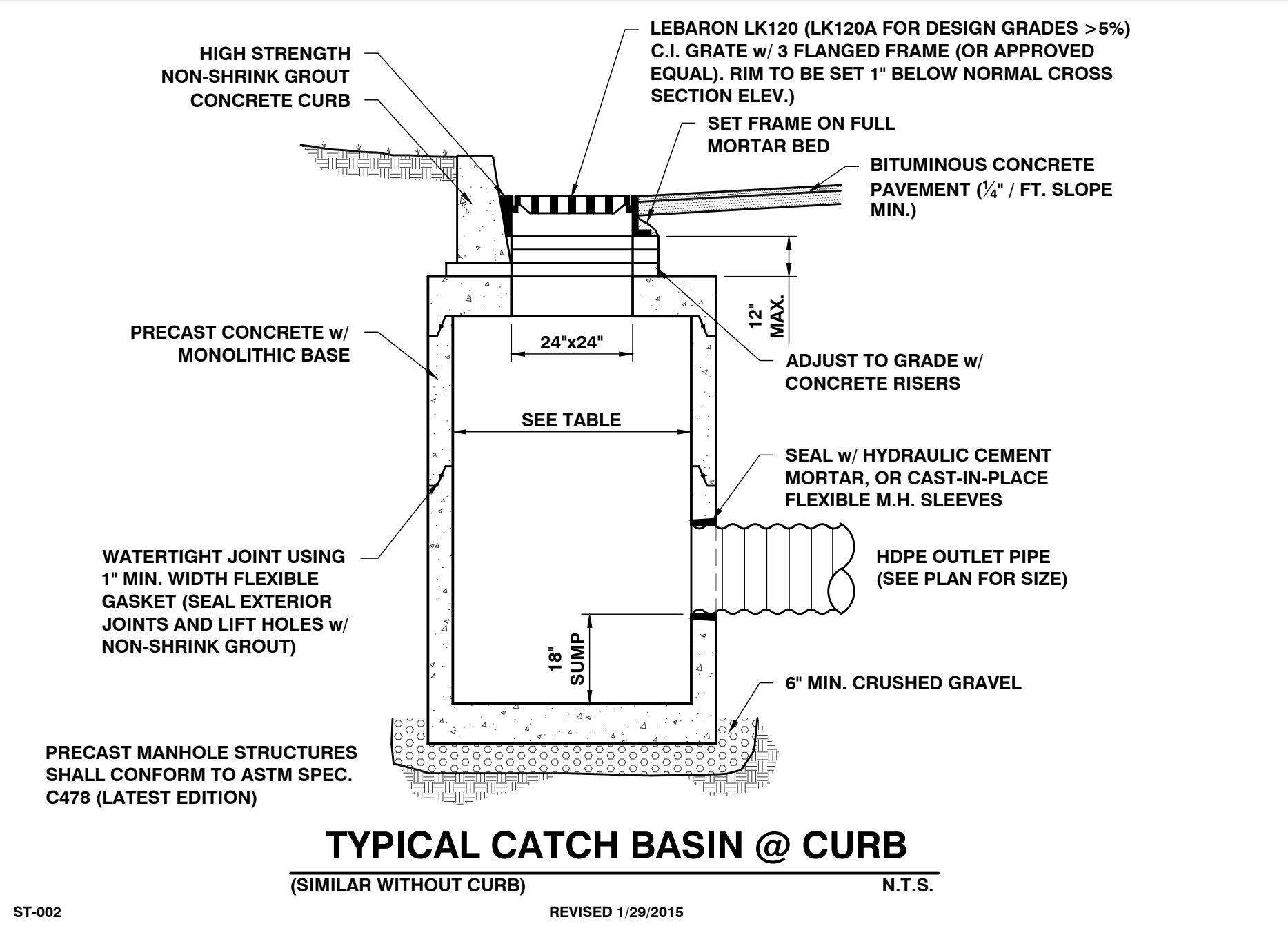


TABLE 1. PLANTING SOIL REQUIREMENTS	
pH RANGE	5.2 TO 7.0

SITE ENGINEER:



CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
802-864-2323 FAX: 802-864-2271 web: www.cca-vt.com

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PBS

OWNER:

**BURLINGTON
COLLEGE**

351 NORTH AVE
BURLINGTON VERMONT
05401

PROJECT:

**BUILDING
RENOVATION AND
SITE
IMPROVEMENTS
329, 351 NORTH
AVE.**

BURLINGTON, VT

DATE CHECKED REVISION

SITE DETAILS

DATE

--

SCALE

AS SHOWN

PROJ. NO.

14215

DRAWING NUMBER

C4.1

PROGRESS PLANS
7/28/2015

Burlington Development Review Board

149 Church Street, City Hall

Burlington, VT 05401

www.burlingtonvt.gov/PZ/DRB

Phone: (802) 865-7188

Fax: (802) 865-7195

Austin Hart, Chair
Brad Rabinowitz
Jonathan Stevens
Israel Smith
A.J. LaRosa
Alexandra Zipparo
Geoff Hand
Jim Drummond (Alt.)



BURLINGTON DEVELOPMENT REVIEW BOARD

Tuesday, August 4, 2015, 5:00 p.m.

Contois Auditorium, City Hall, 149 Church Street, Burlington, VT
Minutes

Board Members Present: A.Hart, Jonathan Stevens, Brad Rabinowitz, A.J.LaRosa, Alexandra Zipparo, Geoff Hand

Board Members Absent: Israel Smith

Meeting commenced at 5:04pm

- I. **Agenda; noticed application for 37- 47 Church St not taking it up tonight; no other changes**
- II. **Communications; 18-20 Weston St taken up on Other Business**
- III. **Minutes; Minutes for July 21st Meeting**
- IV. **Consent Agenda**
 1. **16-0012CU; 747 Pine Street (RM, Ward 2C) Cresta Cooper Nedde LLC, CU**
Establish health studio in unit 3, no site changes. (Project Manager, Mary O'Neil)

A.Hart - recused himself from this item.
B.Rabinowitz - chair for this item.
J.Stevens - motioned to adopt staff findings and recommendations on permit.
A.Zipparo - seconded the motion.
Motion 4-0-0
Motion carries.
 2. **16-0001SN; 37-43 Church Street (CBD, Ward 3), Panera Signage, Bigger Boat LLC**
Replace existing nonconforming signs with new nonconforming signs for Panera Bread (Project Manager, Scott Gustin) *This application has been revised for administrative review.*

Unanimous decision by Board to table this item.
- V. **Certificate of Appropriateness**
 1. **16-0016CA; 187 Carrigan Drive (ICC, Ward 1E) University of Vermont**
Rear addition to the central heating and chiller plant and expansion of existing open air enclosure. (Project Manager, Scott Gustin)

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Department of Planning & Zoning at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).

A.Hart - recused himself from this item.
 B.Rabinowitz - chairs item
 R.Vaughan - presents project for CPCH; former chillers encompasses 40' towers; display and final design work shown with slide presentation; central chiller will be located in central heating plant; small addition placed 40' off existing plant.
 J.Stevens - questioned orientation of project.
 R.Vaughan - describes more screening; addition 89 x 38; taking down two walls, extending west and east side walls; front façade all brick and granite; height varies from 25 to 35 ' due to grading; ventilation cupola; second floor mezzanine; metal roof; height matches existing cooling tower wall; aligns with key elements and existing bldg.
 B.Rabinowitz - 12 surface parking spaces will be eliminated.
 R.Vaughan - will lose 12 spaces;
 B.Rabinowitz – asks staff if this is considered an issue?
 S.Gustin – says it is a non-issue.
 B.Rabinowitz – is this project consistent with new dorm projects? Questions the landscaping at 100 ft. wall.
 R.Vaughan - Brick pavers across front and adding trees near STEM project. STEM project provides landscaping.
 A.Zipparo – not sure if parking is a non-issue.
 S.Gustin – this project involves an overlay and 12 removed spaces are okay.
 B.Rabinowitz - Closes Public Hearing at 5:25pm

2. 15-1401CA; 185-195 College Street (D, Ward 3C) Great Cedars, LLC

Renovations associated with changes of use: First floor and basement commercial; 2nd, 3rd & 4th floors for 33 new residential units. Window repair and replacement, exterior repair as needed, parking identification. (Project Manager, Mary O'Neil)

Steve Guild, applicant, explains that owner intends to have first floor as commercial and second, third and fourth floors converted to residential, which includes studios and one and two bedrooms. Permits are currently in place to restore façade, windows, rot and damaged brick. Majority of the work is all inside. No tenants moved in at this time.

Tenants will be able to apply for individual permits;

A.Hart – Is there a site plans showing alleys and roads, elevations and references to buildings.

M.ONeil - presents Board with plans

A.Hart – asked for staff comments

S.Guild – said there are 66 parking spaces in Merchants garage leaving 59 spaces available in Merchant St for parking and at College St. The bike room on second floor is 16 x 19 floor area. Inclusionary housing will be moved to another building. Windows specifications are according to staff recommendations.

B.Rabinowitz – asked if some apts have access to College St and Mechanics Lane.

Owner does not own the dumpsters on Stacy Lane.

A.Hart – is there a request for waiver of impact fees?

M.ONeil - not aware of a waiver for impact fees.

A.Hart – the Planning and Zoning Department can determine if a waiver is warranted.

The issue is a proposal for more central trash and rubbish removal. What is the implication of adding 33 units and providing for rubbish removal and dumpsters? Need to see a proposal for this arrangement and what the fall back plan will be.

B.Rabinowitz - noted building plan is incomplete since it does not show for overlap making for a confusing plan to follow.

M.ONeil – there are significant impacts due to recycling and rubbish, which the plan does not address this. It cannot be business as usual.

A.Hart – said this is a great use for building /residential; permits are already issued for the project.

M.ONeil – drawings are incomplete.

A.Hart – does this include graphics?

M.ONeil - DPW needs to remove an encroachment; DPW access achieved outside of ROW; formerly a modern storefront.

A.Hart – Is 33 parking spaces in parking plan enough for the number of bedrooms?

A.Zipparo - are all market rate apartments?

S.Guild – yes market rate and shows Board.

J.Stevens - identified 2nd floor plan as shown

A.Zipparo - how many bike spaces will there be?

S.Guild – 8 long term spaces and 3 short term spaces according to code.

A.Zipparo - this may be inadequate at times; questions private garage.

B.Rabinowitz - garage commitments are being explored.

M.ONeil – number of garage spaces in question and applicant is required to file storm water plan.

B.Rabinowitz – question on the type of windows

O'Neil - wood clad in kind.

B.Rainbowitz – are windows in each building consistent and all the same?

S.Guild – intent is to match what's there now. No chance to check every window. Boarded up windows are on 1st and 2nd floor. Once tenants move in, they will apply for where they want the windows.

B.Rabinowitz - is elevation B whole facade boarded up?

S.Guild - yes this is second floor plan.

B.Rabinowitz - what are the materials used on 2nd floor

S.Guild - stucco finish painted.

A.Hart - resolving access issue for pedestrians? Will facades will be more visible?

S.Guild - not focused on alley until 1st floor tenants move in.

A.Hart – what is the connection with commercial tenants? Will applicant have to come back when commercial tenants are identified?

M.ONeil - could do signage administratively.

A.Hart - these decisions may be different depending on tenants.

B.Rabinowitz - great to see bldg being used; disappointing that facades are ignored and are inconsistent.

S.Guild – only doing window replacements that will not affect historic nature; 1st floor windows are not original.

B.McGrew – concerns about no requirement to go to neighborhood group regarding inclusionary housing and the market rate apartments.

A.Hart – there is an inclusionary requirement for the Community and Economic Development Office, which the applicant needs fulfill or applicant would need to provide compensation.

B.McGrew – will this be for affordable housing and is it a requirement?

A.Hart – asks staff how applicant complies.

M.ONeil - applicant has not indicated.

A.Hart - no request to do off site?

B.McGrew - parking garage is a full private garage with 33 spaces. What happens to other people's parking spaces? Not sure about parking study what is being counted.

A.Hart – Board will be looking at what is available.

B.McGrew - who is being to be displaced? Are all contracted? Concerned about displacement of cars creating more congestion for downtown residents.

A.Zipparo – did you attend the meeting?

B.McGrew - told by David White there is no requirement due to no expansion of foot print.

A.Hart - call P and Z tomorrow to ask when deliberative session will be held.

M.Fritz – property manager for 168 college, 198 college, 206 college questions corporate plaza parking not being monitored or having designated spaces with no guarantee for a spot. Oversells all the time and oversubscribed with no system to monitor;

B.Rabinowitz - corporate takes hourly parking but not Merchants.

A.Hart – Board will discuss this. It will be in violation if not allowing spaces for 33 units. This is a requirement that needs to be done.

A.Zipparo - seen this requirement before
M.Fritz - knows the pressure for parking, surface and garage; emotional issues regarding access; speaks on behalf of commercial tenants. Hardly any professionals have signage; noise language issues; paint all over street; Fire dept. there all day; feeling if it's always going to happen affecting value of businesses; day to day difficult; had asked to clean up paint but no response.
AHart - Board can discuss; people using sidewalks and roadways; concerns to call DPW Understand that construction is disruptive.
M.Fritz - garbage concern; lack of knowledge about windows good bad and what they will be; consistency
AHart – Board will discuss windows
M.Fritz - concern about alleys; disappointed in façade on first fl not historic look; think more people would be present to speak, but description of agenda was not clear until amended agenda went out.
A.Hart - whether one person says it or more than one we consider everything.
M.Fritz - appreciates hearing this.
A.Hannaford – from the north ward parks in a different garage; interested in parking in this garage; sees conflict that Handy has parking and towing business and parking arrangements between residential and commercial units.
A.Hart – take up with Planning Commission not DRB's concern
A.Hannaford - knowing College St and the development of other buildings and whether his project is being held to similar standards.
S.Guild - parking is between owners and tenants; windows; most are aluminium frame and have to be replaced; going to match existing style; some covered up consistent throughout alley and entire building.
J.Stevens - sees random locations of windows no consistency.
B.Rabinowitz – there is a lot of stuff on the building façade. Is there an intention that it all stays until there is a reason to remove? Removing power line?
S.Guild - power comes into basement; not sure where lines come from.
Gutting whole bldg; leaving free press; clean up alley of garbage; make entire alley more pedestrian friendly.
A.Hart - agrees change of use is good thing.
B.Rabinowitz – disappointed that significant historic architecture is not being presented well.
J.Stevens - hoping to see commentary on inclusionary housing.
S.Guild – will be designated to another location.
M.Oneil – inclusionary housing was not part of the application.
A.Hart - may have to come back to Public Hearing about this.
Public Hearing was closed at 6:27pm

VI. Adjournment

V. Other Business;

S.Gustin - Board in May; CE reopen; Board decision with limited parameters; decision couple weeks ago was partial; CE what is decision; amend decision to put both decision together; original decision never written up and put together;
A.Hart - not part of original
S.Gustin - taking staff report working with city attorney; have recording but no audio
M.ONeil - cord into recorder faulty
A.Hart - incorporate May and more recent decisions
Adjourned Discussion at 6:32pm

Motion
AJLaRosa; move to grant permit and adopt staff findings
JStevens; seconded motion
Motion: 4-0-0
Motion Carries.

Deliberative Session set for Monday, August 9, 2015 at 5:00p.m.

Plans may be viewed in the Planning and Zoning Office, (City Hall, 149 Church Street, Burlington), between the hours of 8:00 a.m. and 4:30 p.m.

Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Planning and Zoning office is considered public and cannot be kept confidential.

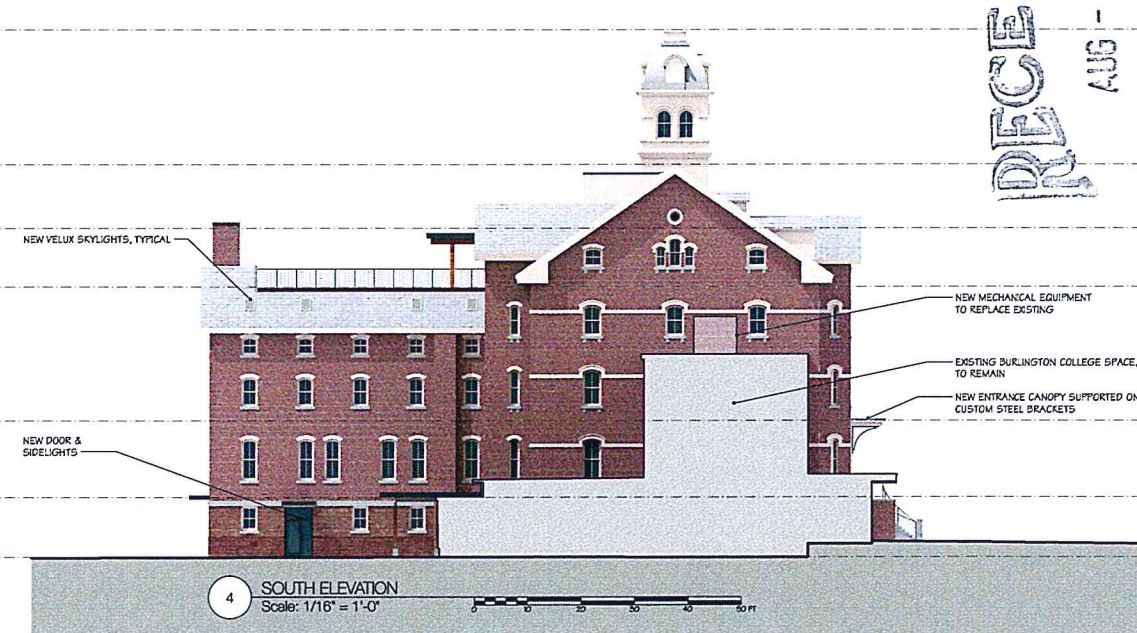
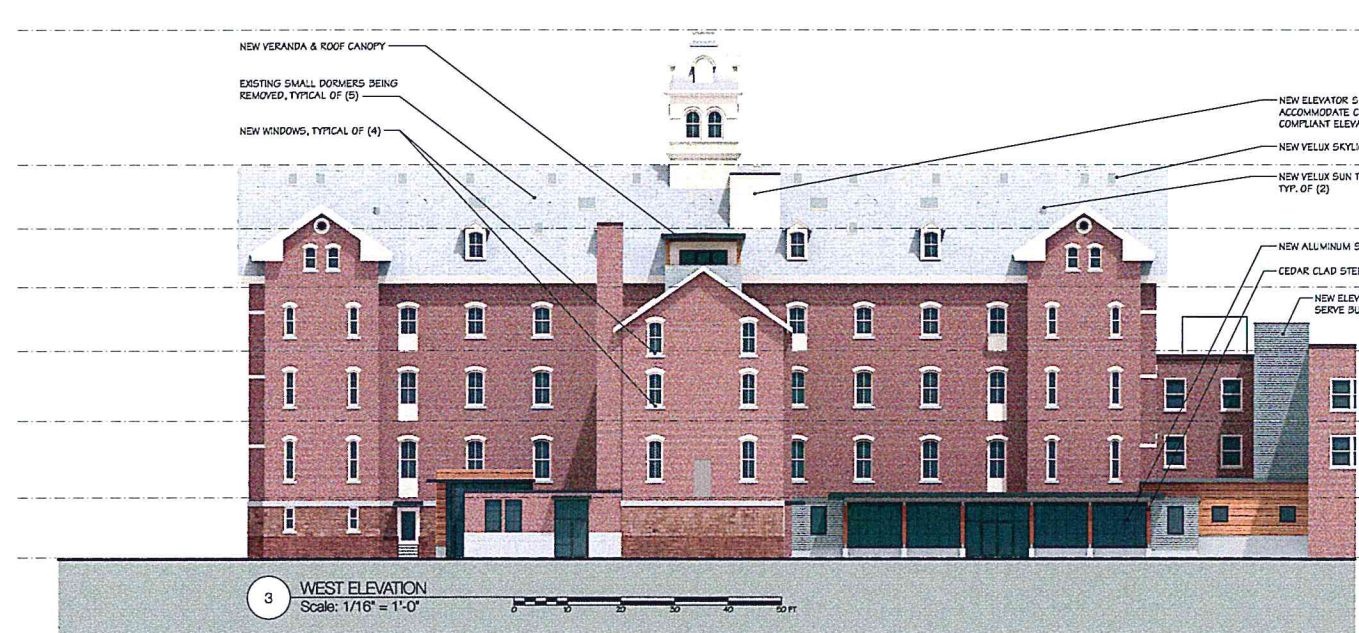
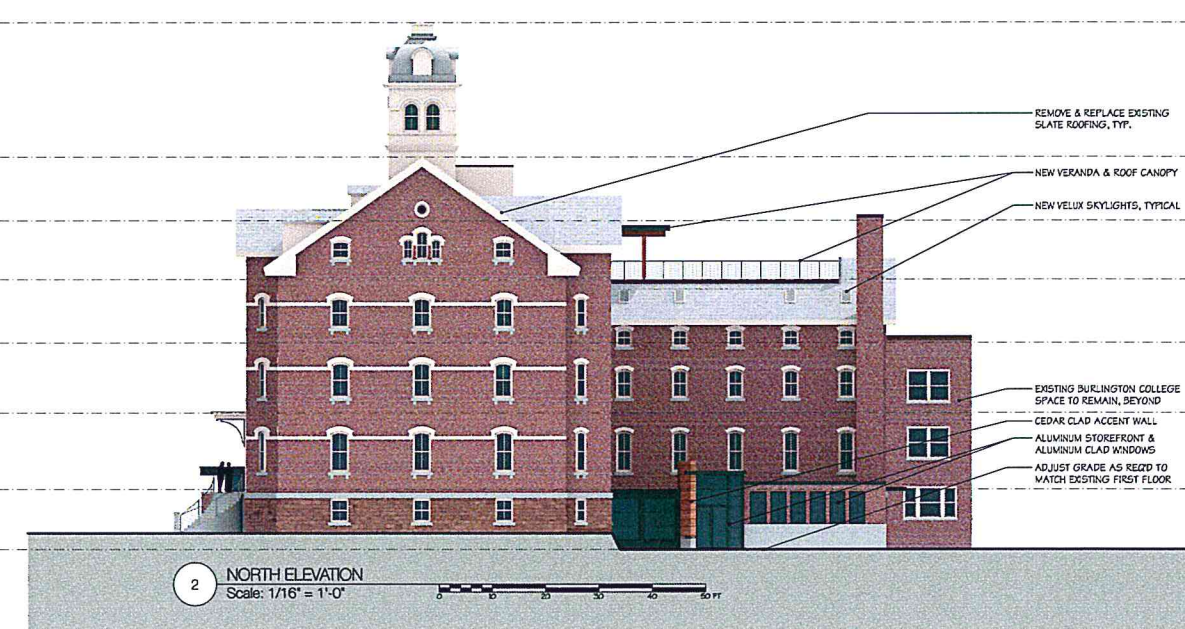
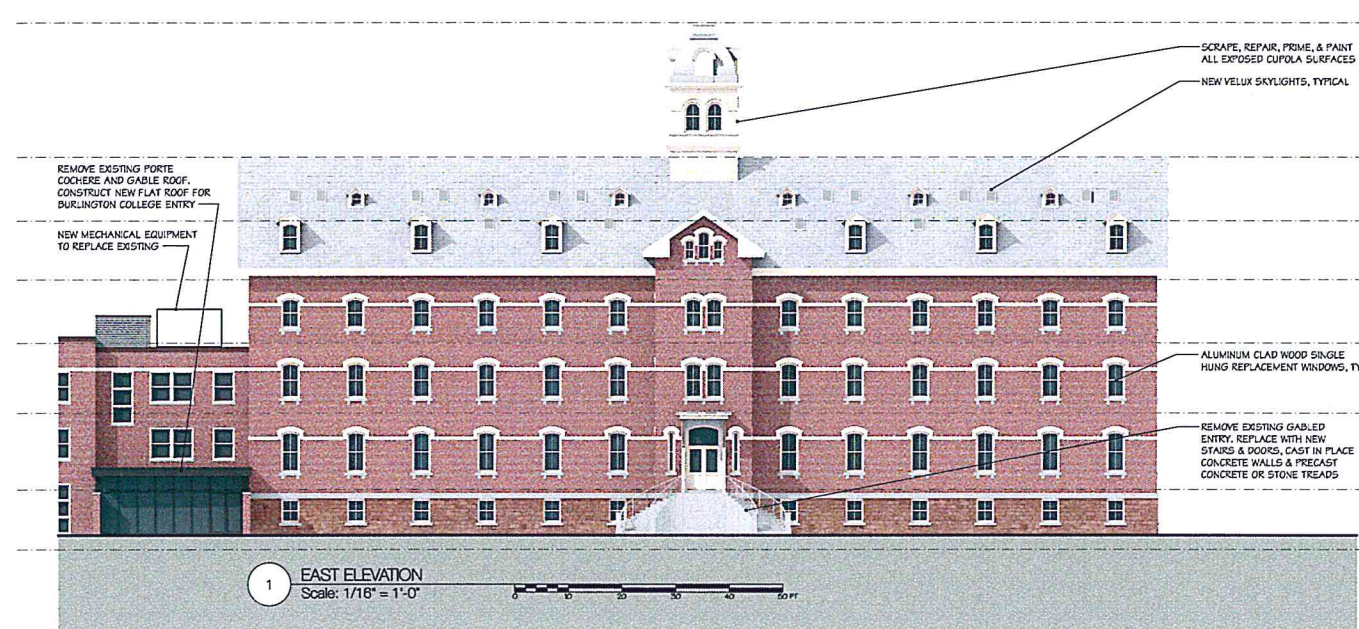
This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/pz/drb/agendas or the office notice board, one week before the hearing for the order in which items will be heard.

A.Hart, Chair, Development Review Board

Date

Anita Wade, Planning and Zoning Clerk

Date



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BURLINGTON, VERMONT

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Duncan
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T: 802.884.6693

DATE: 08.05.2015

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