

Burlington Design Advisory Board

149 Church Street, City Hall

Burlington, VT 05401

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DESIGN ADVISORY BOARD Tuesday, July 22, 2014 Conference Room 12, City Hall, Burlington, VT AGENDA

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

Session I - 3:00 – 3:45 p.m.

14-1321CA/MA: 111 COLCHESTER AVENUE (I, Ward 1) Fletcher Allen Health Care, Inc.
New Inpatient building west of Ambulatory Care Center with associated parking, lighting and landscaping.
(Project Manager: Mary O'Neil)

Session II - 3:45 – 4:30 p.m.

14-1320CA/CU: 10 UNIVERSITY PLACE (I, Ward 1) UVM
Demolition of Chittenden, Buckham, Wills residential complex with redevelopment plans including associated pedestrian amenities. (Project Manager: Scott Gustin)

Session III - 4:30 – 4:45 p.m.

Annual Organizational Meeting



Inpatient Building Fletcher Allen Health Care

Burlington, Vermont

City of Burlington Final Site Plan Application

June 30, 2014



Department of Planning and Zoning

149 Church Street, City Hall

Burlington, VT 05401-8415

Phone: (802) 865-7188

Fax: (802) 865-7195

www.burlingtonvt.gov/pz

Zoning Permit Application

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

PROJECT LOCATION ADDRESS: 111 Colchester Avenue

PROPERTY OWNER*: FAHC, c/o Dave Keilty

UVM, c/o Linda Seavey

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

UVM
POSTAL ADDRESS: 109 South Prospect Street

CITY, ST, ZIP: Burlington, VT 05405

DAY PHONE: 802.656.0215

EMAIL: linda.seavey@uvm.edu

SIGNATURE: *Linda Seavey for the University of Vermont*
I am the owner. In addition, I duly authorize the applicant (if noted) to act on my behalf for all matters pertaining to this zoning permit application.

APPLICANT: Co-Applicant: FAHC c/o Dave Keilty
Co-Applicant: UVM c/o Linda Seavey

FAHC
POSTAL ADDRESS: 199 Main Street, Suite 150

CITY, ST, ZIP: Burlington, VT 05401

DAY PHONE: 802.847.8443

EMAIL: Dave.Keilty@vtmednet.org

SIGNATURE:

Linda Seavey for the University of Vermont

Description of Proposed Project: New approximately 208,000 sq. ft. Inpatient Building west of the Ambulatory Care Center building at the Medical Center Campus with associated parking, lighting and landscaping.

Existing Use of Property: ☐ Single Family ☐ Multi Family: # ___ Units ☒ Other: Hospital/Medical Center

Proposed Use of Property: ☐ Single Family ☐ Multi Family: # ___ Units ☐ Other: Hospital/Medical Center

Will 400 sq ft or more of land be disturbed, exposed and/or developed?

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

Yes ☒ No ☐

For Single Family & Duplex, will total impervious area be 2500 sq ft or more?

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

Yes ☐ No ☐

Are you proposing any work within or above the public right of way?

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

Yes ☐ No ☒

Estimated Construction Cost (value)*: \$ 104 million

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

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

Office Use Only	Zone	Eligible for Design Review?	Age of House	Lot Size										
Type:	SN	AW	FC	BA	COA 1	COA 2	COA 3	CU	MA	VR	HO	SP	DT	MP
Check No.	Amount Paid		Zoning Permit #											

Fletcher Allen Health Care
Inpatient Building Project
Final Site Plan Narrative

June 30, 2014

I. Overview

Fletcher Allen Health Care (Fletcher Allen) is proposing an approximately 208,000 square foot (sq. ft.) inpatient building project (the Project) to be located next to the Emergency Department on the west side of its Medical Center Campus. The Project will consist of approximately 128 inpatient replacement beds to be hosted in single rooms with connections to the McClure Building and the West Pavilion of the Ambulatory Care Center. The Project includes a small boundary line adjustment with the University of Vermont.

This Project has been anticipated and discussed with the City and Fletcher Allen's neighbors over the past six years. The factors that influenced the need for and the design of this Project are as follows:

- The replacement of outdated infrastructure to meet the needs of current medical practices. Fletcher Allen's oldest inpatient buildings are more than 50 years old. The beds that will be replaced in Shepardson are located in facilities that were built in 1961. New facilities are needed to provide care that is consistent with today's hospital design standards and match the high-quality care provided by Fletcher Allen's physicians and staff;
- The replacement of double rooms to private single rooms to meet the 2010 or most recent edition of the FGI Guidelines for Design and Construction of Health Care Facilities which are current hospital design standards within the industry and State Hospital licensing agencies including the Vermont Green Mountain Care Board. Currently, 60% of Fletcher Allen's inpatient rooms are double or multiple bed rooms that do not meet contemporary standards for patient care;
- By creating more single bed rooms, Fletcher Allen can provide sufficient space for medical equipment and more effectively practice infection prevention; and
- Offering more single rooms will help Fletcher Allen create a healing environment that is patient-centered, provides quiet and comfort to patients and their families, and offers more privacy and confidentiality.

Introduction to the Project

The Project as currently planned consists of an approximately 208,000 sq. ft. seven-story building (two lower circulation and mechanical floors, four inpatient bed floors and a mechanical penthouse) with related site work, utility/MEP upgrades and extensions, renovations and interfacing within the existing ACC and McClure Buildings. The Project would be constructed above the existing Emergency Department parking lot and would connect with the existing ACC and McClure buildings in several locations.

The Project's exterior elements will consist of a combination of thin clad masonry, glass curtain wall and "punched window" openings employing some aspects of the architectural vocabulary of the adjoining ACC building. The Project will apply for LEED certification.

Site improvements will consist of a realignment of the Emergency Department access road – Hospital Drive, with circulation and drop off areas beneath and next to the new building. Vehicular access will be maintained from Colchester Avenue. New pedestrian walkways provide connections to the existing network of sidewalks and multi-use path. Exterior lighting and landscaping will be included consistent with current standards used on the FAHC Medical Center Campus and the University's exterior lighting standards. Landscape plantings along the access driveway, pedestrian walkways and parking area will provide shading and soften the hardscape. Rain gardens within the parking area and along Hospital Drive will help address stormwater treatment.

FAHC and the University of Vermont currently have 136 parking spaces in the project area. The project parking for both will be reconfigured with no net change in the number of spaces. There are no plans to add medical or clinical full time equivalent (FTE) staff. There may be some additional support staff, but it is unclear at this phase of design. Regardless, no additional parking spaces are proposed and parking will continue to be managed within the 2,094 cap for Fletcher Allen on-campus parking spaces.

The Project includes minor modifications to the Emergency Department entrance on Level 1, an extension of the utility tunnel on Level L from the existing ACC building to the Project, installation of a new 1,400 ton centrifugal chiller, related cooling tower infill in the Central Plant, a new boiler, and related MEP extensions from the ACC utility tunnel to the Project. The Project also includes footings and utility pathways to enable future additional vertical expansion.

The Project is replacing existing beds in Shepardson 3North and Shepardson 4North. This replacement, as outlined in the Fletcher Allen Master Facility Plan, is the first of several planned bed replacement facilities at the Medical Center Campus which may occur over the coming

decades. The vacated space in Shepardson 3North and Shepardson 4North will be used for decompressing overcrowding within the existing campus. There will be no new office or clinical programs.

The total proposed square footage (208,000 sq. ft.) includes unoccupied and low-occupancy areas such as mechanical spaces (including the mechanical penthouse), vertical circulation spaces, and the skybridge connector to McClure.

The proposed square footage also includes several possible add-alternates which are being studied. For the purposes of this application we are assuming all of these add-alternates will be constructed and are requesting approval of them. In the event any of these add-alternates are deleted the final project square footage may be less. In such event we will seek any required project amendments.

A boundary line adjustment will be needed with UVM in order to accommodate the building and associated parking improvements. The proposed boundary line is shown on the plans and a separate application will be submitted for this.

Schedule for Design and Construction

Fletcher Allen has an approved Certificate of Need (CON) from the Green Mountain Care Board that allows for planning only, no construction has been approved. Fletcher Allen has retained a design team and a construction manager to assist with pre-construction planning, and will continue to coordinate with UVM on their housing master plan and on landscaping between their planned STEM project and the Project. Fletcher Allen anticipates submitting a construction CON for the Project by the end of September 2014. If approved, construction is planned for the spring of 2015 subject to the issuance of City and State permits. The estimated timetable for completion of the Project is to commence construction in the Spring of 2015 with anticipated completion in Fall of 2018. The total estimated construction cost is \$104,585,229. The total project cost, including construction, equipment and furnishings, will be higher.

II. Initial Planning, Sketch Plan Review

Fletcher Allen has been involved in master planning for its Medical Center Campus and for inpatient bed replacement options since 2006 with extensive discussions with the Burlington Planning Commission and with the Combined City Council / Planning Commission Institutional Development Committee. The Project is consistent with Fletcher Allen's Master Facility Plan as discussed with the City during this process.

Fletcher Allen met with the City Planning and Zoning Staff in the fall of 2013 to receive early input regarding the conceptual design of the Project. In November of 2013, Fletcher Allen met with the City Technical Review Committee to present and discuss the project. Several issues that staff felt need to be addressed as the design of the Project progresses included stormwater mitigation, possible impacts to Converse Hall, and fire truck access. A sketch plan application was submitted to the City in March 2014. The Design Advisory Board (DAB) and Development Review Board (DRB) held hearings in March and April 2014. In March 2014, Fletcher Allen met with the Ward 1 Neighborhood Planning Assembly (NPA) and a letter has been submitted by the Steering Committee of the NPA and is included in this application. Comments received from the DAB, DRB, City Planning and Zoning Staff and the Ward 1 NPA are focused on the relationship of the Project design and Converse Hall, the demolition of the UVM dorms and how this will be addressed, and views of the Project from Colchester Avenue. Each of these comments has been considered in the final site plan design.

III. City Development Review Criteria

We have provided information on the Project that addresses the City's Development Review Criteria in conformance with The Comprehensive Development Ordinance.

Exemption Request

The City's Comprehensive Development Ordinance has a provision for an exemption from Conditional Use and Major Impact Review - *Article 3, Part 5: Conditional Use and Major Impact Review, Section 3.5.3 Exemptions*. We believe the Inpatient Building project qualifies for an exemption from Major Impact Review under the exemption listed in Section 3.5.3 (d) of the Comprehensive Development Ordinance. Please consider this a request for an official ruling with regard to whether the project so qualifies.

Section 3.5.3 (d) says "...*Major Impact Review shall not apply to applications involving one or more of the following... (d) Projects that do not result in a change of use or increased parking demand as determined by the administrative officer....*"

The Inpatient Building project qualifies for this exemption because a) it does not involve a change of use and, b) will not increase overall parking demand on campus. The first of these is clear: the use on the Fletcher Allen medical center campus is and will remain a hospital. The beds that are planned for the Inpatient Building exist on the campus today as part of the hospital use and will simply be relocated on campus as a result of this project.

During planning and permitting for the Renaissance Project, Fletcher Allen agreed to a cap of 2,094 parking spaces on the Medical Center Hospital (MCHV) campus. All on-campus parking demand must be met within this number. The calculations that arrived at this number assumed various factors, including pre-existing uses, new or expanded uses in the ambulatory care center, growth in services over time, occasional peak demands, off campus parking, a dynamic transportation demand management (TDM) program, and a built-in on-campus vacancy factor of approximately 10%. This built-in vacancy factor allows for occasional surges of demand and for easier flow at all times. Less vacancy than this results in delays in finding spaces (a problem when people are trying to make appointments on time) and increased frustration for all concerned.

As part of this 2,094 space cap, Fletcher Allen actively manages its parking through its TDM programs to ensure that increases in parking needs over time are offset by TDM efforts that reduce demand among other users. This is what Fletcher Allen committed to during permitting for the Renaissance Project and remains committed to today.

As previously stated, the Inpatient Build project will not increase the number of parkers over the course of a typical day because it will not result in an increase in beds on the campus. The parking for the Inpatient Building will be accommodated within the 2,094 parking space cap as part of Fletcher Allen's ongoing management of its parking facilities and TDM programs. No increase in parking spaces is proposed as part of this project.

Accordingly, this project does not involve a change of use and will not cause increased parking demand. Therefore, we believe this project qualifies for the exemption to Major Impact Review set forth in Section 3.5.3 (d) and we are requesting this exemption.

Building Design

The overall approach to the design of the Inpatient Building is that the addition is conceived as a continuation of the architectural language established by the existing ACC. The existing Fletcher Allen campus, having been built over many decades, is comprised of a variety of disparate architectural styles and materials. The Inpatient Building is designed to help unify and extend the most recent major architectural development on the campus rather than adding yet another language to the mix. The use of the similar materials, proportions and façade gestures will allow the Inpatient Building to be viewed in this manner.

The massing and scale of the Inpatient Building seeks to blend with the existing ACC. The south façade will read as an extension of the ACC entrance arc that provides the main entry face for

Fletcher Allen. The main mass of the building forms a gentle curve that works with this arc and foreshortens the views from many angles of the western façade thus reducing its perceived size.

At the base of the Inpatient Building highly articulated columns faced in thin clad masonry, similar to those at the existing ACC, will front the vehicular access drive and provide a consistent campus architectural statement for vehicular drop off areas as cars approach the building and drive underneath for Emergency Department access. The west façade will feature a series of vertical glazed elements set in a thin clad masonry façade. The glazing will reflect the functional layout of the plan where paired patient room windows provide views towards the lake. Projecting brows at the top of each glazed area will recall similar features on the existing ACC building.

The Inpatient Building will have a flat roof with a fully adhered roof membrane utilizing tapered insulation sloped to interior roof drains. The uppermost level of the building will be an enclosed mechanical penthouse clad in articulated metal panel with louvers for air movement integrated into the façade design. There will be no exposed mechanical equipment viewable from the ground or adjacent buildings.

There will be two main entry points at the ground level of the building. One will be the public entrance to the emergency department which will be entered directly from a vehicular drop off area sheltered by the new building above. Glass areas will allow for visibility into the public waiting area of the Emergency Department during the day and provide a lighted beacon for way finding in the evening. Prominent and appropriate signage will also be present. The other main entry point will be the ambulance entrance, which will remain in its current location with existing canopy and signage.

The building fenestration will be a reflection of the hierarchy of the programmatic uses inside. The largest glazed areas will be at the locations of the patient rooms and the family visitor lounge to allow as much daylight and exposure to views for these areas as practical to promote an evidence-based design healing environment. These will be consistent from floor to floor and provide for a vertical emphasis to the façade fenestration. Opportunities for natural light in other areas such as ends of corridors and elevator lobbies will be provided to aid in orientation to the outside and way finding utilizing less prominent glazed areas.

The Project will incorporate various features which will allow it to be an example of energy efficiency for the Fletcher Allen campus. The building's exterior will feature triple glazed windows for greater thermal efficiency. The mechanical system will incorporate chilled beam

technology allowing for a more efficient distribution of cooling loads through the building. Energy efficient LED lighting will also be utilized throughout the facility.

The Inpatient Building will have an enclosed mechanical penthouse with a roof elevation of 101' above grade or 459' – 4" above mean sea level. This complies with the Institutional Core Campus Overlay District height restriction of no greater than 540' above mean sea level as well as the ICC-UVM central campus height overlay district height restriction of no greater than 140' above grade.

The Inpatient Building will be only briefly visible from Colchester Avenue and from University Place. The most prominent view of the Inpatient Building will be from the UVM Central Quad. Each of these views of the Inpatient Building will be softened with landscape plantings.

Relationship to Converse Hall

The immediate vicinity of the project area includes several buildings that are 50 or more years old including Converse Hall and the: Chittenden-Buckham-Wills Residential Complex (CBW). Converse Hall is considered to be a significant historic resource. The design process for the Inpatient Building project carefully considered the potential impacts on these buildings. The initial design attempted to balance impacts on all of the buildings and could have been constructed with all four remaining. Feedback from City staff, Fletcher Allen's historic preservation consultant and others suggested that it was more important to further reduce impacts on the historic building of greater value: Converse Hall. Furthermore the University's 2006 Campus Master Plan and 2013 Housing Master Plan calls for future demolition of CBW Residential Complex since the structures are not feasible to renovate to modern standards primarily due to the pre-cast concrete construction. Doing so resulted in moving the Inpatient Building further away from Converse Hall at the expense of greater impacts on the buildings of lesser historic value: Chittenden-Buckham-Wills Residential Complex.

Numerous elements in the proposed design reflect the efforts to preserve the visual prominence of Converse Hall as an important historic resource. The original proposed location of the Inpatient Building has been moved northerly away from Converse Hall in order to provide more space between the two structures and protect views to the west and east. The historic walkway from Converse Hall's main entrance westerly to the UVM campus will be retained and enhanced, preserving the historic link between the residence hall and the UVM Central Quad.

The materials and design elements selected for the Inpatient Building respond to the existing features of the Ambulatory Care Center (ACC) and Converse Hall in the proposed use of similarly hued thin clad masonry, and the design esthetic that employs curved forms to

strengthen the relationship between Converse Hall, the ACC and the Inpatient Building. In addition, the vertical windows that will be regularly spaced across the south elevation of the Inpatient Building reflect similar fenestration patterns of both Converse Hall and the south elevation of the ACC.

Lot Coverage Calculations

Fletcher Allen is allowed up to 65% total lot coverage under Section 4.5.2(C)(2) of the Comprehensive Development Ordinance. This section of the ordinance provides an incentive for Fletcher Allen to maintain substantial green space in a “transitional buffer” along Colchester Ave. and East Ave. For every 1% that lot coverage in the transitional buffer is below 40%, Fletcher Allen gains 1% in allowable overall lot coverage up to a maximum 65%.

The boundary line adjustment will increase the entire Fletcher Allen campus from 32.34 acres to 33.37 acres. The campus “transitional buffer” lot coverage does not change: the total buffer is 8.74 acres with 2.24 acres of impermeable area for a total of 26%, which is below the 40% maximum. The proposed overall lot coverage, including the Inpatient Building and associated parking, on the Fletcher Allen campus will increase slightly from 19.02 acres to 19.71 acres, and will increase slightly from 58% to 59%. This is under the total maximum lot coverage of 65%.

UVM’s lot coverage before the land transfer is 48.09%. The UVM lot coverage changes after the land transfer (exclusive of UVM projects: removal of the CBW residence halls and installation of the Green Mountain Walkway) to 48.04%. They will still be under the total maximum lot coverage of 65%.

Circulation and Parking

Traffic access to the site will remain from Colchester Avenue with an adjusted Hospital Drive. The Inpatient Building does not have direct pedestrian access to the site: it is internally connected to the ACC West Pavilion and to McClure with a skybridge. Vehicular access is associated with the Emergency Department for Fletcher Allen and UVM’s parking as described below.

The proposed site plan incorporates a turnaround directly the north of the Inpatient Building for fire truck access and movement. We have worked with the Fire Marshall to insure that the proposed design meets the needs of public safety. The existing ambulance entry to the Emergency Department will remain in its present location with reconfigured access and ambulance drop off.

There are no changes to the total count of 136 parking spaces available in the project area, spanning both UVM and Fletcher Allen property, 6 of which are handicapped accessible spaces. The parking area has adjusted to accommodate the Inpatient Building, and there are 47 spaces allocated to Fletcher Allen for the Emergency Department and 89 spaces for UVM as exists today. The proposed Inpatient Building will not add additional bed capacity nor will there be any increase in on campus parking.

Existing City permits limit Fletcher Allen's on-campus parking to a maximum of 2,094 spaces. Existing permits also allow Fletcher Allen to vary the number of physical parking spaces on site at any given time based on its ongoing dynamic management of parking, which includes limiting on-campus parking permits for staff and other Transportation Demand Management (TDM) programs, so long as the quantity does not exceed the 2,094 parking space cap. Parking will continue to be managed within the 2094 cap for on-campus parking spaces. As always, from time to time there may be fewer physical spaces on campus, depending on Fletcher Allen's ongoing management of parking.

Pedestrian and bicycle access routes to and from the site are updated with the multi-use path shifted to the west side of Hospital Drive to avoid conflicts with the Emergency Department. Sidewalks connect the parking area with the Emergency Department and to the existing sidewalks around Converse Hall, ACC and the UVM campus. Bike racks are provided near the Emergency Department entrance. The Inpatient Building, site parking, and pedestrian sidewalks and multi-use path are handicapped accessible meeting the Americans with Disabilities Act (ADA) requirements.

Landscape

Thoughtful landscape design has been incorporated into the project. As one approaches the Inpatient Building from Colchester Avenue, shade trees line Hospital Drive. Within the parking lot adjacent to Converse Hall is a central, colorful raingarden that collects surface water for treatment. A second raingarden is placed in the interior of the fire truck turnaround north of the Inpatient Building. A paved walk radiates out from the covered plaza by the Emergency Department through a shaded tree grove to the Fletcher Allen parking, across the Converse Hall axial walk, through the UVM parking area adjacent to the raingarden, and south to the UVM campus and beyond. Columnar, shade and specimen trees provide shade throughout the parking areas and along pathways, and tree and shrub plantings along the western edge of the parking area screen paved areas visible from the UVM campus. Tree and raingarden plantings are prominently visible from the Inpatient Building patient rooms and intended to provide a gentle transition to the UVM campus.

Stormwater and Erosion Control

The project causes only a small increase in impervious area from 19.02 acres to 19.71 acres. Stormwater control will be accomplished using two approaches. One approach will be connecting to the existing collection system that conveys runoff to the North Campus Treatment and Detention Facility. The North campus Facility provides treatment to both UVM and Fletcher Allen. The Facility is designed, permitted and constructed in accordance with the State of Vermont's unified sizing criteria. Additionally, some on-site treatment will be included to the extent practicable. These on-site measures will likely include rain garden or bio-retention type systems located at some of the grass median areas as well as the vegetated down gradient edge of some of the parking areas.

For erosion prevention and sediment control, the project will follow best practices to prevent and or minimize erosion during construction. Currently Fletcher Allen has hired a construction manager that is working on a detailed logistics/phasing plan. Due to the size of the project as well as constructing the building over an active Emergency Department, there are a series complex steps the contractor will have to undertake in order to construct the project while maintaining access to the Emergency Department. Once the logistics plan is completed and signed off on, a detailed Erosion Prevention and Sediment Control Plan set will be developed and submitted to the State Agency of Natural Resources as part of their construction general permit program (CGP). This plan will take into account the phases/steps that will be required for construction and reflect the measures that will be applied as part of each phase of the project. The City's Stormwater Program Manager will be consulted with as part of this plan development as well as receiving copies of the final plan.

Outdoor Lighting

Energy efficient LED lighting will be utilized throughout the site and is proposed to coordinate with Fletcher Allen's and UVM's existing lighting. Pole-mounted LED light fixtures, identical to those currently used on the FAHC campus, are placed along Hospital Drive, throughout the parking areas, and along walkways to provide safe, efficient lighting conditions.

All areas under the Inpatient Building for vehicular drop off and public access to the Emergency Room will be adequately lit during the evening hours. The relocated parking lot for the Emergency Department will also get appropriate lighting utilizing fixtures consistent with types already in use on the Fletcher Allen campus.

Infrastructure

The Inpatient Building project will disrupt a number of existing utilities including, water, sewer, storm drains, power (both Fletcher Allen and BED) and Fletcher Allen Communication duct

banks. Measures are being taken to reroute impacted utilities as well as servicing the Project with water, sewer and power.

MEMO

TO: Dave Keelty
FROM: Dave Saladino, PE & Mark Smith, PE
DATE: June 28, 2014
SUBJECT: FAHC Inpatient Building – Traffic Assessment

On behalf of Fletcher Allen Health Care (FAHC), RSG has conducted the following assessment of expected traffic impacts related to the proposed Inpatient Building project in Burlington, Vermont.

1.0 SUMMARY OF KEY FINDINGS

We offer the following summary of key findings based on the analysis presented in this memorandum:

- Existing traffic conditions at key entry points to the main FAHC campus are within acceptable norms during peak conditions.
- Traffic generated by the Medical Center is dictated almost entirely by the number of employees and beds within the facility and can be reduced by extensive Transportation Demand Management Programs a key element of which is limited on-campus parking.
- No net change in the total number of beds or maximum parking spaces are expected at the Medical Center as a result of the new Inpatient Building.
- No net increase in vehicle traffic or parking demand is expected due to the proposed Inpatient Building project.

Per the recently approved 2014-2019 Joint Institutions Parking Management Plan (JIPMP), FAHC is not anticipating any projects that will affect parking demand over the next five years, and their current parking supply of 2,874 spaces for the Medical Center is 89 spaces more than their projected demand.

FAHC, as a member of Campus Area Transportation Management Association (CATMA), will continue to manage its traffic and parking consistent with its management practices. FAHC's basic management strategy is to ensure an adequate number of parking spaces to enable patients and families to park in accessible and convenient parking facilities. Through use of Transportation Demand Management (TDM) practices in cooperation with CATMA, FAHC provides incentives to encourage mass transportation, pedestrian, biking and carpooling alternatives to reduce Single Occupant Vehicle (SOV) employee traffic to the site. FAHC maintains 1,108 number of employee satellite parking spaces. This, combined with stringent employee parking management protocols and a robust shuttle system to encourage off-site parking, allows FAHC to provide convenient patient parking while maintaining overall onsite parking within the bounds of its permitted onsite parking space inventory.

In addition, total parking on campus is capped at 2,094 spaces by virtue of the hospital's Act 250 land use permit, #4C0506. The parking spaces required to serve this expansion will be accommodated within the existing parking inventory.

3.0 TRAFFIC ANALYSIS

This study relies upon design standards and analysis procedures documented in the 2010 Highway Capacity Manual,² Trip Generation,³ A Policy on Geometric Design of Highways and Streets,⁴ Manual on Uniform Traffic Control Devices (MUTCD),⁵ Traffic Impact Evaluation: Study and Review Guide,⁶ and the Vermont State Design Standards,⁷ which are the generally accepted traffic analysis references relied upon by traffic engineering professionals and VTrans for projects of this type in Vermont.

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

² Transportation Research Board, National Research Council, *Highway Capacity Manual* (Washington, DC: National Academy of Sciences, 2010).

³ Institute of Transportation Engineers, *Trip Generation* 9th Edition (Washington, D.C.: Institute of Transportation Engineers, 2012).

⁴ American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 6th Edition (Washington DC: AASHTO, 2011).

⁵ American Traffic Safety Services Association (ATSSA), ITE, and AASHTO, *Manual on Uniform Traffic Control Devices*, 2009 Edition (Washington DC: FHWA, 2009).

⁶ Vermont Agency of Transportation, Development Review Section, *Traffic Impact Evaluation Study and Review Guide* (October 2008).

⁷ State of Vermont Agency of Transportation, *Vermont State Standards* (Montpelier: VTrans, 1 July 1997).

immediate access points and those intersections or highway segments receiving 75 or more project-generated peak hour trips.⁸

Since no additional vehicle trips are expected due to the proposed project, trends in surrounding traffic, and the performance at FAHC entry points were reviewed in this assessment. The following analysis examining traffic performance during the peak hours at the following two key intersections (see Figure 1):

1. The northern health care facility entrance (Mary Fletcher Drive) on Colchester Avenue, and
2. The intersection of Beaumont Street and Carrigan Drive.

Monitoring these two locations captures the main access points to the hospital campus, including the two parking garages, as well as the vast majority of surface parking lots. Note that these intersections also serve parking lots for the University of Vermont staff and faculty.

3.1 | TRAFFIC VOLUMES AND ADJUSTMENTS

Resource Systems Group performed turning movement counts at each study intersection in June of 2014.

Following VTrans traffic study guidelines, raw peak hour traffic volumes were adjusted to represent the design hour volume (DHV)⁹ in the expected project build year of 2018, using two adjustment factors:

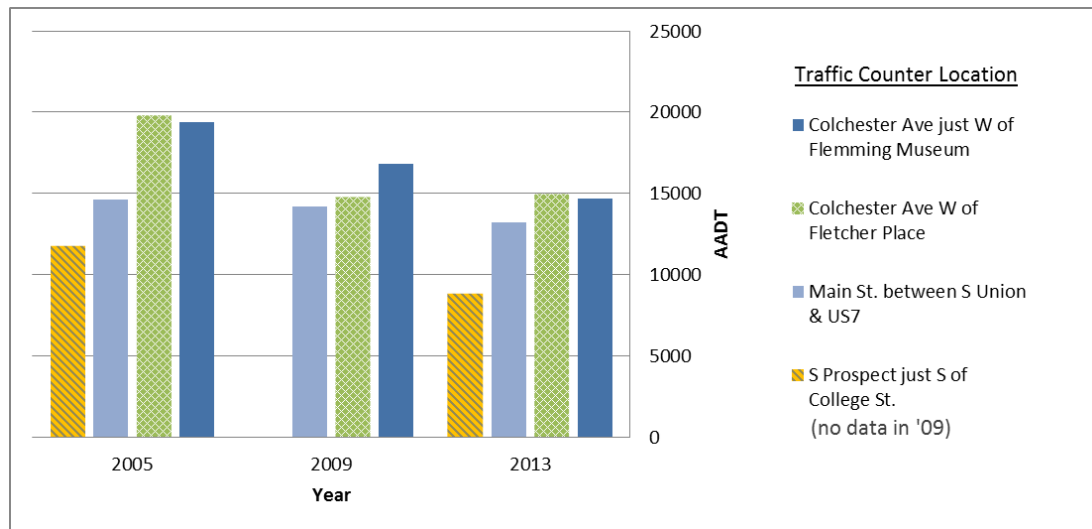
1. Design hour adjustment factors are based on VTrans count station S6C022 (located on Colchester Avenue just east of the hospital entrance), which had an Average Annual Daily Traffic (AADT) volume of 15,000 vehicles per day in 2013. Design hour adjustment factors are based on the VTrans “k” factor¹⁰ and DHV equation for Urban Roads presented in the 2013 VTrans Red Book.
2. An annual adjustment factor, which represents general background traffic growth (i.e. non-hospital related traffic). The recent trend in traffic volumes (AADT) at various nearby traffic counter locations is illustrated in Figure 2. As projected in the latest VTrans Continuous Traffic Counter Grouping Study and Regression Analysis Report, background traffic growth is expected to be flat to negative over the short term (0-5 years), as well as long term (5-20 years). No adjustment was made in this case.

⁸ Vermont Agency of Transportation, Development Review Section, *Traffic Impact Evaluation Study and Review Guide* (January 2003).

⁹ The DHV is the 30th highest hour of traffic for the year and is used as the design standard in Vermont.

¹⁰ $DHV = AADT * k$

FIGURE 2. TREND IN BACKGROUND TRAFFIC¹¹



3.2 | SCENARIO VOLUME GRAPHICS

Figures 3 and 4 present the project build year traffic turning movement volumes (AM and PM peaks) at the two study area intersections.

FIGURE 3: 2018 AM PEAK HOUR

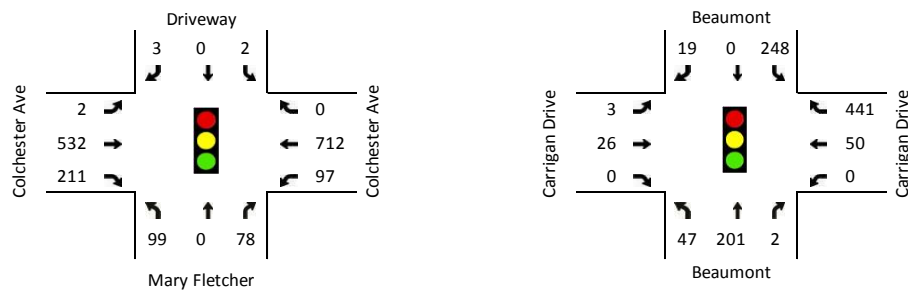
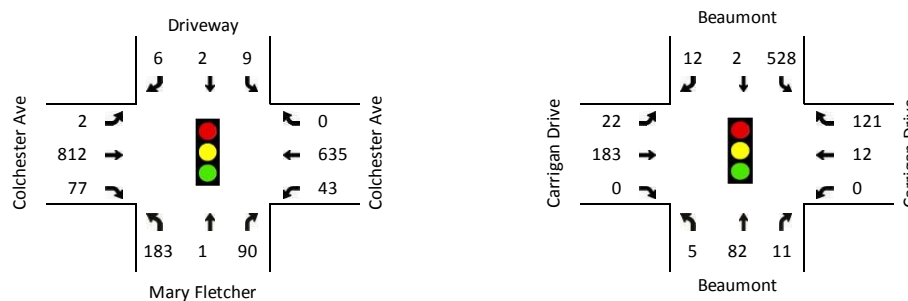


FIGURE 4: 2018 PM PEAK HOUR



¹¹ Source: VTrans Automatic Traffic Recording (ATR) Station History 2004-2013

3.3 | INTERSECTION PERFORMANCE

Level-of-service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is estimated using the procedures outlined in the 2000 Highway Capacity Manual. In addition to traffic volumes, key inputs include the number of lanes at each intersection and the intersection control types at each study intersection. Existing traffic phasing and timings were used in this analysis.

The 2000 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 5 shows the various LOS grades and descriptions for signalized intersections.

FIGURE 4: LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Characteristics	Total Delay (sec)
A	Little or no delay	≤ 10.0
B	Short delays	10.1-20.0
C	Average delays	20.1-35.0
D	Long delays	35.1-55.0
E	Very long delays	55.1-80.0
F	Extreme delays	> 80.0

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.

The Highway Capacity Manual congestion reports within Synchro (v8), a traffic analysis software package from Trafficware, were used to assess congestion at the study intersections. Figure 6 present the performance results for the adjusted volumes during the weekday AM and PM Peak hour scenarios, respectively.

In addition to delay and LOS, the volume to capacity ratio (V/C) for each intersection and approach is shown. Volume to capacity represents the ratio of actual vehicles to the capacity to process vehicles given the amount of green time for that approach in the study hour. A V/C greater than one indicates the approach or intersection is over capacity.

Based on this analysis, both study intersections are expected to operate at LOS C or better during AM and PM design hours, with V/C ratios well below 1.0.

FIGURE 6. STUDY INTERSECTION PERFORMANCE (2018)

Intersection approach	AM Peak Hour			PM Peak Hour		
	LOS	Delay (sec)	Volume / Capacity	LOS	Delay (sec)	Volume / Capacity
Beaumont Dr / Carrigan Drive:						
overall	B	15	0.35	B	13	0.66
EB, Carrigan	B	16	0.1	B	17	0.57
WB, Carrigan	B	16	0.18	B	14	0.11
NB, Beaumont	B	13	0.39	B	19	0.45
SB, Beaumont	B	15	0.36	B	11	0.49
Colchester Ave / Mary Fletcher (FAHC entrance):						
overall	B	14	0.73	C	21	0.82
EB, Colchester	B	17	0.78	C	24	0.86
WB, Colchester	A	8	0.57	A	9	0.52
NB, FAHC	C	29	0.54	D	39	0.73
SB, Driveway	C	26	0	C	30	0.01

4.0 CONCLUSIONS

- Traffic conditions at the key entry points to the main FAHC campus are within acceptable norms during peak conditions.
- Traffic generated by the Medical Center is dictated almost entirely by the number of employees and beds within the facility.
- No net change in the total number of beds or employees are expected at the Medical Center as a result of the new Inpatient Building.
- No net increase in vehicle traffic or parking demand is expected due to the proposed Inpatient Building project.
- FAHC uses Transportation Demand Management (TDM) programs to manage its on-site parking demand so that it can be efficiently satisfied by the on-site parking inventory at any point in time.

Based on the analysis presented above we project construction of the FAHC Inpatient Building, 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.

END OF MEMO



HISTORIC BUILDINGS EVALUATION SUMMARY

For City Review

Inpatient Building
Fletcher Allen Health Care
Burlington, Vermont
June 30, 2014

As part of the City of Burlington development review process, a project that involves sites listed or eligible for listing on the state or national register of historic places shall meet design standards following the Secretary of the Interior's Standards for the Treatment of Historic Properties. A historic site is defined as "any site, structure, district or archeological landmark which has been officially included in the National Register of Historic Places and /or the State Register of Historic Places or which is established by the Vermont Advisory Council on Historic Preservation as being historically significant." [10 VSA Section 6001 (9). This summary describes the work undertaken by Liz Pritchett according to standards set forth for review of historic sites, structures and districts in the vicinity of the proposed Inpatient Building Project, and her assessment of any potential impacts to identified historic sites.

To conduct this review, standards were followed that are used by the Vermont Division for Historic Preservation (DHP) and have been applied in Act 250 cases. These standards are essentially borrowed from those set forth in regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act (36 CFR 800). Project review identifies potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and to known or potential archeological resources.

Fieldwork involved site visits to the project area to identify districts or sites with significant historic buildings over fifty years of age, which were determined to either be within the Project's footprint or potentially have clear views of the Project. The Area of Potential Effect (APE) comprises the portion of the Fletcher Allen Health Care campus that is bounded by East Avenue on the east, Colchester Avenue on the north, the northeasterly portion of the University of Vermont Main Campus defined by the area south from the Fleming Museum on Colchester Avenue to the long, rectangular lawn known as the Central Quad, the three residence halls east of the lawn, known as Chittenden-Buckham -Wills Residential Complex (CBW), and the UVM academic buildings east of the CBW, Rowell Building, Given Building and Converse Hall. The construction site of the Inpatient Building is approximately in the center of the APE.

HISTORIC BUILDINGS EVALUATION SUMMARY

For City Review: *Inpatient Building*

Fletcher Allen Health Care, Burlington, Vermont

June 30, 2014

Page 2

Literature review involved research of Burlington files at the DHP offices in Montpelier, Vermont. The purpose of the DHP file search was to inventory significant historic sites in the APE that are currently listed on the National Register of Historic Places (NR) and the Vermont Historic Sites and Structures Survey (also called the State Register/ SR), or have been determined NR or SR eligible by the Vermont Advisory Council on Historic Preservation. Project files previously reviewed by the DHP for Act 250 or Section 106 within in the APE were also investigated.

After conducting fieldwork, literature review, and review of other relevant materials, the Project's potential effects to historic resources were assessed. The three-part test for evaluating impacts on historic sites known as the *Middlebury* analysis was applied to determine the potential effect of the Project.

Of the four historic buildings directly abutting the Inpatient Building, Converse Hall is considered to be a very significant historic resource. The design process for the Inpatient Building project carefully considered the potential impacts on these buildings. The initial design attempted to balance impacts on all of the buildings and could have been constructed with all four residence halls remaining. Feedback from City staff, Fletcher Allen's historic preservation consultant and others suggested that it was more important to further reduce impacts on the historic building of greater value: Converse Hall. Furthermore, UVM's 2006 Campus Master Plan and 2013 Housing Master Plan calls for future demolition of Chittenden-Buckham-Wills Residential Complex since the structures is not feasible to renovate to modern standards primarily due to the pre-cast concrete construction. Doing so resulted in moving the Inpatient Building further away from Converse Hall at the expense of greater impacts on the buildings of lesser historic value: Chittenden-Buckham-Wills Residential Complex.

Located on the UVM campus and directly adjacent to the project area, Converse Hall is a significant High Victorian Gothic style building that is listed in the State Register and eligible for listing in the National Register. In order to handle the potential for an undue adverse effect to Converse Hall, Fletcher Allen and Morris Switzer Architects has designed the project to mitigate potential effects. The site realignment moved the footprint of the Inpatient Building further away from Converse Hall, preserving more of the traditional view corridor between the two buildings. In addition, the design for the Inpatient Building features massing, materials and details that are compatible with Converse Hall, such as limestone veneer and traditional window treatments, while also employing the contemporary curved facade elements and ample use of glass seen on the Ambulatory Care Center so that the new structure will blend with the adjacent buildings on the FAHC campus and Converse Hall. The historic walkway from the Converse Hall's main

HISTORIC BUILDINGS EVALUATION SUMMARY

For City Review: *Inpatient Building*

Fletcher Allen Health Care, Burlington, Vermont

June 30, 2014

Page 3

entrance westerly to the UVM campus will be retained and enhanced, preserving the historic link between the residence hall and the UVM Central Quad.

FAHC Inpatient Bed Project – Permitting 14.0630

Landscape Narrative

Entering the site from Colchester Avenue and Beaumont Avenue, the tree-lined Hospital Drive provides a clearly delineated separation between vehicular traffic and an 8' wide multi-use path along the west edge of the drive. An allee of trees along the multi-use path creates lacy shade, and provides a safe separation from parking and emergency traffic. Several richly planted stormwater treatment areas work to slow water and sediment, minimizing impacts offsite, and providing colorful focal points within paved areas.

The entry drive comfortably arcs with the curving geometry of the new Inpatient Building, and UVM and FAHC parking is separated to ensure sufficient parking for FAHC Emergency Department (ED) visitors. All UVM parking exits the main drive first, opposite from the ED vehicle bay, with parking along the western edge of the site leading to the main UVM lot adjacent to Converse Hall. Within this main lot, a central, colorful raingarden bounded by a concrete retaining wall collects surface water for treatment. Beyond the UVM parking along Hospital Drive, the ED visitor dropoff and adjacent FAHC parking area lie at its terminus, separated from UVM main lot by the east-west axial pedestrian corridor between Converse Hall and UVM central campus. A vehicular-free, accessible pedestrian route connects FAHC parking and the main ED visitor entry. Leaving from the ED main doorway, pedestrians move through a covered plaza adjacent to the vehicular dropoff, a flexible outdoor space that houses bicycle racks and modular seating. A paved walk radiates out from the covered plaza through a shaded tree grove to the FAHC parking, across the Converse Hall axial walk, through the UVM parking area adjacent to the raingarden, and south to the UVM campus and beyond.

A 12' paved drive extends from the end of Hospital Drive, parallel to the tree-lined multi-use path, to providing fire truck access to the existing Converse Hall circle above. To accommodate grade near the top of the fire access drive, a curved retaining wall will extend from the existing FAHC wall. Below the wall, a secluded outdoor terrace will serve as an outdoor waiting area for the ED, adjacent to and accessible from the interior ED waiting room. Pole-mounted LED light fixtures, identical to those currently used on the FAHC campus, are placed along Hospital Drive, throughout the parking areas, and along walkways to provide safe, efficient lighting conditions. Columnar, shade and specimen trees provide shade throughout the parking areas and along pathways, and tree and shrub plantings along the western edge of the parking area screen paved areas visible from the UVM campus. Tree and raingarden plantings are prominently visible from the Inpatient Building patient rooms. A clearly marked multi-use path and adjacent walkways connect and improve safe pedestrian and biking conditions from across both campuses and beyond, designed with flexibility to connect with future UVM multi-use pathways.

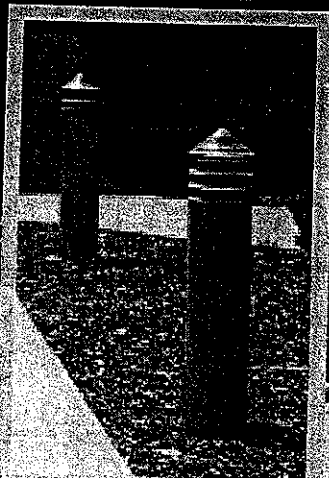
FLETCHER ALLEN HEALTH CTR
Type: C Mfg: LUMEC
175MH-OPC-SE3-1A-AM6W-20

Opticone Series

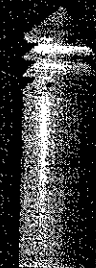
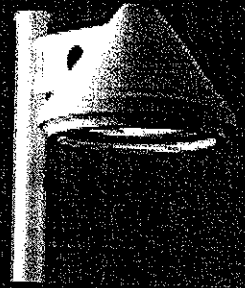
OPC/OPCS/OPCB



OPC™-SG1-2 luminaire on a ATR pole



OPCB™ bollard



LUMEC

OPC/OPCS/OPCB

OPC Luminaire

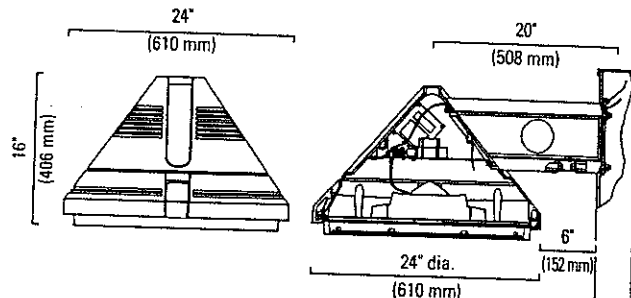
The Opticone **OPC™** luminaire consists of a one-piece cast-aluminum pinched-cone housing, a round lens-frame assembly and a latch mechanically assembled together. The luminaire is fully gasketed.

The one-piece cast-aluminum lens-frame comes with a copolymer ethylene propylene gasket (EPDM) and a tempered glass lens.

A 3-point spring-type double-position cast-aluminum latch permits tool-free access to the lamp and ballast plate.

The ballast plate hinges down to provide tool-free access to the ballast.

OPC luminaire is UL and CSA approved.



OPC - SG1
EPA: 2.40 sq. ft.
Weight: 62 lbs (28.1 kg)

Lamp Guide

Optics	OPC		OPCS	
	SG1/2/3/ Q/FM	SE	SCB/ SHB	SG1/2/3/ Q/FM
70 MH, medium	—	—*	•	—
100 MH, medium	—	—*	•	—
175 MH, mogul	—	—*	•	—
250 MH, mogul	—	—*	•	—
400 MH, mogul	—*	•	N/A	•
750 MH, mogul	—	N/A	N/A	N/A
1000 MH, mogul	—	N/A	N/A	N/A
50 HPS, mogul	—	—*	•	—
70 HPS, mogul	—	—*	•	—
100 HPS, mogul	—	—*	•	—
150 HPS, mogul	—	—*	•	—
250 HPS, mogul	—	—*	•	—
310 HPS, mogul†	—	—*	•	•
400 HPS, mogul	—	—*	•	•
750 HPS, mogul	•	N/A	N/A	N/A

- Remote ballast in pole.
- * Requires a polycarbonate (175W max.) or tempered glass sag lens.
- † Requires a reduced jacket lamp.
- ‡ Not available in 347 volts.
- § Not available with SGFM optics.

OPC™ and OPCS™ luminaires accommodate H.I.D. or incandescent lamps as shown in the above table.

The UL or CSA-recognized CWA-type ballast features a -30F (-34C) lamp-starting capacity, a power factor of 90% or better and a regulation of lamp power within ±10% of rated input voltage. HPS ballasts operate within ANSI trapezoidal limits.

The luminaire's lens frame, secured by a 3-point spring-type double-position cast-aluminum latch, pivots along a housing integrated hinge to permit tool-free access to the lamp and ballast plate.

The ballast is integrated in the hood of the luminaire, on a unitized ballast tray, or is remote in the pole base.

For the **OPCB™** bollard, please consult bollard literature or www.lumec.com web site.

Optical Systems

SG optics

Segmented cut-off reflector system set in faceted arc-image duplicating patterns



SG1:
Asymmetrical (I)



SG3:
Asymmetrical (III)



SGFM:
Forward-throw



SG2:
Asymmetrical (II)



SGQ:
Symmetrical (V)

SE optics



Small segmented cut-off reflector set in faceted arc-image duplicating patterns

SE5:

Symmetrical (V)

SE3:

Asymmetrical (III)

SCB and SHB optics (OPC only)



Sealed optical chamber consisting of a reflector permanently assembled on top of a tempered glass drop lens

SCB3M:

Asymmetrical cut-off (III)

SHB3M:

Asymmetrical hyperextensif (III)

For the SCB and SHB optics, the sleeve and shutter permit exact positioning of the lamp.
(clear lamp not included).

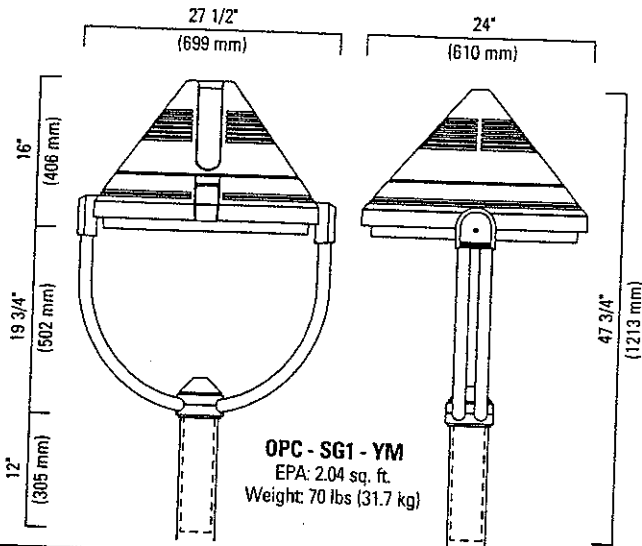
For further information, refer to the *Outdoor Lighting Application Guide*.

Ordering Sample

Lamp	Luminaire	Optical System	Voltage	Mounting & Configuration	Pole	Finish	Options
250 HPS	OPC	SCB	240V	1A	SM6-15	BKTX	FS

Lumec reserves the right to substitute materials or change the manufacturing process of its products without prior notification.

OPC-YM Luminaire on Yoke-mount



OPC - SG1 - YM
EPA: 2.04 sq. ft.
Weight: 70 lbs (31.7 kg)

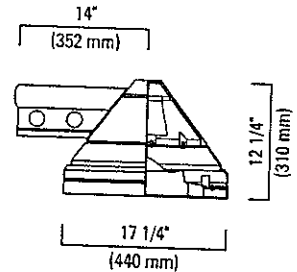
OPCS Luminaire

The **Opticone OPCS™** luminaire is similar to the OPC but in a smaller size and consists of a two-piece spun and cast-aluminum pinched-cone housing, a round lens-frame assembly and a latch mechanically assembled together. The luminaire is fully gasketed.

The one-piece cast-aluminum lens-frame comes with a copolymer ethylene propylene gasket (EPDM) and a tempered glass lens.

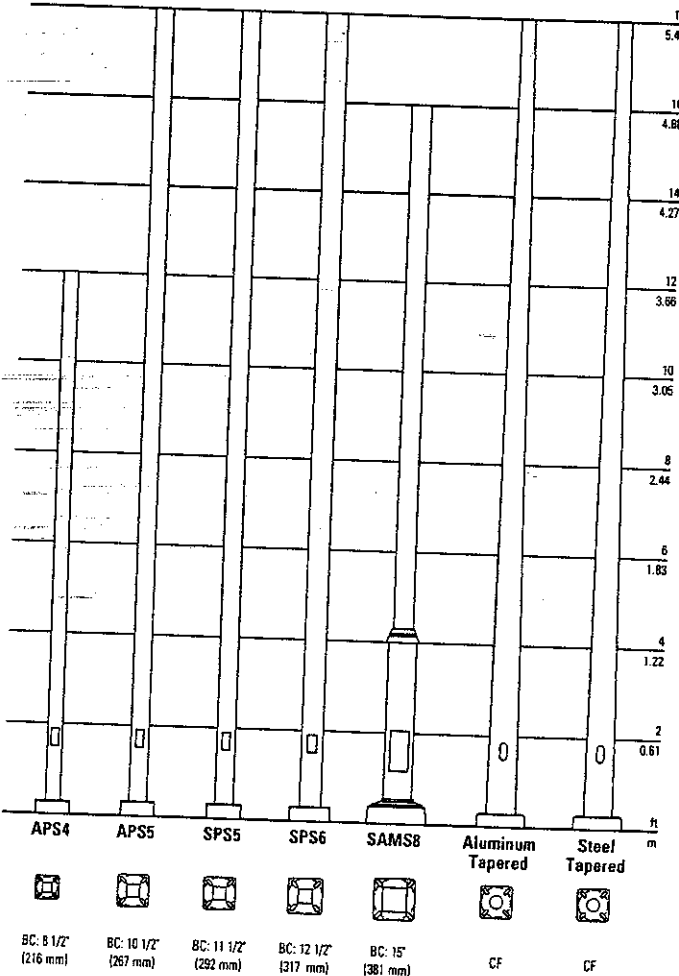
A 3-point spring-type double-position cast-aluminum latch permits tool-free access to the lamp and ballast plate. The ballast plate hinges down to provide tool-free access to the ballast.

OPCS luminaire is UL and CSA approved.



OPCS - SG1
EPA: 1.50 sq. ft.
Weight: 45 lbs (20.4 kg)

Poles



Finishes

16 Standard Colors Available

The specially-formulated textured (TX) Lumital powder coat is available in a range of 16 standard colors. This unique coating of thermosetting polyester resins provides a highly-durable UV-resistant exterior finish as per ASTM G7.

Lumital coatings are specially formulated for outstanding salt-spray resistance according to ASTM B117 standards.

All surfaces are chemically treated using a four-step (aluminum) or six-step (steel) process prior to painting. Consult Lumec for complete specifications.

SC Special Color

Provide a 4" (102 mm) square color chip.

It is possible to order smaller minimal quantities of powder paint at a premium. Your representative will be able to tell you if a powder coating can be developed for your project.

Lumiseal, a biofriendly reactive organic conversion coating, is applied on all aluminum parts that are subject to salt-spray corrosion. Consult Lumec for complete specifications.

Please note that where quantities do not warrant it, Lumec reserves the right to use an oven-cured liquid polyurethane finish.

Luminaire Options

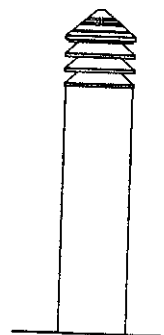
FS	Fusing (Consult Factory)
HS	House shield (SG optics only)
DL	Drop lens

Pole Options

HB	Hinged base (APR4 & APS4 poles only)
DR*	Duplex receptacle (120 volts only)
GFI*	Duplex receptacle with ground fault interrupter (120 volts only)
PH	Photoelectric cell
LS*	Provision for loudspeaker outlet
BA*	Banner arm
LBC9	Decorative base cover (Available with APR4 and SPR4 poles only)
IP	Interior paint (pole only, consult factory for applicable poles)

* Consult the Pole Guide for feasibility with cast-aluminum shafts.

OPCB Bollard



For the **OPCB™** bollard. Consult bollard literature or www.lumec.com web site.

Consult the Pole Guide for details and the complete line of poles.

OPC/OPCS/OPCB

Opticone OPC with SG3 optical systems Pavement luminance for two-lane road lit from one side

This illustration shows how the Opticone OPC luminaires with SG3 optics delivers even illuminance uniformity in one-side installations on wide roads.

150 W HPS lamp

Light Loss Factor: 0.80

Average illuminance (lux), E avg.: 9.24

Illuminance uniformity, E max./min.: 5.3 : 1

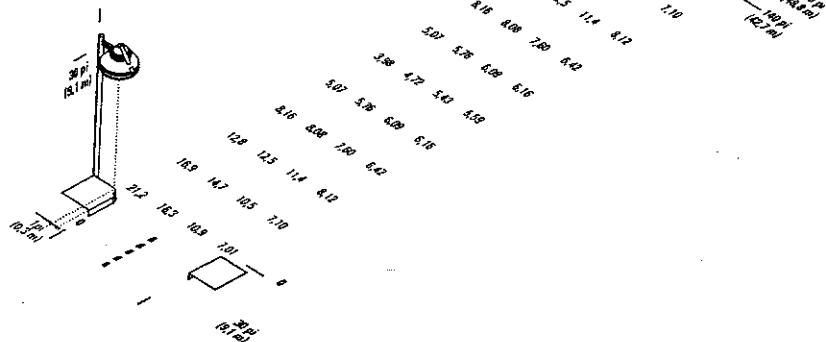
Illuminance uniformity, E avg./min.: 2.3 : 1

Average luminance (cd/m²): 0.61

Luminance uniformity: L max./L min.: 6.2 : 1

Luminance uniformity: L avg./L min.: 2.8 : 1

Veiling luminance, max. Lv/avg. Lp: 0.19 : 1



Opticone OPC with SG3 optical systems Pavement luminance for parking lots

This illustration shows how Opticone OPC luminaires with SG3 optics delivers even illuminance uniformity, in a parking facility.

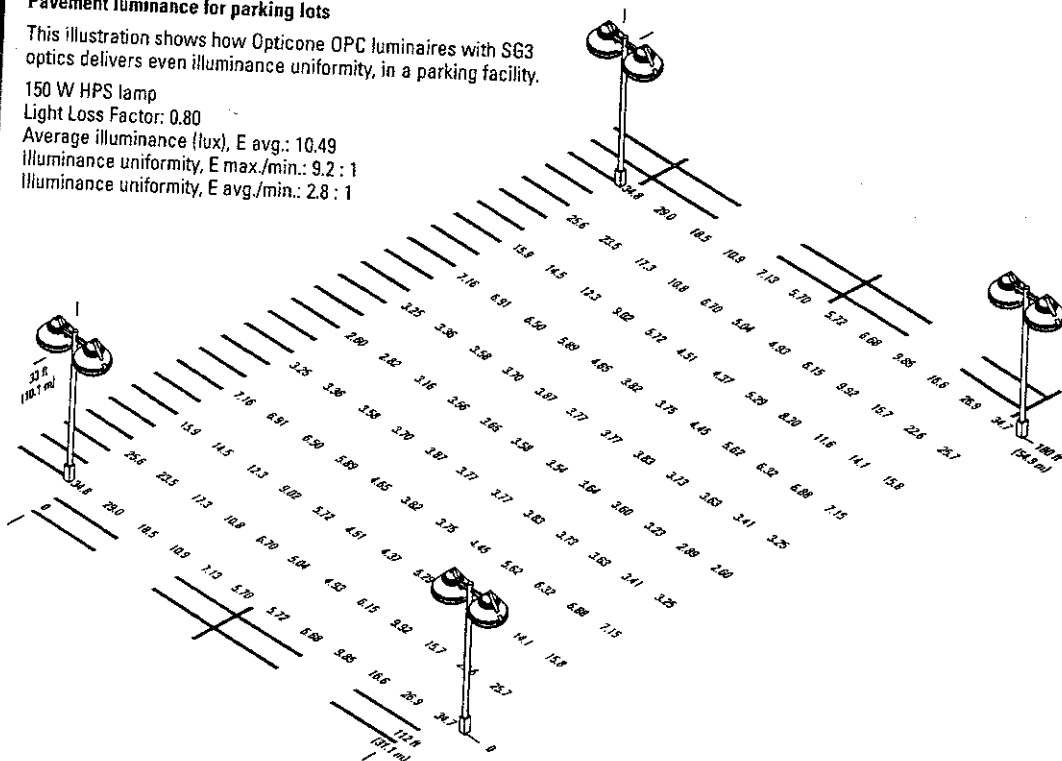
150 W HPS lamp

Light Loss Factor: 0.80

Average illuminance (lux), E avg.: 10.49

Illuminance uniformity, E max./min.: 9.2 : 1

Illuminance uniformity, E avg./min.: 2.8 : 1



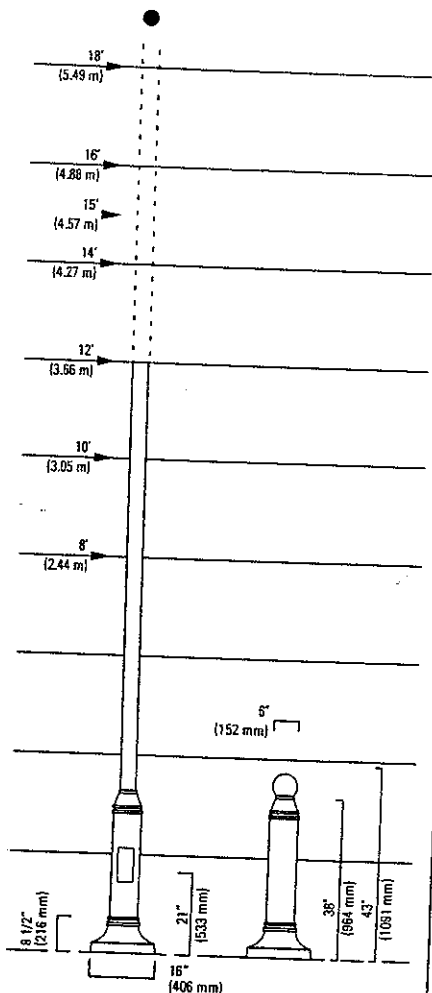
LUMEC

AM6

Round Aluminum Bottleneck Pole

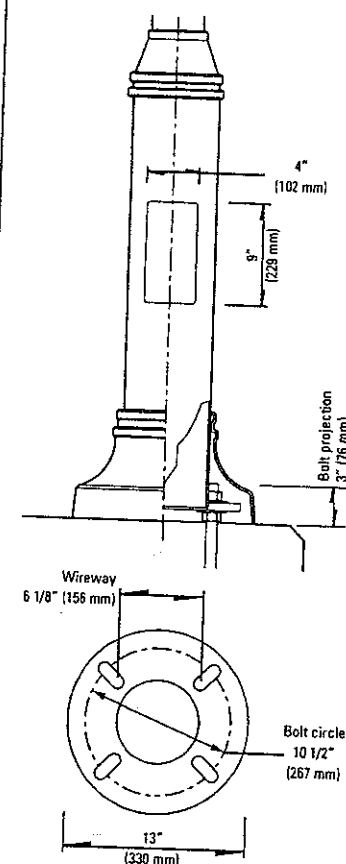
Pole Guide

LUMEC



AM6 BORAM6-DSH
Non-luminous bollard
Bollard Anchor Bolts: 5/8-12 (16-305)

Base Details:



Comes with 4 anchor bolts,
8 nuts and washers.
B.C. from: 8 3/4\" to 11\" (222 to 279 mm)

Specifications:

Pole: made from a one-piece, seamless 4\" round (102 mm) tube of extruded aluminum welded over and in a 6 5/8\" round (168 mm) extruded-aluminum pole base.

The assembly is welded to both the top and bottom of a reinforced base cast from zinc-rich aluminum.
A 4\" by 9\" (102 by 229 mm) maintenance opening, complete with cover and copper ground lug, is centered 21\" (533 mm) from the bottom of the anchor plate.

Joint cover: made from two pieces of cast aluminum mechanically fastened to the junction with stainless steel screws.

Base cover: made from two pieces of cast aluminum mechanically fastened to the base with stainless steel screws.

Finish: "Hot Dip" chemical etching preparation.

Lumital polyester powder coat textured finish.

Available in 16 standard colors.

Durable UV-resistant exterior finish as per # ASTM G7 and outstanding salt-spray resistance according to # ASTM D2247 testing procedures.

Options:

DE: Pole base buried 5' (1524 mm) in the ground (see details on page 83).

LS: Provision for loudspeaker outlet

PH7: Button-type photoelectric cell (specify operating voltage)

PH8: Quarter-turn type photoelectric cell (specify operating voltage)

PH9: Shorting cap for single phase only

DR: Duplex receptacle (120V line volt. only)

GR: DR with common ground fault interrupter (120V line voltage only)

BASXX: One single banner arm

BABSXX: One single break-away banner arm

BADXX: One double banner arm

BABDXX: One double break-away banner arm

Note: EPA recommendations are calculated according to AASH-T0 standards and include a 30% gust factor, with a 50-lb. (22.7 kg) load applied at 1ft. (305 mm) above the center of the pole.

The maximum EPA rating shown is 30.0 sq. ft. Some poles may exceed this rating.

Bollard: The pole base is available with a DSH cast-aluminum decorative sphere (non-luminous).

For other options, please consult the factory.

Ordering Information

Catalogue number	Nominal height		Section	Wall thickness		Weight		EPA rating			Base size		Bolt circle		Anchor bolts		
	ft.	m		in.	mm	in.	mm	lbs.	kg	70mph ft ²	80mph ft ²	100mph ft ²	in.	mm	in.	mm	in.
AM6F-8	8	2.44	4	102	0.125	3.2	27	12	18.4	14.3	9.2	13	330	10 1/2	267	3/4-20	19-508
AM6U-8	8	2.44	4	102	0.226	5.7	37	17	30.0	25.0	16.3	13	330	10 1/2	267	3/4-20	19-508
AM6F-10	10	3.05	4	102	0.125	3.2	31	14	13.2	10.2	6.4	13	330	10 1/2	267	3/4-20	19-508
AM6U-10	10	3.05	4	102	0.226	5.7	41	19	23.4	18.0	11.3	13	330	10 1/2	267	3/4-20	19-508
AM6F-12	12	3.66	4	102	0.125	3.2	35	16	9.9	7.4	4.4	13	330	10 1/2	267	3/4-20	19-508
AM6U-12	12	3.66	4	102	0.226	5.7	45	20	15.8	11.8	7.3	13	330	10 1/2	267	3/4-20	19-508
AM6F-13	13	3.97	4	102	0.125	3.2	36	16	8.1	6.0	3.5	13	330	10 1/2	267	3/4-20	19-508
AM6U-13	13	3.97	4	102	0.226	5.7	46	21	13.1	9.9	5.9	13	330	10 1/2	267	3/4-20	19-508
AM6F-14	14	4.27	4	102	0.125	3.2	38	17	5.3	3.9	2.2	13	330	10 1/2	267	3/4-20	19-508
AM6U-14	14	4.27	4	102	0.226	5.7	48	22	8.7	6.5	3.9	13	330	10 1/2	267	3/4-20	19-508
AM6F-15	15	4.57	4	102	0.125	3.2	40	18	4.3	3.0	1.6	13	330	10 1/2	267	3/4-20	19-508
AM6U-15	15	4.57	4	102	0.226	5.7	50	23	7.3	5.3	3.0	13	330	10 1/2	267	3/4-20	19-508
AM6U-16	16	4.88	4	102	0.226	5.7	52	24	6.0	4.3	2.4	13	330	10 1/2	267	3/4-20	19-508
AM6W-16	16	4.88	4	102	0.318	8.1	74	34	7.9	5.8	3.2	13	330	10 1/2	267	3/4-20	19-508
AM6U-18	18	5.49	4	102	0.226	5.7	55	25	4.2	2.8	1.3	13	330	10 1/2	267	3/4-20	19-508
AM6W-18	18	5.49	4	102	0.318	8.1	87	39	5.6	3.9	2.0	13	330	10 1/2	267	3/4-27	19-686
AM6W-20	20	6.10	4	102	0.318	8.1	96	44	3.9	2.6	1.0	13	330	10 1/2	267	3/4-27	19-686

Other pole thicknesses are available for use with banner arms. Consult factory.
Lumec neither designs nor makes recommendations as to the design of concrete bases.

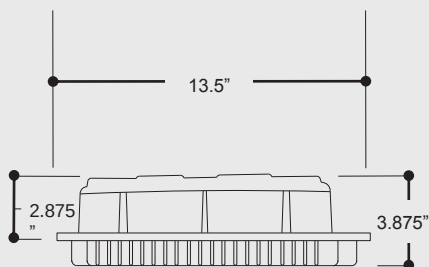
EcoFit® LED Light Engine

The smart solution. The right fit.™

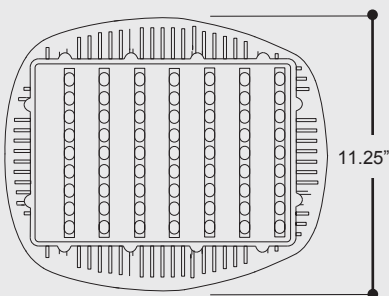


Made in the USA

Meets ARRA Guidelines
Manufactured in Lee's Summit, MO



Product weight = 13 pounds.



Universal Application

Roadway

Parking Lot – shoebox, pendant, post-top (*with adapter plate*)

Parking Garage – housing required

Indoor High Bay – housing required

Independent Performance Tests

EcoFit provides 3rd party validation from the most recognized testing laboratories available on www.ecofitlighting.com.

- Photometrics (LM-79)
- Thermal management (LM-80)
- Safety (UL 8750/1598, CSA C22.2)
- Corrosion (ASTM-B117)
- ISO 9000-2001 manufacturer
- RoHS compliant
- Ingress protection (IP-66)
- Pole vibration (ANSI-C136.3)
- Mechanical stress
- Surge Protection (IEEE C62.45)
- Transient protection (IEEE C62.41)
- Noise (47CFR-15B)



Approvals and Endorsements

Design Lights Consortium approved
DOE Lighting Facts listed (all models)

Cree LED City/University approved

International Dark Sky Association approved

PG&E Pre-qualified vendor

SCE Pre-qualified vendor



Specifications subject to change without notice.
U.S. Patents D611647, D611648. Other U.S. and International patents pending.

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Revision 4.0 (3/11)

EcoFit Lighting
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Lenexa, Kansas 66214
(866) 789-9449
www.ecofitlighting.com

EcoFit® LED Light Engine

The smart solution. The right fit.™

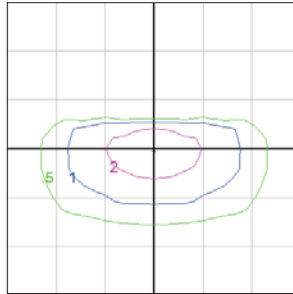
Photometrics

Isofootcandle Plots

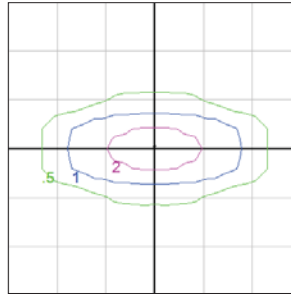
Initial footcandles at grade.
90/525mA unit example.

Gridlines represent units of
mounting height of 20 feet.

Type II/III



Type V



Standard Features

- 0-10V dimming
- Overtemp protection
- Lightning Arrestor (10kV/5kA)
- Warranty – 5 year on power supply, LEDs, 10 year on chassis/housing

LED & Electrical Performance

						Type III		Type V	
Model	Drive Current (mA)	CRI	Input Power (W)	Input Current (120V)	Input Current (240V)	Delivered Lumens	Total System Efficacy (lm/W)	Delivered Lumens	Total System Efficacy (lm/W)
30	350	≥80	37	0.317A	0.185A	2,265	61	2,262	60
30	525	≥81	56	0.481A	0.235A	3,005	54	2,973	52
42	350	≥81	48	0.408A	0.223A	3,144	65	3,180	65
42	525	≥81	73	0.620A	0.322A	4,145	57	4,192	56
63	350	≥81	70	0.588A	0.308A	4,533	64	4,488	65
63	525	≥82	106	0.892A	0.450A	5,900	56	5,784	55
90	350	≥70	91	0.761A	0.380A	6,365	70	7,375	82
90	525	≥70	136	1.133A	0.567A	8,252	61	9,764	71

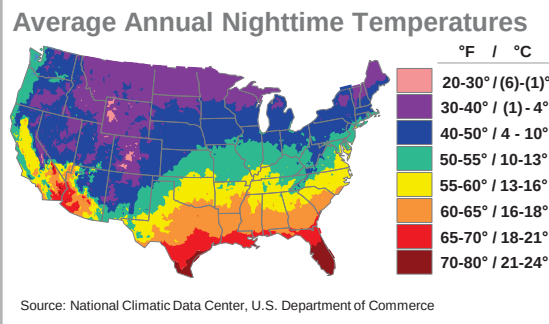
1. Input voltage (120-277 VAC).

2. 480V also available. Operating frequency 50-60 Hz.

3. Power factor > 0.90, THD < 20%.

4. All BUG ratings are B2-U0-G1 or below.

LED Junction Temperature (T_J) & Projected L₇₀ Life

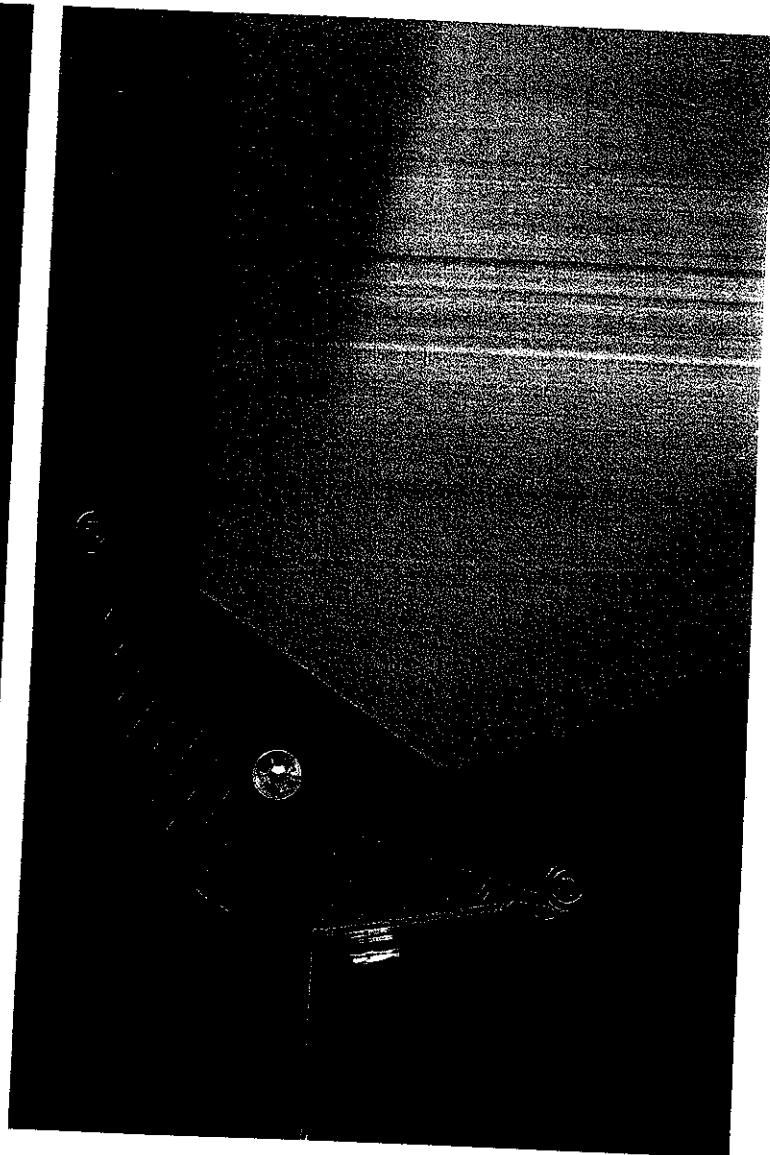
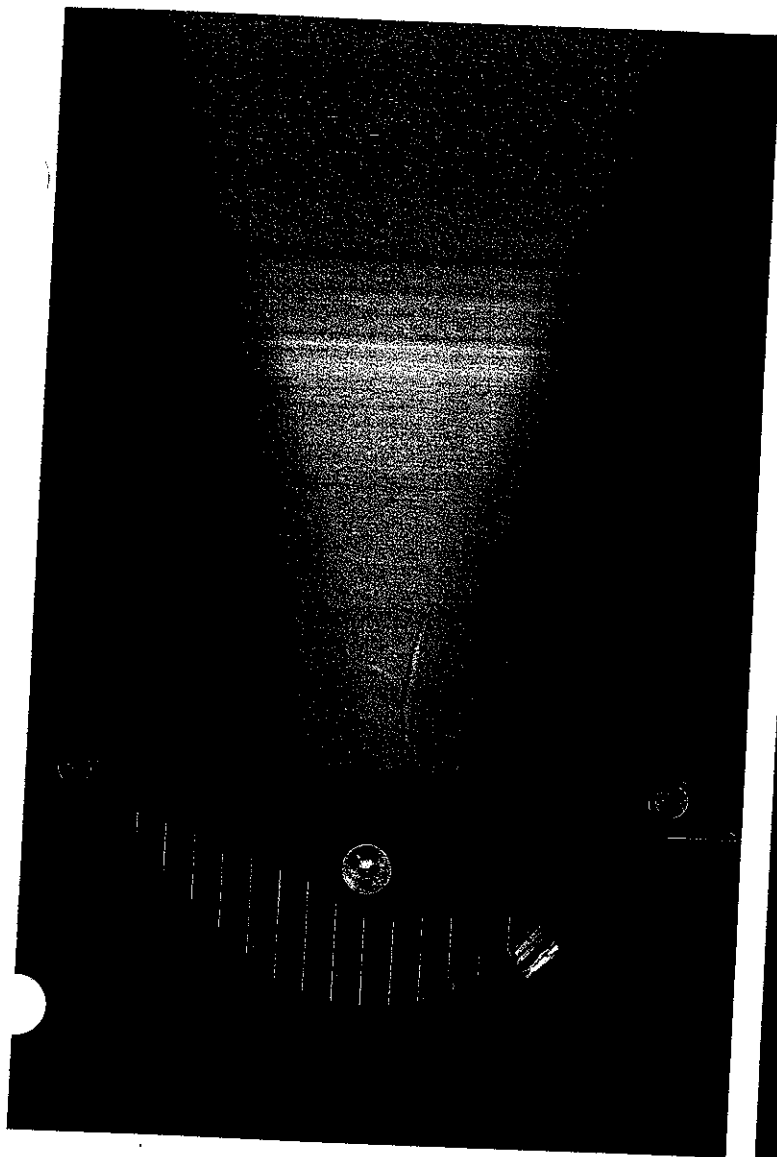


L70 Lifetime Expectancy (LM-80 Test Data)									
Model		Average Nighttime Outdoor Temperature							
LEDs	Drive Current	<32°F (0°C)	41°F (5°C)	50°F (10°C)	59°F (15°C)	68°F (20°C)	77°F (25°C)	86°F (30°C)	95°F (35°C)
30	350	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
30	525	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
42	350	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
42	525	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
63	350	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
63	525	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
90	350	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000
90	525	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000	≥75,000

Note: L₇₀ life projections are provided by Philips Lumileds, and are based on IES LM-80 testing and IES TM-21 extrapolation methods. Using these methods, Lumileds projects a worst case of 75,000 L₇₀ hours for 4100K LEDs operated at 700mA and at LED temperatures (T_{SP}) of 105°C. Since these levels of drive current and LED temperature are well above EcoFit's highest levels, the L₇₀ hours shown above should be regarded as conservative. For more information, see www.EcoFitLighting.com.

Ordering Information

D	-	2/3	-	120/240	-	350	-	CXRE	-	30	-	4600	-	CE
Product Series		Distribution 2/3 = Type II/III 5 = Type V		Input Voltage 120-240 = Universal (120-240 VAC) 277 = 277 VAC		LED Drive Current 350 = 350mA 525 = 525mA		LED Supplier CXPE = Cree X-PE REBEL = Lumileds Rebel		LED Quantity 30 = 30 LEDs 42 = 42 LEDs 63 = 63 LEDs 90 = 90 LEDs		LED Color Temperature 4600 = 4600K (Neutral) Nominal Other color temperatures available by request.		Housing AP = Adaptor Plate CE = Ceiling FL = Floodlight CO = Cobra Head



Moonshine

High performance
floodlights and spotlights
for discharge lamps

Concept: Roland Jéol
Design: Roy Fleetwood

TYPE LG6

1290019940

BLACK Finish 277V

* specify Distribution

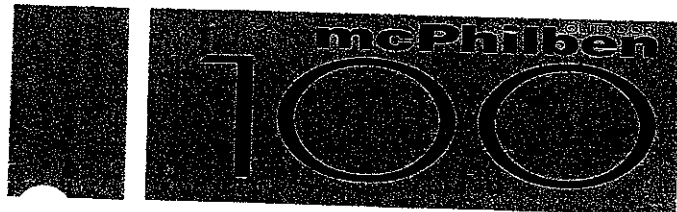
Note Remote BALLAST

designplan 

79 Trenton Avenue
Frenchtown, NJ 08825

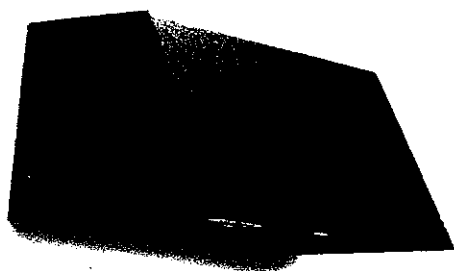
Tel: (908) 996-7710
Fax: (908) 996-7042

designplan  MEYER LIGHTING

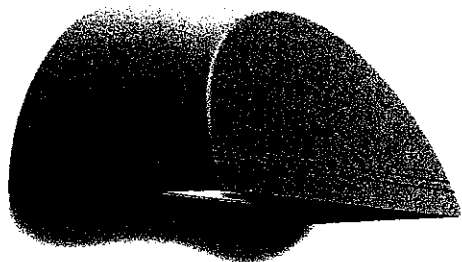


LINE

101/102
PERFORMANCE
SCONCES



101 Trapezoidal Sconce



102 Rounded Wedge Sconce

The mcPhilben Outdoor 101 Trapezoidal and 102 Rounded Wedge high performance sconces offer an excellent alternative to unsightly wall mounted fixtures. These architecturally refined luminaires are designed to integrate naturally to wall surfaces. The 101 and 102 luminaires are available with three (3) different distribution patterns - a wide throw, a medium throw and a forward throw. Each luminaire is designed to accept sources up to 175W MH. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.

- Wide luminaire spacings from sharp cutoff wall mounted luminaires
- Handsome, compact forms integrate to mounting surfaces
- Rugged die cast aluminum construction

FLETCHER ALLEN HEALTH CTR

Type: LG7 Mfg: GARDCO

102-WT-70MH-277-XXX-SL

ORDERING

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE ¹	FINISH	OPTIONS
102	WT	150 MH	277	BRP	PCB
101 102	(Trapezoidal) (Rounded Wedge)	FT WT MT			
		(Forward Throw) ⁴ (Wide Throw) ⁴ (Medium Throw)			
		HID			
		35 HPS ² 50 MH		BRP Bronze Paint	F Fusing (120, 277)
		50 HPS 70 MH		BLP Black Paint	PCB Button Type Photocontrol
		70 HPS 100 MH		WP White Paint	QR Quartz Standby ⁴
		100 HPS 150 MH ³		NP Natural	SL Solite [®] Diffusing Lens
		150 HPS 175 MH		BGP Aluminum Paint	Solite is a registered Trademark of AFG Industries
				SC Beige Paint	5° Uptilt for FT optics
				Special Color (specify) Paint	WLU Wet location door for inverted mounting
					WS Wall mounted box for surface conduit
		FLUORESCENT			
		(1)26 QF (Quad tube)			
		(2)26 QF (Quad tube)			
		(2)26 QF-DIM (Quad tube-Dimming) ²			
		(1)42 TRF (Triple tube)			
		(1)42 TRF-DIM (Triple tube-Dimming) ²			
Notes: 1) Contact factory for other voltages					
2) 120V only					
3) ANSI # M102					
4) Not available w/fluorescent lamps					
RECOMMENDED DIMMER CONTROL:					
(Other controls are available, please contact ESI for listing)					
Derate the rated power by 80%. For example, a 1000w dimmer may only drive 800w of these ballasts.					
DIM-E REVERSED PHASE CONTROL					
				Lightoller	Rated Power
				ZP260ESI	260W
				ZP425ESI	425W
				OS300ESI	300VA
				OH500ESI	500VA

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510/357-3088 FAX
<http://www.mcphilbenoutdoor.com/>

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Boisbriand
Quebec, Canada J7G 2A7
Tel: 514/430-7040
Fax: 514/430-1453

mcPhilben OUTDOOR 100 LINE

101/102
PERFORMANCE
SCONCES

SPECIFICATIONS

GENERAL

Each mcPhilben 100 Line luminaire is a wall mounted cutoff luminaire for high intensity discharge or fluorescent lamps. Internal components are totally enclosed, rain-tight, dust-tight and corrosion resistant. Housing, back plate and door frame are die cast aluminum. A choice of three (3) optical systems are available. Luminaires are suitable for wet locations.

HOUSING

Single piece soft trapezoidal (101) or rounded wedge (102) housings are die cast aluminum. A memory retentive gasket seals the housing with the doorframe to exclude moisture, dust, insects and pollutants from the optical system. A black, die cast ribbed backplate dissipates heat for longer lamp and ballast life.

DOOR FRAME

A single piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners. The heat and impact resistant 1/8" tempered glass lens and one-piece gasket are mechanically secured to the door frame with four (4) galvanized steel retainers.

OPTICAL SYSTEMS

Reflectors are composed of specular extruded and faceted Alzak® components, electro-polished, anodized and sealed. Reflector segments are set in arc tube image duplicating patterns to achieve the wide throw (IES Type II), forward throw (IES Type IV), or medium throw distributions.

TECHNICAL

Each high power factor HID ballast is the separate component type capable of providing reliable lamp starting to -20°F (-29°C). Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600VAC at 150°F (65°C) or higher. Standard and dimming fluorescent units have a starting temperature of 0°F (-18°C). Dimming range is 15% to 100%. Standard fluorescent ballasts are solid state. Consult factory for magnetic.

LAMPHOLDER

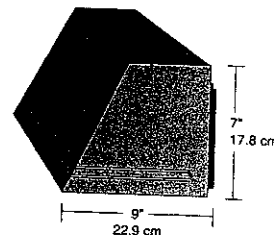
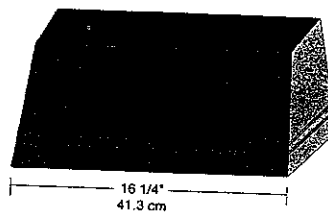
Pulse rated medium base sockets are glazed porcelain with nickel plated screw shell. Fluorescent sockets are high temperature plastic (PBT) with brass contacts.

FINISH

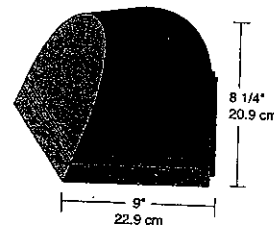
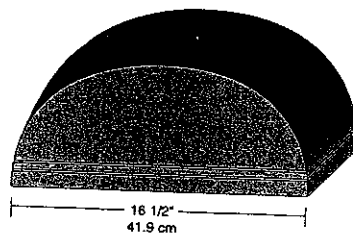
Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, textured polyester powdercoat finish.

LABELS

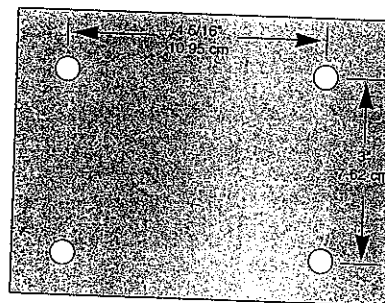
All fixtures bear CSA and UL Wet Location labels.



101 - Trapezoidal Sconce



102 - Rounded Wedge Sconce

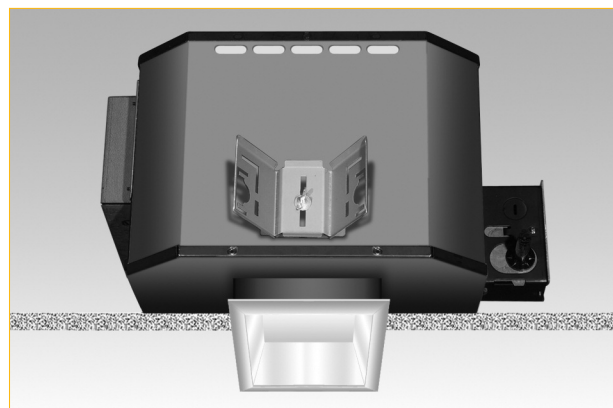
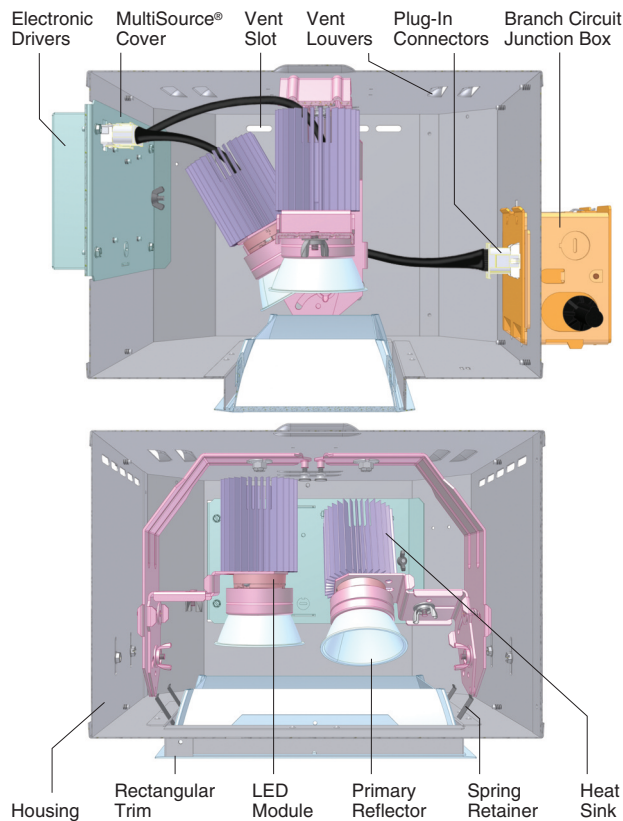


Mounting Bolt Pattern

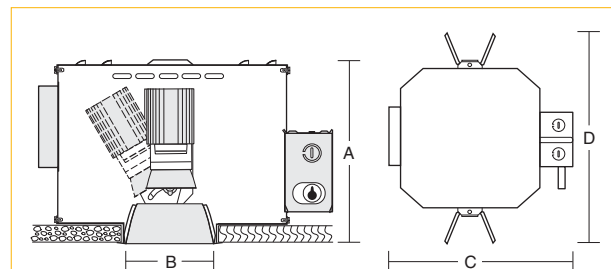
Thomas Lighting reserves the right to change materials or modify the design of its products without notification as part of the company's continuing product improvement program.

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Boisbriand
Quebec, Canada J7G 2A7
Tel: 514/430-7040
Fax: 514/430-1453



Dimensions and Sources



Number	A Depth	B Aperture	C Width*	D Length	LED Module
D4216	9 15/16" 252mm	4 1/2" x 8 1/2" 114 x 216mm	16 5/8" 422mm	18 1/4" 464mm	2x1000 lm or 1300 lm Xicato

*For Lutron dimming use 17 5/8".

Energy and Ordering Information

Fixture	Module Lumens	System Lumens	System Watts*	lm/W	Order Code Model L K V
D4216	1000	1625 ^Δ	32	50.9	D4216 10 30 12
	1300	1871 [‡]	46	40.7	D4216 13 30 12

Fixture provided standard 3000K with Softglow® clear trim.
Module lumens: specify 10 for 1000 lm, 13 for 1300 lm.
Kelvin temperatures: specify 27 for 2700K, 30 for 3000K, 35 for 3500K, 40 for 4000K.
*Indicates LM-79 Test Data. ^ΔIndicates KV Test Data.
*Wattage consumption based on current module series test data.

D4216 Medium Beam, 1000 lm, 1300 lm

D1

Directional Downlight, 4 1/2" x 8 1/2" Rectangular Aperture
Two Xicato Remote Phosphor Modules
Fixed Function, MultiSource® Technology

Optics and Applications

Independent directional systems are designed with locking capability to rotate 180° and angulate 30°. Beam distributions can be changed in the field. Crossing the beams creates interesting effects. Illuminate two different objects from one fixture. Medium beam distribution is standard. See accessories for narrow and wide distribution options.

Design Features - MultiSource® Capable

Fixture housings are designed with MultiSource® plug and play connectors allowing field conversion to other sources. New lighting technologies will be incorporated as they become available. Proprietary passive heat sinks ensure proper temperatures are maintained. Pressure springs assure tight trim to ceiling fit. Service from below only. Maximum ceiling thickness is 7/8".

Modules

Two Xicato remote phosphor modules use high efficiency blue LEDs that convert to white light when directed through a phosphor lens. Lumen packages are 1000 lm and 1300 lm operating on 1A drivers. Standard 3000K, 80 CRI. 2700K, 3500K, 4000K available. Rated Life is 50,000 hours at 70% lumen output.

Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage.

Finish

Standard trim is anodized Softglow® clear. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Finish

5 year limited. See KV website for manufacturer's details.

General

Fixture is pre-wired and thermally protected, UL and C-UL listed, for damp location and eight wire, 75°C, branch circuit wiring. All products are union made IBEW. Designed and manufactured in the USA.

Accessories

- | | |
|---|-----------------------------|
| SB Softglow® black trim. | ST Softglow® titanium trim. |
| SG Softglow® gold trim. | SW Softglow® wheat trim. |
| SH Softglow® mocha trim. | SY Softglow® pewter trim. |
| SP Softglow® graphite trim. | SZ Softglow® bronze trim. |
| WT White trim flange. | WHT White complete cone. |
| R2 26" support rails. | 27 2700 Kelvin temp. |
| R5 52" support rails. | 35 3500 Kelvin temp. |
| F Fuse. | 40 4000 Kelvin temp. |
| SO Fine microprism lens*. | FR Frosting on lens, |
| LL Linear lens*. | specify lens type. |
| LP Large prism lens*. | DCE Double circuiting. |
| DP Fixed downlight position. | |
| ND Narrow beam distribution. | |
| WD Wide beam distribution. | |
| FMT4 Flush mount, contact factory. | |
| FLT8 Full lens trim 4 x 8", specify lens type. | |
| REM Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Remote mount only. Ceiling access required. | |
| D1 Lutron to 1%, 3 wire control. | |
| DE Lutron EcoSystem to 1%, digital 4 wire. | |
| AS Xicato Artist Series 95 CRI module for 1000 lm. Contact factory for energy information. | |

*FLT option required.



Kurt Versen Company

Point Source Lighting
Westwood, New Jersey 07675

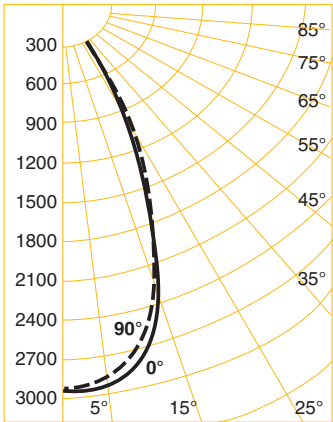
D1

D4216 Medium Beam

Footcandle Values at Nadir, Fixtures Mounted in 15° Slope

Distance	5'						10'						15'						20'					
	Nadir		10°		15°		Nadir		10°		15°		Nadir		10°		15°		Nadir		10°		15°	
Lamps	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam
D4216 1000 lm 3000K	118	104	2'	83	3'	30	26	4'	21	5'	13	12	5'	9	8'	7	7	7'	5	11'				
D4216 1300 lm 3000K	159	142	2'	115	3'	40	35	4'	29	5'	18	16	5'	13	8'	10	9	7'	7	11'				

Candlepower Distribution

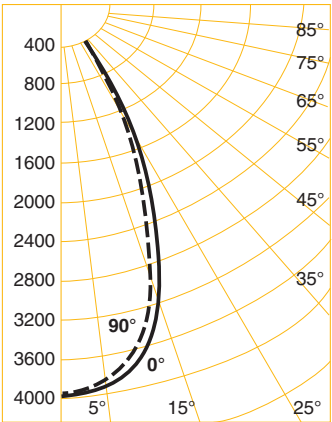


D4216 1000 lm 3000K
LER 50.9 S/M 0° .7
S/M 90° .7

Candelas

°	0°		90°	
	1625*	1625*	1625*	1625*
0	2958	2958	2958	2958
5	2945	2914	2914	2914
10	2758	2698	2698	2698
15	2340	2267	2267	2267
20	1678	1679	1679	1679
25	836	1130	1130	1130
30	403	593	593	593
35	108	253	253	253
40	63	107	107	107
45	38	25	25	25
50	28	15	15	15
55	20	10	10	10
60	15	7	7	7
65	12	4	4	4
70	10	3	3	3
75	8	3	3	3
80	6	3	3	3
85	4	2	2	2
90	0	0	0	0

°Vertical Angles
*Luminaire Lumens



D4216 1300 lm 3000K
LER 40.7 S/M 0° .6
S/M 90° .6

°	0°		90°	
	1871*	1871*	1871*	1871*
0	3971	3971	3971	3971
5	3928	3843	3843	3843
10	3707	3513	3513	3513
15	3185	2834	2834	2834
20	2179	1958	1958	1958
25	1474	1240	1240	1240
30	1054	536	536	536
35	354	244	244	244
40	134	73	73	73
45	93	23	23	23
50	65	13	13	13
55	45	9	9	9
60	33	4	4	4
65	25	1	1	1
70	19	0	0	0
75	14	0	0	0
80	10	0	0	0
85	6	0	0	0
90	0	0	0	0

°Vertical Angles
*Luminaire Lumens

Notes

- 1 Photometric Report: D4216 1000 lm KV Report No. 71113-A, D4216 1300 lm LTL Report No. 260910.
- 2 Data with Softglow® trim.
- 3 Colored trim multipliers vary with beam orientation and degree of angulation. Contact the factory for specific data.
- 4 All data derived with fixtures mounted in 15° sloped ceiling.

Products	Search	Information	Contact	Partners
--------------------------	------------------------	-----------------------------	-------------------------	--------------------------

Back to Recessed Luminaires



Recessed wall with louvers

Designed for low mounting heights for the illumination of steps, stairs, ramps, aisles and other interior and exterior locations.

Recessed luminaires with die cast aluminum faceplate with integral louvers. Etched tempered glass diffuser.

See individual product page for LED driver and color temperature information.

Fluorescent units include integral electronic ballasts.

U.L. listed, suitable for wet locations.

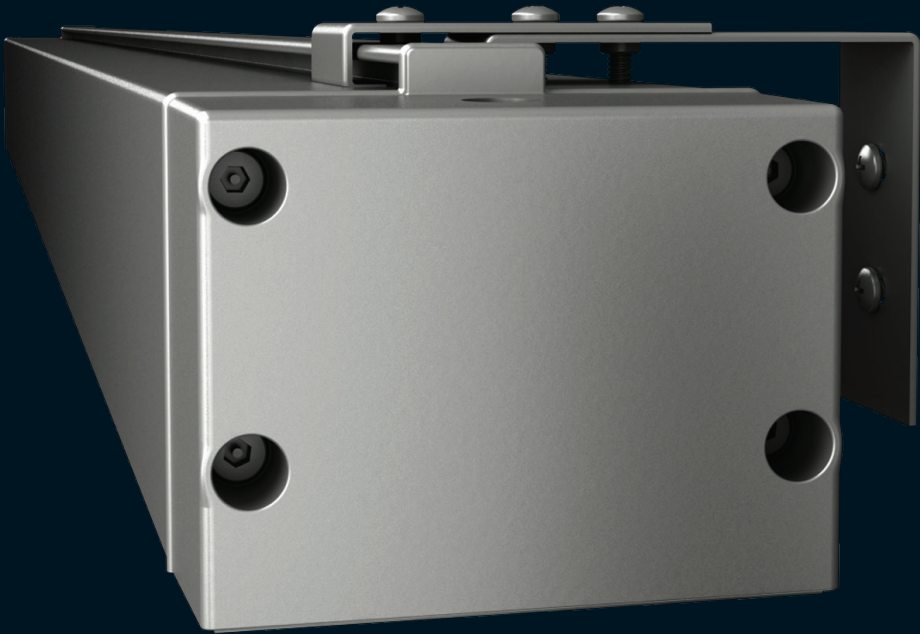
Protection class: IP65

Finish: Standard BEGA colors.

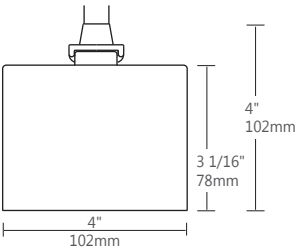


Click product # for details			Lamp	β	Temp°C	A	B	C
2038LED	EXPRESS	ADA	10.1W LED			13	4 7/8	4
2039LED	EXPRESS	ADA	13.4W LED			16 1/2	4 7/8	4
2040LED	EXPRESS	ADA	16.8W LED			20 1/2	4 7/8	4
2226P	EXPRESS	ADA	(1) 18W CF twin-4p			13	4 7/8	4
3126P		ADA	(1) 27W CF twin-4p			16 1/2	4 7/8	4
3125P		ADA	(1) 39W CF twin-4p			20 1/2	4 7/8	4

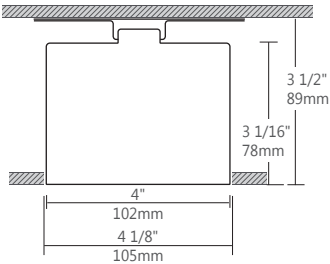
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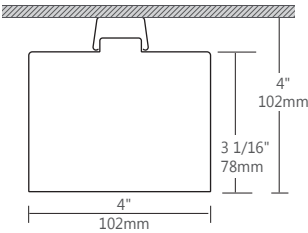
DIMENSIONS



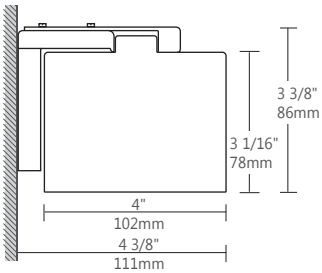
PENDING



RECESSED



SURFACE



WALL



Wet Beam brought a sleek and compact Beam luminaire for wet locations to the market. It suits both indoor spaces such as bathrooms, spas, and indoor parking garages as well as outdoor spaces such as under-canopy installations. Like its fluorescent counterpart, the LED version of the Wet Beam complements the Beam LED family. It allows for applications such as the continuation of indoor lines of light in the ceiling to the under-canopy outdoors to maintain a consistent appearance throughout the space.

Maintenance requirements for Wet Beam LED are very low and it allows for significant energy savings. Color rendering with Wet Beam LED is very good and, unlike with fluorescent HID or HPS luminaires, it provides white light under any ambient temperature, allowing notably occupants to feel safer.

MAIN PRODUCT SPECIFICATIONS

1	PRODUCT ID	2	VERSION	3	NOM. LUMENS/FT	4	COLOUR TEMP.	5	SHIELDING
WBLED	pendant led	B1	B1 (factory preset)	500	500 lm/ft	35	3500 k	F	frosted lens
WBSLED	surface led			700	700 lm/ft	30	3000 k	S	satin lens
WBWLED	wall led			900	900 lm/ft	40	4000 k		
WBRLED	recessed led								

6	LENGTH/FT	7	FINISH	8	VOLTAGE	9	DRIVER
2	2'	AP	aluminum paint	120	120V	D	dimming
3	3'	W	white	277	277V	LT	lutron
4	4'	C	custom	UNV	universal		
5	5'						
8	8'						
S#	System Run						



For complete luminaire specification sheets, please visit our web site at www.axislighting.com

MOUNTING OPTIONS



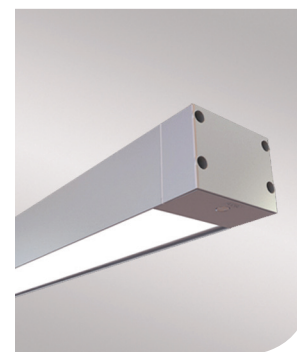
PENDANT



RECESSED



SURFACE



WALL

WET BEAM4 LED

PERFORMANCE AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
500 lm/ft	6.6w/ft	76 lm/w
750 lm/ft	10.25w/ft	73 lm/w
900 lm/ft	12.8w/ft	70 lm/w

* Based on a 11" luminaire using one driver
Please consult factory for custom lumen output and wattage.

OPTICS OPTIONS

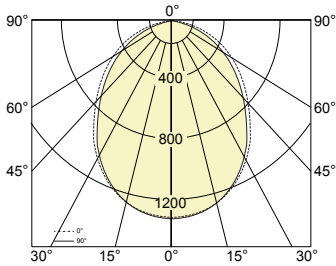


S satin lens



F frosted lens

PHOTOMETRICS

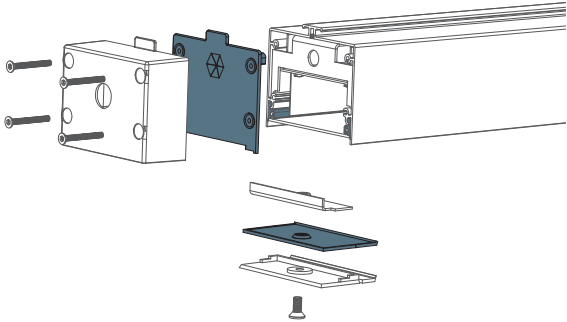


Wet Beam4 LED Direct
Luminaire Lumens: 2999 lm
Input Watts: 10.25 w
Efficacy: 74.9 lm/w
IES FILE: WBLED-B1-750-35.IES

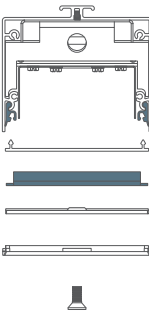
i All LED-related data in this document is valid as of Jan. 2013
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at www.axislighting.com.

GASKETED END CAP

With it's gasketed end cap and lens the Wet Beam is made for wet locations, it is ideal for exterior soffits and canopies of malls, hospitals and other institutions.



LENS SIDE VIEW



GASKETED END CAP

CONSTRUCTION

Housing	Extruded Aluminum (0.062" nominal) Up to 70% Recycled Content
End Cap	Die Cast Zinc (0.070" nominal)
Interior Brackets	Die Formed Sheet Steel (16 ga)
Gaskets	Moulded Elastomer (0.100" nominal)
Lens Gaskets	Extruded Elastomer (0.045" nominal)
Frosted Lens	Frosted Acrylic 68% transmissive

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

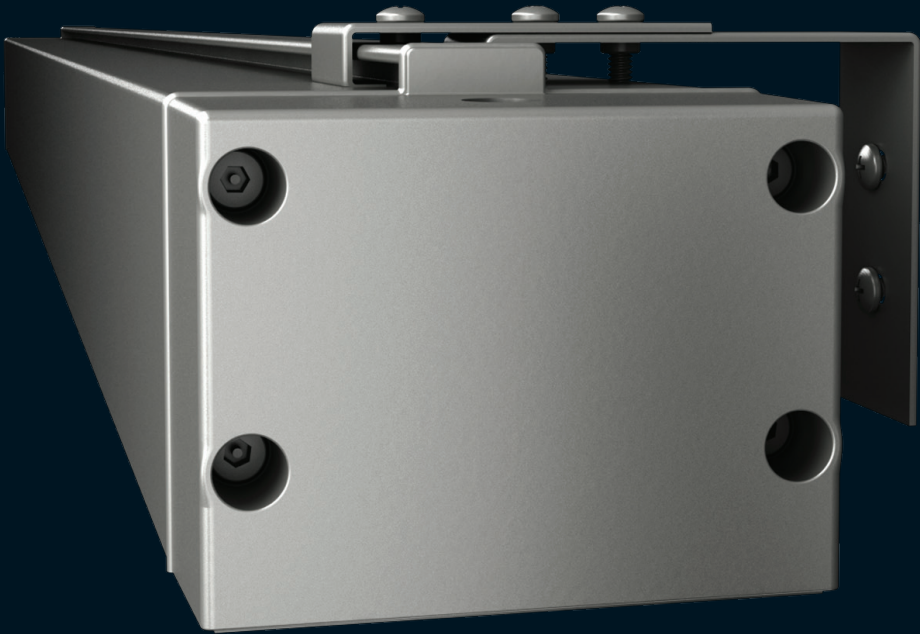
Thermal management

Aluminium housing acting as the heat spreader to maximize life.

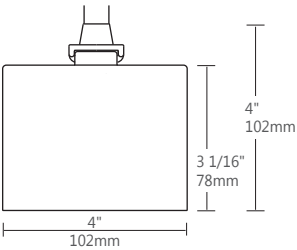
Emergency

Emergency battery pack or emergency circuit optional.

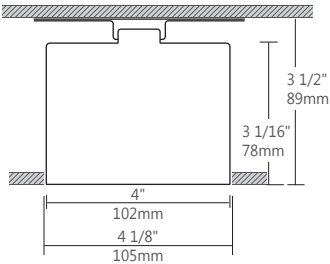




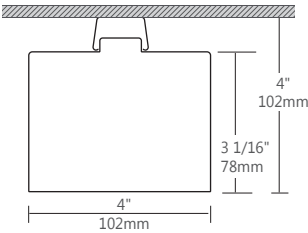
DIMENSIONS



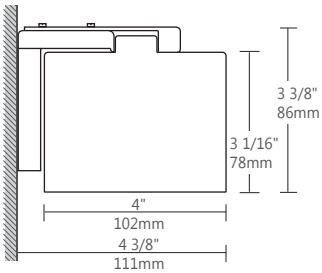
PENDING



RECESSED



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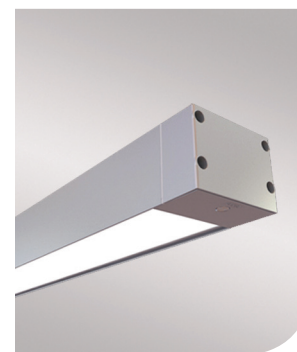
PENDANT



RECESSED



SURFACE



WALL

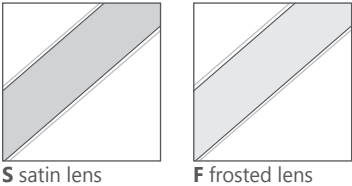
WET BEAM4 LED

PERFORMANCE AT 3500K

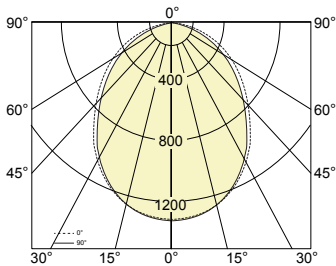
NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
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750 lm/ft	10.25w/ft	73 lm/w
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* Based on a 11" luminaire using one driver
Please consult factory for custom lumen output and wattage.

OPTICS OPTIONS



PHOTOMETRICS

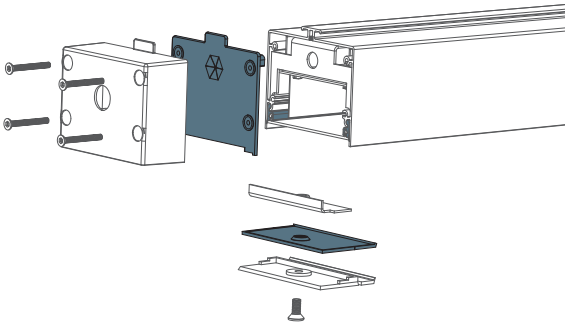


Wet Beam4 LED Direct
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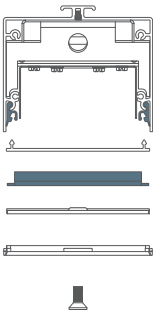
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LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

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Emergency battery pack or emergency circuit optional.

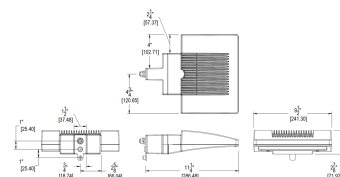


ALED26

ALED Area Lights mount to 4" square steel poles at 15'-20'. 1 to 4 fixtures can be mounted to each pole. IES Full Cutoff, Fully Shielded optics. 5 year Warranty.

Color: Bronze

Weight: 6.5 lbs



LED Info

Watts: 26W
Color Temp: 5000K (Cool)
Color Accuracy: 70
L70 Lifespan: 100000
LM79 Lumens: 2,662
Efficacy: 90 LPW

Driver Info

Type: Constant Current
120V: 0.26A
208V: 0.16A
240V: 0.14A
277V: 0.12A
Input Watts: 30W
Efficiency: 88%

Technical Specifications

UL Listing:

Suitable for wet locations.

Lifespan:

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

IP Rating:

Ingress Protection rating of IP66 for dust and water.

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semiCircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Warranty:

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

Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation.

Housing:

Precision die cast aluminum housing, lens frame.

Gaskets:

High temperature silicone.

Effective Projected Area:

EPA = 0.27.

Finish:

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

Green Technology:

ALEDs are Mercury, Arsenic and UV free.

IESNA LM-79 & IESNA LM-80 Testing:

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

Color Consistency:

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

Color Stability:

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

Color Uniformity:

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

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Driver:

Multi-chip 26W high output long life LED Driver
Constant Current, 720mA, Class 2, 6kV Surge
Protection, 100V-277V, 50-60 Hz, 100-240V.4 Amps.

THD:

7.5% at 120V, 11% at 277V



ALED26 - continued

Cold Weather Starting:

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

Thermal Management:

Cast aluminum Thermal Management system for optimal heat sinking. The ALED is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

Dark Sky Approved:

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

California Title 24:

California Title 24

Equivalency:

The ALED26 is Equivalent in delivered lumens to a 70 W Metal Halide Area Light.

HID Replacement Range:

The ALED26 can be used to replace 42 CFL - 100W Metal Halide Area Light based on delivered lumens.

Patents:

The ALED design is protected by U.S. PATENT D608,040 and patents pending in the U.S., Canada, China, Taiwan and Mexico.

DLC Listed:

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

Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

Trade Agreements Act Compliant:

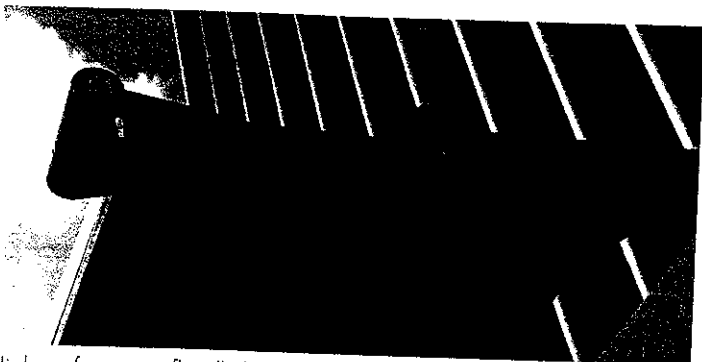
This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.



Moonshine A



High performance floodlights and spotlights for compact fluorescent and Metal Halide. IP65, die cast low copper aluminum housing, all exterior steel parts are stainless steel, axially symmetrical or rotationally symmetrical reflector, tempered glass lens flush with frame, silicon gasket, either remote ballast or recessed ballast box for exterior installation. Fluorescent version has integral electronic -25 F cold weather ballasts.

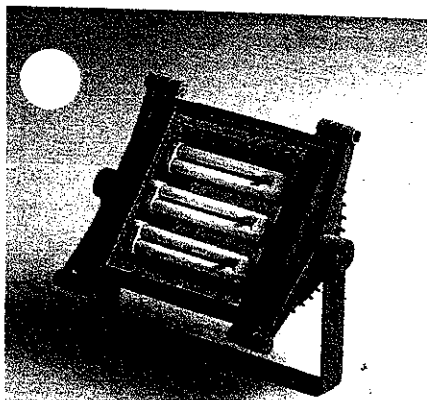
Moonshine is a range of floodlights and spotlights which offers new possibilities for the architectural illumination of buildings. Wide, medium and narrow beam axially symmetrical and rotationally symmetrical are available for the Metal Halide versions. The high IP rating makes them suitable for exterior use, up or down, and for applications in buildings where dust is a problem.

Both sizes of housing take double ended MH lamps. Concentrating on this type of lamp made it possible to design luminaires with a very shallow cross section. When installed horizontally on a

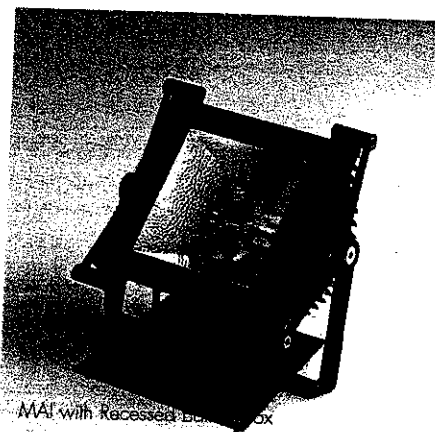
façade, the luminaires only have a minimal effect on the overall appearance of the building.

The 6mm (.236") thick tempered glass is ceramic printed and is flush with the frame. The absence of a lip around the edge makes it more difficult for water and dirt to build up on the glass. This reduces the amount of maintenance.

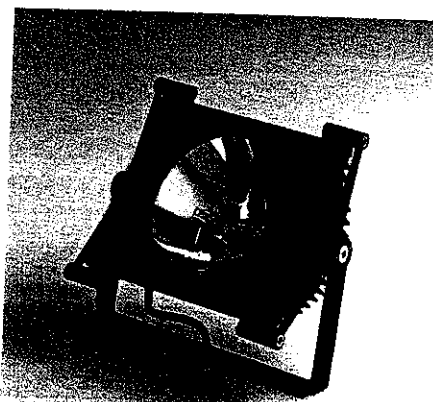
Moonshine is the result of international cooperation between the lighting consultant Roland Jéol and the architect and industrial designer Roy Fleetwood. Both are internationally recognized as being leaders in their field.



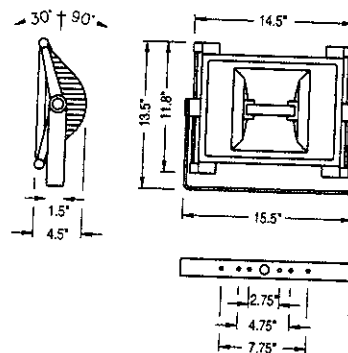
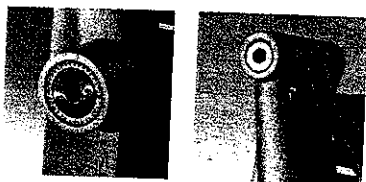
MA4 with Integral Ballast



MA4 with Recessed Ballast Box

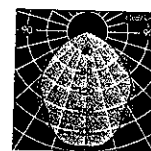


MA4 with Remote Ballast



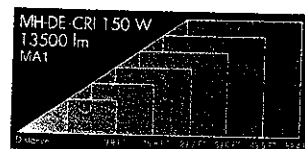
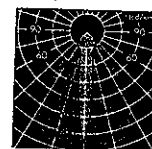
MAF Fluorescent

Lamp	CRI	Socket	Half beam angle	
			C0-180	C90-270
3x18 Dulux L RS	82	2G11	93	100



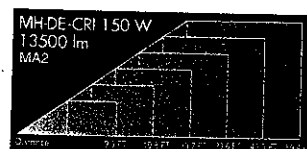
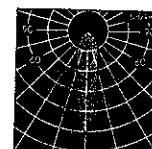
MA1 Axially symmetrical, narrow beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	C90-270
70W MASTER COLOR MH DE 3000K	85	Rx7s	10	73
150W MASTER COLOR MH DE 3000K	85	Rx7s	10	73



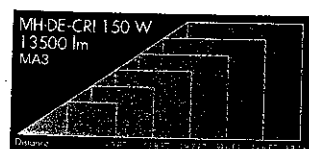
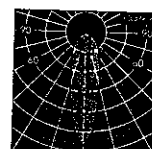
MA2 Axially symmetrical, medium wide beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	C90-270
70W MASTER COLOR MH DE 3000K	85	Rx7s	22	73
150W MASTER COLOR MH DE 3000K	85	Rx7s	22	73



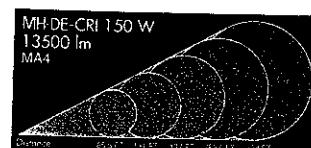
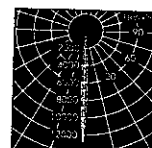
MA3 Axially symmetrical, wide beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	C90-270
70W MASTER COLOR MH DE 3000K	85	Rx7s	40	76
150W MASTER COLOR MH DE 3000K	85	Rx7s	40	76



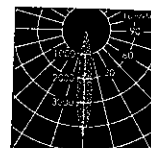
MA4 Rotationally symmetrical, narrow beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	
70W MASTER COLOR MH DE 3000K	85	Rx7s	9	
150W MASTER COLOR MH DE 3000K	85	Rx7s	9	



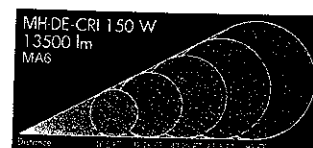
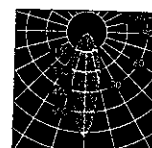
MA5 Rotationally symmetrical, medium wide beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	
70W MASTER COLOR MH DE 3000K	85	Rx7s	20	
150W MASTER COLOR MH DE 3000K	85	Rx7s	20	



MA6 Rotationally symmetrical, wide beam

Lamp	CRI	Socket	Half beam angle	
			C0-180	
70W MASTER COLOR MH DE 3000K	85	Rx7s	45	
150W MASTER COLOR MH DE 3000K	85	Rx7s	45	



ORDERING CHART moonshine A

SERIES	Prod. ID XXX	Lamp X	Wattage XX	Body X	Finish XX	Grill X	Ballast X	Lens X	Options XX
Fluorescent	MAF	8 - FLOUR	G6 - 3x18W Biax 4Pin CRI 82 35K	B - Adjustable Floodlight	10 - Matte Silver	0 - None	C - 120V - 277V ELECT	T - Clear Temp Glass	0 - None
Axially Sym Narrow	MA1	9 - HID	L5 - 70W Master Color D/E CRI 85 30K	T - Recessed Ballast Box	78 - Textured Black		9 - 120V MAG HPF		
Axially Sym Medium	MA2		U1 - 150W Master Color D/E CRI 85 30K	Adjustable Floodlight	EW - Euro White		A - 277V MAG HPF		
Axially Sym Wide	MA3				99 - Custom		R - 120V/277V MAG HPF REM		
Rotation Sym Narrow	MA4								
Rotation Sym Med	MA5								
Rotation Sym Wide	MA6								

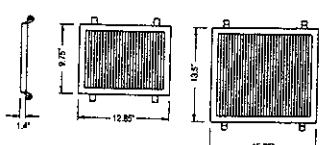
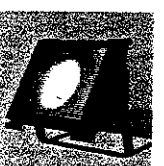
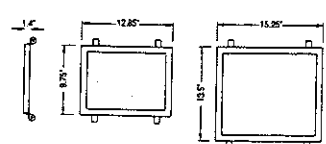
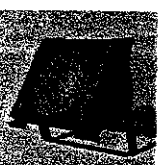
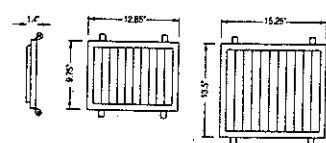
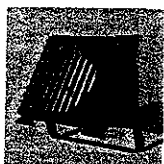
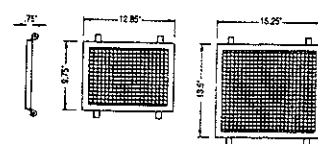
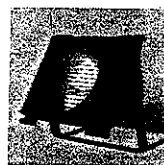
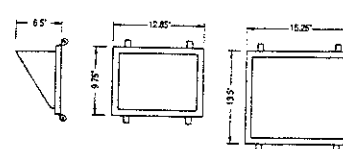
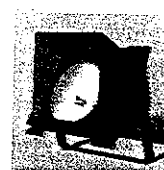
NOTE: B STYLE BODY IS ALWAYS USED FOR FLUORESCENT
WITH INTEGRAL ELECTRONIC BALLAST
B STYLE BODY IS FOR HID WITH REMOTE BALLAST
T STYLE BODY IS ALWAYS INTEGRAL BALLAST
IN RECESSED BALLAST BOX

NOTE: FLUOR. IS ALWAYS C
HID IS EITHER 9 OR A FOR "T" BODY
OR R FOR "B" BODY

Moonshine A		Moonshine B	
Part number	Part number	Colour	Description
129 0 016 940	129 0 036 940	black	cowl c/w frame
129 0 016 960	129 0 036 950	white	
129 0 016 950	129 0 036 960	silver grey	

Moonshine A		Moonshine B	
Part number	Part number	Colour	Description
129 0 012 940	129 0 032 940	black	protection grill c/w frame
129 0 012 960	129 0 032 950	white	
129 0 012 950	129 0 032 960	silver grey	

Moonshine A		Moonshine B	
Part number	Part number	Colour	Description
129 0 014 940	129 0 034 940	black	vertical louvre c/w frame
129 0 014 960	129 0 034 960	white	
129 0 014 950	129 0 034 950	silver grey	
129 0 015 940	129 0 035 940	black	horizontal louvre c/w frame
129 0 015 960	129 0 035 960	white	
129 0 015 950	129 0 035 950	silver grey	



Moonshine A		Moonshine B	
Part number	Part number	Colour	Description
129 0 018 940	129 0 038 940	black	green filter c/w frame
129 0 018 960	129 0 038 960	white	
129 0 018 950	129 0 038 950	silver grey	
129 0 013 940	129 0 033 940	black	blue filter c/w frame
129 0 013 960	129 0 033 960	white	
129 0 013 950	129 0 033 950	silver grey	
129 0 017 940	129 0 037 940	black	red filter c/w frame
129 0 017 960	129 0 037 960	white	
129 0 017 950	129 0 037 950	silver grey	
129 0 011 940	129 0 031 940	black	yellow filter c/w frame
129 0 011 960	129 0 031 960	white	
129 0 011 950	129 0 031 950	silver grey	

Only for spotlights with narrow beam light distributions

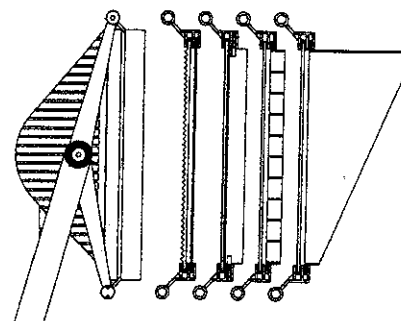
129 0 019 940	129 0 039 940	black	ribbed glass for vertical beam
129 0 019 960	129 0 039 960	white	
129 0 019 950	129 0 039 950	silver grey	
129 0 020 940	129 0 040 940	black	ribbed glass for horizontal beam
129 0 020 960	129 0 040 960	white	
129 0 020 950	129 0 040 950	silver grey	

The frames can carry a special glass plus another accessory.

Moonshine A		Moonshine B	
Part number	Part number	Colour	Description
129 0 051 910*	129 0 071 910*	yellow	filter
129 0 051 930*	129 0 071 930*	blue	
129 0 051 970*	129 0 071 970*	red	
129 0 051 980*	129 0 071 980*	green	

Only for spotlights with narrow beam light distributions

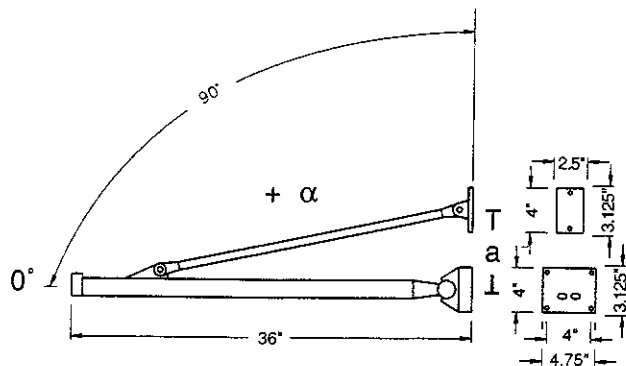
129 0 059 000*	129 0 079 000*	-	ribbed glass, vertical beam
129 0 060 000*	129 0 080 000*	-	ribbed glass, horizontal beam



Accessories such as louvres and special glasses are fitted into a supporting frame and are screwed onto the front of the floodlight. A special glass plus another accessory can be fitted to one frame.

Cantilever Wall Arm for Moonshine Series

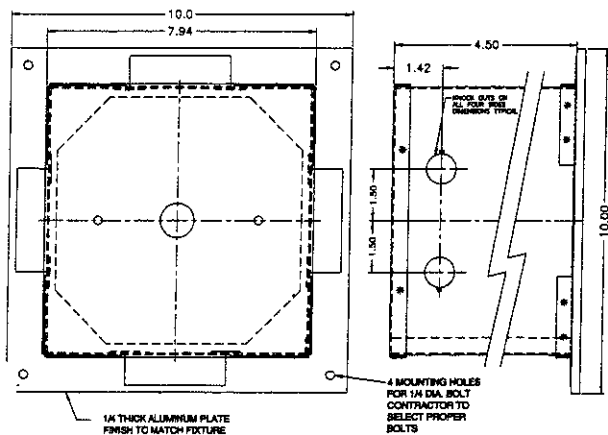
The angle of the arm depends on two factors. First the distance between the wall plate and the fixture plate. Second, there is adjustment on the arm itself. So, for example, if the distance from the center of the wall plate to the center of the brace is 10", the arm can go from 18 degrees below horizontal to 9 degrees above horizontal. This represents a spread of 27 degrees.

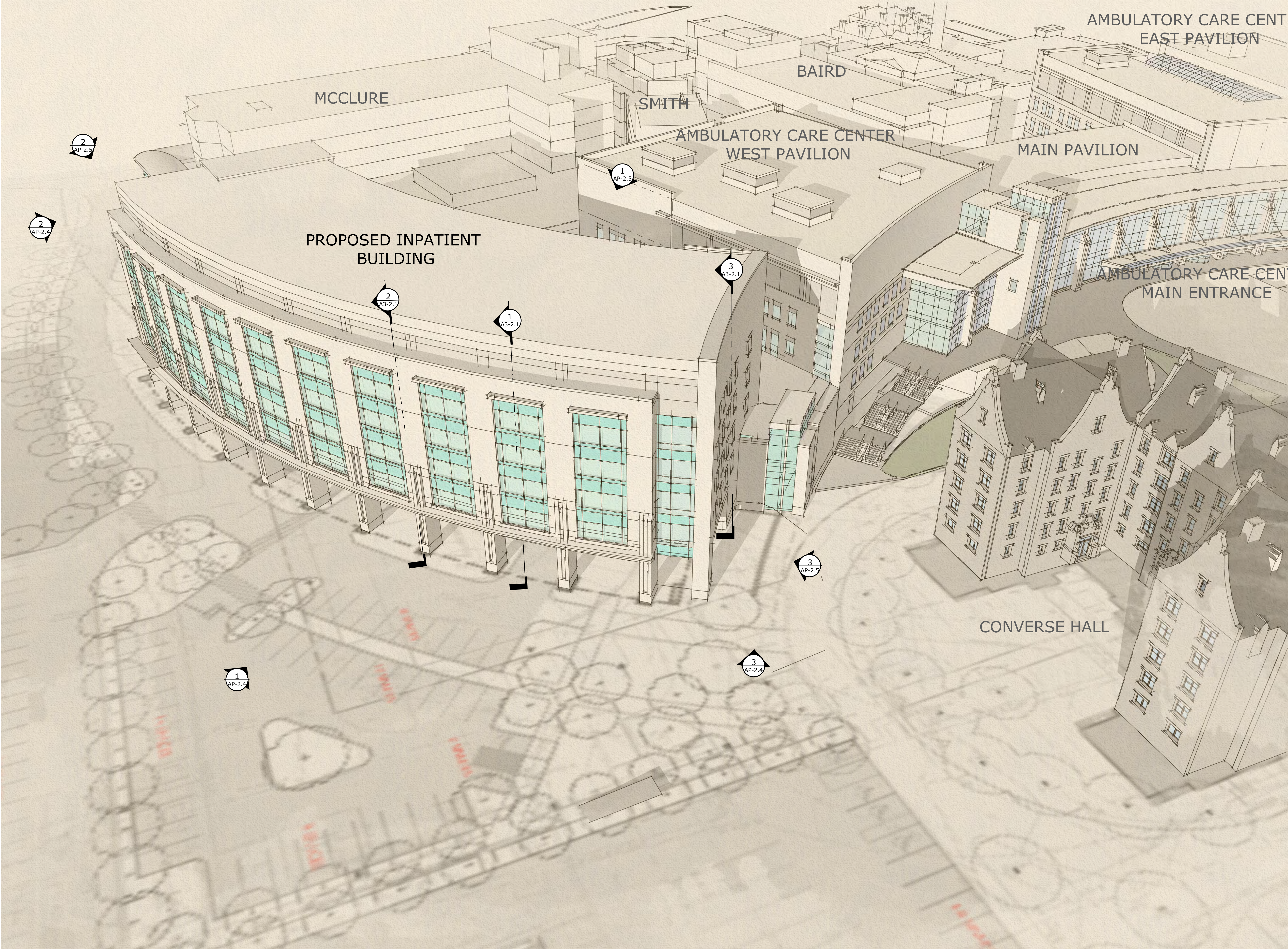


The interdependence of the installation angle α to distance a

Distance a in inches	Angle α in °	Range in °
10	-18 - +9	27
12	-18 - +11	29
14	-18 - +13	31
16	-18 - +15	33
18	-18 - +17	35
20	-18 - +19	37
22	-18 - +21	39
24	-18 - +23	41
26	-18 - +25	43
28	+2 - +27	25
30	+14 - +29	15
32	+29 - +31	2
34	+31 - +33	2

Recessed Ballast Box





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Sheet Title and Number	

OVERHEAD VIEW



1 VIEW LOOKING NORTHEAST
NTS

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EXTERIOR VIEW

AP-2.2



1 VIEW LOOKING EAST FROM UVM QUAD
NTS

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EXTERIOR VIEW

AP-2.3



1 VIEW LOOKING SOUTHEAST WITH SKYBRIDGE CONNECTION
NTS

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BUILDING

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EXTERIOR VIEW

AP-2.3A



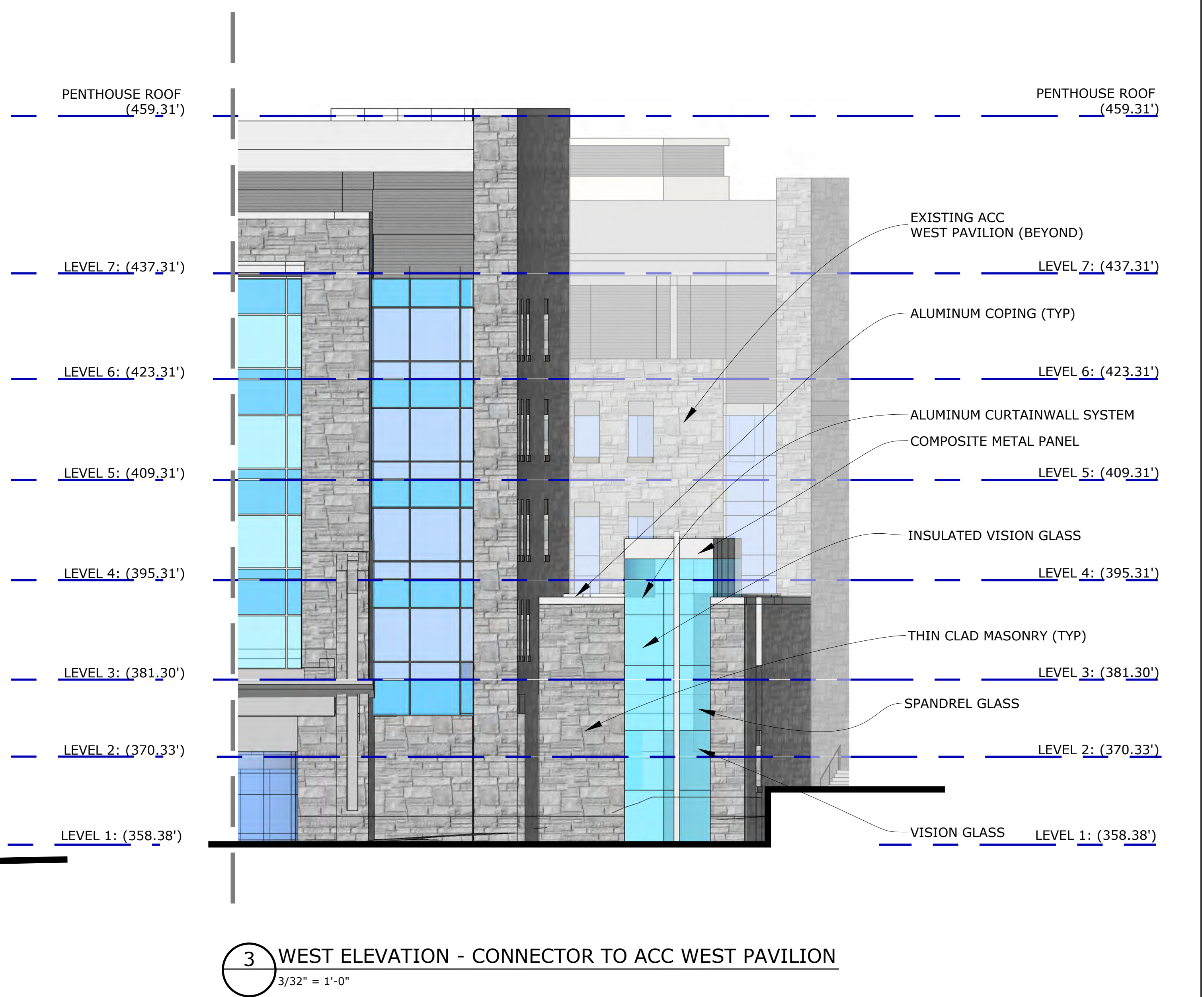
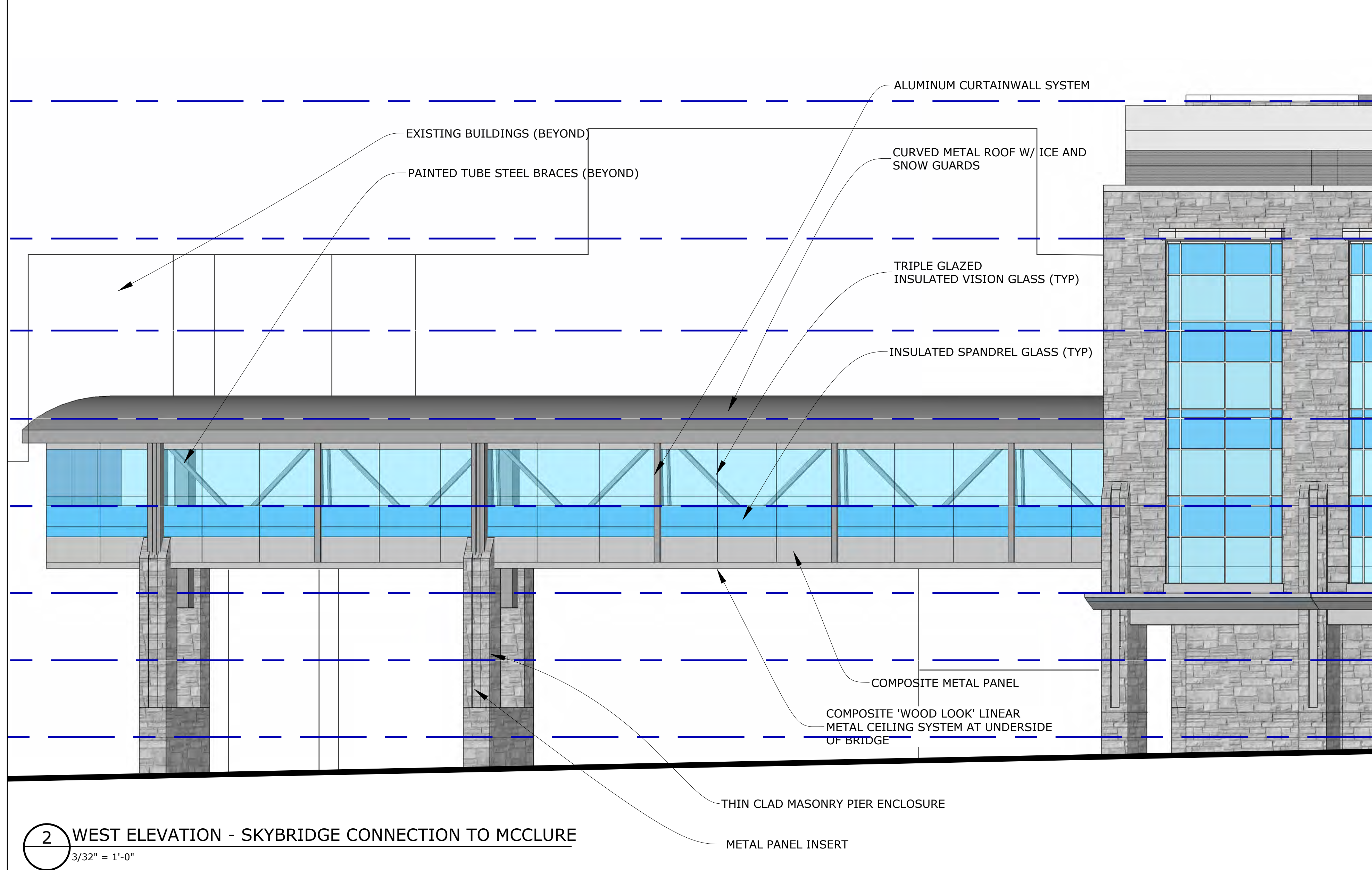
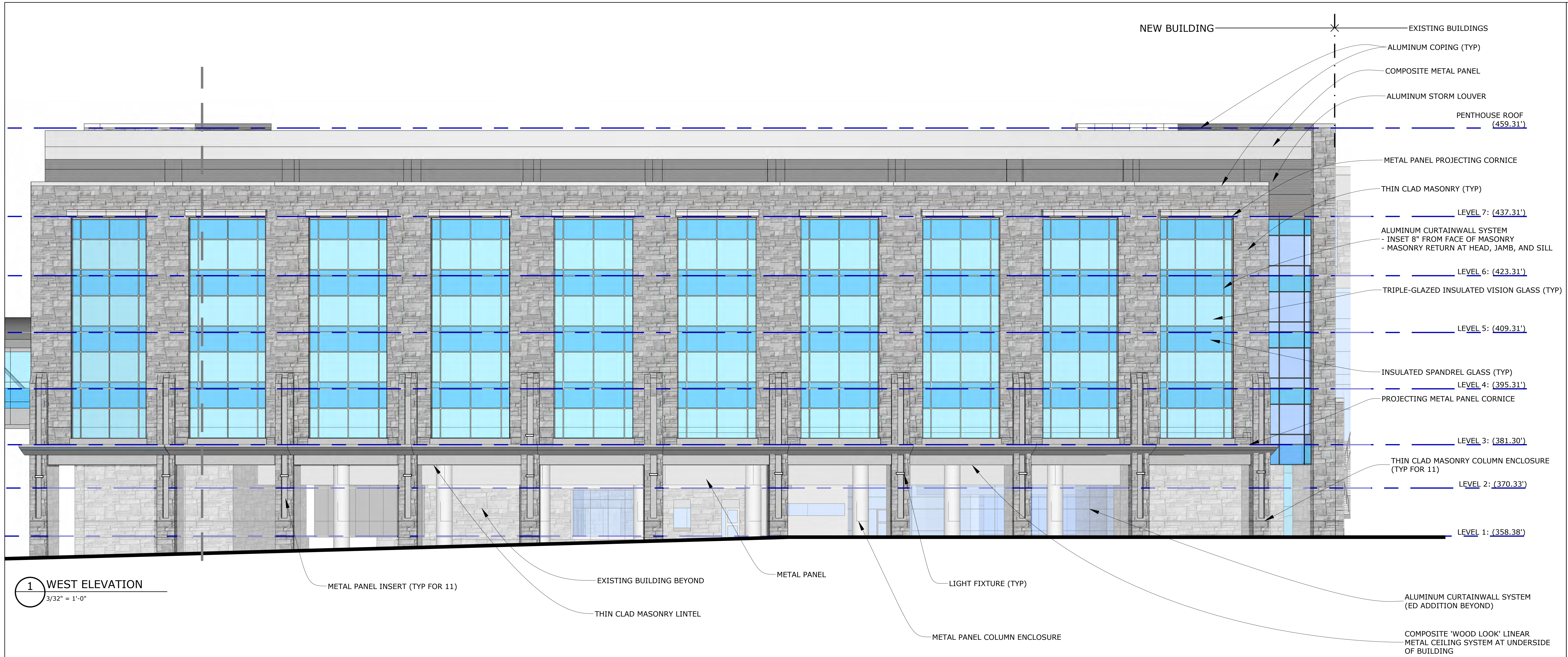
1 VIEW FROM UNIVERSITY PLACE
NTS



2 VIEW FROM COLCHESTER AVENUE
NTS

INPATIENT
BUILDING

EXTERIOR VIEWS



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environments for health

Williston, Vermont
Boston, Massachusetts
Portland, Maine

185 Talbot Road
Williston, VT 05495
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f 802.870.9350
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Fletcher
Allen
HEALTH CARE

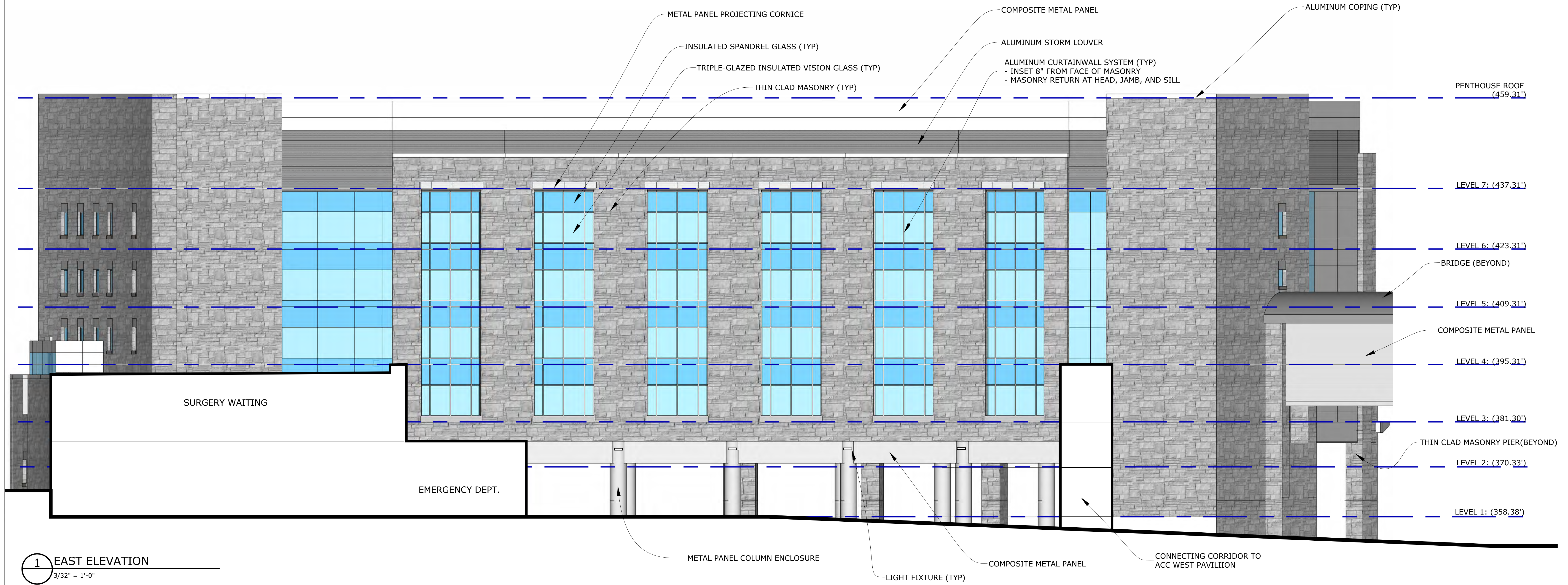
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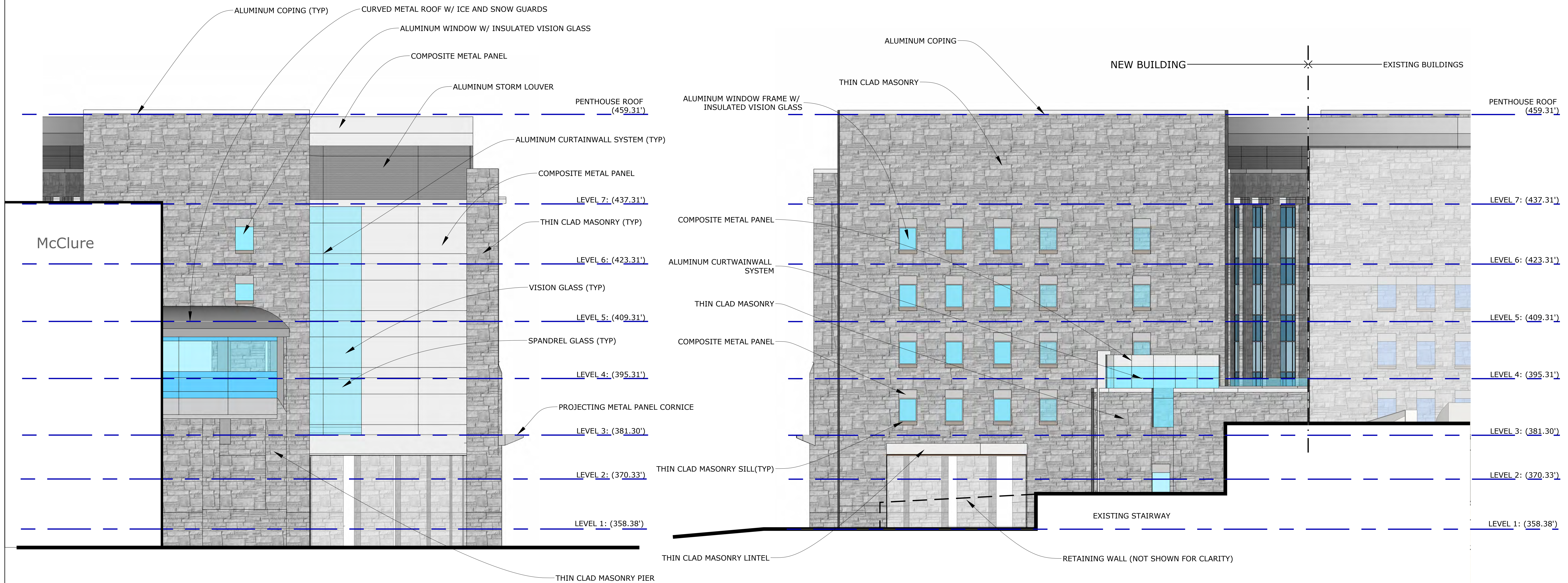
MorrisSwitzer Project Number201254
Date30 JUNE 2014
ScaleAS NOTED
Sheet Title and Number

EXTERIOR
ELEVATIONS

AP-2.4



1 EAST ELEVATION
3/32" = 1'-0"



2 NORTH ELEVATION
3/32" = 1'-0"

3 SOUTH ELEVATION
3/32" = 1'-0"

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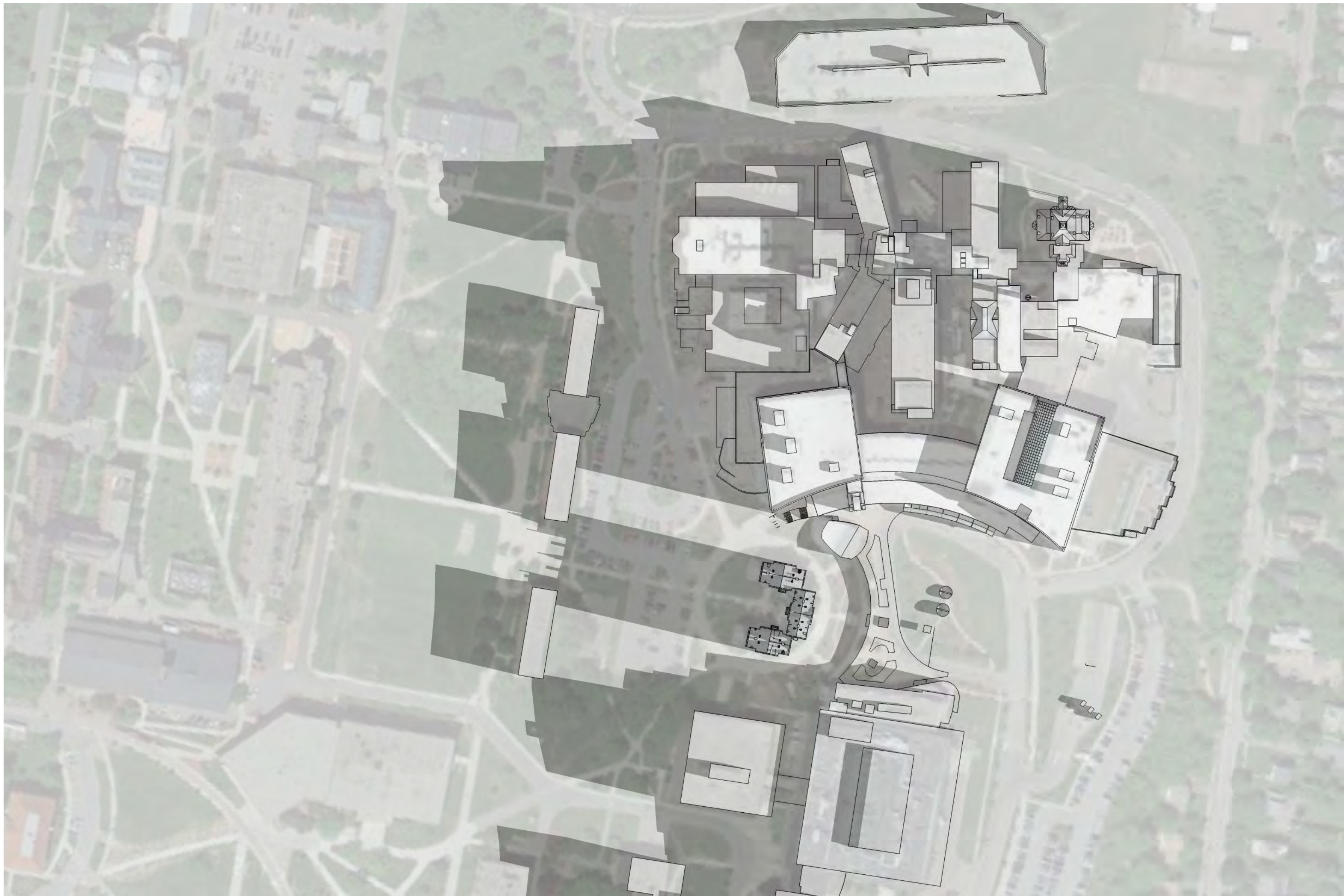


INPATIENT BUILDING

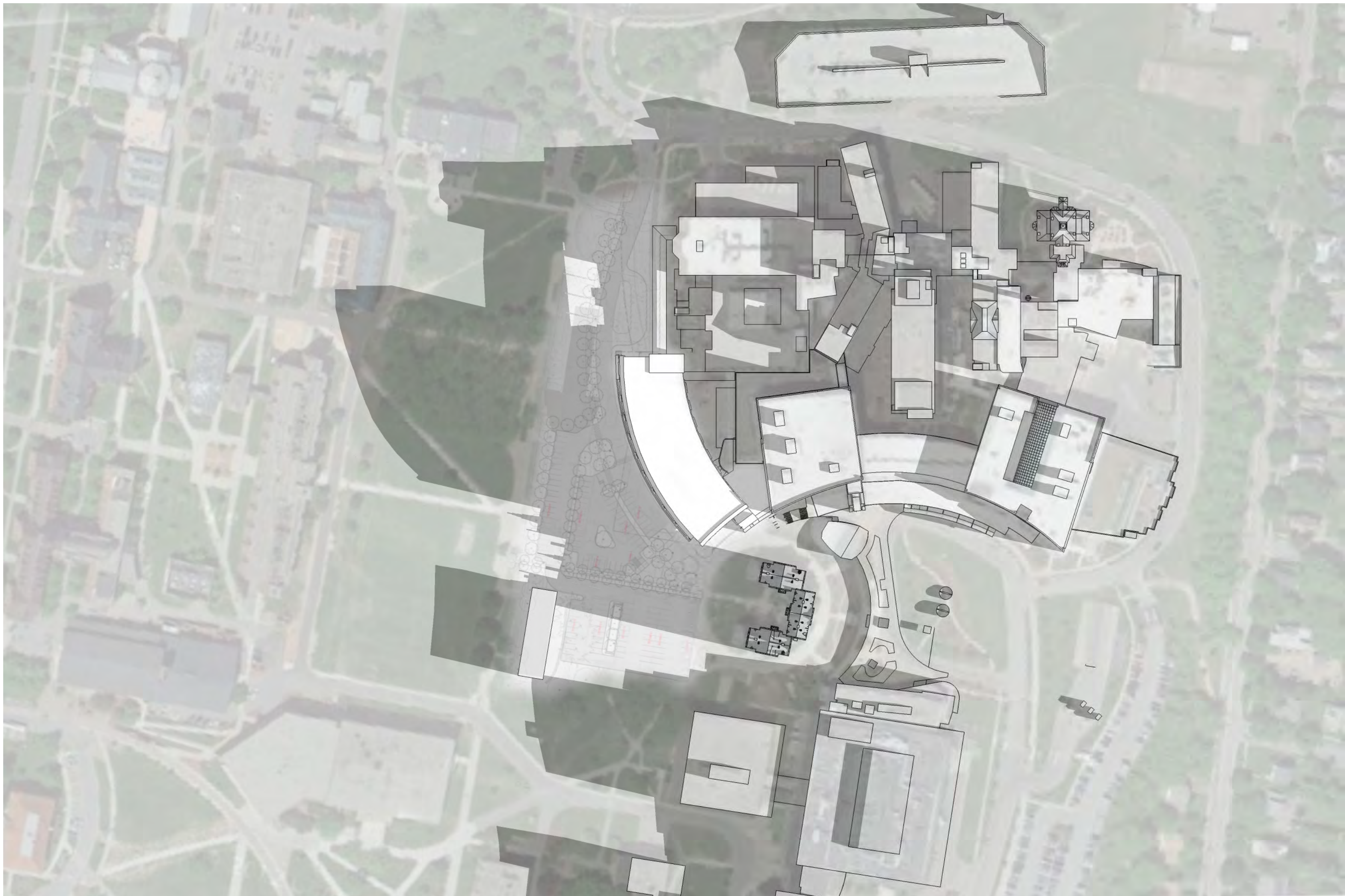
MorrisSwitzer Project Number	201254
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EXTERIOR ELEVATIONS

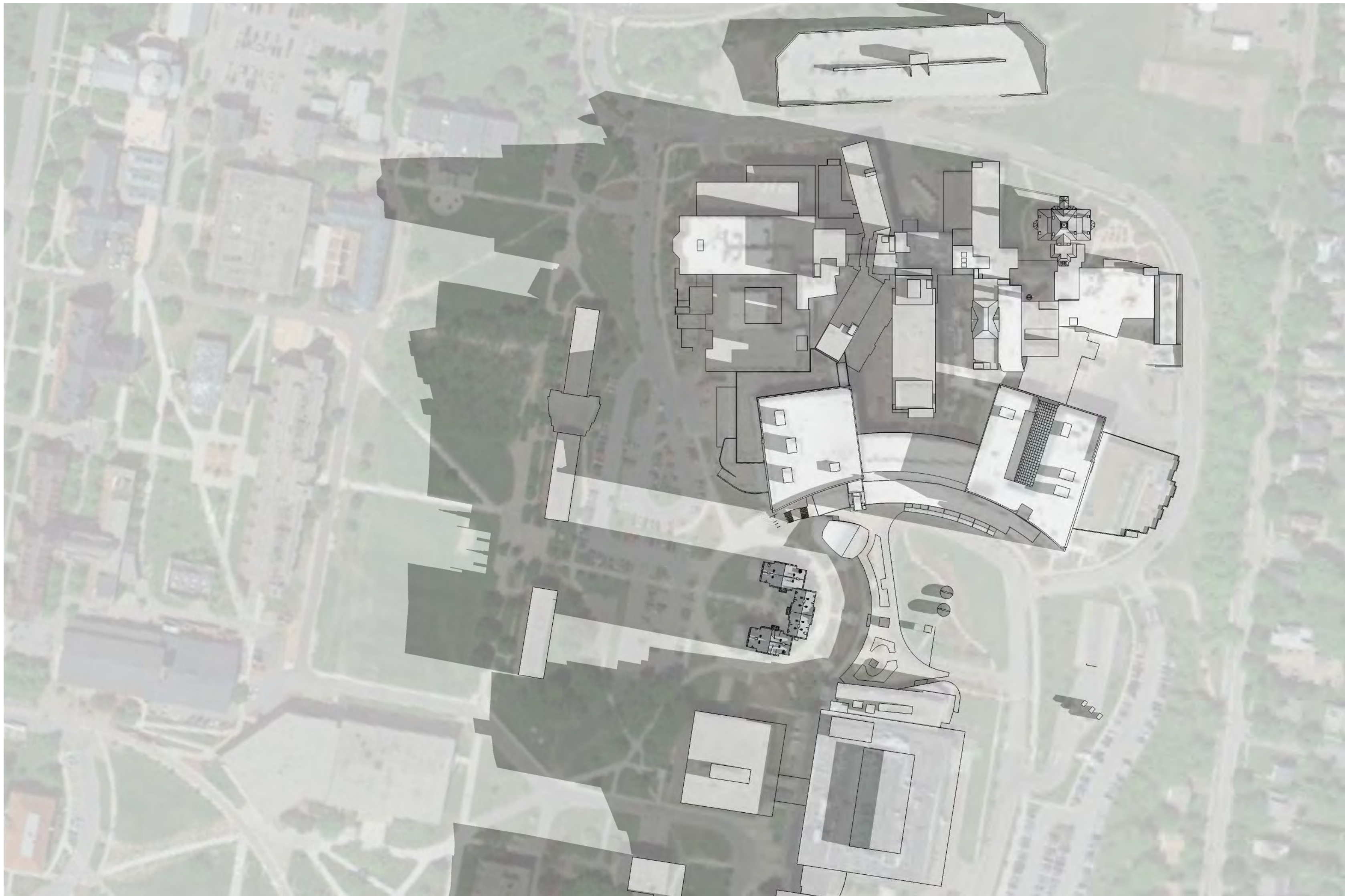
AP-2.5



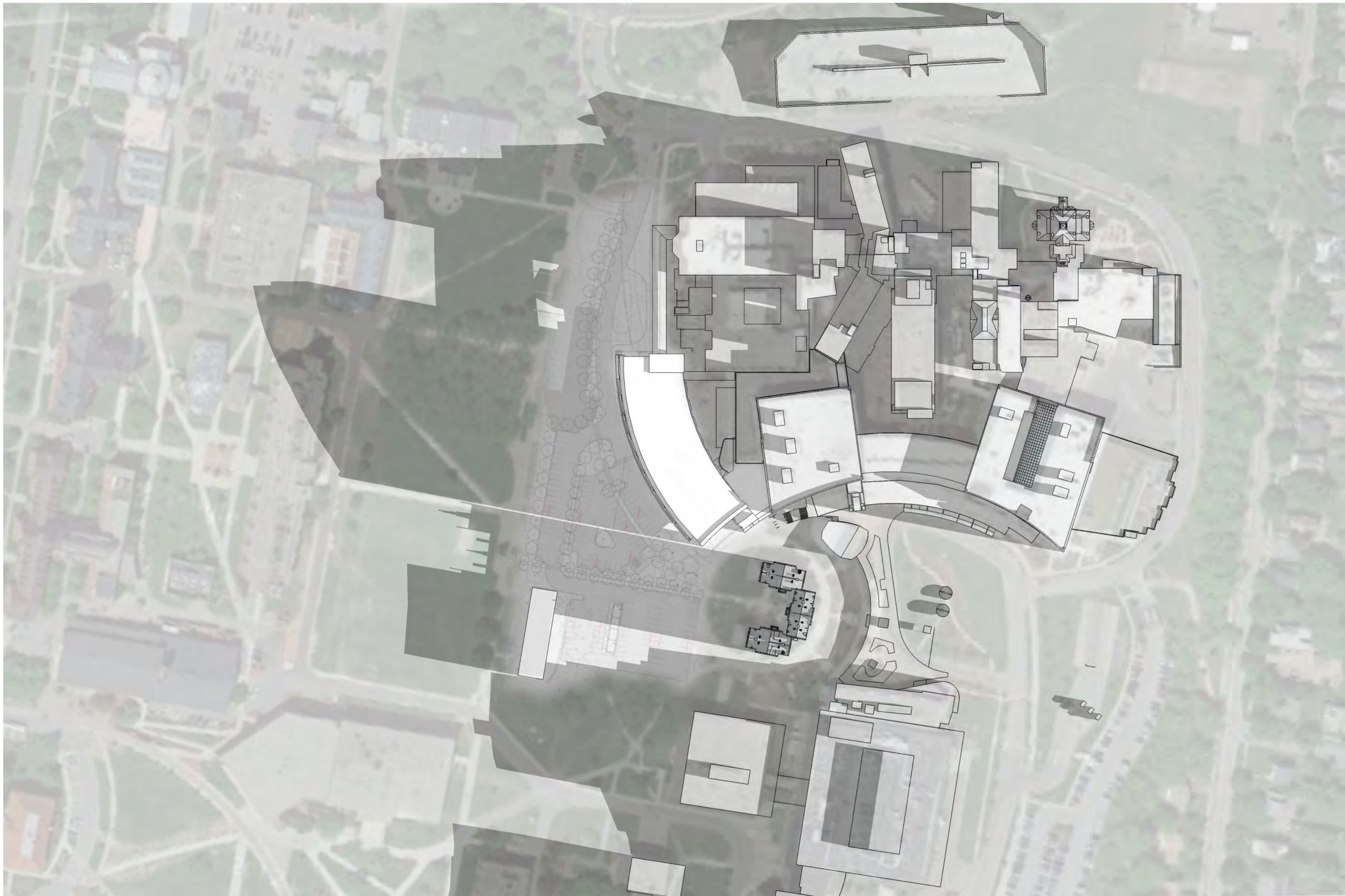
1 EXISTING - SPRING EQUINOX - 7AM
NTS



2 PROPOSED - SPRING EQUINOX - 7AM
NTS



3 EXISTING - FALL EQUINOX - 7AM
NTS



4 PROPOSED - FALL EQUINOX - 7AM
NTS

MECHANICAL
ROOMELECTRICAL
ROOM

WEST
PAVILION

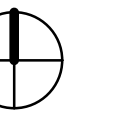
(UNEXCAVATED)

UTILITY TUNNEL
(E)

ELEV
PIT (E)

UP

Project North

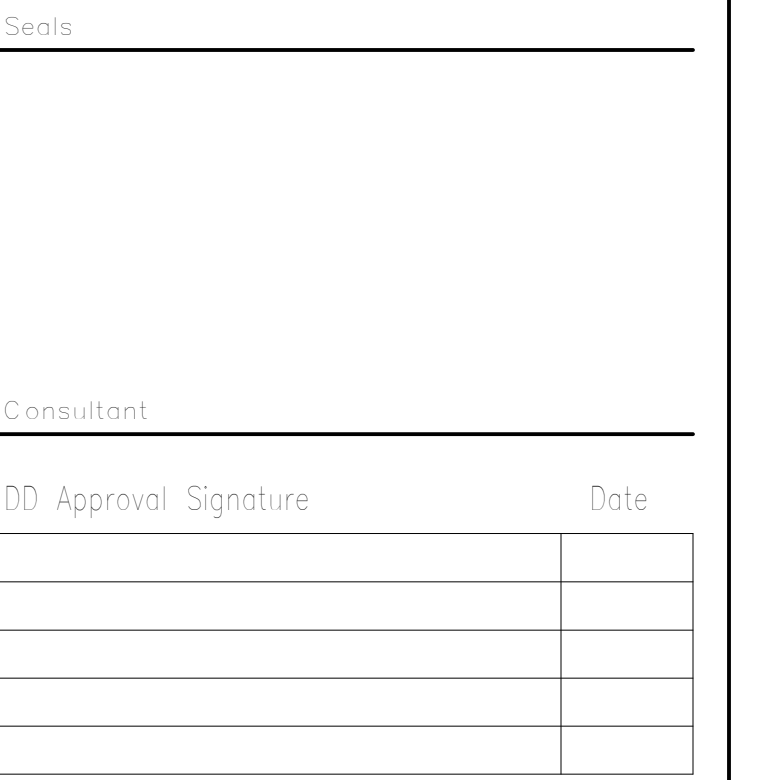
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Scale	1/16" = 1'-0"
Sheet Title and Number	

A1-1.0



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FIRST FLOOR PLAN

A1-2.0

C:\Users\jgravel\Documents\FAHC West Wing Bed Tower_201254_jgravel.rvt



Seals

Consultant

DD: Approval Signature

Date

Project North

Key Plan N.T.S.

SITE PERMIT APPLICATION

06.30.14

Revision

Date

No



INPATIENT BUILDING

MorrisSwitzer Project Number 201254

Date 30 JUNE 2014

Scale 1/16" = 1'-0"

Sheet Title and Number

SECOND FLOOR PLAN

A1-3.0

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Scale 1/16" = 1'-0"

Sheet Title and Number

THIRD FLOOR PLAN

A1-4.0

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Scale 1/16" = 1'-0"

Sheet Title and Number

FOURTH FLOOR PLAN

A1-5.0

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MorrisSwitzer Project Number 201254

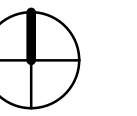
Date 30 JUNE 2014

Scale 1/16" = 1'-0"

Sheet Title and Number

FIFTH FLOOR PLAN

A1-6.0

[illegible]

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Scale	1/16" = 1'-0"
Sheet Title and Number	

SIXTH FLOOR PLAN

A1-7.0

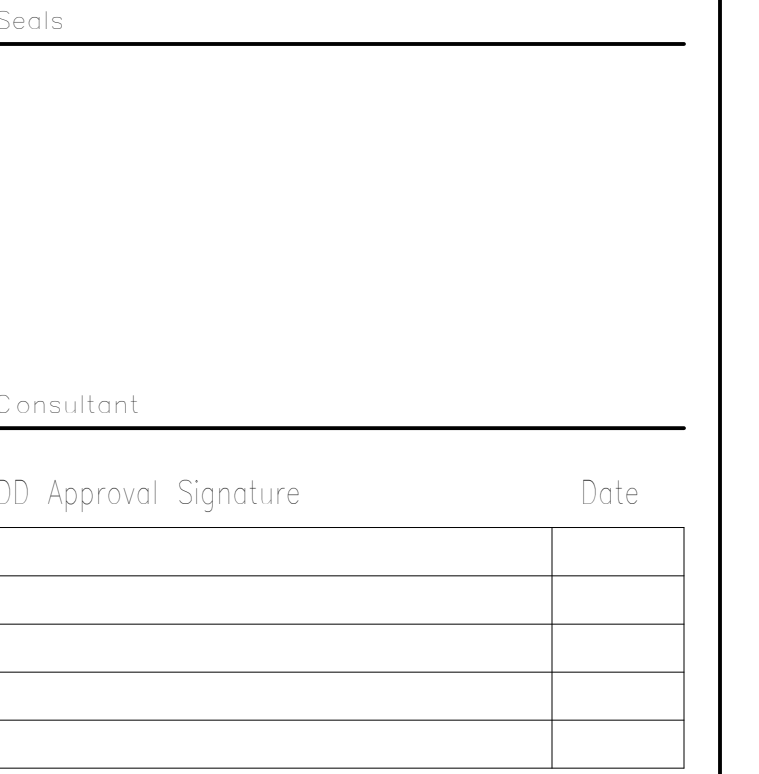


SITE PERMIT APPLICATION	06.30.14	
Revision	Date	No



MorrisSwitzer Project Number	201254
Date	30 JUNE 2014
Scale	1/16" = 1'-0"
Sheet Title and Number	

A1-8.0



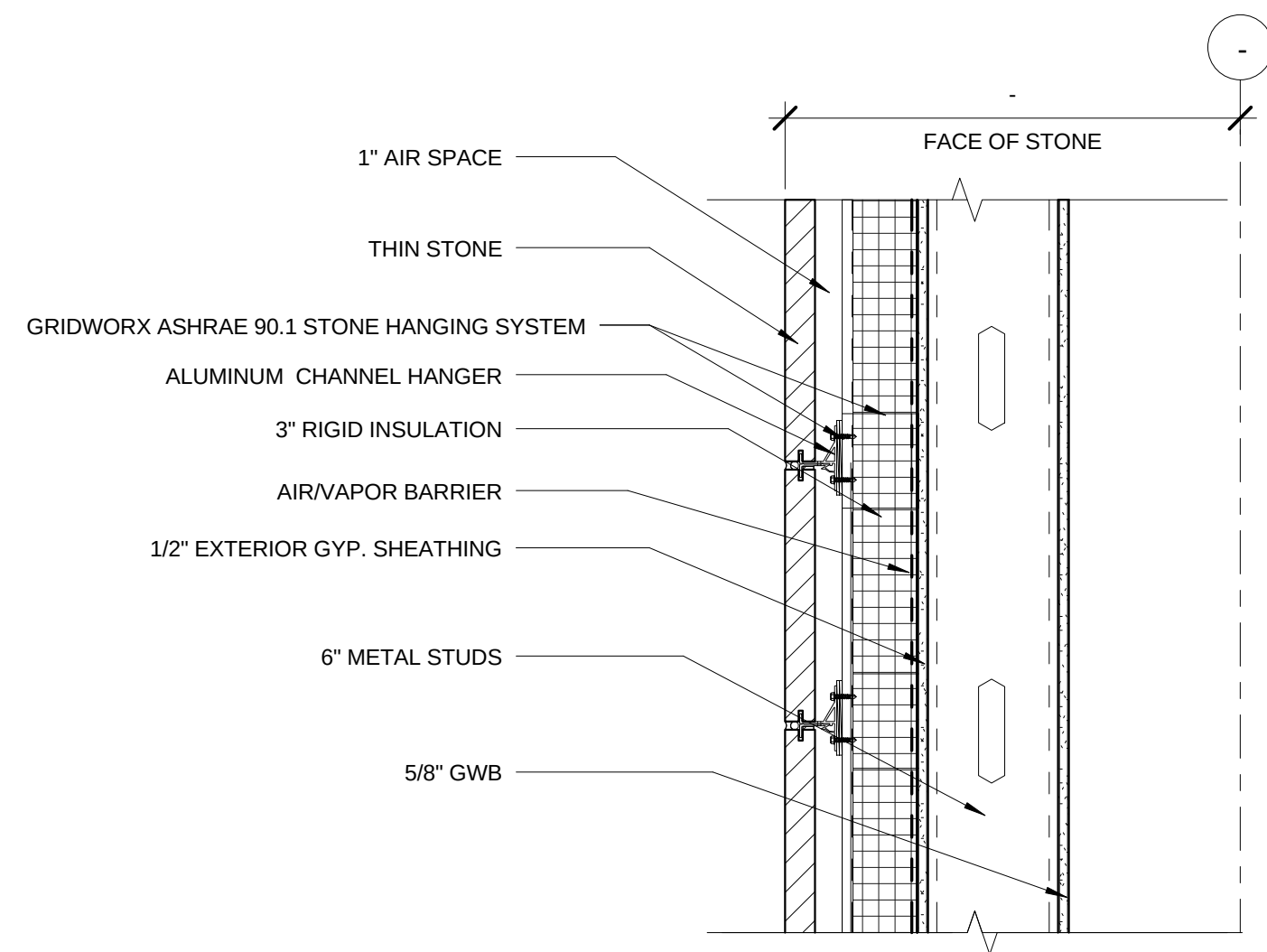
SITE PERMIT APPLICATION	06.30.14	
Revision	Date	No



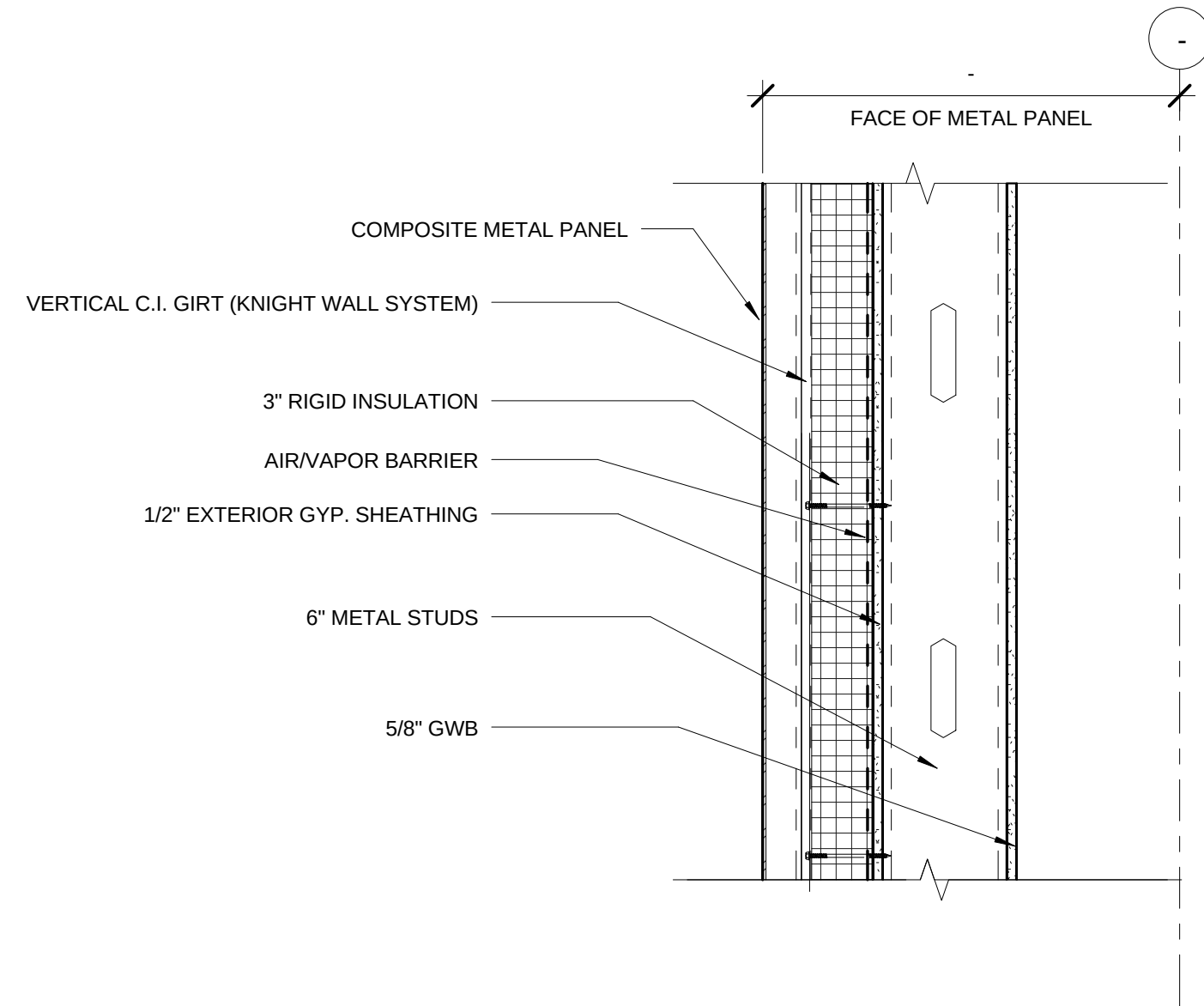
MorrisSwitzer Project Number	201254
Date	30 JUNE 2014
Scale	1/16" = 1'-0"
Sheet Title and Number	

A1-9.0

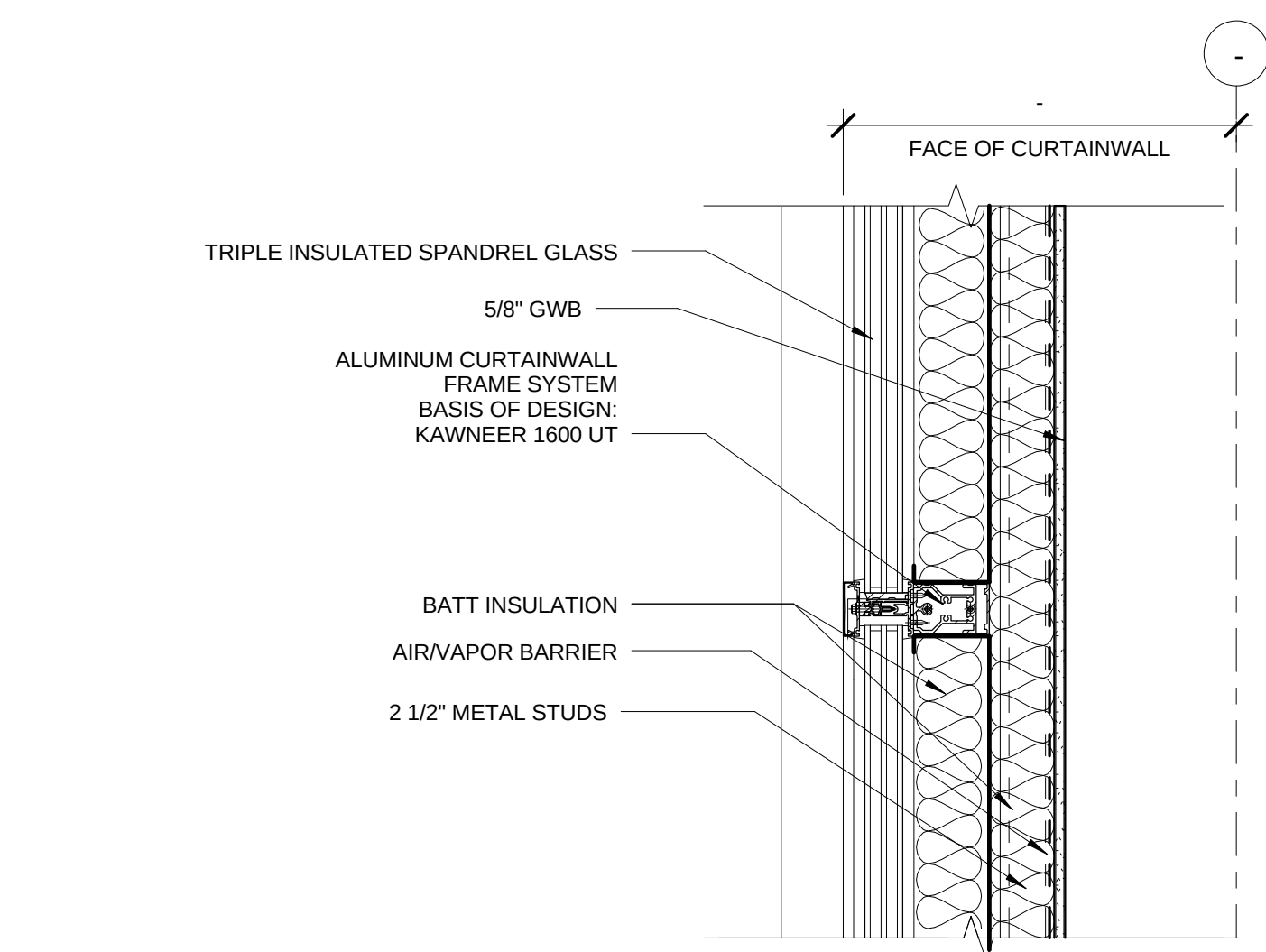
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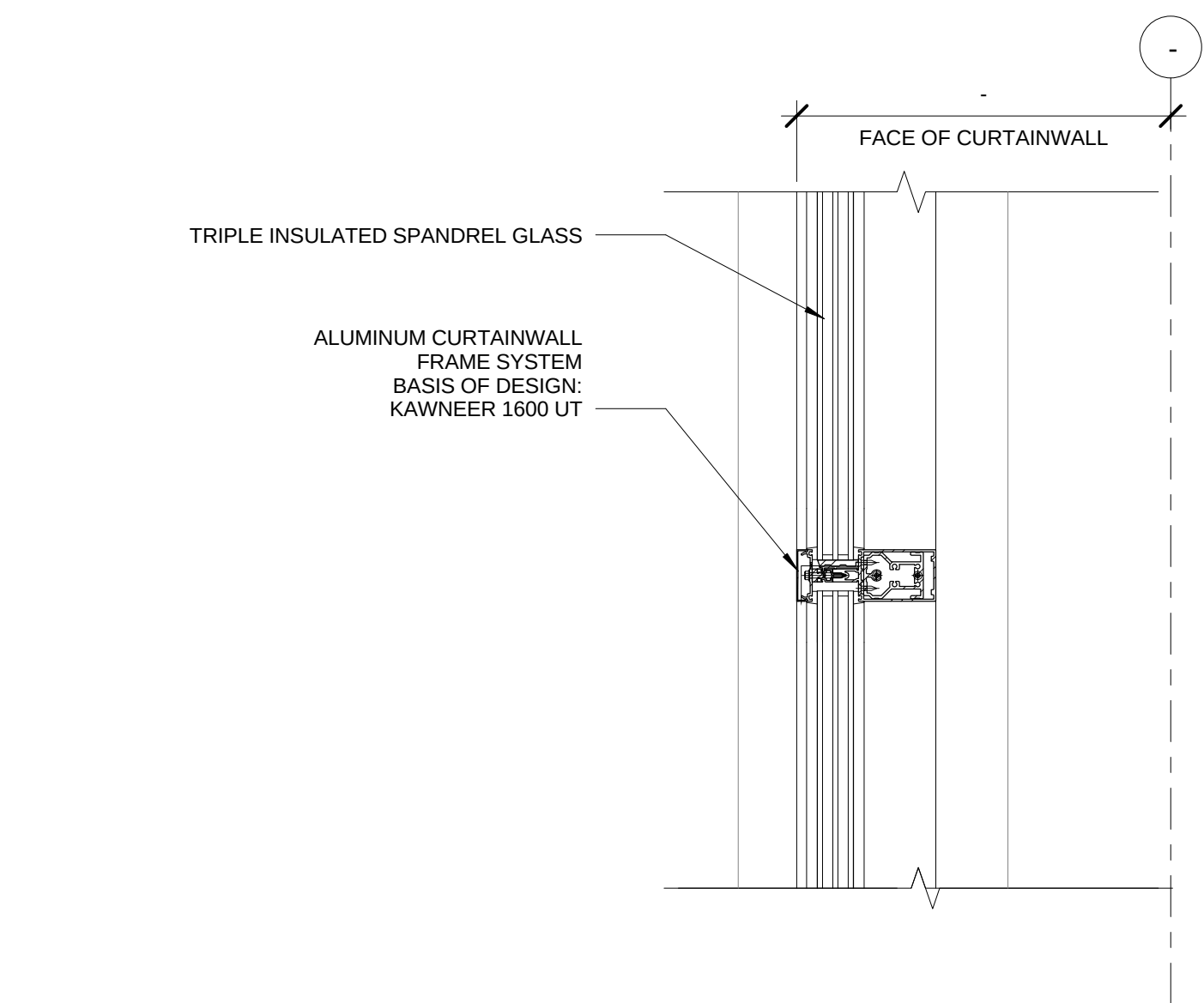
W01 WALL TYPE - THIN CLAD MASONRY
A3-2.1 1 1/2" = 1'-0"



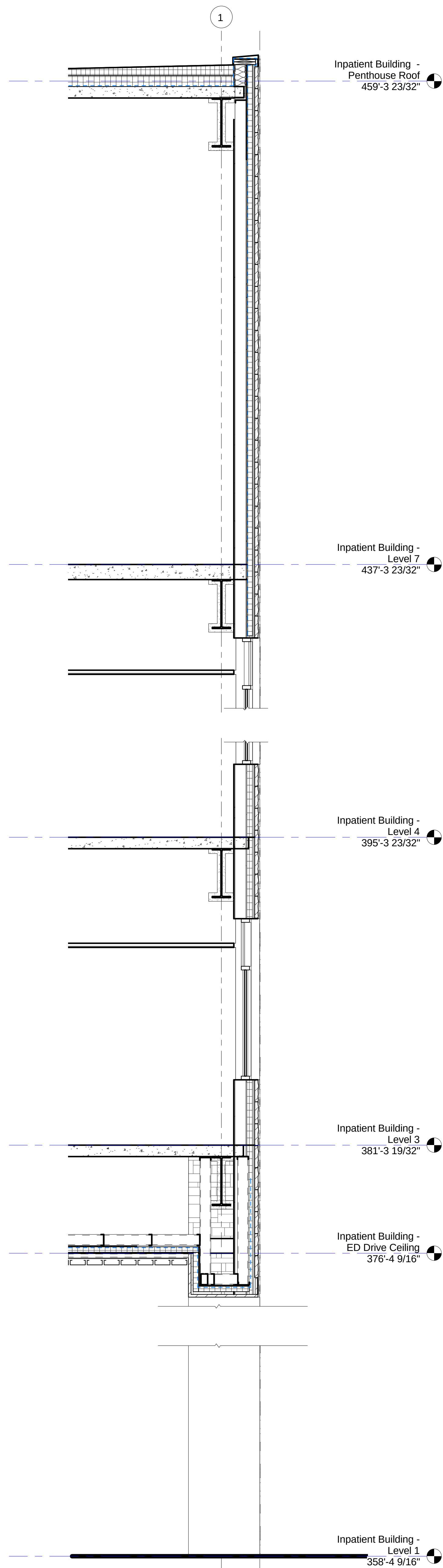
W02 WALL TYPE - METAL PANEL
A3-2.1 1 1/2" = 1'-0"



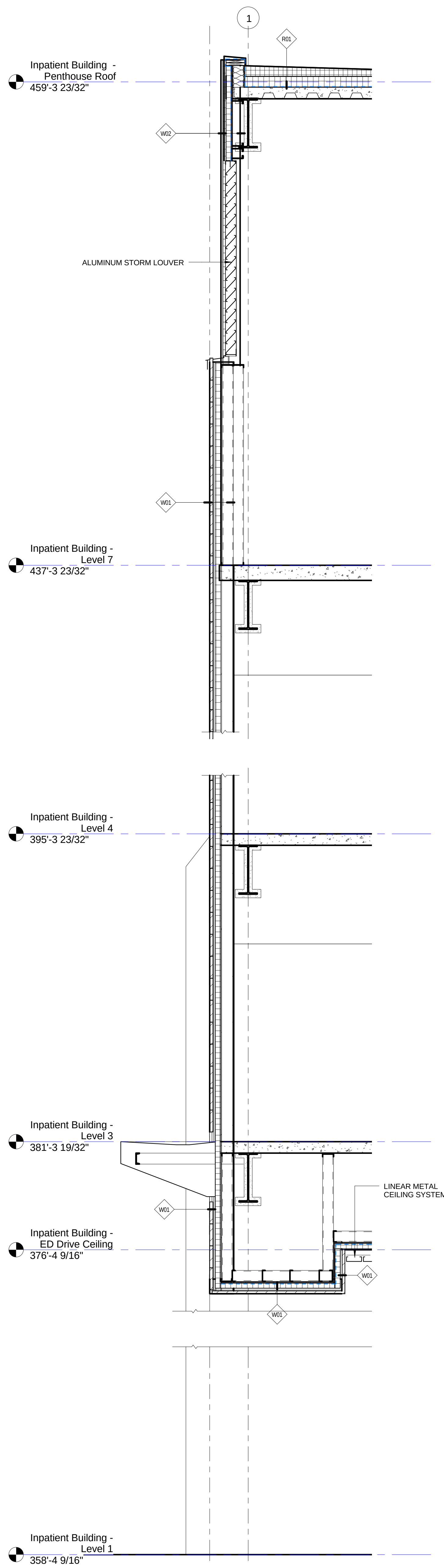
W03 WALL TYPE - CURTAINWALL SPANDREL GLASS
A3-2.1 1 1/2" = 1'-0"



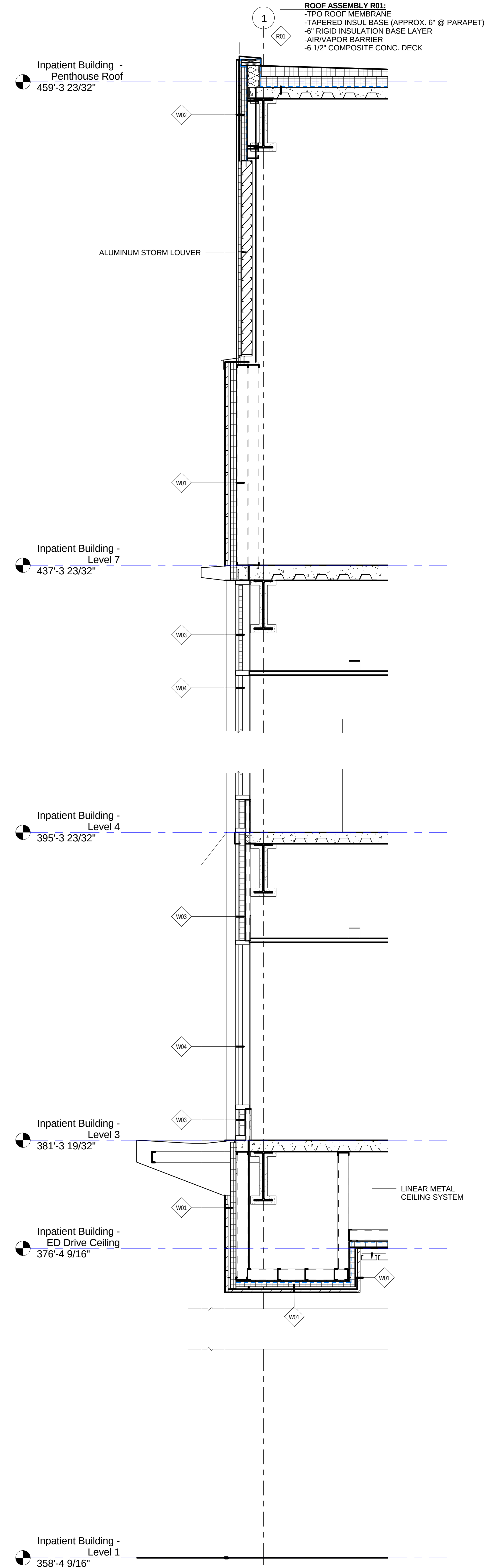
W04 WALL TYPE - CURTAINWALL VISION GLASS
A3-2.1 1 1/2" = 1'-0"



3 WALL SECTION
A3-2.1 3/8" = 1'-0"



2 WALL SECTION
A3-2.1 3/8" = 1'-0"



1 WALL SECTION
A3-2.1 3/8" = 1'-0"

Seals

Consultant

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Date

Project North

Key Plan N.T.S.

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WALL SECTIONS

A3-2.1

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1 REFLECTED CEILING - LEVEL 1
A6-2.0 1/16" = 1'-0"

- BUILDING FIXTURE LEGEND**
- B1: COLUMN DOWNLIGHT, EXTERIOR BUILDING LIGHTING
 - C: EMERGENCY @ DOOR, EXTERIOR BUILDING LIGHTING
 - D: RECESSES @ SOFFIT, EXTERIOR BUILDING LIGHTING
 - F: LED STRIP, 2FT, EXTERIOR BUILDING LIGHTING
 - G: LED STRIP, 4FT, EXTERIOR BUILDING LIGHTING
 - H: LED STRIP, 8FT, EXTERIOR BUILDING LIGHTING
- SEE THE SITE LIGHTING DRAWING FOR MORE INFORMATION.

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Date 30 JUNE 2014
Scale As indicated
Sheet Title and Number

FIRST FLOOR REFLECTED CEILING PLAN

A6-2.0



INPATIENT BUILDING FLETCHER ALLEN HEALTH CARE

BURLINGTON, VERMONT

SITE PERMIT APPLICATION

30 JUNE 2014

name

OWNER:

**Fletcher
Allen**
HEALTH CARE
*In alliance with
The University of Vermont*
111 Colchester Avenue
Burlington, VT 05401
t: 802.247.0000
www.fletcherallen.org

ARCHITECT:

morrisxswitzer
environments for health

185 Talcott Road
Williston, Vermont 05495
t: 802.878.8841
f: 802.878.9350
www.MorrisSwitzer.com

CIVIL:

Stantec

55 Green Mountain Drive
South Burlington, VT 05403
t: 802.864.0223
f: 802.864.0165
www.stantec.com

LANDSCAPE:

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

7 Marble Avenue
Burlington, VT 05401
t: 802.864.0010
f: 802.864.6267
www.wagnerhodgson.com

date

INDEX OF DRAWINGS:

LOT COVERAGE:

- LC-100 LOT COVERAGE EXISTING CAMPUS
- LC-100a LOT COVERAGE WITH PROPERTY LINE ADJUSTMENT

CIVIL:

- C-1PL BOUNDARY ADJUSTMENT PLAN
- C-101 EXISTING CONDITIONS PLAN
- C-102 ROADWAY LAYOUT PLAN
- C-103 ROADWAY PROFILE
- C-104 CIVIL SITE LAYOUT PLAN
- C-105 SITE GRADING PLAN
- C-106 EROSION CONTROL PLAN
- C-107 UTILITY PLAN
- C-501 SEWER DETAILS
- C-502 WATER DETAILS
- C-503 STORMWATER DETAILS
- C-504 EROSION CONTROL DETAILS
- C-505 GENERAL DETAILS

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- L1-0 LAYOUT AND MATERIALS PLAN
- L2-0 PLANTING PLAN
- L3-0 TREE SHADING PLAN FALL EQUINOX

ARCHITECTURAL:

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- AP-2.2 EXTERIOR VIEW
- AP-2.3 EXTERIOR VIEW
- AP-2.3A EXTERIOR VIEW
- AP-2.3B EXTERIOR VIEWS
- AP-2.4 EXTERIOR ELEVATIONS
- AP-2.5 EXTERIOR ELEVATIONS
- AP-2.6 BUILDING SHADOW IMPACT DIAGRAMS
- A1-1.0 LOWER LEVEL FLOOR PLAN
- A1-2.0 FIRST FLOOR PLAN
- A1-3.0 SECOND FLOOR PLAN
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- A1-5.0 FOURTH FLOOR PLAN
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- A1-7.0 SIXTH FLOOR PLAN
- A1-8.0 SEVENTH FLOOR PLAN
- A1-9.0 ROOF PLAN
- A3-2.1 WALL SECTIONS
- A6-2.0 FIRST FLOOR REFLECTED CEILING PLAN



Legend:

- Open Space (permeable area)
Campus Core
- Open Space (permeable area)
Campus Buffer
- Campus Buffer Boundary
- Property Line

FAHC SITE - CAMPUS CORE AREA		
BUILDINGS	8.27	35%
PAVEMENT	8.24	35%
IMPERMEABLE AREA (ACRES)	16.46	70%
PERMEABLE AREA (ACRES)	7.09	30%
TOTAL (ACRES)	23.60	100%
FAHC SITE - CAMPUS BUFFER AREA		
BUILDINGS	0.95	11%
PAVEMENT	1.29	15%
IMPERMEABLE AREA (ACRES)	2.24	26%
PERMEABLE AREA (ACRES)	6.50	74%
TOTAL (ACRES)	8.74	100%
FAHC SITE - COMBINED		
BUILDINGS	9.22	28%
PAVEMENT	9.53	29%
IMPERMEABLE AREA (ACRES)	18.75	58%
PERMEABLE AREA (ACRES)	13.59	42%
TOTAL (ACRES)	32.34	100%

North

Scale: 1" = 100'

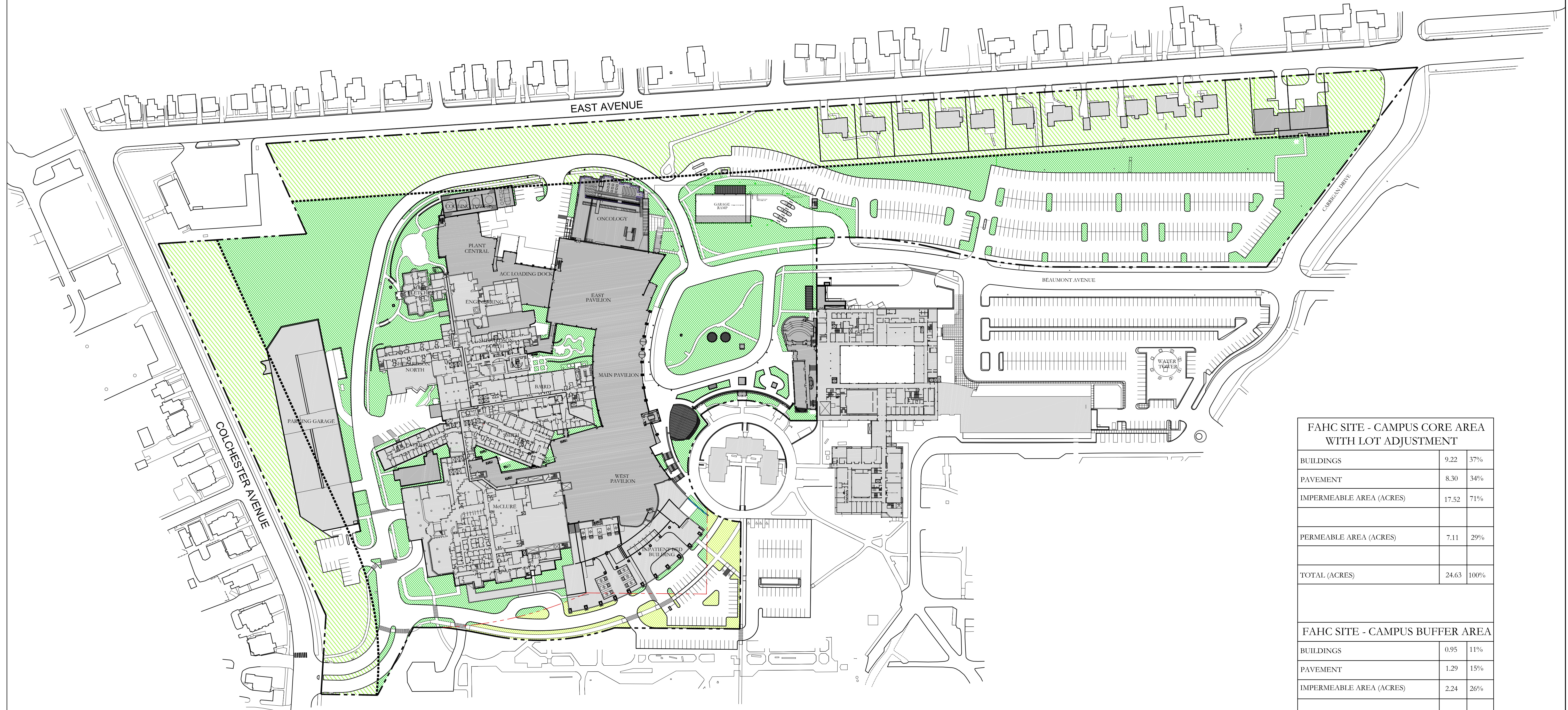
Date: 06/30/14

Drawn By:

Checked By: MW

Revisions:

Rev.	Site Permit Application Description	06.30.14 Date
------	-------------------------------------	---------------



Legend:

- Open Space (permeable area) Campus Core
- Open Space (permeable area) Adjusted Lot Area
- Open Space (permeable area) Campus Buffer
- Campus Buffer Boundary
- Property Line
- Adjusted Property Line

**FAHC SITE - CAMPUS CORE AREA
WITH LOT ADJUSTMENT**

BUILDINGS	9.22	37%
PAVEMENT	8.30	34%
IMPERMEABLE AREA (ACRES)	17.52	71%
PERMEABLE AREA (ACRES)	7.11	29%
TOTAL (ACRES)	24.63	100%

FAHC SITE - CAMPUS BUFFER AREA

BUILDINGS	0.95	11%
PAVEMENT	1.29	15%
IMPERMEABLE AREA (ACRES)	2.24	26%
PERMEABLE AREA (ACRES)	6.50	74%
TOTAL (ACRES)	8.74	100%

FAHC SITE - COMBINED

BUILDINGS	10.17	30%
PAVEMENT	9.59	29%
IMPERMEABLE AREA (ACRES)	19.76	59%
PERMEABLE AREA (ACRES)	13.61	41%
TOTAL (ACRES)	33.37	100%



Scale: 1" = 100'

Date: 06/30/14

Drawn By:

Checked By: MW

Revisions:

Rev.	Site Permit Application Description	06.30.14 Date

Title
**Lot Coverage
with Property Line
Lot Adjustment**

Sheet Number:

LC-100a

Project Number: 07099

File:



GENERAL NOTES

ALL CONTRACTORS ARE REQUIRED TO CONTACT THE UTILITY LOCATE COMPANIES, THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.

THIS DRAWING IS A PART OF A COMPLETE SET OF DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS MENTIONED HEREIN, INCLUDING A RELATED DOCUMENTS PREPARED BY THE PROJECT ENGINEERS, AND ARCHITECTS. DO NOT USE THIS SET OF DRAWINGS FOR CONSTRUCTION PRIOR TO NOTIFYING THE LANDSCAPE ARCHITECT.

LIGHTING AND IRRIGATION EXISTS THROUGHOUT THIS ENTIRE SITE. LOCATION OF LIGHTING AND SUPPLY SHOULD BE REVIEWED PRIOR TO CONSTRUCTION.

THE LOCATION OF THE UNDERGROUND UTILITIES ARE LOCATED ON ENGINEERING DRAWINGS PREPARED BY THE PROJECT ENGINEER. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO CONSTRUCTION. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER PRIOR TO INSTALLATION. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

THE LANDSCAPE ARCHITECT AND CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE WORK PRODUCT THEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITH THE WORK PRODUCT, THE LANDSCAPE ARCHITECT SHALL BE PROMPTLY NOTIFIED SO THAT THEY MAY HAVE THE OPPORTUNITY TO TAKE ANY STEPS NECESSARY TO RESOLVE THE ISSUE. FAILURE TO PROMPTLY NOTIFY THE OWNER AND THE LANDSCAPE ARCHITECT OF SUCH CONDITIONS SHALL ABSOLVE THEM FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE OWNER AND THE LANDSCAPE ARCHITECT, OR IN CONTRADICTION TO THE OWNER AND THE LANDSCAPE ARCHITECTS WORK PRODUCT OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE OWNER AND THE LANDSCAPE ARCHITECT BUT FOR THE PARTIES RESPONSIBLE FOR THE TAKING OF SUCH ACTION.

EXTERIOR SITE LIGHTING KEY

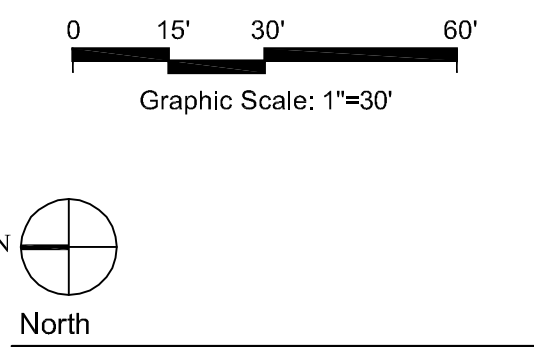
LABEL	SYMBOL	QTY.	BRAND	DESCRIPTION	CONFIGURATION	DISTRIBUTION	LAMP WATTAGE
C	●	14	LUMEC	OPTICONE w/ EcoFit Retrofit 20' MOUNTING HEIGHT	SINGLE	TYPE V	90 WATT EcoFit LED Retrofit
C2	●	3	LUMEC	OPTICONE w/ EcoFit Retrofit 20' MOUNTING HEIGHT	2@180°	TYPE V	90 WATT EcoFit LED Retrofit
g12	●	11	DESIGNPLAN	MOONSHINE WALL LIGHT MA2	SINGLE	MEDIUM BEAM	70 WATT METAL HALIDE
HL	■	5	BEGA	RECESSED WALL MOUNTED LUMINAIRE 2039LED	SINGLE	ETCHED DIFFUSER	134 WATT LED
K	●	5	RAB	ALED26 20' MOUNTING HEIGHT	SINGLE	TYPE 4	26 WATT LED
K2	●	1	RAB	ALED26 20' MOUNTING HEIGHT	2@180°	TYPE 4	26 WATT LED
EX	●			EXISTING LIGHT FIXTURES TO REMAIN			

ISO-CONTOUR KEY

ISO-CONTOUR	FOOTCANDLE VALUE
1.00	
0.50	
0.25	

STATISTICAL AREA SUMMARY

Grid Type: Horizontal Illuminance Grid Units: Footcandles	Ave	Max	Min	Ave/Min	Max/Min
FAHC - Side Lot	1.47	5.20	0.10	14.70	52.00
UVM/ED Parking Lot	0.82	3.60	0.00	0.00	0.00



Scale: 1" = 30'

Date: 06/30/14

Drawn By:

Checked By: MKW

Revisions:

Rev.	Description	Date	By

Title
Lighting Plan
Inpatient Building Project

Sheet Number:

LI-1.0

Project Number:
File:



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Stantec

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Fax. 802.864.0165
www.stanlec.com

Consultant

DD Approval Signature	Date

Key Plan N.T.S.

SITE PERMIT APPLICATION	06/30/14	

Revision	Date	No
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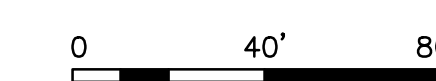


In alliance with
The University of Vermont

MorrisSwitzer Project Number	201254
Drawn By	G. MERKLE
Date	30 JUNE 2014
Scale	1" = 40'-0"
Sheet Title and Number	

Drawn By	G. MERKLE
Date	30 JUNE 2014
Scale	1" = 40'-0"

C-101





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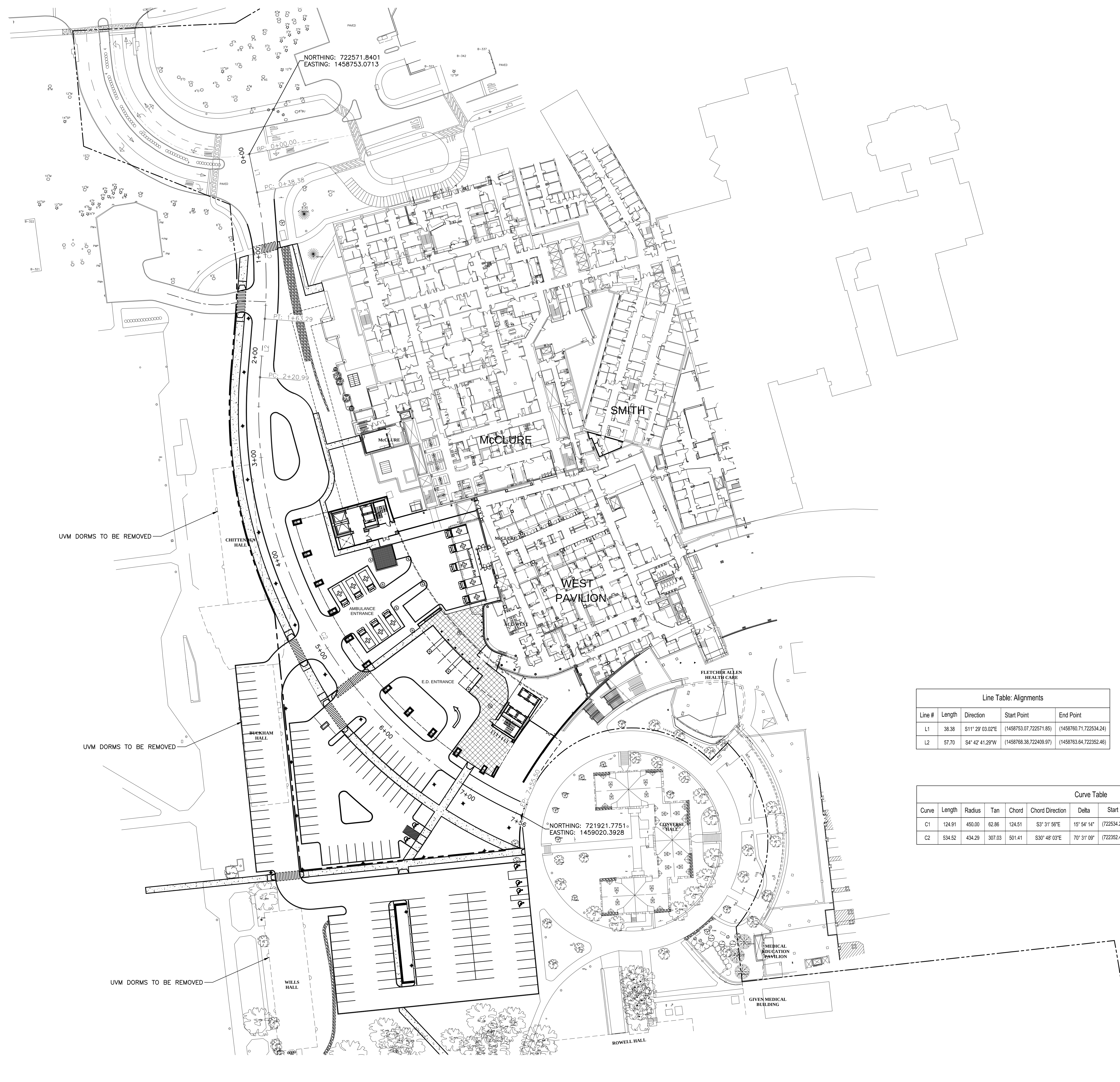
**Fletcher
Allen**
HEALTH CARE



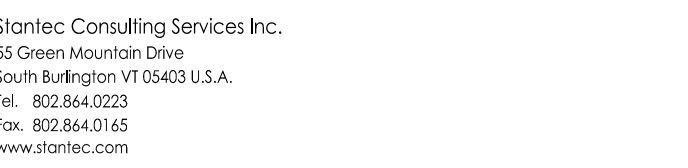
*In alliance with
The University of Vermont*

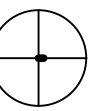
MorrisSwitzer Project Number	201254
Drawn By	G. MERKLE
Date	30 JUNE 2014
Scale	1" = 40'-0"

C-102



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SITE PERMIT APPLICATION	06.30.14	
Revision	Date	No



orrisswitzer Project Number 201254

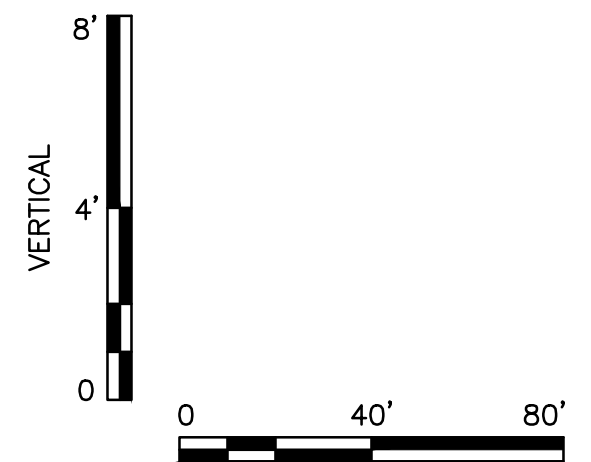
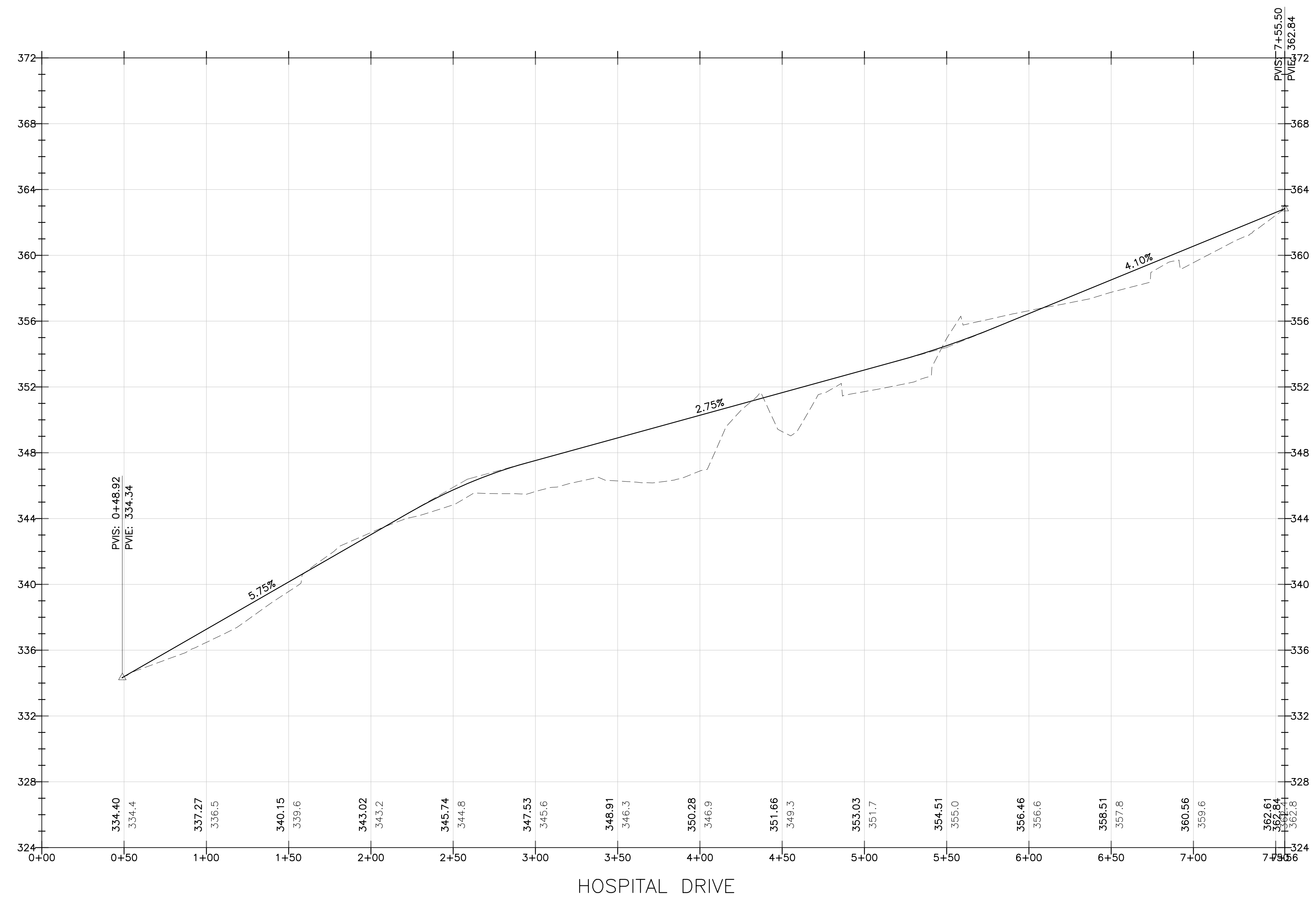
Drawn By G. MERKLE

30 JUNE 2014

scale	AS SHOWN
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Sheet Title and Number

C-103





SITE PERMIT APPLICATION	06.30.14	

Revision	Date	No
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Sheet Title and Number

C-104



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Consultant

DD Approval Signature

Key Plan N.T.S.

[illegible]

SITE PERMIT APPLICATION	06.30.14	
Revision	Date	No



In alliance with
The University of Vermont

Martin-Guinea, Daniel, Number	201254
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Morris Switzer Project Number	201254
Drawn By	G. MERKLE

Drawn By	G. MERKLE
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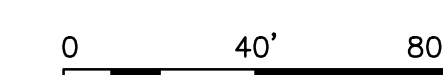
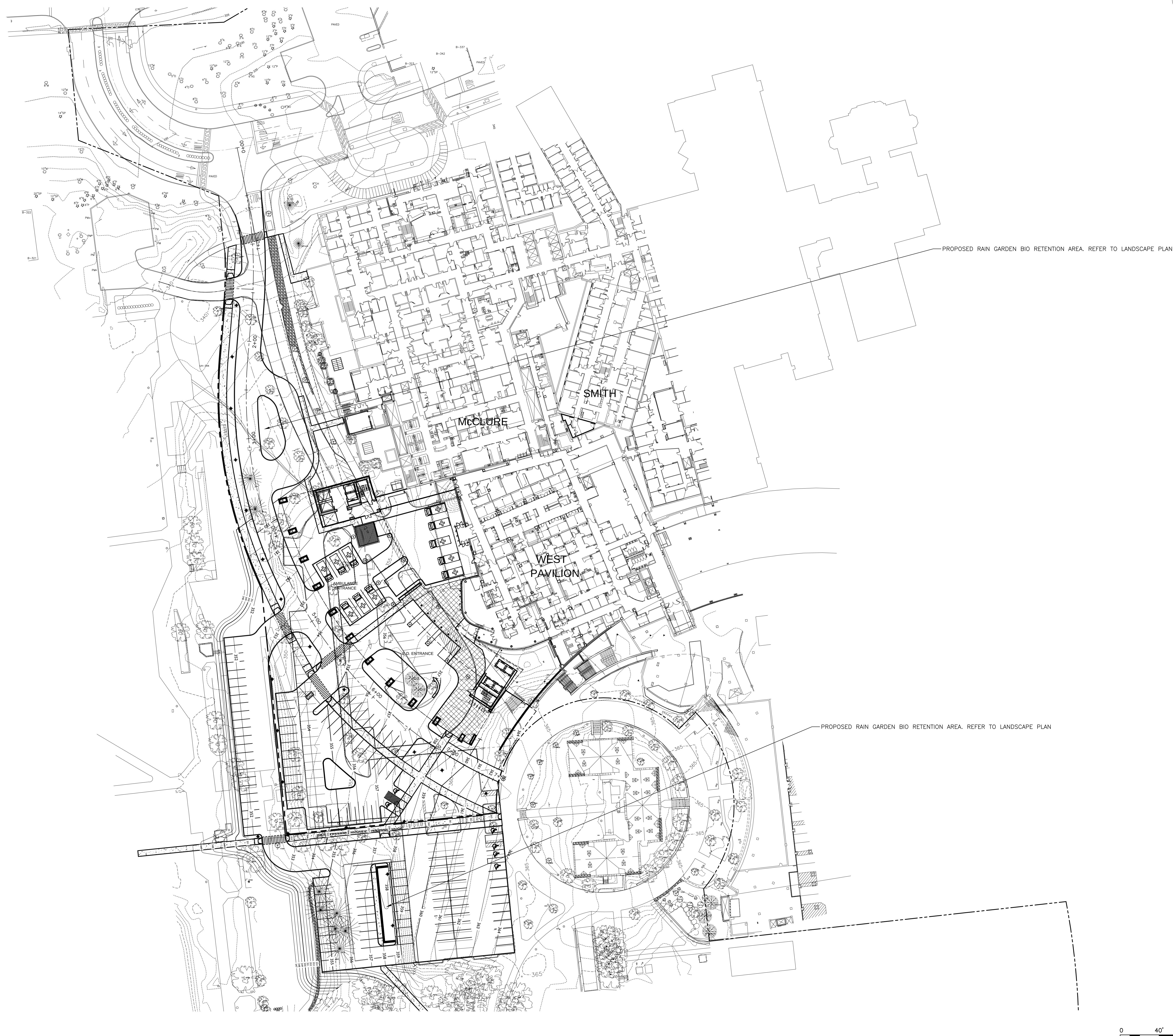
Date 30 JUNE 2014

Scale 1" = 40'-0"

Sheet Title and Number

[illegible]

C-105





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Key Plan N.T.S.

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SITE PERMIT APPLICATION	06.30.14	
Revision	Date	No



MorrisSwitzer Project Number	201254
Drawn By	G. MERKLE
Date	30 JUNE 2014
Scale	1" = 40'-0"

C-107

GENERAL:

GENERAL:

ALL DIMENSIONS IN INCHES.

OPTICALLY CENTER SYMBOLS WITHIN SECTIONS UNLESS OTHER NOTED.

THESE SIGNS ARE INTENDED FOR GROUND MOUNTING ONLY.

COLORS:

THE REGULATORY SIGNS SHOWN ON SHEETS C8.3 & C8.4 SHALL HAVE BLACK TEXT ON REFLECTORIZED WHITE BACKGROUND UNLESS OTHERWISE NOTED. THE WARNING SIGNS SHOWN ON C8.3 & C8.4 SHALL HAVE BLACK TEXT AND SYMBOLS ON REFLECTED YELLOW BACKGROUNDS EXCEPT AS OTHERWISE NOTED. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR REGULATORY SIGNS AND WARNING SIGNS SHOWN ON SHEETS C8.3 & C8.4 MAY BE ANY OF THE FOLLOWING OF THE MINIMUM THICKNESS NOTED.

		36" X 12"
		36" X 24"
12" X 12"	24" X 24"	36" X 36"
18" X 18"	30" X 18"	42" X 30"
	30" X 30"	48" X 48"

FLAT SHEET ALUMINUM	0.060"	0.080"	0.100"
HIGH DENSITY OVERLAP PLYWOOD	1/2"	1/2"	5/8"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE

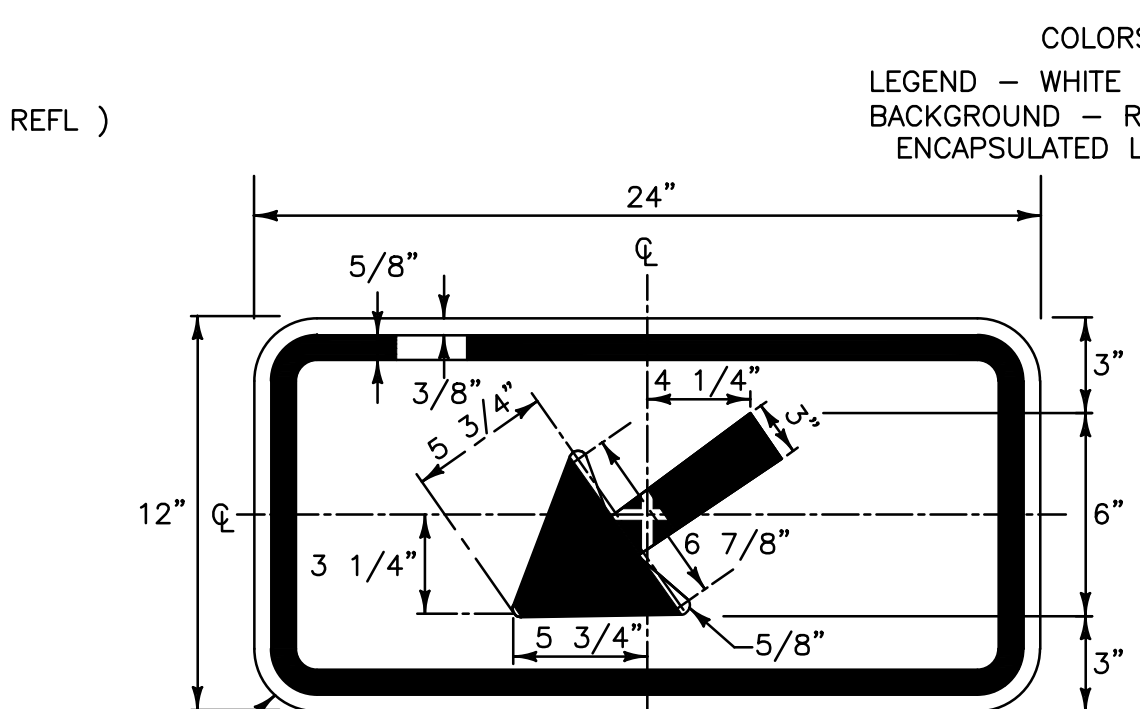
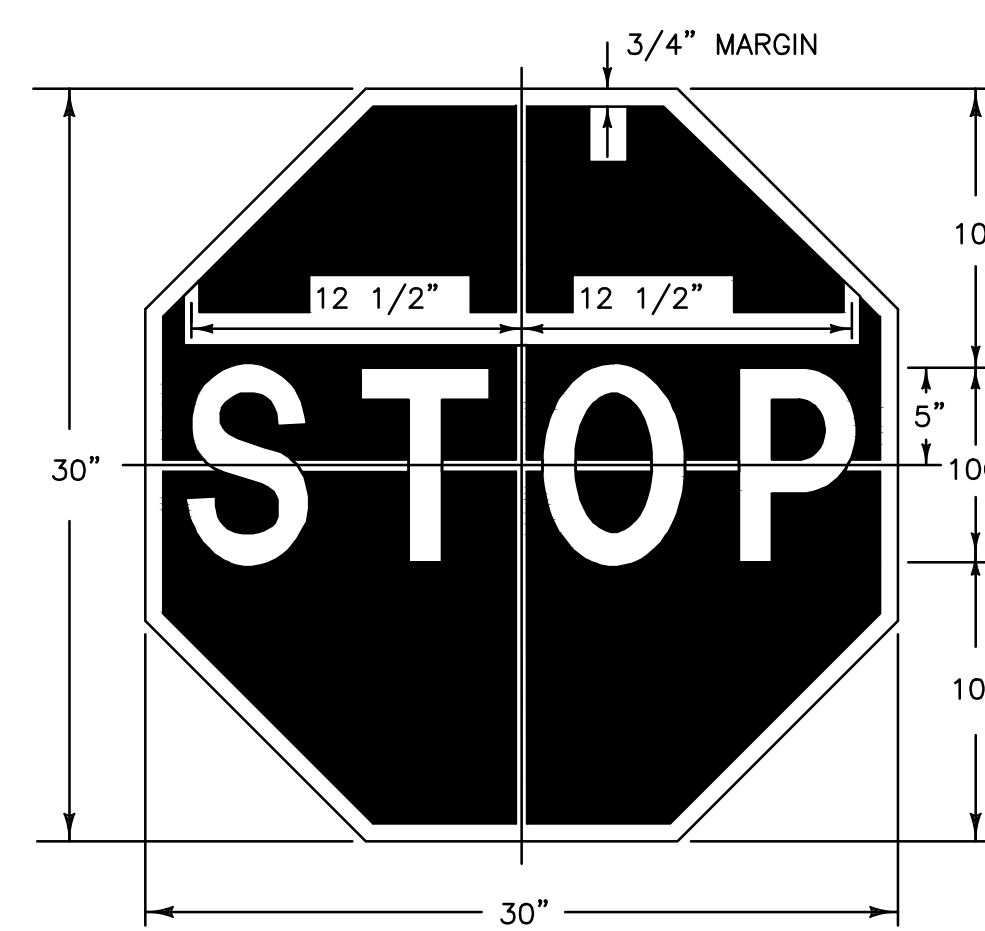
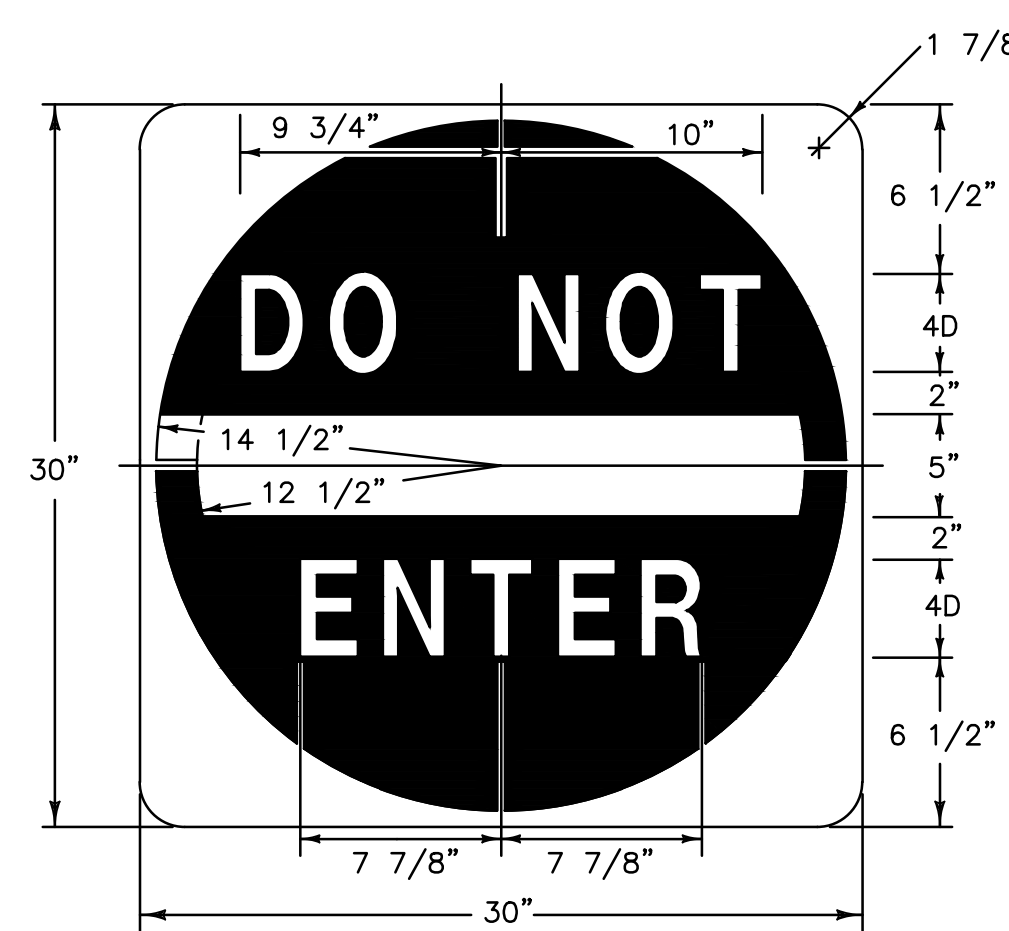
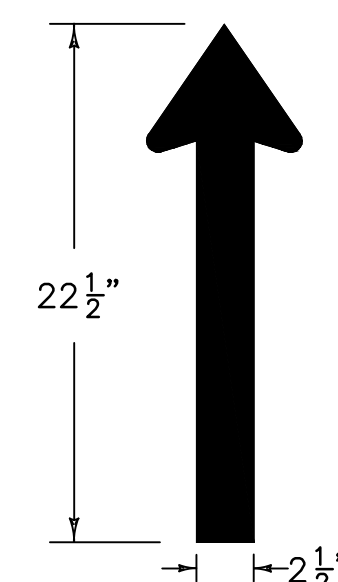
THE REFLECTIVE MATERIAL FOR GROUND MOUNTED REGULATORY SIGNS SHALL BE AASHTO TYPE II OR III WHITE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. THE TEXT PORTIONS OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. HAND PAINTING MUST BE COMPARABLE IN QUALITY TO THE RESULTS OBTAINED BY SILK SCREENING. CONCAVATED LENS REFLECTIVE SHEETING SHALL BE USED FOR THE SIGN BACKGROUND WHERE NOTED.

SPECIFICATIONS:

REGULATORY & WARNING SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR TRAFFIC SIGNS.

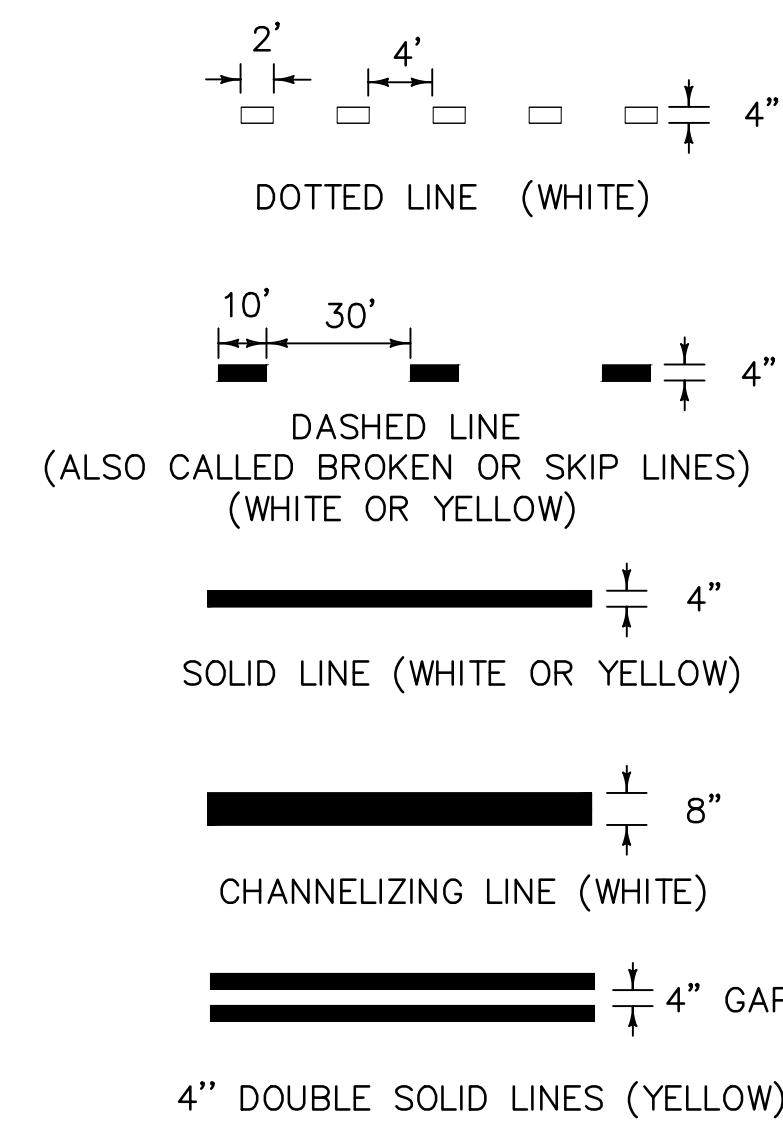
TEXT DESIGN:

LETTERS, DIGITS, ARROWS, SPACING AND TEXT DIMENSIONS SHALL CONFORM WITH THE "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND DESIGNS PRESCRIBED IN THE STANDARD HIGHWAY SIGNS AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



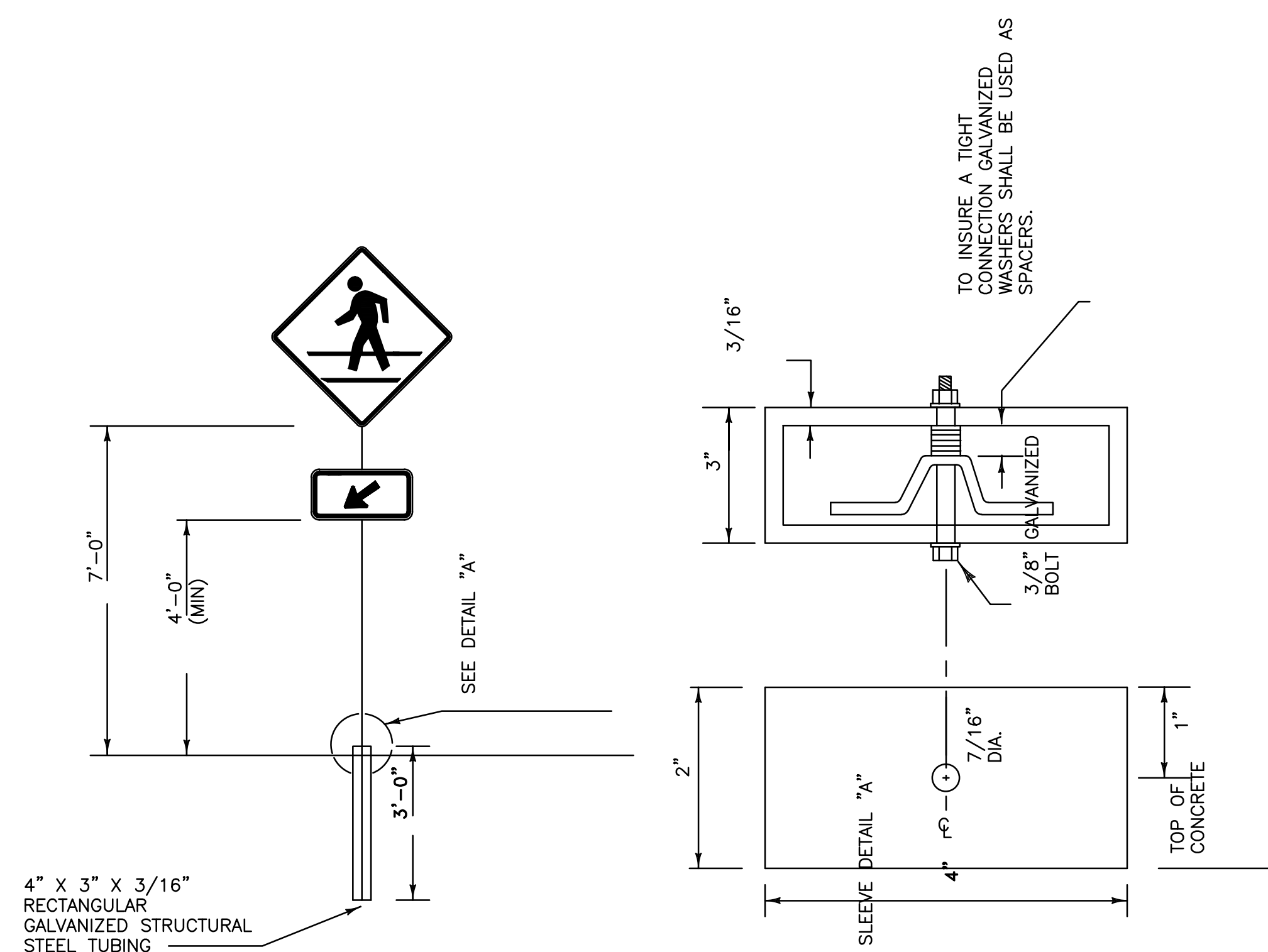
W16-7P

BLACK BORDER & SYMBOL
WITH REFLECTORIZED FLUORESCENT YELLOW - GREEN BACKGROUND
SEE SHEET PM.6 FOR MATERIALS

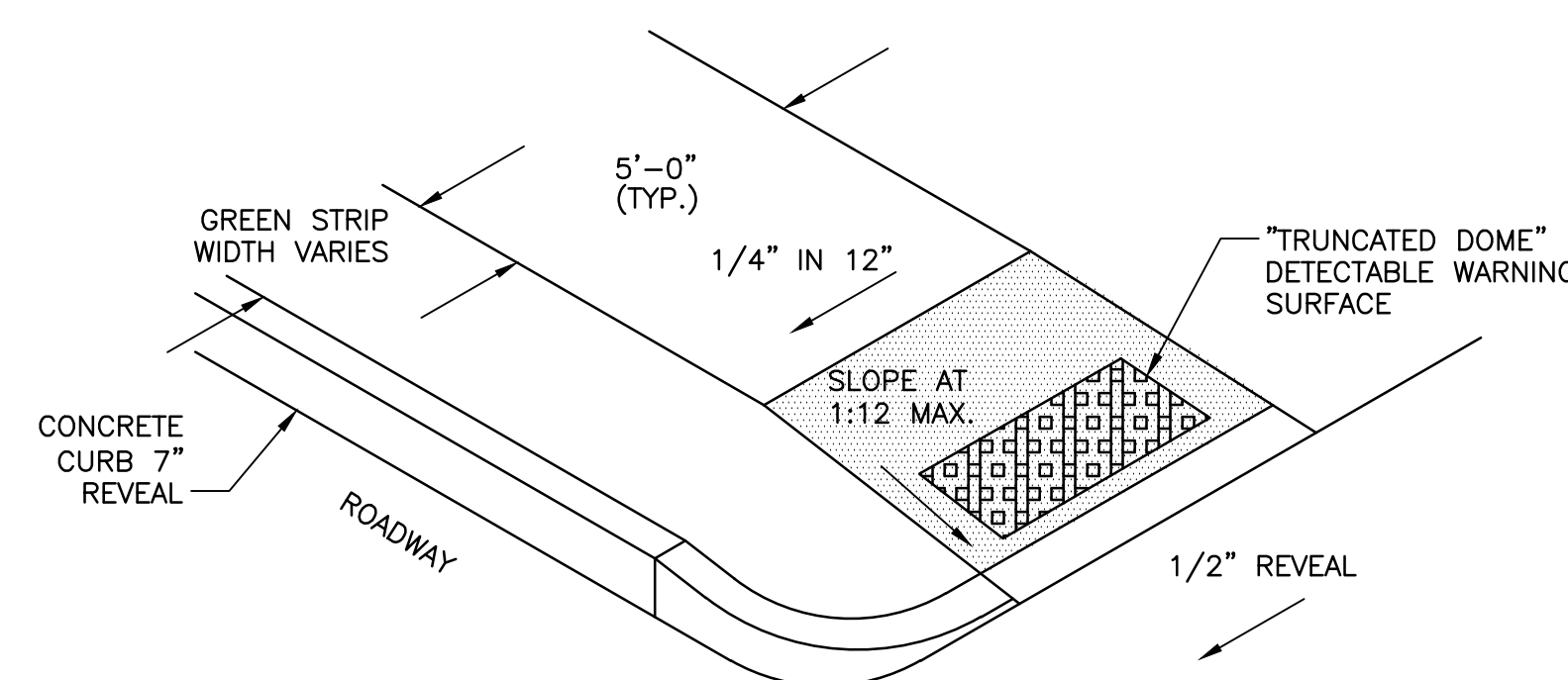


PAVEMENT MARKING LINES DETAIL
NOT TO SCALE

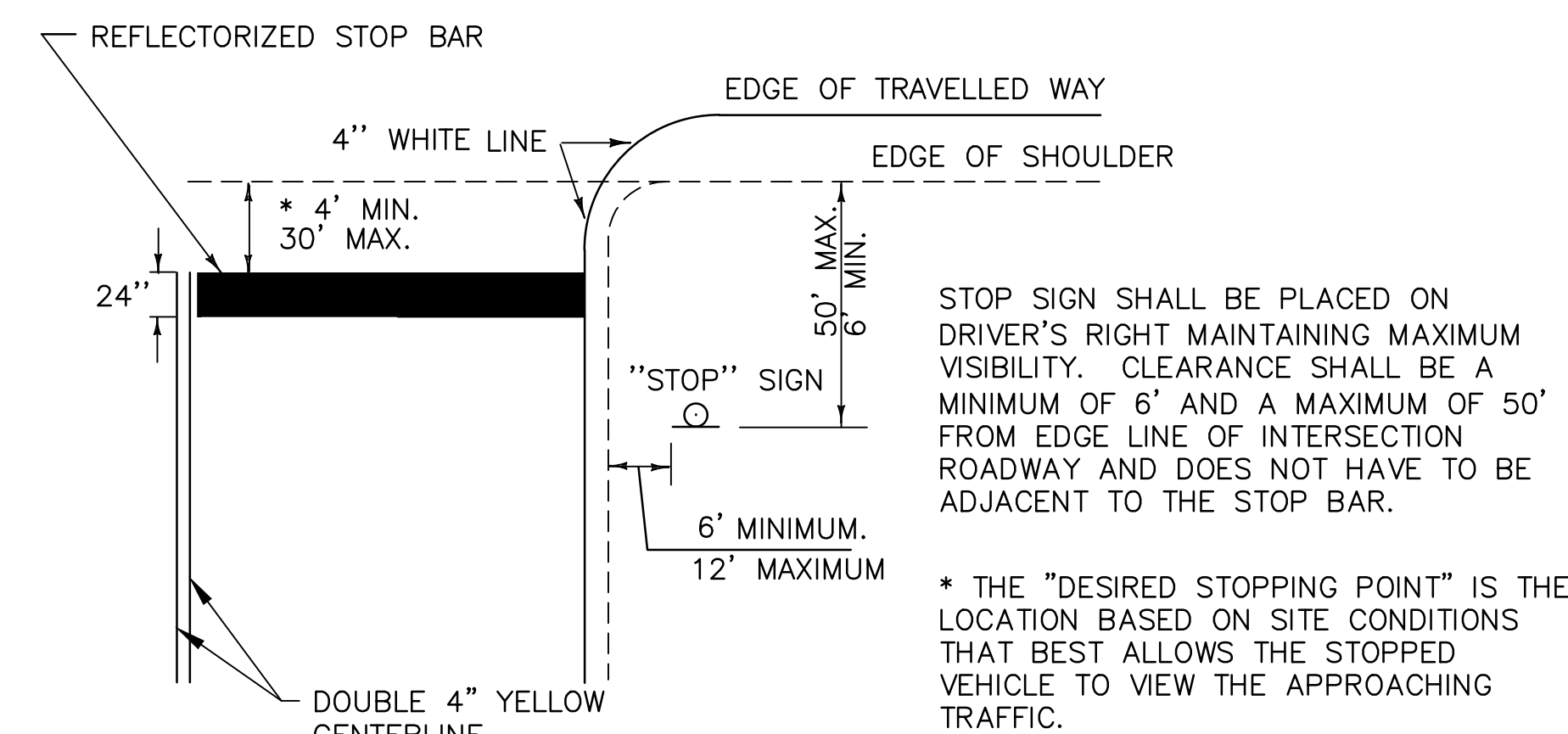
REGULATORY SIGN INFORMATION DETAIL
NOT TO SCALE



SLEEVE FOR SIGN POSTS INSTALLED DETAIL
NOT TO SCALE
IN CONCRETE OR PAVEMENT

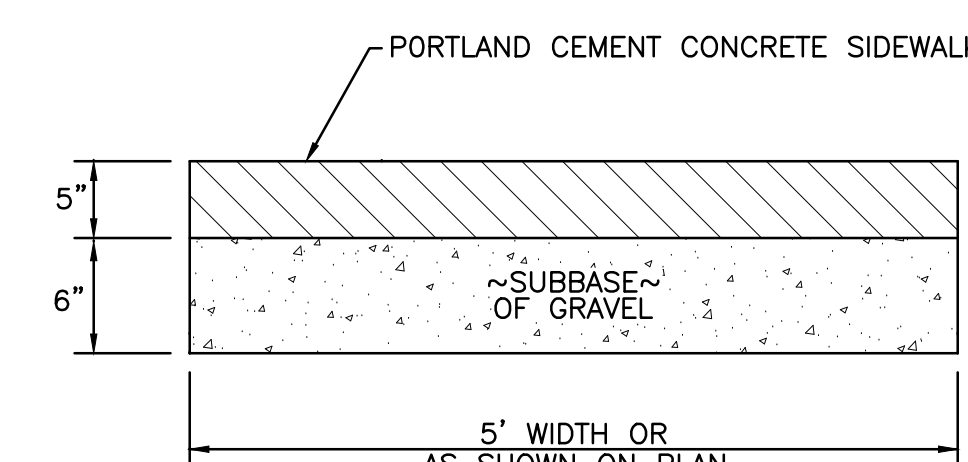


TYPICAL CURB AND SIDEWALK TERMINATION
NOT TO SCALE



STOP BAR LAYOUT

STOP BAR LAYOUT DETAIL
NOT TO SCALE



SIDEWALK DETAIL
NOT TO SCALE



DD Approval Signature	Date

Key Plan N.T.S

SITE PERMIT APPLICATION	06.30.14	
Revision _____	Date _____	No. _____



INPATIENT BUILDING

MorrisSwitzer Project Number	20125
Drawn By	G. MERKL
Date	30 JUNE 201
Scale	NO SCALE
Sheet Title and Number	

GENERAL DETAILS

KEY QTY	SCIENTIFIC NAME	COMMON NAME
SUN ANGLE CALCULATION DATA		
LONGITUDE:	72D 6' 8" WEST	
LATITUDE:	45D 0' 4" NORTH	
CALCULATION DATE:	SUMMER SOLSTICE	
TIME:	SOLAR NOON (11:45 AM, EST)	
RESULTING SUN ALTITUDE ANGLE:	66.13°	
SHADE TOTALS		
TOTAL SHADE PROVIDED ON FAHC PARKING:		4144 SF (32% OF PAVED AREA)
TOTAL SHADE PROVIDED ON UVM PARKING:		5980 SF (24% OF PAVED AREA)
TREE SIZING (COLUMNAR TREE):		
TREE SIZING (SHADE TREE):		35' HEIGHT, 15' DIAMETER
TREE SIZING (SPECIMEN TREE):		40' HEIGHT, 20' DIAMETER
TREE SIZING (SPECIMEN TREE):		45' HEIGHT, 27' DIAMETER



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WAGNERHODGSON

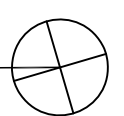
T802.864.0010 F802.864.6267 www.wagnerhodgson.com

Consultant

DD Approval Signature

Date _____

Subject Non



Key Plan N.T.S.

[illegible]

SITE PERMIT APPLICATION	6.30.14	
Revision	Date	No



INPATIENT BUILDING

MorrisSwitzer Project Number 2012

Commissioner's Project Number	2012
Date	30 JUNE 20

Scale 1" = 30'

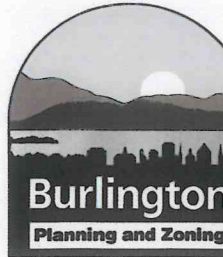
Sheet Title and Number

TREE SHADING PLAN

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



MEMORANDUM

To: The Design Advisory Board
From: Mary O'Neil, AICP, Senior Planner *monie*
RE: ZP 14-1321CA/MA 111 Colchester Avenue
Date: July 22, 2014

File: ZP 14-1321CA/MA

Location: 111
Colchester Avenue
(FAHC)

Zone: ICC/FAHC

Ward: 1

Date application

accepted: June 30, 2014

Applicant/ Owner:

Fletcher Allen Health
Care (Co-signed by UVM
representative.)

Request: Construction of
approximately 208,000 sq.
ft. seven story inpatient
building west of the
Ambulatory Care Center
building at the Medical
Center Campus with
associated parking,
lighting and landscaping.



Background:

There are extensive zoning, building, electrical, plumbing and mechanical permits on file. Some of the major construction projects include:

- **ZP 14-0807SP;** Sketch plan review to construct new Inpatient Building west of the Ambulatory Care Center building. March 2014.
- **ZP 13-0284CA;** Expansion of seventh floor, Baird Building, for maternity unit. Approved November 2012.
- **ZP 09-436CA;** Installation of Newton Healing Garden among Baird, Shepardson South and ACC; and landscaped Psychiatric interior courtyard between Shepardson South, rear

of East Pavilion and rear of loading docks. As-built approval from Renaissance Project plans. Approved November 2008.

- **ZP 09-253CA**; Construct 23,133 sq. ft. addition for radiation oncology department at East Pavilion with green roof/outdoor space. Phasing to allow later construction of water feature. Approved November 2008.
- **ZP 04-516**; Phase II. Site improvements for FAHC's Renaissance Project and shorten proposed tower and other detail changes to building plans. COA 00-038I. Approved June 12, 2004.
- **ZP 02-251**; Phase M of FAHC Ambulatory Care Facility/Educational center. Phase M consists of the construction of the underground parking garage.
- **ZP 02-250**; Phase L of FAHC Ambulatory Care Facility/Educational center. Phase L consists of the renovation of the Fletcher building, including the porte cochere and coupola. July 2000.
- **ZP 02-249**; Phase K of FAHC Ambulatory Care Facility/Educational center. Phase K consists of construction of the gardens around the Fletcher building. November 2001.
- **ZP 02-248**; Phase J of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase J consists of :1. Demolish Burgess building; 2. Construct east parking lot and oxygen tank farm; And 3. Landscaping in these areas and along cooling towers. November 2001.
- **ZP 02-247**; Phase I of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase I consists of construction of the inpatient concourse. November 2001.
- **ZP 02-246**; Phase H of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase H consists of: 1. Construction of emergency dept. On the 1st floor of acc west pavilion; 2. Demolition of part of smith building and renovation of remainder; 3. Construction of emergency drive and parking lot; and 4. Converse landscaping. November 2000.
- **ZP 02-245**; Phase G of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase G consists of the construction of the ambulatory care center west pavilion (Floors 2 to mechanical penthouse.) November 2001.
- **ZP 02-244**; Phase F of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase F consists of the construction of the patient access center, south parking lots, and main quadrangle. November 2001.
- **ZP 02-243**; Phase E of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase E consists of the demolition of Alumni Hall and construction of the educational center, including both above and below ground portions and the auditorium. November 2001.
- **ZP 02-242**; Phase D Of coa 00-038 FAHC Ambulatory Care Facility/Educational center. Phase D consists of the McClure service core. November 2001.
- **ZP 02-241**; Phase C Of coa 00-038 FAHC Ambulatory Care Facility: central plant, loading docks, materials handling area, cooling towers, and garage.. Approved November 2001.

- **ZP 02-224**; New Birthing Center on top floor of McClure building. Addition of 12,239 sq. ft., Removing 2,111 sq. ft. For net of 10,128 sq. ft.. September 2001.
- **ZP 01-510**; Lot line adjustment between FAHC and UVM as part of the Ambulatory Care Facility proposal. March 2001.
- **ZP 01-379**; Construct four temporary buildings: Three to house hospital functions displaced during construction of FAHC Ambulatory Care Facility; and one as a temporary entrance for the emergency department. April 2001.
- **ZP 00-676**; Phase O of FAHC Ambulatory Care Facility/Educational center. Phase O Consists of site excavation and foundations for all proposed buildings, Including the central plant, Ambulatory Care Facility, Education center and parking garage.
- **ZP 00-676**; Phase N of FAHC Ambulatory Care Facility/Educational center. Phase N consists of the demolition of Adams, Medical Records, Brown and Brown Pavillion totaling approximately 58,000 sq ft. July 2000.

Overview: Fletcher Allen Health Care proposes an approximately 208,000 sq. ft. inpatient building to be located next to the Emergency Department on the west side of the campus. The project will consist of approximately 128 inpatient **replacement** beds to be hosted in single rooms with connections to the McClure Building and the West Pavilion of the Ambulatory Care Center. It is proposed to be constructed over the existing emergency room.

The seven story structure will include 2 lower circulation and mechanical floors, four inpatient bed floors and a mechanical penthouse. The beds are intended to replace beds from the Shepardson 3 and 4 North (built 1961) and to provide single rooms to meet the 2010 Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Health Care Facilities. The project will require a small boundary line adjustment with the University of Vermont.

PART 1: LAND DIVISION DESIGN STANDARDS

Sec. 6.1.1 Applicability.

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

Sec. 6.1.2 Review Standards

(a)Protection of important natural features:

The arrangement of blocks and lots shall preserve watercourses, wetlands, steep slopes, flood-prone areas, rock outcroppings, wildlife habitat and travel corridors, specimen trees and contiguous stands of forest, and other sensitive ecological and geological areas to the extent practicable.

The proposed minor boundary adjustment is intended to accommodate the new inpatient building, and does not impede any watercourses, wetlands, steep slopes, wildlife habitat and travel corridors, or sensitive ecological and geological areas.

(b) Block Size and Arrangement:

No new blocks proposed. Not applicable.

(c) Arrangement of lots:

The size and arrangement of new lots shall reflect and perpetuate the existing development pattern of the surrounding neighborhood. Lots shall be created in such a way as to enable their development pursuant to the requirements of this ordinance, and ensure a clear transfer of title.

Interior lot lines extending from a street should be perpendicular or radial to the street right-of-way line to the greatest extent feasible. Flag lots and through lots are discouraged, and shall be allowed only to the extent where topography and existing block and lot arrangement allow no suitable alternative. In such cases, a minimum frontage for access of 20-feet shall be required.

The boundary line adjustment does not commence at a public street but an interior access drive ("Hospital Drive.") The new alignment, however, generally reflects the perpendicular pattern of property lines to the street.

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

No change is proposed to the connectivity of either parcel to the street. The boundary line adjustment is interior to both parcels. Access within the FAHC property will continue to be provided via an internal drive and an interconnected web of pedestrian paths.

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

Sidewalks shall be moved to the west of the FAHC parcel to maintain connectivity within the site, yet minimize or remove conflict at vehicular drives, pedestrian crosswalks, and parking access.

PART 2: SITE PLAN DESIGN STANDARDS

Review under these two sections will be governed by the following over-arching statute:

Vermont State Statute, §4413, Limitations on municipal bylaws

- (a) The following uses may be regulated only with respect to location, size, height, building bulk, yards, courts, setbacks, density of buildings, off-street parking, loading facilities, traffic, noise, lighting, landscaping, and screening requirements, and only to the extent that regulations do not have the effect of interfering with the intended function use:*
- (1) State or community owned and operated institutions and facilities.*
 - (2) Public and private schools and other educational institutions certified by the state department of education.*
 - (4) Public and private hospitals.*

Sec. 6.2.2 Review Standards

(a) Protection of Important Natural Features:

The FAHC site is currently impervious surface, with access and parking areas at the intended site of new construction. A grading plan has been provided to minor alterations. No significant natural features are noted.

(b) Topographical Alterations:

A roadway profile and a grading plan have been provided (Plan C=103; C-105.) These illustrate a gradual increase in site topography from 334'-363', rising along Hospital Drive from north to south east. Given the significant distance between these points, and the active uses accommodated, proposed topo alterations are appropriately incremental within the scope of the project.

(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.

Not applicable per Vermont State Statute, §4413, Limitations on municipal bylaws.

(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).

Not applicable.

(e) Supporting the Use of Renewable Energy Resources:

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

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

Not applicable per Vermont State Statute, §4413, Limitations on municipal bylaws.

(f) Brownfield Sites:

None 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.

A stormwater and erosion control plan has been included (Plans C 106, C 503.) The City Stormwater Administrator has agreed to ongoing review of the proposal, with final Chapter 26 review/acceptance as a prior-to-release condition.

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.

Not applicable under Vermont State Statute, §4413, Limitations on municipal bylaws.

(h) Building Location and Orientation:

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

The proposed new building does not front the existing streetscape, but is an interior addition to the existing medical center campus. In orientation and alignment, it does complete the westerly edge of the complex, and pleasantly fronts the easterly edge of UVM's quad.

The proposed sidewalks provide adequate space for pedestrian flow (8' wide along periphery of project) and provide a connection between Colchester Avenue, the McClure building, parking areas, the emergency room hospital entrance, and the UVM campus/Converse Hall.

Principal buildings shall have their main entrance facing and clearly identifiable from the public street. The development of corner lots shall be subject to review by the city engineer regarding the adequacy of sight distances along the approaches to the intersection. To the extent practicable, development of corner lots in non-residential areas should try to place the building mass near the intersection and parallel to the street to help anchor the corner and take advantage of the high visibility location.

The proposed development is interior to the site; an addition to an interconnected group of buildings that make up the core campus of the Medical Center. It does, however, have an easily identifiable entrance for the public (to be enhanced with signage) to provide critical access to emergency health care services. Access for patient rooms in floors 3-6 will be via the Ambulatory Care Center.

(i) Vehicular Access:

Not applicable under Vermont State Statute, §4413, Limitations on municipal bylaws.

(j) Pedestrian Access:

Not applicable under Vermont State Statute, §4413, Limitations on municipal bylaws.

(k) Accessibility for the Handicapped:

Not applicable under Vermont State Statute, §4413, Limitations on municipal bylaws.
Building codes pertaining to accessibility continue to apply.

(l) Parking and Circulation:

To the extent possible, parking should be placed at the side or rear of the lot and screened from view from surrounding properties and adjacent public rights of ways. Parking areas of more than 20 spaces should be broken into smaller areas separated by landscaping.

The development proposes replacement of 136 existing parking spaces; 47 allocated to FAHC and 89 for UVM. This proposal DOES separate the parking with the proposed boundary line adjustment, placing UVM's parking spaces securely on their own parcel. Therefore, that parking alteration will require a permit from UVM for that work.

A well developed landscaping plan has been provided, which includes two rain gardens and significant planting plan that will separate parking area, walkways and drive paths.

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

Both parking areas will share access from Hospital Drive as well as connective pedestrian walkways.

*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.*

Parking spaces are defined as 18' in length, which do not meet the requirement for standard parking spaces in Table 8.1.11-1. (Plan C-104.) This standard, for spaces at a 90° angle, have a requirement of 20' in length. The required 24' in backup space is met in the plan. Article 8 does allow for compact parking spaces (18' in length), but **Sec. 8.1.12 (h)** is not implicit about limitation. *Compact parking spaces may be used in parking structures or lots. Up to 15% of the total parking spaces in a parking garage may be designated for compact cars.* As this is not a parking structure but a lot, the 15% does not apply. This particular standard of Article 6, however, requires that parking spaces meet the requirements as provided in Article 8; which is 20'.

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.

For FAHC's 47 space parking area, 9 new trees meeting the prescribed caliper will be required. For UVM's parking area (which will need a separate zoning permit application), 18 trees meeting the specified caliper will be required. Plan L-2-0 defines significant landscaping; approximately 28 trees will surround the UVM lot with a minimum caliper for 4", and an adequate number around the smaller FAHC lot. The city arborist will have to be consulted to inquire if the species chosen will meet the requirement of providing the mature canopy dimension of 25'.

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.

Parking areas have clearly defined parking spaces and pedestrian crosswalks. Sidewalks cap the UVM lot on the north, connecting the main campus/quad to the Converse Hall. A sidewalk further connects the UVM lot to the FAHC lot and to Hospital Drive; crossing to the Emergency Room entrance. All provide a clear and unobstructed path to the proposed new building.

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

A bicycle rack is provided under the roof canopy adjacent to the emergency room entrance door. The type of rack is not defined; it will need to meet the guidelines of the City of Burlington Bicycle Parking handbook. Note: Ribbon and comb racks are NOT recommended because the front wheel must be lifted off the ground in order to properly lock a bike frame to the rack.

(m) Landscaping and Fences:

An extensive landscaping plan has been submitted (See Plan L1-0.) Columnar, shade and specimen trees are proposed to provide shade throughout the parking areas and along pathways. Tree and shrub plantings are proposed along the western edge of the parking area to screen their view from the UVM general campus. Two rain gardens are proposed to help with stormwater mitigation. At the south of the development area, a stone retaining wall with an adjacent courtyard is proposed to be ringed with shrubs and ground cover.

(n) Public Plazas and Open Space:

Where public open space is provided as an amenity to the site plan, it should be sited on the parcel to maximize solar exposure, with landscaping and hardscape (including fountains, sitting walls, public art, and street furniture) to encourage its use by the public in all seasons. Public plazas should be visually and physically accessible from public rights-of-ways and building entrances where appropriate and shall be designed to maximize accessibility for all individuals, including the disabled and encourage social interaction.

Public space should be coordinated with the surrounding buildings without compromising safety and visibility. Public spaces should be surrounded by active uses that generate pedestrian traffic, and connect the space to major activity centers, streets, or corridors.

Although not clearly defined as such, the entrance to the emergency room provides the equivalent of a public plaza to be utilized by visitors and patients. Facing westerly and partially under canopy, this area is ripe for some seating, outdoor furniture, or other amenity to liven up the space and provide a place of rest or respite. This is not intended to be a smoking area, however.

The plan does not sacrifice safety or visibility in the provision of open space.

New structures and additions to existing structures shall be shaped to reduce shadows on public plazas and other publicly accessible spaces. In determining the impact of shadows, the following factors shall be taken into account: the mass of area shaded, the duration of shading, and the importance of sunlight to the utility of the type of open space being shadowed. Proposed development shall be considered for solar impact based the sun angle during the Vernal and Autumnal equinox.

See plan AP 2.6. At the height of the Autumnal Equinox, shadow cast will reach as far west as Votey Hall. As the UVM quad is immediately west of the proposed new building, most of the shadow impacts will fall on open land.

(o) Outdoor Lighting:

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

Lighting specs and a photometric plan have been provided (Plan LI 1.0) There is excessive light relative to the parking areas and walkways, per Sec. 5.5.2 (f) 1. and 2. The maximum illumination level for parking areas is not to exceed 4 footcandles at any point– this is a problem along the “rim” of the UVM /ED parking lot (along both first base and third base lines, if the triangle is observed as a baseball diamond.) Additionally, the 2 footcandle maximum illumination for walkways is exceeded at several points along the periphery of the parking areas. Both will need to be adjusted down.

(p) Integrate infrastructure into the design:

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

Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be placed 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.

Most utility and service features are integrated into the site. The proposed re-location of the Converse Hall dumpster is not acceptable as it becomes more prominent on the east/west axis from the UVM campus. A less obtrusive location needs to be identified that removes it from immediate visual access, especially along the view corridor from the main campus. The enclosure as proposed also uses one of the 89 replacement parking spaces, thus minimizing the number of parking spaces provided.

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.

The seventh story of the proposed structure is dedicated to mechanical equipment. In the best articulation of this standard, FAHC has accepted the challenge to incorporate mechanical/HVAC within the design envelope rather than add it as an afterthought. There will be no exposed mechanical equipment viewable from the ground or adjacent buildings.

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 proposed inpatient building, at seven stories, will rise to a rooftop elevation of 101' above grade or 459' 4" above mean sea level. This complies with the FAHC Height Overlay (Map 4.5.2-3) Institutional Core Campus Overlay District height restriction of no greater than 540' above mean sea level, as well as the ICC-UVM central campus height overlap district height restriction of no greater than 140' above grade (Map 4.5.2-4, ICC-UVM Central Campus and

Height Overlay.) As proposed, the inpatient building falls within the height limitations of the CDO.

In concert with the existing McClure and Ambulatory Care Center (ACC), the new inpatient building is consistent in massing and height within the core campus.

2. Roofs and Rooflines.

Not applicable per Vermont State Statute, §4413.

3. Building Openings

Not applicable per Vermont State Statute, §4413.

(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.

As UVM is a public institution, they too meet the limitation on municipal bylaws given above. Review of the relationship to Converse Hall, or the treatment of Chittenden, Buckham and Willis Hall as normally reviewed under Section 5.4.8 will not apply.

(c) Protection of Important Public Views:

See Sec. 6.2.2. (c) above.

(d) Provide an active and inviting street edge:

Not applicable per Vermont State Statute, §4413.

(e) Quality of materials:

Not applicable per Vermont State Statute, §4413.

(f) Reduce energy utilization:

See Sec. 6.2.2. (e). The building will be required to meet energy efficiency standards as defined by Burlington Electric Department.

(g) Make advertising features complementary to the site:

Only directional signage is included within this application. FAHC has a Master Sign Plan, under which additional signage may be applied for.

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p).

(i) Make spaces secure and safe:

All building and life safety code, as defined by the building inspector and fire marshal, shall be implemented.

Comments (Provided to applicant team 7/15/2014.):

1. Review of new UVM parking lot must come on a separate zoning permit application for that parcel.
2. Dimensions of parking spaces shall at a minimum meet the requirements as provided in Article 8. For parking spaces at a 90° angle, spaces shall be 9' x 20'.
3. *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.* For FAHC's 47 space parking area, 9 new trees meeting the prescribed caliper will be required. For UVM's parking area (which will need a separate zoning permit application), 18 trees meeting the specified caliper will be required. Plan L-2-0 defines significant landscaping; approximately 28 trees will surround the UVM lot with a minimum caliper for 4", and an adequate number around the smaller FAHC lot. Confirmation from the City Arborist confirming mature canopy sizes will be required.
4. The dumpster location for Converse Hall will need to be relocated to a more sensitive location outside the east/west view corridor from the main campus, and without utilizing one of the 89 replacement parking spaces. Details of the enclosure will need to be provided for staff review and approval.
5. Lighting will need to be adjusted to meet the limitations of Sec. 5.5.2 (f) 1. (Parking lot lighting) and 2. (Walkways.)
6. The applicant shall define if this application includes the proposed boundary line adjustment, or it will be received under separate applications for both parcels. In any case, a boundary line adjustment will be a requirement for activating this zoning request.

Recommendation: Approval and forward to the Development Review Board with noted conditions/comments.

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, Senior Planner
Nic Anderson, Zoning Clerk
Elsie Tillotson, Department Secretary



TO: Design Advisory Board
FROM: Scott Gustin
DATE: July 22, 2014
RE: 14-1320CA, 10 University Place

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

Request: Demolition of Chittenden, Buckham, Wills residential complex with redevelopment plans including Green Mountain walkway and associated pedestrian amenities

OVERVIEW:

The applicant is requesting approval for demolition of three student dormitories (Chittenden, Buckham, & Wills) to enable construction of the adjacent inpatient building at Fletcher Allen Health Care. While these two projects go hand-in-hand, they are under separate ownership and separate permit application. The demolished buildings will be replaced with new landscaping and the so-called Green Mountain Walkway. Temporary onsite and offsite student housing will be provided and, ultimately, new student housing will be provided onsite; however, no new student housing is included in this proposal. The University of Vermont is an educational institution and, therefore, is subject to only limited zoning review per 24 VSA, Sec. 4413, *Limitations on municipal bylaws*. This application may be reviewed only with respect to location, size, height, building bulk, yards, courts, setbacks, density of buildings, off-street parking, loading facilities, traffic, noise, lighting, landscaping, and screening requirements. The project will include a small boundary line adjustment with FAHC.

ARTICLE 6: DEVELOPMENT REVIEW STANDARDS

Part 1, Land Division Design Standards

(a) Protection of important natural features: The arrangement of blocks and lots shall preserve watercourses, wetlands, steep slopes, flood-prone areas, rock outcroppings, wildlife habitat and travel corridors, specimen trees and contiguous stands of forest, and other sensitive ecological and geological areas to the extent practicable.



The proposed minor boundary adjustment is intended to accommodate the new inpatient building, and does not impede any watercourses, wetlands, steep slopes, wildlife habitat and travel corridors, or sensitive ecological and geological areas.

(b) Block Size and Arrangement:

No new blocks proposed. Not applicable.

(c) Arrangement of lots:

The size and arrangement of new lots shall reflect and perpetuate the existing development pattern of the surrounding neighborhood. Lots shall be created in such a way as to enable their development pursuant to the requirements of this ordinance, and ensure a clear transfer of title. Interior lot lines extending from a street should be perpendicular or radial to the street right-of-way line to the greatest extent feasible. Flag lots and through lots are discouraged, and shall be allowed only to the extent where topography and existing block and lot arrangement allow no suitable alternative. In such cases, a minimum frontage for access of 20-feet shall be required. The boundary line adjustment does not commence at a public street but an interior access drive. The new alignment, however, generally reflects the perpendicular pattern of property lines to the street.

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

No change is proposed to the connectivity of either parcel to the street. The boundary line adjustment is interior to both parcels. Access remains unchanged on both properties via internal drives and an interconnected web of pedestrian paths.

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

Sidewalk connectivity will be retained with the completion of the so-called Green Mountain Walkway across the center green.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The project site contains no significant natural features. Greenery within the site is limited to landscaped lawn, trees, and other plantings. Proposed landscaping is addressed under criterion (m) below.

(b) Topographical alterations

Not applicable per 24 VSA, Sec. 4413.

(c) Protection of important public views

Not applicable per 24 VSA, Sec. 4413.

(d) Protection of important cultural resources

Not applicable per 24 VSA, Sec. 4413.

(e) Supporting the use of alternative energy

Not applicable per 24 VSA, Sec. 4413.

(f) Brownfield sites

Not applicable per 24 VSA, Sec. 4413.

(g) Provide for nature's events

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

(h) Building location and orientation

No new buildings are included in this application.

(i) Vehicular access

Not applicable per 24 VSA, Sec. 4413.

(j) Pedestrian access

Not applicable per 24 VSA, Sec. 4413.

(k) Accessibility for the handicapped

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

(l) Parking and circulation

No net change in the amount of existing parking is included in this proposal. The application indicates that some existing spaces will be reconfigured to accommodate the FAHC inpatient project. How and where this reconfiguration will take place is not clear on the project plans and must be specifically identified.

(m) Landscaping and fences

New construction included in this proposal is limited to the so-called Green Mountain Walkway and associated landscaping. The proposed walkway will provide a curvilinear pedestrian link between Mary Fletcher Drive and Carrigan Drive, running through the ample green space of the central campus. The walkway will be lined with shade trees. Several clusters of new evergreen trees are also proposed. Note that the application plans refer to "conceptual redevelopment," and landscaping specifics are lacking. Details as to the type of new plantings proposed and walkway materials are needed.

(n) Public plazas and open space

No public plazas or open space are included in this proposal.

(o) Outdoor lighting

No outdoor lighting information has been provided. Presumably, new lighting fixtures will illuminate the proposed Green Mountain Walkway. If so, fixture cut sheets, locations, and illumination levels need to be specified.

(p) Integrate infrastructure into the design

New utility lines serving the proposed construction must be buried.

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

Not applicable.

RECOMMENDED MOTION:

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

1. A landscaping plan that includes details as to species and size of plantings proposed.
2. Outdoor lighting fixture locations, cut sheets, and illumination levels.
3. Site plan depicting how and where existing parking will be reconfigured with no net change in parking spaces provided.



CAMPUS PLANNING SERVICES

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

June 30, 2014

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

PROJECT: Demolition of Chittenden-Buckham-Wills Residential Complex
University of Vermont, 71,73,79 Colchester Avenue

Dear Ken,

The University is proposing to demolish Chittenden-Buckham-Wills Residential Complex (CBW) located on the east side of the University's Central Campus Quadrangle (Central Quad) that abuts the University's institutional neighbor, Fletcher Allen Health Care (FAHC) south of Colchester Avenue. The Project includes the demolition of CBW (refer to Attachment 1 – CBW Residential Complex Demolition Plan) and the conceptual redevelopment plan (refer to Attachment 2 – CBW Site Conceptual Redevelopment Plan) that illustrates the enhanced Green Mountain Walkway.

The Central Campus Quadrangle is surrounded by Fleming Museum to the north, FAHC and CBW to the east, Bailey-Howe Library to the south, and Central Heating Plant, Cook Science Building, and Kalkin Hall to the west. For purposes of this Project application, the Project Site is located within the University's Central Campus District and within the City's Institutional Zoning District inclusive of the Institutional Campus Core Overlay (ICC-UVM) and the ICC-UVM Central Campus Height Overlay.

The City's Planning & Zoning Department has advised the University that this Project will be reviewed as Conditional Use under Certificate of Appropriateness (COA) Level II. The University believes that this Project conforms to all the applicable sections of the Burlington Comprehensive Development Ordinance, including Article 3 § 3.5.6 (a) Conditional Use Review Standards, Article 4 §4.5.2 and 2(d) Institutional Core Campus Overlay Districts and UVM Central Campus (ICC-UVM), and Article 5 §5.4.8 Historic Buildings and Sites. In addition, Burlington Technical Review Committee (6/12/14) determined that this Project is exempt from major impact review because it does not expand the floor area of an existing building or the structural capacity of existing development, as per §3.5.3 (c). Refer to Attachment 3 – UVM Assessment of Project Conformance with the Burlington Development Ordinance that highlights the criteria for review and provides the University's assessments regarding conformance with the applicable review criteria.

As the City is aware, the University is expediting our Housing Master Plan recommendation to demolish CBW to construct housing consistent with first-year student housing requirements in order to meet the requisite timeline of FAHC's Inpatient Building Project (construction start 7/6/2015) to serve the wider community's public good (i.e. hospital and medical services) NOTE: The University initially planned to retain Wills Hall for a transitional period of time. However, the impact of the upcoming FAHC construction, including the need to relocate critical infrastructure servicing Wills Hall, precludes the use of this building. Therefore, all three buildings will be demolished as part of this Project.

In terms of replacement housing needs, although the University would remain in compliance with the 2009 UVM/City Memorandum of Understanding without providing temporary housing replacement, the University has worked diligently with local housing developers, to develop a Temporary Housing Replacement Plan (refer to Attachment 4) to maintain the existing student bed capacity within University affiliated housing. In addition, the University has recently (5/16/14) initiated a public Request for Proposal (RFP) process for development, property management, and private-public partnership financing services for first-year student housing and dining abutting this site on Central Campus. The University expects to receive viable proposals and make a selection by the end of September 2014.

In order to meet FAHC's timeline, UVM can only provide at this point a conceptual redevelopment plan that includes landscaping enhancements to the Green Mountain Walkway that was envisioned in the 2006 Campus Master Plan (refer to Attachment 5). The Green Mountain Walkway will create a system of pedestrian linkages through the core of the campus to Trinity Campus to the north and Redstone Campus to the south. The Conceptual Redevelopment Plan has been somewhat modified from the 2006 CMP vision due to the changing site boundaries. However, it is still envisioned to be a gently arching walkway that will align and link with the existing paths through the Campus Quad and Converse Hall's entrance walkway. There will be exterior lighting and will include an extensive program of tree planting along the walkway.

Although the University and FAHC have not completed the formal process of transferring property, the University has calculated that the land exchange represents approximately 1.02 acres. The adjusted lot coverage of the University's Institutional Core Campus Overlay, including the land transfer is 48.04%. The lot coverage after the demolition of CBW and the development of Green Mountain Walkway will be 47.56%, a reduction of .48% impervious, well within the 70-75% permitted lot coverage. The University expects that the demolition and the redevelopment of the Green Mountain Walkway will represent a negligible net change in lot coverage regardless of recalculations based on minimal boundary changes.

The project lies primarily in the North Campus Watershed and discharges to the North Campus Treatment Facility located southerly of Centennial Field. Within this Project, there will be no net increase to stormwater flow or capacity due to this Project.

Although outside of the project site limits, but included in FAHC's Inpatient Building Project application, the University's existing parking will be reconfigured with no net change to the number of parking spaces as part of the FAHC Inpatient Building Project.

As consistent with past practices, the University has met with key community stakeholders including the NPA's to outline the University's Housing Master Plan that includes the recommendation to demolition obsolete housing.

The University will not be able to start construction of the CBW Redevelopment Plan until FAHC's Inpatient Building Project is substantially complete, projected to be Fall 2018. In order to accommodate these needs, the University is requesting that the zoning permit be extended and expire in six (6) years, late Fall 2020. This extension of the permit period will allow appropriate time for installation of landscaping improvements to be completed in the growing seasons.

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

Sincerely,



Lani Ravin, AICP, UVM Associate Planner
Campus Planning Services

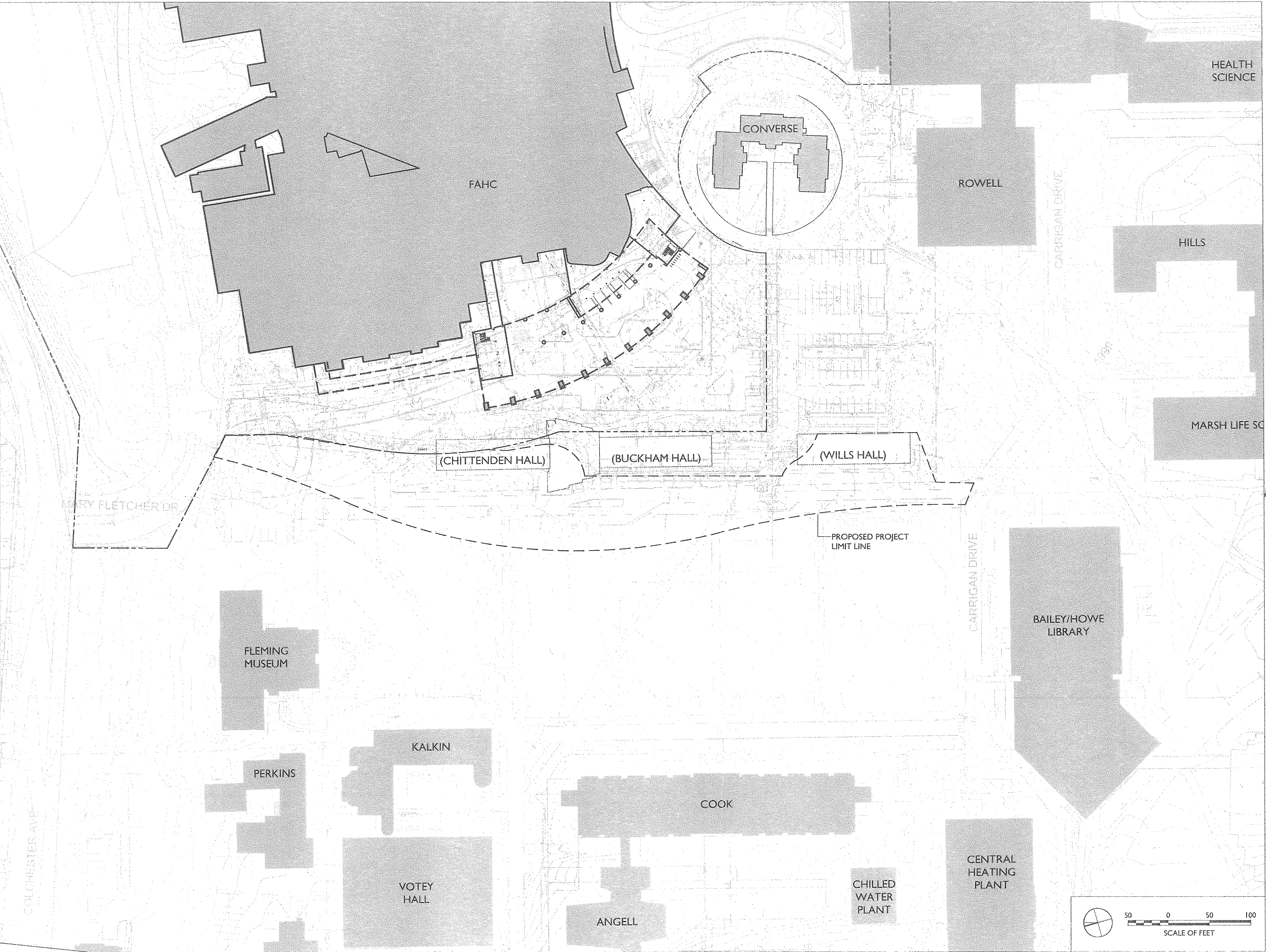
cc: Linda Seavey, Director, Campus Planning Services
Robert Vaughan, Director, Capital Planning & Management
Ken Bean, Project Manager, Facilities Design & Construction

ATTACHMENTS:

Zoning Permit Application

Check #1320963 \$4,680 Application Fee and Conditional Use Fee

Attachment 1:	CBW Residential Complex Demolition Plan, dated 6/30/14
Attachment 2:	CBW Site Conceptual Redevelopment Plan, dated 6/30/14
Attachment 3:	UVM Assessment of Project Conformance with Comprehensive Development Ordinance
Attachment 3A:	Existing conditions: Orthophoto of the Central Campus Quad Area
Attachment 3B:	Existing conditions: CBW Photographs
Attachment 4:	UVM Temporary Housing Replacement Plan
Attachment 5:	2006 Campus Master Plan – Green Mountain Walkway Excerpt (pages 138-139)
Attachment 6:	Historic Assessment Report: Chittenden-Buckham-Wills Residential Complex (CBW)
Attachment 7:	Erosion Prevention Sediment Control (EPSC) Application and Plans



RECEIVED

JUN 30 2014

DEPARTMENT OF
PLANNING & ZONING

UVM CBW
RESIDENTIAL
COMPLEX
DEMOLITION
PLAN

REVISIONS

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JOB NO.

SCALE 1" = 50'-0"

DATE 06.30.14

LI.0

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JUN 30 2014
DEPARTMENT OF
PLANNING & ZONING

UVM
CBW SITE
CONCEPTUAL
REDEVELOPMENT
PLAN
CONCEPTUAL
GREEN
MOUNTAIN
WALKWAY

REVISIONS

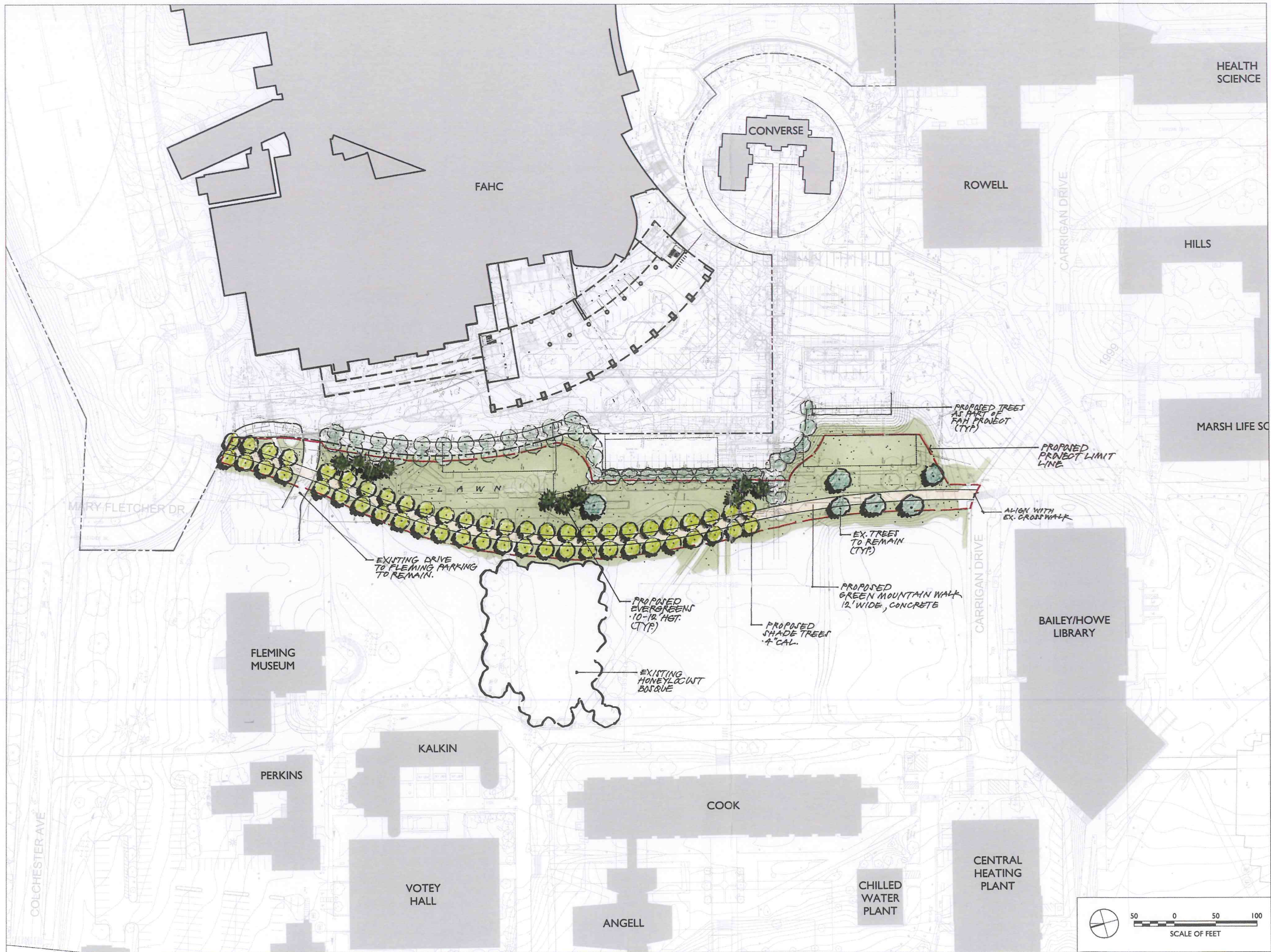
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DATE 06.30.14

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UVM Assessment of Conformance with the Applicable Burlington Comprehensive Development Ordinance:

I

**Project: Demolition of Chittenden-Buckham-Wills Residential Complex (CBW) & Green Mountain Walkway Conceptual Redevelopment Plan
71, 73, 79 Colchester Avenue, University of Vermont**

The University has extracted the applicable review criteria and provides the following information for your review:

Article 3 § 3.5.6 (a) Conditional Use Review Standards

The University believes that the CBW Demolition and the Conceptual Redevelopment Project will not result in an undue adverse effect on the following standards:

1. The capacity of existing or planned community facilities:

The existing capacity of the CBW 391 beds (i.e., Chittenden Hall = 130 beds, Buckham Hall = 133 beds, Wills Hall = 128 beds). The University has worked with the local development community to develop a Temporary Housing Replacement Plan (refer below and to Attachment 4) that outlines the University's plans to maintain the same number of beds through the duration of this Project.

1. **326 Quarry Hill Road, South Burlington** – UVM entered into a lease with Northeast Quarry, LOLC for the entire building commencing August 15, 2014. The property comprises 32 apartments and will accommodate **126** students. The lease is subject to annual renewal in UVM's sole discretion.
2. **Quarry Hill Road, South Burlington** – UVM is in serious negotiations to occupy an additional building that will provide housing for approximately **150** students. The lease will be for one year, subject to annual renewal in UVM's sole discretion.
3. **870 Williston Road (Sheraton), South Burlington** – UVM is in discussions with the Sheraton regarding rental of 40 guest rooms in the original wing of the Hotel. These rooms will accommodate **80** students.
4. **Reconfiguration of Existing Student Housing Capacity** – UVM's current capacity is over 6,110 beds. The University can reconfigure existing housing to accommodate the additional **35** student beds. The University does this on an annual basis to accommodate fluctuating student levels.

Total Temporary Housing Replacement Plan

391 beds

2. The character of the area

The character of the area is a hub of student life and is an integral part of the University's academic and medical core. It is also adjacent to Fletcher Allen Health Care to the west. The area includes one of the 5 priority landscape projects identified in the 2006 Campus Master Plan (refer to Attachment 5 – 2006 CMP Green Mountain Walkway). The Green Mountain Walkway is envisioned to be a cultural hub with energized spaces and dynamic linkages. It will be a major pedestrian avenue and connective green space and will be an important landscape element to bridge the architectural transitions between UVM and FAHC.

The Central Campus Quadrangle (Central Quad) is one of the remaining large open spaces on campus that is used for informal recreation and outdoor events. Separate from this application, this area also includes some student housing and the University is in an active RFP process to develop additional student housing and dining in this area of the campus for first-year students with an occupancy goal of August 2017. The character of the area will be significantly improved by the enhancement of the Green Mountain Walkway.

3. Traffic impacts

Traffic will not increase as a result of this Project as it consists of demolition of existing buildings and enhancement of the Green Mountain Walkway, primarily a pedestrian avenue with limited vehicular access for shuttles and emergency access. The University will expand our Campus Area Transportation System (CATS) with shuttle services for the students housed in South Burlington.

4. Other standards as per existing City bylaws and city and state ordinances

UVM entered into a Memorandum of Agreement on Housing with the City of Burlington in 2009. Among other items, the MOA states, "After Fall 2009 and continuing throughout the duration of this agreement, UVM agrees to provide, by its own means or by working with a third party developer, student housing within the institutional districts defined in the City Comprehensive Development Ordinance in effect on March 9, 2009, or outside the boundaries of the City of Burlington on a 1:1 basis relative to increased enrollment of undergraduate students beyond the number enrolled in Fall 2009."

UVM is in full compliance with this item and would remain so even if temporary beds were not leased:

	Enrollment	Housing Capacity
Fall 2009	10,156	5,707
Fall 2013	9,764	6,110
DIFFERENCE	(392)	403

With a decrease of 392 students and an increase of 403 beds, UVM would remain in full compliance with the MOA on housing without acquiring temporary housing for the loss of 391 beds between Fall 2015 and Fall 2017. However, it is our plan to keep our housing capacity at the current level of 6,110 beds and in order to achieve this, UVM will provide 391 beds of temporary housing during this interim period, as noted above.

5. Utilization of renewable energy resources

The University will recycle as much building material as possible. The conceptual redevelopment plan will include energy efficient exterior lighting as per the University Exterior Lighting standards.

6. Cumulative impact

The impact of this demolition is the loss of the CBW Residential Complex. This impact will be mitigated by appropriate documentation as listed in §5.4.8 below. The enhancements of the Green Mountain Walkway will improve circulation and pedestrian amenities in this part of our campus. By the University expediting its plans to demolish CBW, the public good will be served by allowing FAHC's Inpatient Building Project to be in aligned with the industry standards and the needs of their patients.

7. *Increased number of unrelated individuals in a dwelling unit in residential areas*
Not applicable.

8. *Control the location and number of vehicular access points to the property:*
Given the challenges of the multiple overlapping projects in this area, the vehicular access points may be more controlled during construction. However, there will be no changes to the location and number of vehicular access points to the property at the completion of this Project (i.e. CBW Demolition or the Green Mountain Walkway Redevelopment Plan).

9. *Limit on number, location and size of signs:*
The University will erect permanent signs as per the DRB-approved UVM Wayfinding & Signage Master Plan. Temporary construction signs will guide all users during construction.

10. *Mitigation, including landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area:*
The mitigation for the demolition will be the Green Mountain Walkway Conceptual Redevelopment Plan (refer to Attachment 2 – Conceptual Redevelopment Plan). As described above, the Green Mountain Walkway is envisioned to be a cultural hub with energized spaces and dynamic linkages. It is envisioned to be a major pedestrian avenue and provide connective green space and an important landscape element to bridge the architectural transitions between UVM and FAHC. The Green Mountain Walkway will significantly improve the pedestrian experience and provide associated pedestrian amenities, including potential series of informal indoor/outdoor spaces, pocket and winter gardens.

11. *Time limits of construction:*
The University will need to start demolition of CBW after the end of the 2014-2015 academic year (May 2015) and complete demolition in time for FAHC to break ground on their new facility. The Green Mountain Walkway Redevelopment Plan will not be able to begin until FAHC's Inpatient Building Project is substantially complete. That work is phased to take place over the next 4 years, completed in August 2018. The FAHC phased construction is due to the need to maintain full emergency hospital access over the full period of construction. FAHC has indicated that they will need some time to completely vacate FAHC's staging area on University property. With that constraint, the University believes it will need to delay the installation of much of the landscaping improvements to the following spring growing season (2019).

Therefore, the University is requesting that this permit be extended and expire after six (6) years, in late Fall 2020.

12. *Limits on hours of (de)construction to reduce impact on surrounding properties:*
The nearest neighbor is FAHC which is interested in having demolition occur as soon as possible. The site is surrounded by UVM and FAHC buildings and property so impact to neighbors may be lessened. Students will not be living in Converse during the summer, when deconstruction is scheduled.

13. *Future enlargement to return for review by DRB*
Agreed.

14. *Performance Standards*

The University will comply with its own construction standards and LEED policies.

15. Additional reasonable conditions and safeguards
None at this time.

Article 4 §4.5.2 Institutional Core Campus Overlay Districts
§4.5.2(d) UVM Central Campus (ICC UVM)

2. Lot Coverage:

Existing lot coverage within ICC-UVM (adjusted by FAHC land transfer): 48.04%
Proposed lot coverage within ICC-UVM (adjusted by FAHC land transfer): 47.59%
Maximum lot coverage is 70-75% so this project is well within permitted lot coverage.

4. Surface Parking:

No new surface outdoor parking spaces are proposed in this application. Some existing parking spaces will be moved to a new configuration in order to accommodate FAHC inpatient Building Project.

Article 5 § 5.4.8 Historic Buildings and Sites

(a) Applicability:

*In order to be subject to the provisions of this section, **all** of the following conditions must be present:*

1. The buildings are 50 years old or older:

CBW was built in 1947 so they are older than 50 years.

2. Significance regarding:

a. historic events,

There are no significant historic events associated with these buildings.

b. associations with the lives of significant persons of the past,

There is no direct association with the lives of significant persons of the past. There are many people, famous and not, of whom it can be said "they slept here" since these are college residence halls, but that is a very minor distinction.

c. Distinctive construction, work of a master, high artistic value, or represents a significant entity as a whole;

These buildings are not highly significant examples of architecture on the UVM campus (refer to Attachment 6: UVM CBW Historic Buildings Evaluation Preliminary Review Report for further details). The architectural firm that designed these building, McKim Mead and White, has done much higher quality work elsewhere. The precast panel construction was also done elsewhere, it is not unique.

d. Maintenance of an exceptionally high degree of integrity, original site orientation and virtually all character defining elements intact

The buildings have not retained their integrity or character defining elements. Significant façade changes took place over the years.

- e. *Yields or may yield prehistoric information, and*
No prehistoric information is associated with these buildings.

3. *Building or site possesses a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.*
The buildings and site do not possess a "high degree of integrity of location setting, materials, workmanship, feeling or association". CBW Complex were built quickly for returning students after WWII as economically as possible. They were not designed to be architectural icons. The area around the buildings is changing and evolving according to the needs of the University and Fletcher Allen Health Care.

Conclusion:

In this case very few of the necessary conditions for applicability are present. The buildings do not meet the criteria for historic status as per the Burlington CDO. These three buildings may be eligible for listing on the State Register; they are less likely to be found eligible for listing on the National Register of Historic Places.

The University does not think that the Project is subject to §5.4.8, the following information may be helpful regarding the standards for review of demolition:

- The structures are currently sound and well maintained although outdated and not up to current standards and best practices. The buildings function as current student residences.
- The new Fletcher Allen Inpatient Building Project, in its current and final configuration, is located too close to the building footprint of the CBW buildings. Therefore it is not possible to rehabilitate or reuse the current structures. These structures cannot be practicably moved.
- The proposed redevelopment of the new Fletcher Allen Inpatient Building Project will provide a substantial community-wide benefit that far outweighs the historic or architectural significance of the buildings proposed for demolition. The new Inpatient Building will provide single-bed rooms, which is the current hospital standard.
- This demolition and conceptual redevelopment proposal mitigates to the greatest extent practical any impact to the historical importance of Converse Hall, a much more important historical resource than CBW. The FAHC Inpatient Building design was moved further from Converse Hall which is why it now is located close to the building footprint of CBW.
- The University will properly document, using the applicable standards of the Historic American Building Survey (HABS) all of the design, features, construction techniques and examples of materials at the CBW buildings. The University will store this documentation at the Bailey Howe Library, Special Collections, so that it can be available to historians, architectural historians and others interested in Burlington's architectural history.
- After demolition of CBW, FAHC will redevelop the site for their Inpatient Building.

- This plan will be compatible with the historical integrity and will enhance the architectural character of the immediate area by avoiding direct impacts to Converse Hall.
- FAHC plans to start construction as soon as all permits are obtained and CBW is demolished.
- The time between demolition and commencement of new FAHC construction is planned to be less than six months, however it is contingent on obtaining all necessary permit approvals. The University will be able to commence construction of the redevelopment plan only after all phases of the FAHC construction is substantially complete, in spring of 2019.
- The University will recycle as much material as possible, as part of its commitment to sustainable building practices and policy that all buildings achieve at least LEED Silver certification. Unfortunately the building materials cannot be sold, reclaimed or salvaged as CBW was built with precast concrete panels.

§5.5.3 Stormwater & Erosion Control

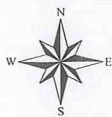
Please find attached an Erosion Prevention Sediment Control Plan for this Project (refer to Attachment 7 – EPSC Plan, dated 6/30/2014). The University will comply with the standards in Article 3, Stormwater & Erosion Control of Chapter 26 of the City Code of Ordinances: Wastewater, Stormwater and Pollution Control.

Summary:

The University believes that this Project conforms to all the applicable sections of the Burlington Comprehensive Development Ordinance. Per the City's Development Review Committee, this project is exempt from major impact review because it does not expand the floor area of an existing building or the structural capacity of existing development, as per §3.5.3 (c).

ATTACHMENTS:

Attachment 3A:	Existing conditions: Orthophoto of the Central Campus Quad Area
Attachment 3B:	Existing conditions: CBW Photographs



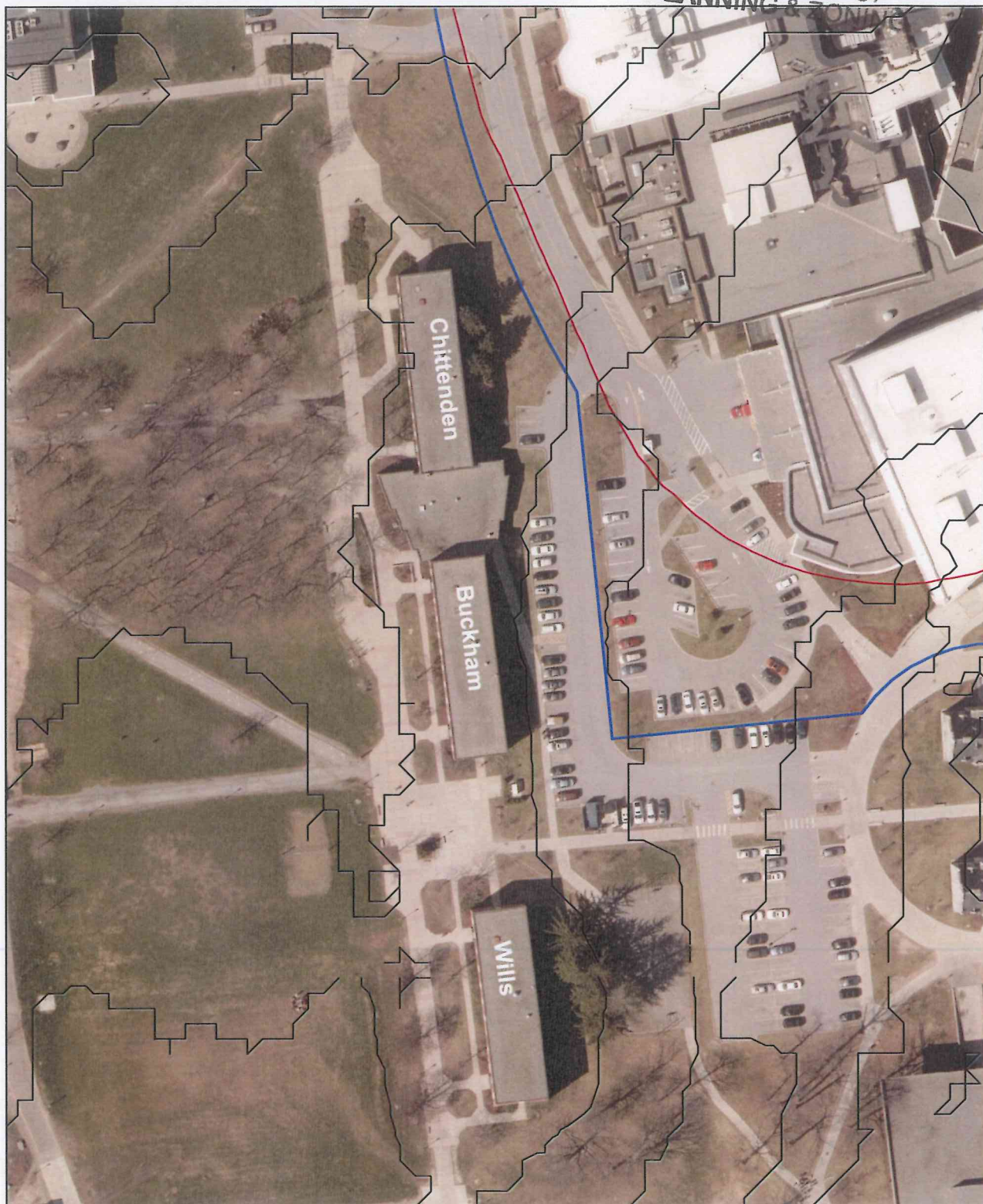
Site Location Map
Chittenden, Buckham & Wills Halls
University of Vermont

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JUN 30 2014

Orthophoto: Spring 2011

DEPARTMENT OF
PLANNING & ZONING



Prepared by Campus Planning Services
Date: 6/30/2014

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



Chittenden, Buckham & Wills (CBW) Residential Complex Demolition
71,73 & 79 Colchester Avenue, University of Vermont
Existing Conditions Photographs



Wills, Buckham and Chittenden, South & West Façades, looking North

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Chittenden, West Façade

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Chittenden, South Entry on West Façade



Chittenden, North Façade



Chittenden, East Façade



Connector Building, East Façade (also looking at Chittenden, South & East Façades)



Connector Building, West Façade



Buckham, South Façade



Buckham, East Façade



Buckham, West Façade



Wills, South Façade



Wills, West Façade



Wills, West Façade, North Entrance



Wills, North Façade



Wills, East Façade

**The University of Vermont
Temporary Housing Replacement Plan
As of June 30, 2014**

The University is expediting the demolition of Chittenden-Buckham-Wills Residential Complex (CBW) to allow construction of Fletcher Allen Health Care (FAHC)'s new Inpatient Building Project.

Although UVM would remain in full compliance* with the 2009 UVM/City Memorandum of Understanding regarding housing, the University plans to keep our housing capacity at the current level of 6,110 beds. In order to achieve this, the University has developed a Temporary Housing Replacement Plan to replace CBW bed capacity. The existing capacity of the CBW is 391 beds (i.e., Chittenden Hall = 130 beds, Buckham Hall = 133 beds, Wills Hall = 128 beds). The following outlines the University's plans to maintain the same number of beds during this interim period as follows:

1. **326 Quarry Hill Road, South Burlington** – UVM entered into a lease with Northeast Quarry, LOLC for the entire building commencing August 15, 2014. The property comprises 32 apartments and will accommodate **126** students. The lease is subject to annual renewal in UVM's sole discretion.
2. **Quarry Hill Road, South Burlington** – UVM is in serious negotiations to occupy an additional building that will provide housing for approximately **150** students. The lease will be for one year, subject to annual renewal in UVM's sole discretion.
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4. **Reconfiguration of Existing Student Housing Capacity** – UVM's current capacity is over 6,110 beds. The University can reconfigure existing housing to accommodate the additional **35** student beds. The University does this on an annual basis to accommodate fluctuating student levels.

Total Temporary Housing Replacement Plan = 391 beds

*UVM is in full compliance with the 2009 UVM/City MOU on Housing and would remain so even if temporary beds were not leased:

	Enrollment	Housing Capacity
Fall 2009	10,156	5,707
Fall 2013	9,764	6,110
DIFFERENCE	(392)	403

ATTACHMENT 4 - UVM Temporary Housing Replacement Plan

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JUN 30 2014

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PLANNING & ZONING

GREEN MOUNTAIN WALKWAY

The Green Mountain Walkway is a pedestrian avenue and connective green space that creates a system of linkages through the core of the campus to Trinity District to the north and Redstone Campus to the south. Where University Place represents the historic heart of the campus, Green Mountain Walkway has a more contemporary context, which is reflected in the arcing form of the walkways, its new open spaces, lighting and site furnishings.

The Green Mountain Walkway begins at the north edge of the Main Street North District on Colchester Avenue, where the existing access road to Fletcher Allen Health Care has been realigned to allow the walkway to follow a more direct route. The Green Mountain Walkway moves through the C-B-W Quadrangle with a sequence of gently-arcing walkways that strike a counterbalance with the existing architecture grid of the quad. A secondary system of pathway traces the perimeter of the C-B-W quad, and cuts through it laterally and diagonally. At the Bailey/Howe Library, the Green Mountain Walkway forks, with one branch arcing through the Bailey/Howe Quadrangle, and another towards the foot of the hill at the Aiken Center, where it meets up with a pathway that moves diagonally through the Dudley H. Davis Center Oval, to connect with the Redstone Walkway to the south and the University Gateway Arboretum to the east.

The crescent formed between the arcing and the straight sections of the Green Mountain Walkway in the C-B-W Quad becomes a lawn of gently tilted planes suitable for informal games and lying out in the sun. The east face of the landforms is steeper, and acts as a seating edge looking out onto the walkway.

The convergence of the Green Mountain Walkway and the pathway leading to Converse Hall is marked with a plaza that is envisioned as a center of social and residential life in the C-B-W Quad.

The arcing paths of the Green Mountain Walkway are lined on either side by a row of deciduous trees. The open spaces on either side of the walkway are planted with more formal groupings of trees, and open glades.

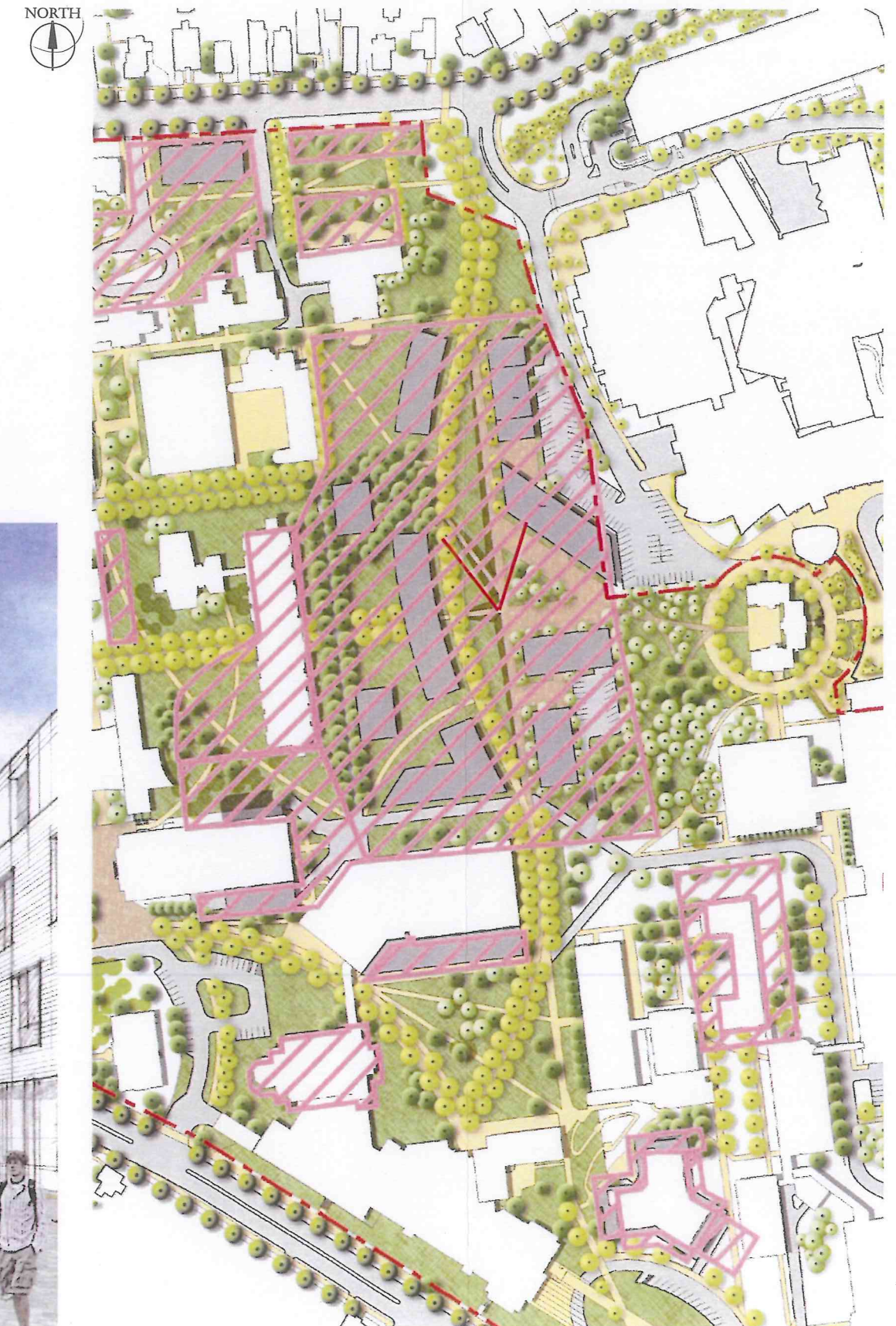
The Green Mountain Walkway is tied together by a consistent and distinct language of materials and site furnishings.

Green Mountain Walkway is also being considered as a possible future location for some of the food vendors currently located on University Place due to the future transformation into a high pedestrian activity zone. This location, convenient to both the core campus and Trinity District along with electrical water hook-ups, would be an excellent place for outdoor eating and informal gathering.

The illustrative plan and perspective represent preliminary concepts only.

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JUN 30 2014
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PLANNING & ZONING

GREEN MOUNTAIN WALKWAY



Burlington Design Advisory Board

149 Church Street, City Hall

Burlington, VT 05401

<http://www.burlingtonvt.gov/PZ/Boards/Design-Advisory-Board/>

Telephone: (802) 865-7188

(802) 865-7195 (FAX)

Matthew Bushey, Chair

Todd Thomas, Vice Chair

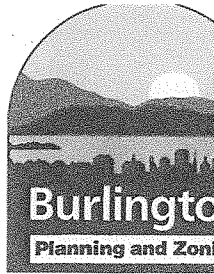
Sean McKenzie

Steve Offenhartz

Ronald Wanamaker

Jeremy Gates, Alternate

Phil Hammerslough, Alternate



MINUTES BURLINGTON DESIGN ADVISORY BOARD July 22, 2014

Board members present: Sean McKenzie, Ron Wanamaker, Phil Hammerslough, Jeremy Gates.

Board members absent: Matthew Bushey, Steven Offenhartz, Todd Thomas

Staff members present: Mary O'Neil, Scott Gustin

Agenda items:

I. ZP14-1321CA, 111 Colchester Avenue (FAHC)

New Inpatient Building, parking and landscaping improvements

Representatives for FAHC included David Keelty, David G. White, Jerry Schweitzer, Jason Williams, and Gail Henderson-King of White & Burke.

Public Comment and submission materials from Martha R. Lang. Concern about:

1. Stormwater
2. Property line adjustment
3. Historic buildings affected
4. Student Housing

Motion by Sean McKenzie: I move we recommend approval and forward to the Development Review Board with staff comments at the end of the staff report.

2nd – Ron Wanamaker

Vote 4-0.

II. ZP 14-1320CA/CU; 10 University Place

Demolition of Chittenden, Buckham, Wills Halls, landscaping.

Motion by Sean McKenzie: I move to recommend approval to the Development Review Board with staff recommendations.

2nd – Phil Hammerslough.

Vote 4-0.

III. Annual Reorganizational Meeting. See attached.

Design Advisory Board
Terms of Office FY 2015
Organizational Meeting July 22, 2014

Member	Appointed	Term expires
Ron Wanamaker	12.15.2003	6.30.2016
Sean McKenzie	10.25.2004	6.30.2017
Matthew Bushey**	4.16.2012	6.30.2016
Steven Offenhartz*	9.13.2010	6.30.2017
Todd Joseph Thomas	1.12.2011	6.30.2015
Jeremy Gates (A)	7.15.2013	6.30.2017
Phil Hammerslough (A)	4.16.2012	6.30.2014

*Chair FY 2014

**Vice Chair FY 2014

*** Clerk (none appointed)

Δ Representative to the Zoning Ordinance Committee (none appointed 2014)

Terms are for three years.

Chair, Vice Chair and Clerk shall be voted on annually; before May 1st and preferably around Town Meeting Day.

Action taken July 22, 2014

Chair: Matthew Bushey

Vice-Chair: Todd Thomas

Clerk: none appointed

Representative to the Zoning Ordinance Committee: Phil Hammerslough