

Burlington Development Review Board

Department of Permitting & Inspections

645 Pine Street
Burlington, VT 05401

www.burlingtonvt.gov/DPI/DRB

Telephone: (802) 865-7188

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AJ LaRosa
Caitlin Halpert
Geoff Hand
Sean McKenzie
Brad Rabinowitz
Leo Sprinzen
Chase Taylor
Marina Campbell, (Alternate)
Evan Gould, (Alternate)



Development Review Board

Tuesday, March 19, 2024, 5:00 PM

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

Please click the link below to join the webinar:

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

Webinar ID: 832 2569 6227

Passcode: 969186

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

1. Agenda

2. Communications

3. Minutes

4. Consent

4.1.

**ZP-24-51; 187 South Champlain Street (RH, Ward 3) City DPW Parks Rec Dept / Max Madalinski
Reapplication for expired permit ZP-22-466 for renovations to City Pocket Park. (Project Manager, Mary O'Neil)**

5. Public Hearing

5.1.

**ZP-24-50; 75 Briggs Street (E-LM, Ward 5) Meraki Realty Holdings, LLC / Andrea Charest
Reapplication of proposed construction of new health club, climbing, and community center including
related site improvements. (Project Manager, Scott Gustin)**

6. Certificate of Appropriateness

6.1.

**ZP-24-31; 750 Pine Street (EL-M, Ward 5) James Edward Company, LLC / Susan Nostrand
Proposed Master Sign Plan for the three new businesses located in the Fourbital Factory. (Project
Manager, Scott Gustin)**

6.2.

ZP-24-59; 44 Wright Avenue (RL-W, Ward 5) 44 Wright, LLC / Arthur Chukhman

Rehabilitation of existing triplex, adding a unit within, and constructing detached triplex in the rear for a total of 7 units. (Project Manager, Mary O'Neil)

7. Adjournment

8. Informational and Non-Discrimination Statements

8.1.

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

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at (802) 540-2505.

Department of Permitting and Inspections

Zoning Division

645 Pine Street

Burlington, VT 05401

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

Telephone: (802) 865-7188

(802) 865-7195 (FAX)

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



MEMORANDUM

To: Development Review Board

From: Mary O'Neil, AICP, Principal Planner

Date: March 19, 2024

RE: 187 South Champlain Street; ZP 24-51

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

File: ZP-24-51

Location: 187 South Champlain Street

Zone: FD5 **Ward:** 5S

Parking District: Mixed Use Multi Modal

Date application accepted: February 15, 2024

Applicant/ Owner: Max Madalinski, Burlington Parks, Recreation and Waterfront Department / City of Burlington

Request: Re-application for expired permit ZP-22-466: Renovations to City Pocket Park.

Includes: Replacement and relocation of playground, installation of park light and associated electrical, installation of tables/benches/bike racks, grading, and construction of a concrete walkway and seating area.

Background:

- **Zoning Permit 22-466;** Renovations to City Pocket Park. Includes: Replacement and relocation of playground, installation of park light and associated electrical, installation of tables/benches/bike racks, grading, and construction of a concrete walkway and seating area. Approved November 2022; permit expired without exercise.
- **Zoning Permit 98-429;** Improvements to existing park including play equipment, lighting, benches, etc. April 1998.

Overview:

This is a reapplication for a permit that expired without commencement. It was previously approved by the DRB in November 2022.

187 South Champlain Street is within Form District 5, and identified as a Civic site. Article 6 does not apply; rather **Sections 14.3.6 – G Pocket Park** and **14.7.1(f)** of Article 14 (Form Code.)

The **Design Advisory Board** reviewed the application at their October 25, 2022 meeting and voted unanimously to recommend approval of the project.

All required inter-departmental consultations have occurred. Several NPA appearances have supported this project.

Recommended motion: Consent approval, per the following Findings and Conditions:

I. Findings

Article 5: Citywide General Regulations

Section 5.2.1 Existing Small Lots.

~~187 South Champlain Street is an existing lot. The 1919 Sanborn Map illustrates a single parcel (included 189-191 South Champlain Street) with three residential dwellings and a large concrete and iron-clad outbuilding. By the 1930s, the single dwelling at 187 South Champlain Street was a duplex, and the rear outbuilding was gone. By 1952, the duplex at 187-189 was gone, and a playground area is noted on the site. **Affirmative finding.**~~

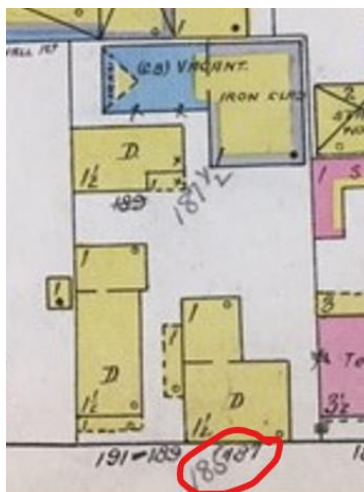
This section has been deleted by warned amendment ZA-24-02,

Section 5.2.2 Required Frontage or Access

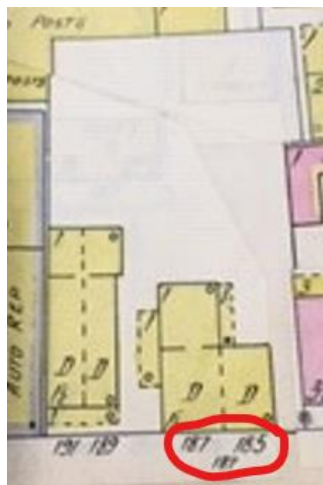
187 South Champlain Street has direct access to the public way and city sidewalks. **Affirmative finding**

Section 5.2.3 Lot Coverage Requirements

See Section 14.3.6. (b), Civic Spaces.



Sanborn map 1919



June 1930



July 1952

Section 5.2.4 Buildable Area Calculation

Not applicable.

Section 5.2.5 Setbacks

See Section 14.3.6.G.

Section 5.2.6 Building Height Limits

No buildings are proposed. Not applicable.

Section 5.2.7 Density and Intensity of Development Calculations

Not applicable.

Part 3: Non Conformities

Not applicable.

Sec. 5.4.8 Historic Buildings and Sites

Not applicable

Section 5.5.1 Nuisance Regulations

As City property, parcel upkeep and monitoring will be consistent with other public parks.

Affirmative finding

Section 5.5.2 Outdoor Lighting

Lighting may not exceed 0.1 footcandles measured 20' beyond the property line. The applicant has provided a revised photometric that assures compliance. **Affirmative finding**

Section 5.5.3 Stormwater and Erosion Control

AS the installation of the stone base/rubberized playground surface will disrupt more than 400 sf, an EPSC is required. Approval of the EPSC was issued February 14, 2024.

Affirmative finding.

Section 5.5.4 Tree Removal

Not applicable.

Article 7: Signs

The proposed Park identification sign is consistent with approved Master Sign Plan 18-0620MP (ZP18-17 OG).

Affirmative finding.

Article 14: Plan BTV Downtown Code**Section 14.3.6 Civic Spaces****(a) Purpose & Applicability**

The purpose of this subsection is to provide a diverse palette of parks and other publicly accessible Civic Spaces for use within the Form Districts as essential components of walkable urban environments and vibrant community centers. The standards established in this

Subsection shall be applicable to the development all proposed Civic Spaces within a Form District either independent from or in combination with other forms of development, and shall be considered independent from the standards found within each Form District.

Civic Spaces established in this subsection are intended to be created independent from or in combination with other Civic Space Types and/or Building Types. The process regarding the review of newly proposed, or alteration to existing, Civic Spaces shall be as provided in Section 14.7.1 f).

(b) Civic Space Types:

- i. **Location:** The Form District(s) in which the Civic Space type is allowed.
- ii. **Size:** The range of allowed sizes of the Civic Space type.
- iii. **Frontage:** The relationship along property lines of a Civic Space to Adjacent Buildings or Lots. The front of the Lots attached to or across a Thoroughfare from a Civic Space should face on to the Civic Space to the maximum extent possible.
 - A. **Building.** Lots that are attached to or across a thoroughfare from a Civic Space listed as having a “Building” frontage shall have the front of the Lot Facing on to the Civic Space for a minimum of three quarters of the Civic Space perimeter.
 - B. **Independent.** Lots that are attached to or across a Thoroughfare from Civic Space listed as having an “Independent” frontage may have the front, side street, or rear of the Lot facing on to the Civic Space.
- iv. **Form.** The placement and Disposition of objects within the Civic Space.
 - A. **Natural.** Civic Spaces with a “Natural” character are designed in a natural manner with no formal arrangement of elements.
 - B. **Formal.** Civic Spaces with a “Formal” character have a more rigid layout that follows geometric forms and has Trees and other elements arranged in formal patterns.
 - C. **Informal.** Civic Spaces with an “informal” character have a mix of both Formal and Natural characteristics.
- v. **Coverage.** The allowed proportion of Impervious Surface within the Civic Space type.
- vi. **Typical Facilities:** A list of the typical facilities found within the Civic Space. This list is not intended to be a complete list of facilities allowed nor is it intended that every Civic Space would contain each of the facilities listed. Where allowed, Buildings, Structures, and commercial concessions within a Civic Space Type shall be Accessory to the overall Civic or recreational function of the Civic Space type. Any commercial concessions shall require a license approved by the Parks, Recreation and Waterfront Director or the City Council as applicable.

14.3.6-G Pocket Park

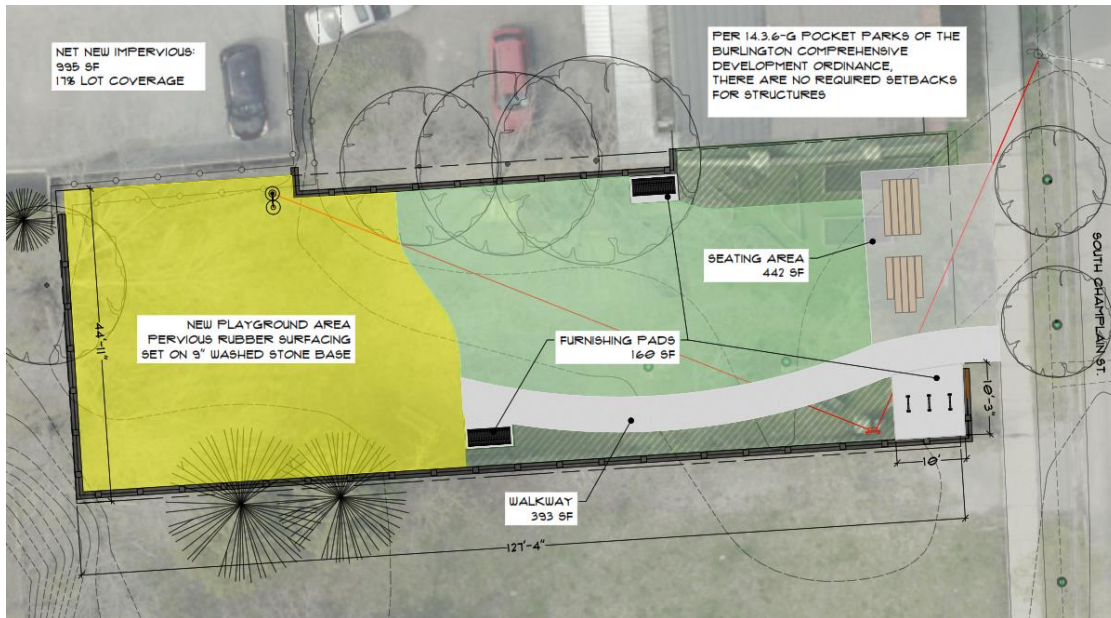
Intent: a small, predominantly green Open Space available for unstructured passive recreation.

Specifications:

Form District	FD5, FD6 (FD5)
Size	500 sf minimum, 0.5 acre maximum (5,835 sf)
Frontage	Independent (faces South Champlain Street)

Character

Formal



There are existing trees within the green belt, and along the abutting property to the north. The improvements will include a gently arcing walkway from an aggregate-surfaced seating area to the playground at the rear of the lot.

Coverage	0% minimum – 50% maximum (17% reported. Rubberized surface over washed stone considered pervious by Stormwater Program.)
Structures	600 sf maximum in aggregate (no structures other than seating area: 442 sf)
Setback for Structures	none
Affirmative finding.	

Section 14.7.1 Applying for a Zoning Permit: Submission Requirements and Review

(c) Application Requirements

ix. A plan for signs, including type, design and dimensions of all existing and proposed ground and/or Building or Structure-mounted signs and/or sign bands.

Submission materials include a plan for a park identification sign, which is consistent with the approved Master Sign Plan for City Parks. (ZP-18-0620MP). **Affirmative finding.**

f) Review and Approval of Civic Spaces and Civic Buildings.

The creation of new Civic Spaces or Civic Buildings, or the Substantial Modification¹ of an existing Civic Space or Civic Building, shall follow the process as defined below. Any other

¹ Section 14.8: Glossary

proposed alteration to an existing Civic Space or Civic Building shall be reviewed and approved by the Administrative officer who shall ensure ongoing compliance with the intent and standards of this Chapter as applicable.

Because of their important civic nature and public use, the design and form of a new or Substantial Modified Civic Space or Civic Building shall be determined after:

- *Pre-application review and consultation with the departments of City Planning, Permitting and Inspections, Community and Economic Development, and Parks, Recreation and Waterfront;*
- *A pre-application Neighborhood Public Meeting pursuant to Section 3.2.1 (d) of the BCDO;*
- *Review and recommendation of the Design Advisory Board; and*
- *Final review and approval by the Development Review Board.*

Consultation with the Departments of Permitting and Inspections (8.17.2022)

CEDO (9.22.2022),

Parks, Recreation and Waterfront (applicant team);

Confirmation by email of consultation with the Office of City Planning (rec'd 10.14.2022.)

The application includes confirmation of NPA attendance as follows:

- NPA Wards 2-3 October 14, 2021 and May 12, 2022
- NPA Ward 5 October 21, 2021 and April 19 or 21, 2022
- NPA Ward 6 October 7, 2021 and May 5, 2022.

Affirmative finding

In its discretion to approve a new Civic Space or Civic Building, the Development Review Board, after a Public Hearing, shall consider and reach an affirmative finding on each of the following:

- i. *Conformance with the adopted land use and development plans for the area as identified in the Municipal Development Plan;*
- ii. *Consistency with:*
 - A. *The purpose of this ordinance;*
 - B. *The intent of the Form District where the project is located;*
 - C. *The purpose of Civic Spaces generally; and*
 - D. *The intent of the Civic Space Type being proposed; and*

Substantial Modification: Any demolition, deconstruction, relocation, rehabilitation, or redevelopment of an existing Building, Structure, Frontage, Development, Improvement, Site, Lot or other appurtenance thereto that, as determined by the Zoning Administrative Officer:

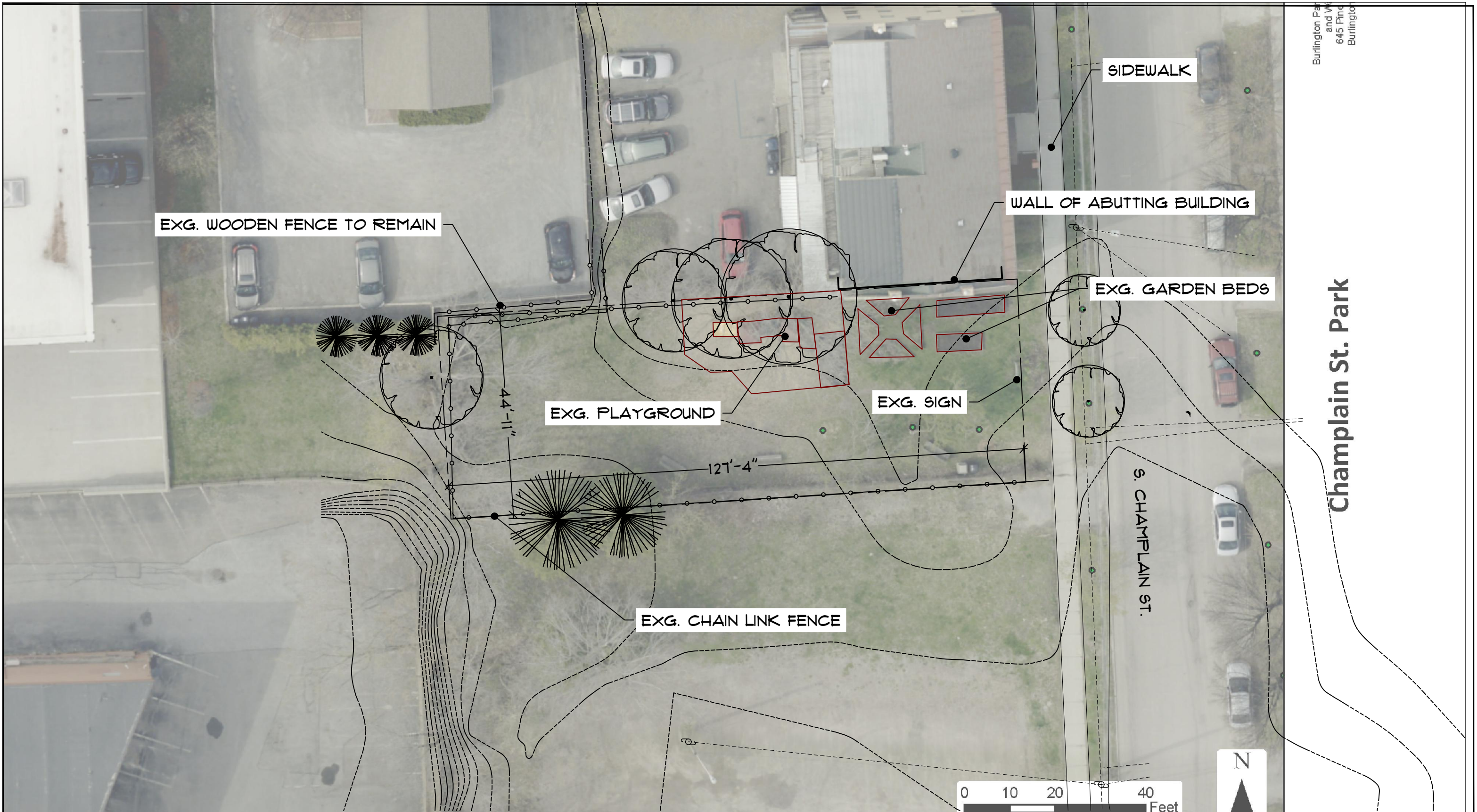
1. Exceeds fifty percent (50%) or more of the pre-development assessed value of the Structure or Building;
2. Involves an improvement or modification of fifty percent (50%) or more of the Lot Area exclusive of any Building or Structure; or;
3. Modifies thirty percent (30%) or more of the Building Façade located within the maximum required Front Setback.

iii. *That the proposed Civic Space or Civic Building as designed provides a positive public benefit and enhancement to the community and the context within which it is proposed.*
Affirmative finding with DRB concurrence.

II. Conditions of Approval

1. Standard Permit Conditions 1-15.

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



Burlington Park
and Waterfront
645 Pine Street
Burlington, VT 05401

Champlain St. Park

20

0

20

40

SCALE: 1" = 20'

EXG. CONDITIONS

Champlain St. Park Rehab

187 South Champlain St, Burlington, VT 05401

BURLINGTON PARKS RECREATION WATERFRONT

645 PINE STREET, SUITE B

BURLINGTON, VT 05401

(802) 864-0123

DESIGNED
MWM

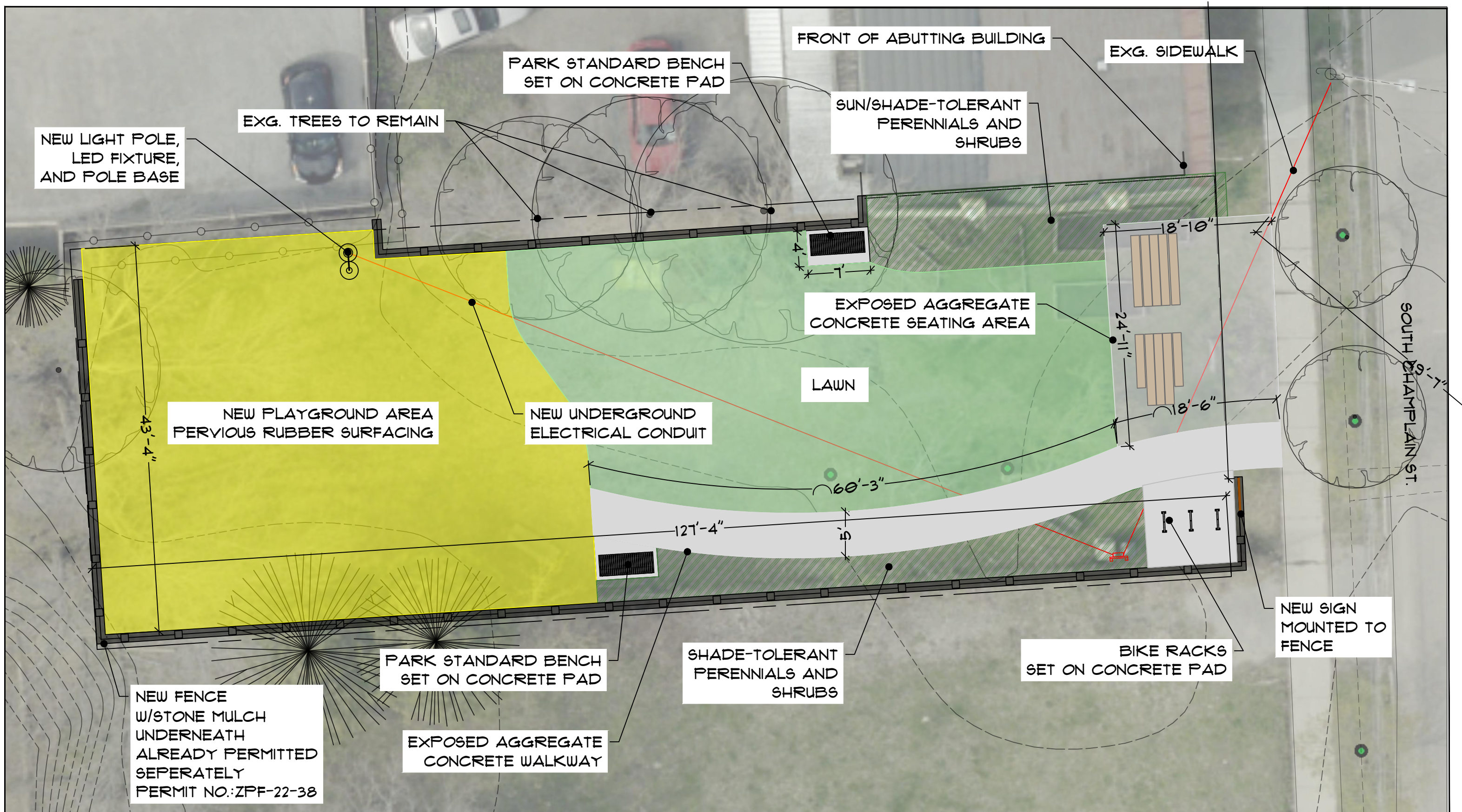
DRAWN
MWM

DATE
9/29/22

SCALE
1"=20'

DRAWING NO.
SHEET 1 OF 4

Page 10 of 169



10 0 10 20

SCALE: 1" = 10'

OVERALL SITE PLAN

Champlain St. Park Rehab

187 South Champlain St, Burlington, VT 05401

**BURLINGTON
PARKS
RECREATION
WATERFRONT**

645 PINE STREET, SUITE B
BURLINGTON, VT 05401
(802) 864-0123

DESIGNED MWM	SCALE 1"=20'
DRAWN MWM	
DATE 9/29/22	DRAWING NO. SHEET 2 OF 4



10

0

10

20

SCALE: 1" = 10'

IMPERVIOUS COVERAGE

Champlain St. Park Rehab

187 South Champlain St, Burlington, VT 05401

BURLINGTON
PARKS
RECREATION
WATERFRONT

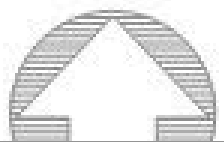
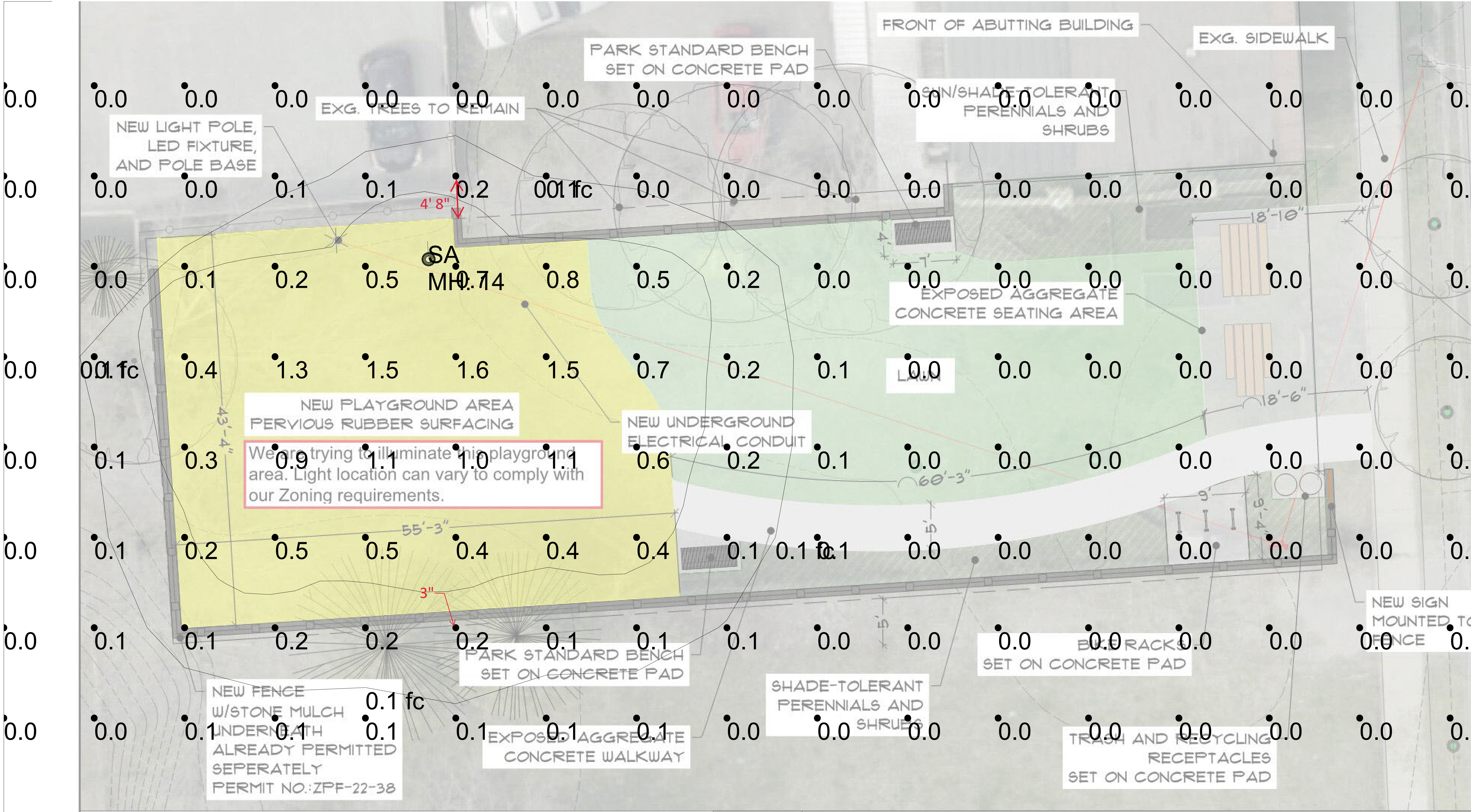
645 PINE STREET, SUITE B
BURLINGTON, VT 05401
(802) 864-0123

DESIGNED MWM	
DRAWN MWM	SCALE 1"=20'
	DRAWING NO.
DATE 9/29/22	SHEET 3 OF 4

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.15	1.6	0.0	N.A.	N.A.

Luminaire Schedule (note fixture catalogue numbers are not complete)					
Type	Qty	Lum. Lumens	LLF	Lum. Watts	Description
SA	1	2493	0.900	40	UCM2-ANG-36L-325-3K7-4W-HS

- NOTES:
- 1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
 - 2) CALCULATIONS MAY OR MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
 - 3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED.
 - 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
 - 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
 - 6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
 - 7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APPEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.



PHOTOCONTROL RECEPTACLE
(TWIST LOCK) SUPPLIED AND
INSTALLED BY A.A.L.
PHOTOCELL BY OTHERS
(SPECIAL)

NOTE:
1) The city / state of this installation is **BURLINGTON, VT.** △
which has been designated as a **100 mph** wind zone
by the AASHTO 2001, 4th. Edition wind map. The
maximum banner size of the banners **MUST NOT TO**
EXCEED 6.00 square feet. The number of banners that may
be use per pole is **1** set. The use of any other appendages
may severely affect the loading of the pole. **AAL** will
not be held liable for damages or injuries that result
from banners or appendages attached to the pole other
than what is specified on this drawing.

TYPE
CATALOG NUMBER
UCM2-STR-36L
325-4K7-3-CL-SLA17-PCR
DB6-4R15'2"-226-PTA-LAB
(2)BBS4-18 △

21A-1216

**FINISH: POLYESTER POWDER
COAT.**

AAL COLOR: **BLS**

TO MATCH:

PROVIDE A SAMPLE COLOR CHIP

LAMPING

LAMP TYPE **LED**

WATTAGE **40 watts**

VOLTAGE **120-277V**

ANCHOR BOLTS

QTY **4**

SIZE **3/4" X 24" X 3"**

BOLT CIRCLE **10"**

PROJECTION **3 1/2"**

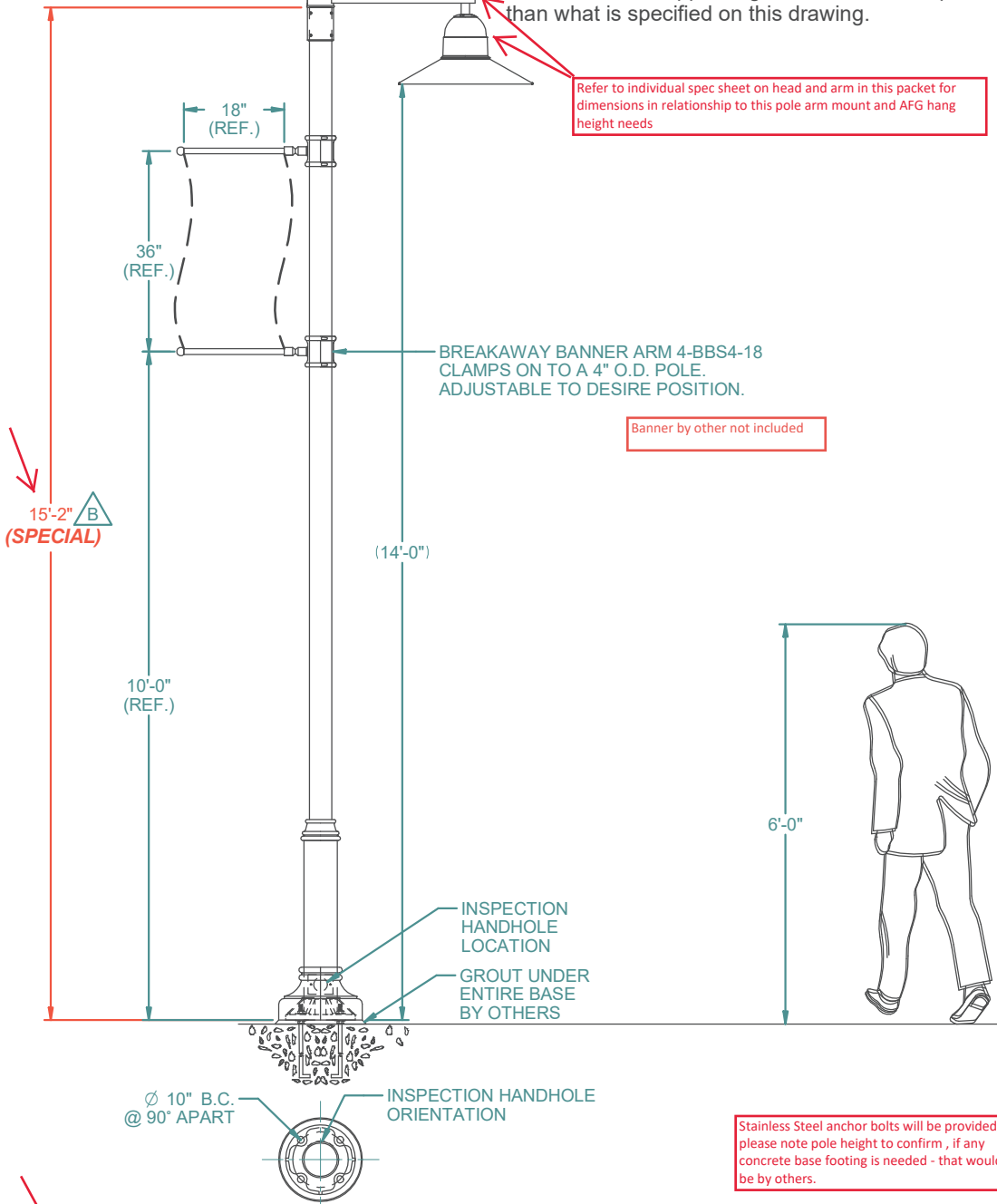
LEVELING NUTS AND WASHERS
MUST BE INSTALLED UNDER ALL
BASES

ONE APPROVED DRAWING
MUST BE RETURNED TO A.A.L.
BEFORE THIS PRODUCT CAN BE
FABRICATED

**Note: For locations near saltwater,
clear anodize coating is the suggested
application. This configuration will
need to be requested during order
entry.**

**WARNING: THIS FIXTURE MUST
BE GROUNDED IN ACCORDANCE
WITH LOCAL CODES OR THE
NATIONAL ELECTRICAL CODE.
FAILURE TO DO SO MAY RESULT
IN SERIOUS PERSONAL INJURY.**

***ARCHITECTURAL AREA LIGHTING
ASSUMES NO RESPONSIBILITY OF
HARM CAUSED BY FAILURES DUE
TO IMPROPER SITE ANALYSIS OR
USAGE OF PRODUCTS OTHER
THAN THEIR INTENDED PURPOSE
AS SHOWN IN THIS DOCUMENT.**



BOTTOM VIEW

(INDICATES POLE IS LAYING DOWN WITH
INSPECTION HANDHOLE FACING UP)

**SIGNED APPROVAL NEEDED PRIOR TO
RELEASE OF ORDER.**

PO#

JOB NAME:

BURLINGTON BIKE PATH 3B



Hubbell Lighting, Inc.



17760 Rowland St.
City of Industry, CA 91748
(626)968-5666

Architectural Area Lighting
Reserves The Right To Change
Manufacturing Processes Without
Notice.

21A-1216

DATE
7/22/2021

DRWN
JMP

DATE

APPRVD

DATE
8/6/2021

REV.
Page 15 of 169



Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:

21A-1216B-UCM2-STR-36L-325-4K7-
3-CL-BLS-SLA17-PCR

Notes:

Type:

SLA21-48538

* see factory drawing for more detail

**UCM2**

ARCHITECTURAL AREA/SITE

FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, 5Q, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral Surge protection: 10k in parallel, 20k in series
- Upgrade Kits



3000K and warmer CCTs only

See Certification Specifications

SPECIFICATIONS**CONSTRUCTION**

- All housing components aluminum 360 alloy, sealed with continuous silicone rubber gaskets
- Standard configurations do not require a flat lens, optional lenses is tempered glass
- All internal and external hardware is stainless steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish is match the luminaire housing

LED/OPTICS

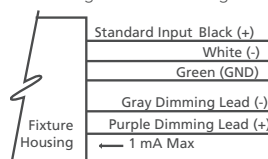
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate
- Optics are held in place without the use of adhesives
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features individual LED optical control based on high performance TIR optical designs.
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL

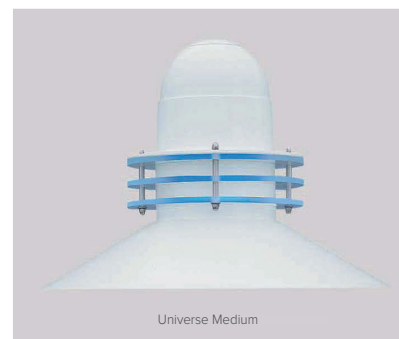
- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control



- Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

CONTROLS

- Egress adapter(s) shall slip over a 4"/100mm DIA. pole with the luminaire or arm slipping over the adapter to add a total of 4.5"/114mm to the overall height. Adapter(s) shall be prewired, independently rotatable 359°, and have a cast access cover with an integral lens and lanyard.

UNIVERSE®**RELATED PRODUCTS**
[UCL2](#)
[UCL2-LK](#)
[UCS](#)
[UCB](#)
CONTROLS (CONTINUED)

- Photocell adapter shall include an internal twist lock receptacle. Photocell by others.
- Egress adapter shall require an auxiliary 120 volt supply for operation of an integral MR16 lamp in the event of emergency. The lamp may be aimed and locked into position with an adjustment range of 15°-45°. Adapter shall have a socket that accepts miniature bi-pin MR16 lamps up to 50 watts, lamp by others

CERTIFICATIONS

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. [See Buy American Solutions.](#)

WARRANTY

- See [HLI Standard Warranty](#) for additional information

KEY DATA	
LUMEN RANGE	1,821–9,336
WATTAGE RANGE	31.52–71.6
EFFICACY RANGE (LPW)	54.5–138.5
INPUT CURRENT RANGE (mA)	260/420/615 mA
WEIGHT	18 lbs 4.1 kg to 27 lbs 12.25 kg
EPA	.53 to 1.05

Submitted by Swaney Lighting	Catalog Number: 21A-1216B-UCM2-STR-36L-325-4K7-3-CL-BLS-SLA17-PCR	Type: SLA21-48538
	Job Name: BURLINGTON BIKE PATH 3B	
Notes:		



UCM2

ARCHITECTURAL AREA/SITE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: UCM2-WND-BLU-FLR-36L-420-4K7-2-CL-BL-WIRSC-SLA2-D-UNV

CATALOG # **UCM2-STR-36L-325-4K7-3-BLS-SLA17-CL**

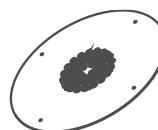
HOUSING

UCM2	LED Quantity	Lumen output	CCT/CRI	Distribution	Finish
UCM2 Universe Medium 2.0	36L 36 LED	260 260mA, 4000 Lumens	AMB Amber-595nm Peak ¹	1 Type I	BLS Black Gloss Smooth
Optional Element		325 450mA Microcore Equivalent	3K7 3000K, 70 CRI	2 Type II	BLT Black Matte Textured
WND Universe Medium with Luminous Window		420 420mA, 6000 Lumens	4K7 4000K, 70 CRI	3 Type III	DBS Dark Bronze Gloss Smooth
SR Universe Medium with Luminous Solid Rings		460 700mA Microcore Equivalent	5K7 5000K, 70 CRI	4W Type IV Wide	DBT Dark Bronze Matte Textured
VSL Universe Medium with Luminous Vertical Slots		615 615mA, 9000 Lumens		5Q Type V Square	GTT Graphite Matte Textured
LUM Universe Medium with Luminous Rings				5W Type V Wide	LGS Light Grey Gloss Smooth
Optional Internal Lens					LGT Light Grey Matte Textured
BLU Blue					PSS Platinum Silver Gloss Smooth
RD Red					VGT Verde Green Matte Textured
GRN Green					WHS White Gloss Smooth
Hood Style					WHT White Matte Textured
ANG Angled Hood					Color Option
BEL Bell Hood					CC ³ Custom Color
FLR Flared Hood					
SKB Skirted Bell Hood					
STR Straight Hood					
Hood Finish					
STS Stainless Steel					
COP Copper					

Mounting	Optional Lens	Options	Mounting Options	Voltage
Pole Mount	CL Clear Lens	HS House Side Shield ⁴	WIR wiSCAPE connectivity	UNV 120-277V
SLA2-D SLA18	DL Diffused Lens ²	SLC Solid Lens Cover	WIRSC wiSCAPE connectivity with Sensor	347 347V
SLA3 SLA20		SF Single Fuse (120, 277, 347)	SCP-8F Sensor Control to 8' Mounting Height	480 480V
SLA4 SLA20A		DF Double Fuse (208, 240, 480)	SCP-20F Sensor Control to 9' to 20' Mounting Height	
SLA7 SLA22D			PCA-C Photocontrol Adaptor Contemporary	
SLA8D SLA24			EPA-C Egress Adaptor Contemporary	
SLA9 TRA7				
SLA10 TRA8				
SLA16 TRA9				
SLA17				
Wall Mount				
WMA5 WMA17				
WMA9D WMA20				
WMA11 WMA24				
WMA12 WMA39				
WMA16				

Notes:

- Wild life friendly
- Diffused Lens is available only with T3 and T5W distribution
- Consult factory for custom color, marine and corrosive finish options
- House side Shield is available only with T1, T2, T3 and T4W distributions



DIMENSIONS

See page 6 for dimensions


Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:
21A-1216B-UCM2-STR-36L-325-4K7-
3-CL-BLS-SLA17-PCR

Notes:

Type:

SLA21-48538

UCM2

ARCHITECTURAL AREA/SITE

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

DELIVERED LUMENS CONTINUED

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
36	325	450mA Microcore Equivalent	None	1	4999	1	0	1	125.0	5092	1	0	1	127.3	5309	1	0	1	132.7
				2	4619	1	0	1	115.5	4705	1	0	1	117.6	4906	1	0	1	122.6
				3	4522	1	0	2	113.0	4606	1	0	2	115.1	4802	1	0	2	120.1
				4W	4572	1	0	2	114.3	4657	1	0	2	116.4	4856	1	0	2	121.4
				1-HS	2825	0	0	0	70.6	2877	0	0	0	71.9	3000	0	0	0	75.0
				2-HS	2467	0	0	1	61.7	2513	0	0	1	62.8	2620	0	0	1	65.5
				3-HS	2416	0	0	1	60.4	2461	0	0	1	61.5	2566	0	0	1	64.1
				4W-HS	2493	0	0	1	62.3	2539	0	0	1	63.5	2647	0	0	1	66.2
				5Q	4799	2	0	1	120.0	4889	2	0	1	122.2	5097	2	0	1	127.4
				5W	4660	3	0	1	116.5	4747	3	0	1	118.7	4950	3	0	1	123.7
			Clear	1-CL	4595	1	0	1	114.9	4681	1	0	1	117.0	4881	1	0	1	122.0
				2-CL	4246	1	0	1	106.2	4325	1	0	1	108.1	4510	1	0	1	112.7
				3-CL	4156	1	0	1	103.9	4234	1	0	1	105.8	4414	1	0	1	110.4
				4W-CL	4203	1	0	2	105.1	4281	1	0	2	107.0	4464	1	0	2	111.6
				1-CL-HS	2596	0	0	0	64.9	2645	0	0	0	66.1	2757	0	0	0	68.9
				2-CL-HS	2268	0	0	1	56.7	2310	0	0	1	57.8	2409	0	0	1	60.2
				3-CL-HS	2221	0	0	1	55.5	2262	0	0	1	56.6	2358	0	0	1	59.0
				4W-CL-HS	2291	0	0	1	57.3	2334	0	0	1	58.4	2434	0	0	1	60.8
				5Q-CL	4412	2	0	1	110.3	4494	2	0	1	112.3	4685	2	0	1	117.1
				5W-CL	4284	3	0	1	107.1	4364	3	0	1	109.1	4550	3	0	1	113.7
			Diffused	3-DL	3581	1	0	1	89.5	3647	1	0	1	91.2	3803	1	0	1	95.1
				5W-DL	3691	1	0	1	92.3	3760	1	0	1	94.0	3920	2	0	1	98.0
	420	6000	None	1	6298	1	0	1	126.4	6416	1	0	1	128.8	6689	1	0	1	134.3
				2	5820	1	0	1	116.8	5928	1	0	1	119.0	6181	1	0	1	124.1
				3	5697	1	0	2	114.3	5803	1	0	2	116.5	6050	1	0	2	121.4
				4W	5760	1	0	3	115.6	5867	1	0	3	117.8	6118	1	0	3	122.8
				1-HS	3559	0	0	0	71.4	3625	0	0	0	72.8	3779	0	0	0	75.9
				2-HS	3109	0	0	1	62.4	3167	0	0	1	63.6	3302	0	0	1	66.3
				3-HS	3044	0	0	1	61.1	3100	0	0	1	62.2	3232	0	0	1	64.9
				4W-HS	3141	0	0	1	63.0	3199	0	0	1	64.2	3335	0	0	1	66.9
				5Q	6047	2	0	1	121.4	6159	2	0	1	123.6	6422	3	0	1	128.9
				5W	5872	3	0	1	117.9	5981	3	0	1	120.1	6236	3	0	1	125.2
			Clear	1-CL	5790	1	0	1	116.2	5898	1	0	1	118.4	6149	1	0	1	123.4
				2-CL	5350	1	0	1	107.4	5449	1	0	1	109.4	5681	1	0	1	114.0
				3-CL	5237	1	0	2	105.1	5334	1	0	2	107.1	5561	1	0	2	111.6
				4W-CL	5295	1	0	3	106.3	5394	1	0	3	108.3	5624	1	0	3	112.9
				1-CL-HS	3271	0	0	0	65.7	3332	0	0	0	66.9	3474	0	0	0	69.7
				2-CL-HS	2858	0	0	1	57.4	2911	0	0	1	58.4	3035	0	0	1	60.9
				3-CL-HS	2798	0	0	1	56.2	2850	0	0	1	57.2	2971	0	0	1	59.6
				4W-CL-HS	2887	0	0	1	57.9	2941	0	0	1	59.0	3066	0	0	1	61.5
				5Q-CL	5558	2	0	1	111.6	5662	2	0	1	113.6	5903	2	0	1	118.5
				5W-CL	5398	3	0	1	108.3	5498	3	0	1	110.4	5732	3	0	1	115.1
			Diffused	3-DL	4511	1	0	1	90.6	4595	1	0	1	92.3	4791	1	0	1	96.2
				5W-DL	4562	2	0	1	91.6	4647	2	0	1	93.3	4845	2	0	1	97.3

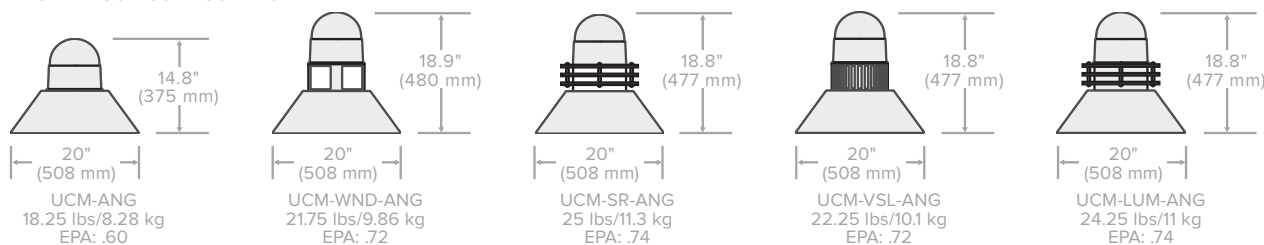
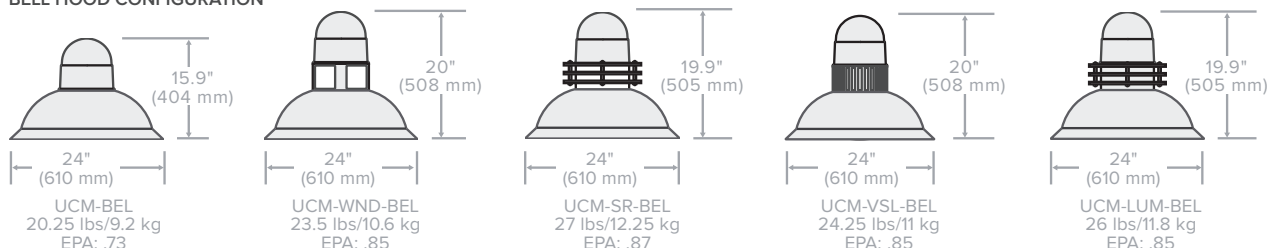
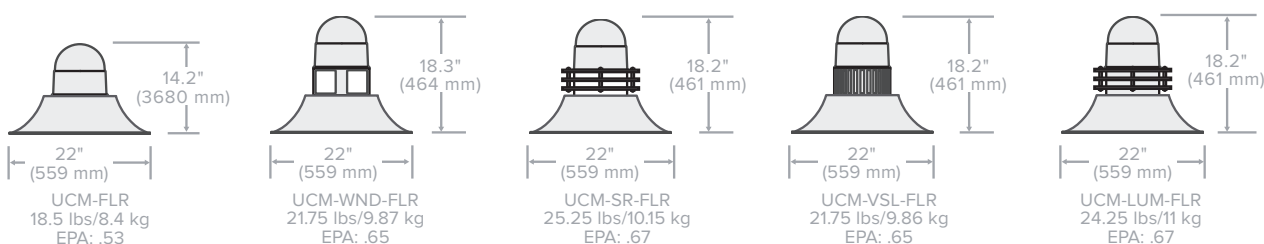
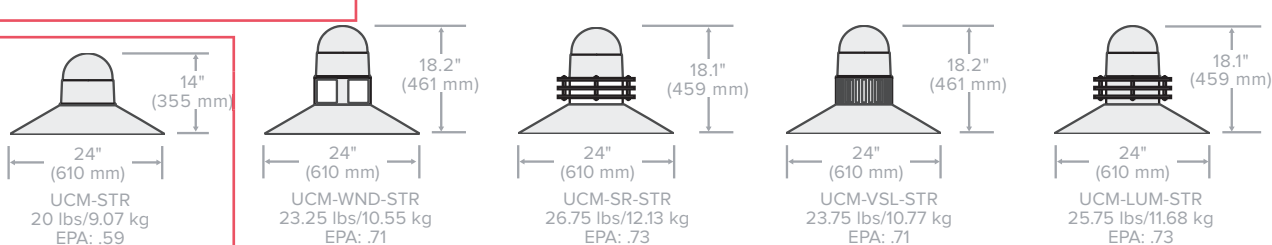
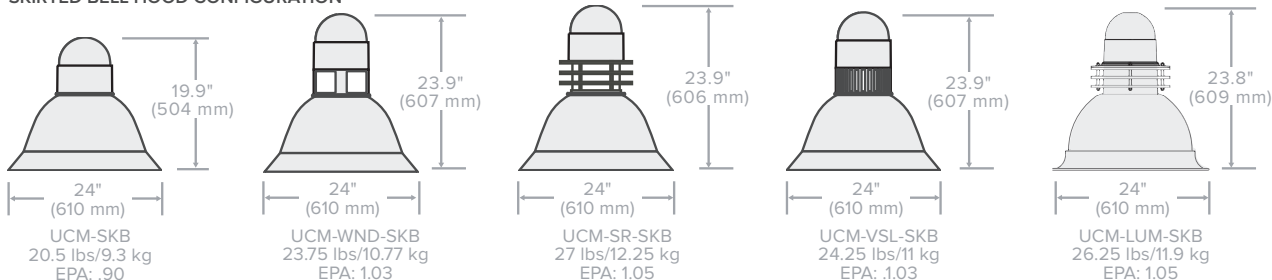
**UCM2**

ARCHITECTURAL AREA/SITE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

DIMENSIONS**ANGLED HOOD CONFIGURATION****BELL HOOD CONFIGURATION****FLARE HOOD CONFIGURATION****STRAIGHT HOOD CONFIGURATION****SKIRTED BELL HOOD CONFIGURATION**



Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:

21A-1216B-UCM2-STR-36L-325-4K7-3-CL-BLS-SLA17-PCR

Notes:

Type:

SLA21-48538

**UCM2**

ARCHITECTURAL AREA/SITE

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PHOTOMETRY

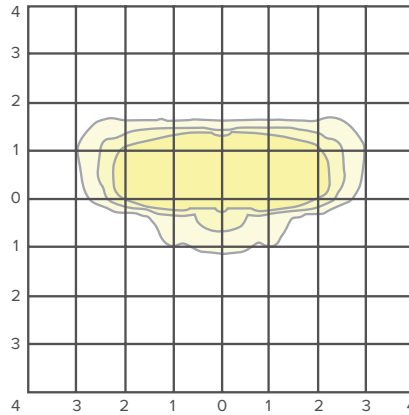
UCM2-ANG-36L-615-4K7-1

LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	8954
Watts	71.59
Efficacy	125.1
IES Type	I
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8046	90%
Downward House Side	908	10%
Downward Total	8954	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8954	100%

ISOFOOT CANDLE PLOT

15' Mounting Height

1.0 FC
0.5 FC
0.2 FC

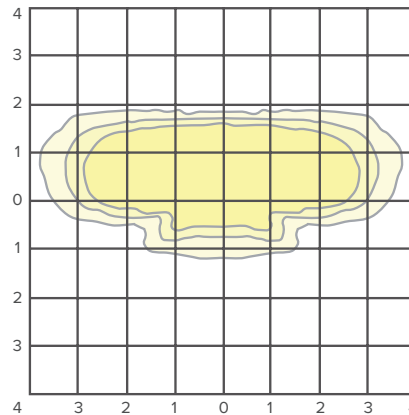
UCM2-ANG-36L-615-4K7-2

LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	8274
Watts	71.59
Efficacy	115.6
IES Type	II
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6942	84%
Downward House Side	1332	16%
Downward Total	8274	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8274	100%

ISOFOOT CANDLE PLOT

15' Mounting Height

1.0 FC
0.5 FC
0.2 FC

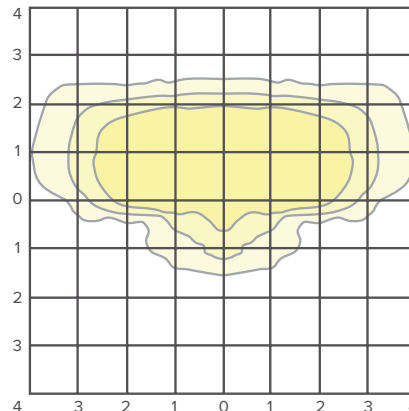
UCM2-ANG-36L-615-4K7-3

LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	8099
Watts	71.59
Efficacy	113.1
IES Type	III
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6800	84%
Downward House Side	1299	16%
Downward Total	8099	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8099	100%

ISOFOOT CANDLE PLOT

15' Mounting Height

1.0 FC
0.5 FC
0.2 FC



Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:

21A-1216B-UCM2-STR-36L-325-4K7-
3-CL-BLS-SLA17-PCR

Notes:

Type:

SLA21-48538

architectural
arealighting

UCM2

ARCHITECTURAL AREA/SITE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

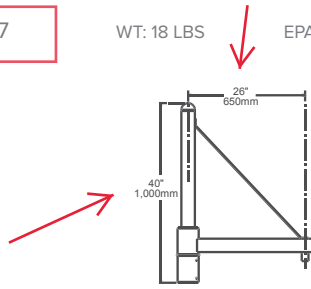
ADDITIONAL INFORMATION CONTINUED

MOUNTING POLE OPTIONS

SLA17

WT: 18 LBS

EPA: 1.50

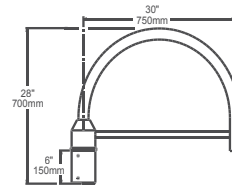


4" POLE

SLA18

WT: 12 LBS

EPA: .85

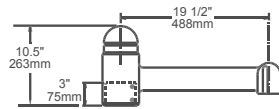


4" POLE

SLA20

WT: 10 LBS

EPA: .70

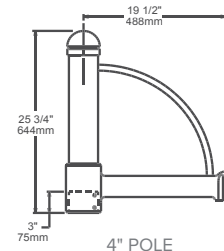


4" POLE

SLA20A

WT: 15 LBS

EPA: 1.30

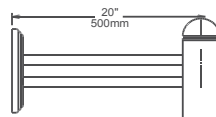


4" POLE

SLA22D

WT: 4 LBS

EPA: .44

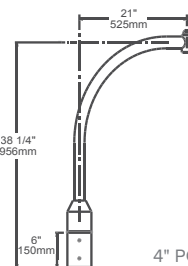


4" POLE

SLA24

WT: 9 LBS

EPA: .85

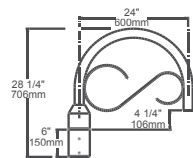


4" POLE

TRA7

WT: 12 LBS

EPA: .90

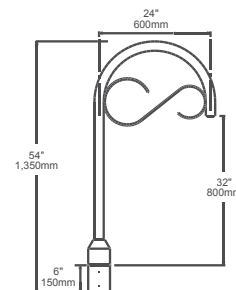


4" POLE

TRA8

WT: 13 LBS

EPA: 1.34



4" POLE



Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:
21A-1216B-SLA17- ARM W/PCR-
BLS-UCM2

Notes:

Type:

SLA21-48538

* see factory drawing for more detail

SLA17/SLA17(5)/SLA17-2/SLA17(5)-2 – Contemporary Arms | TYPE

1. ARM

2. COLOR



SLA17

1. ARM

SLA17 (Slips over 4" pole. Weight: 18 lbs. EPA: 1.50)

SLA17(5) (Slips over 5" pole. Weight: 24 lbs. EPA: 2.20)

SLA17-2 (Twin arms, slips over 4" pole. Weight: 24 lbs.
EPA: 2.05)

SLA17(5)-2 (Twin arms, slips over 5" pole. Weight: 33 lbs.
EPA: 2.09)

2. COLOR

BLS Black Gloss Smooth

BLT Black Matte Textured

DBS Dark Bronze Gloss Smooth

DBT Dark Bronze Matte Textured

GTT Graphite Matte Textured

LGS Light Grey Gloss Smooth

LGT Light Grey Matte Textured

PSS Platinum Silver Smooth

VGT Verde Green Textured

WHS White Gloss Smooth

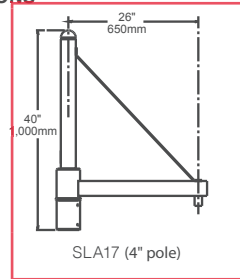
WHT White Matte Textured

Color Option

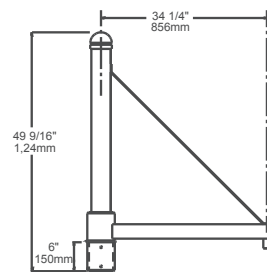
CC* Custom Color

* Consult factory for custom color, marine
and corrosive finish options

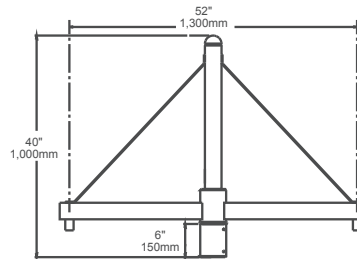
DIMENSIONS



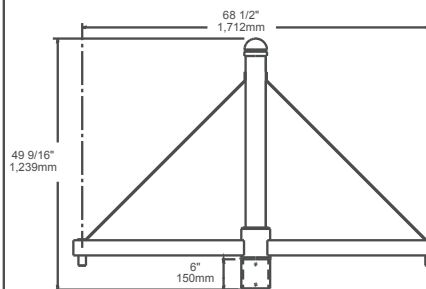
SLA17 (4" pole)



SLA17(5) (5" pole)



SLA17-2 (4" pole)



SLA17(5)-2 (5" pole)

SPECIFICATIONS

The arm shall be of one piece unitized aluminum construction, fully welded and assembled. The slip fitter shall be cast aluminum with an internal wireway and pole stop. The arm shall be prewired with a quick connector for easy installation.

The arm shall have a cast aluminum fitter welded to the top of the arm(s) for attaching the fixture.

The fixture shall be mounted with three stainless steel bolts through the top of the arm fitter into the fixture. The attachment point shall have a silicone pad for sealing the fixture to arm connection.

The arm shall slip over a 4"/100mm or 5"/125mm diameter pole or tenon. The cast aluminum slip fitter shall have six stainless steel cup point set screws for securing the arm to the pole or tenon.



ARCHITECTURAL AREA LIGHTING
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JOB _____
TYPE _____
NOTES _____



Job Name:
BURLINGTON BIKE PATH 3B

Catalog Number:
BBS4-18-BLS

Notes: BOTTOM ARM 10' ABOVE BASE

Type:

SLA21-48538

Accessories

DATE

TYPE

Banner Arms are adjustable see factory drawing

BANNER ARMS BREAKAWAY ARMS

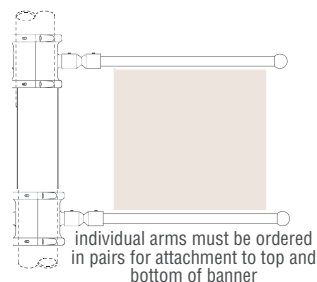
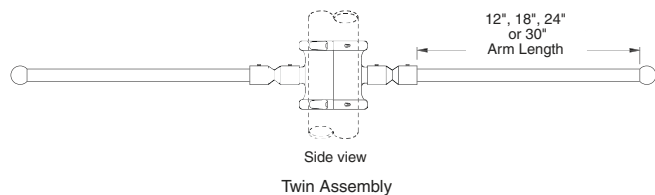
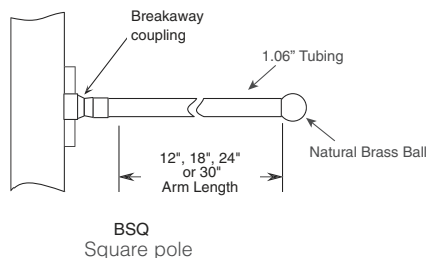
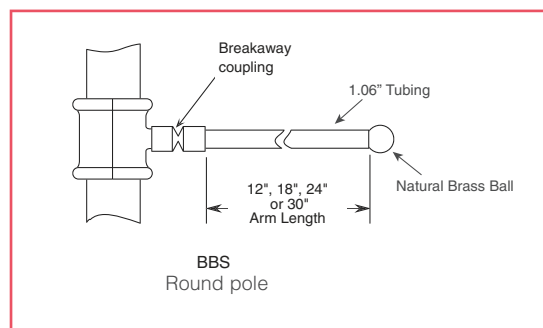
CATALOG NO.
BANNER ARMS

BBS4-12	Single assembly for 4" O.D. pole, 12" arm.
BBS4-18	Single assembly for 4" O.D. pole, 18" arm.
BBS4-24	Single assembly for 4" O.D. pole, 24" arm.
BBS4-30	Single assembly for 4" O.D. pole, 30" arm.
BBS5-12	Single assembly for 5" O.D. pole, 12" arm.
BBS5-18	Single assembly for 5" O.D. pole, 18" arm.
BBS5-24	Single assembly for 5" O.D. pole, 24" arm.
BBS5-30	Single assembly for 5" O.D. pole, 30" arm.
BBD4-12	Twin assembly for 4" O.D. pole, 12" arms. (2)
BBD4-18	Twin assembly for 4" O.D. pole, 18" arms. (2)
BBD4-24	Twin assembly for 4" O.D. pole, 24" arms. (2)
BBD4-30	Twin assembly for 4" O.D. pole, 30" arms. (2)
BBD5-12	Twin assembly for 5" O.D. pole, 12" arms. (2)
BBD5-18	Twin assembly for 5" O.D. pole, 18" arms. (2)
BBD5-24	Twin assembly for 5" O.D. pole, 24" arms. (2)
BBD5-30	Twin assembly for 5" O.D. pole, 30" arms. (2)

CATALOG NO.
BANNER ARMS

BSQ4-12	Single assembly for 4" SQ. pole, 12" arm.
BSQ4-18	Single assembly for 4" SQ. pole, 18" arm.
BSQ4-24	Single assembly for 4" SQ. pole, 24" arm.
BSQ4-30	Single assembly for 4" SQ. pole, 30" arm.

Note: For square poles, Specify banner arms location on pole.



DESCRIPTION

Round AAL banner arms are two-piece clamshell designs for 4"/100mm or 5"/125mm diameter poles. Banner arms for square pole shall be secured to the side of the pole with two bolts. Banner arms may be easily detached from or reattached to the pole.

The breakaway coupling is designed to yield in order to prevent excessive forces on the pole. An internal, stainless steel cable keeps the arm attached to the pole assembly. The wind speed at which the coupling detaches from the pole is determined by the banner type, pole height and vertical location of the banner on the pole. The loading is also affected by securing the banner at the top only, or the top and bottom.

NOTE: Factory consultation required for all Hubbell banner arms to ensure proper pole loading per application wind zone, maximum banner size and perforation considerations.



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JOB _____
TYPE _____
NOTES _____



Sign Description

Small Park Identification Signage are used to identify inner city parks where the medium park identification signage can not be sited, or is determined to not visually fit the environment. This size identification panel should be located at the major entries to the parks, and were possible mounted to the left of the entry, in cases where the mounting conditions can not Various conditions may exist for implementation of these signs, fabricators must complete survey for locations and provide recommendations for mounting based on existing conditions.

Messaging should be limited to the park's name only, and if possible limited to a single line of text, and set in title case.

Material Specifications

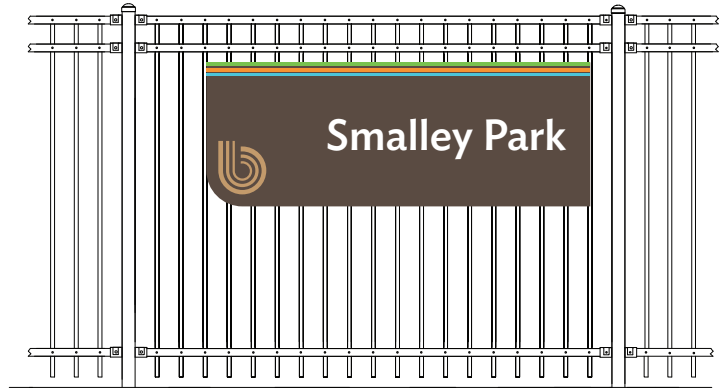
Panel
1/2" pan formed, or fabricated aluminum panel mounted to rail with angle and tamper resistant mechanical fasteners. Panel painted or powdercoated C4, with C5 Logo, and C1, C2, C3 Rules.

Alternate a 1/4" thick solid aluminum panel may be implemented for this sign type. Mechanical fasteners must be tamper resistant, and not penetrate the sign face. All hardware must be painted to match sign base color C1.

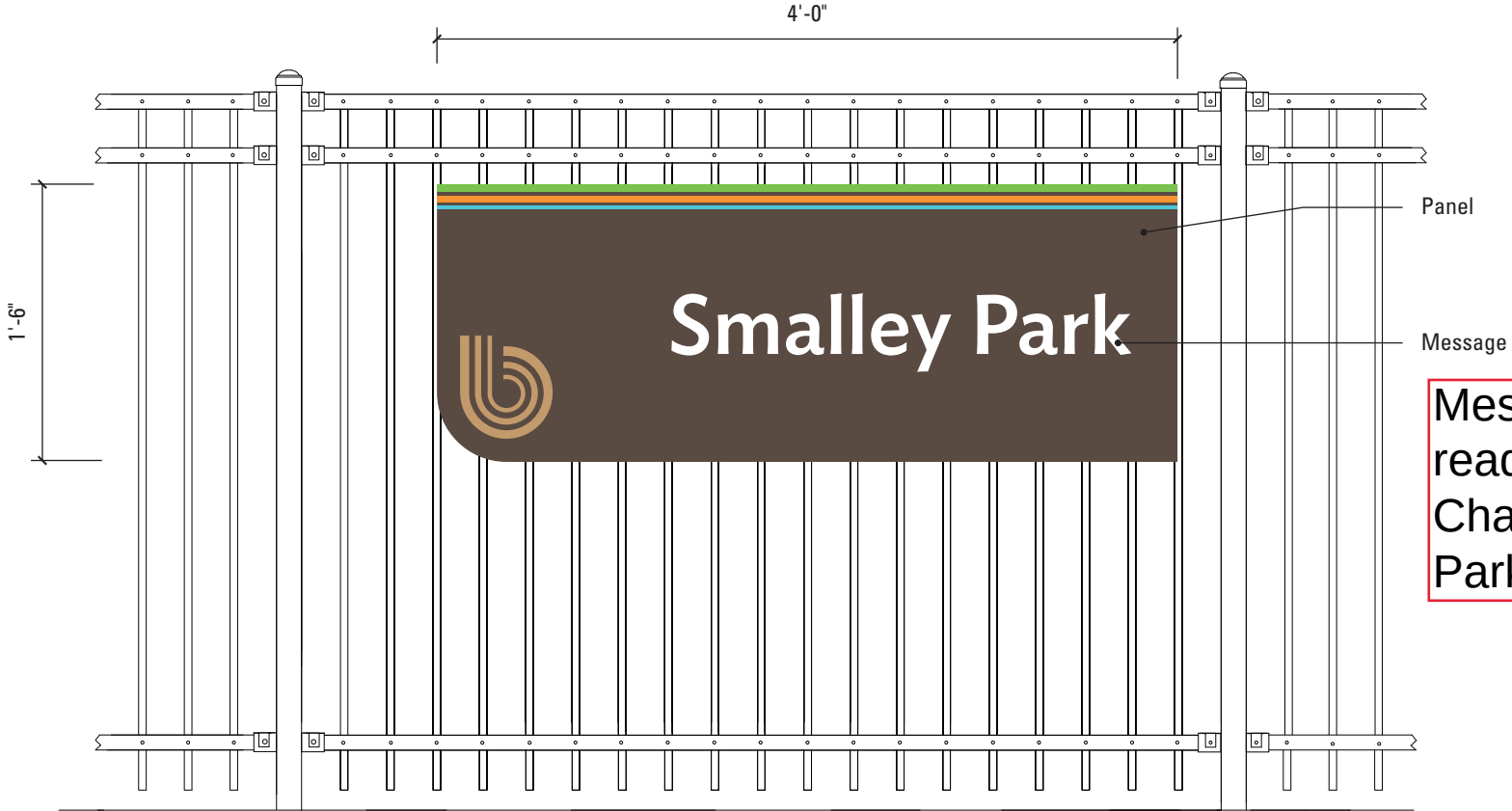
Message
Applied C6 Vinyl set in Ideal Sans Medium



1 Top
Scale: 1" = 1' - 0"

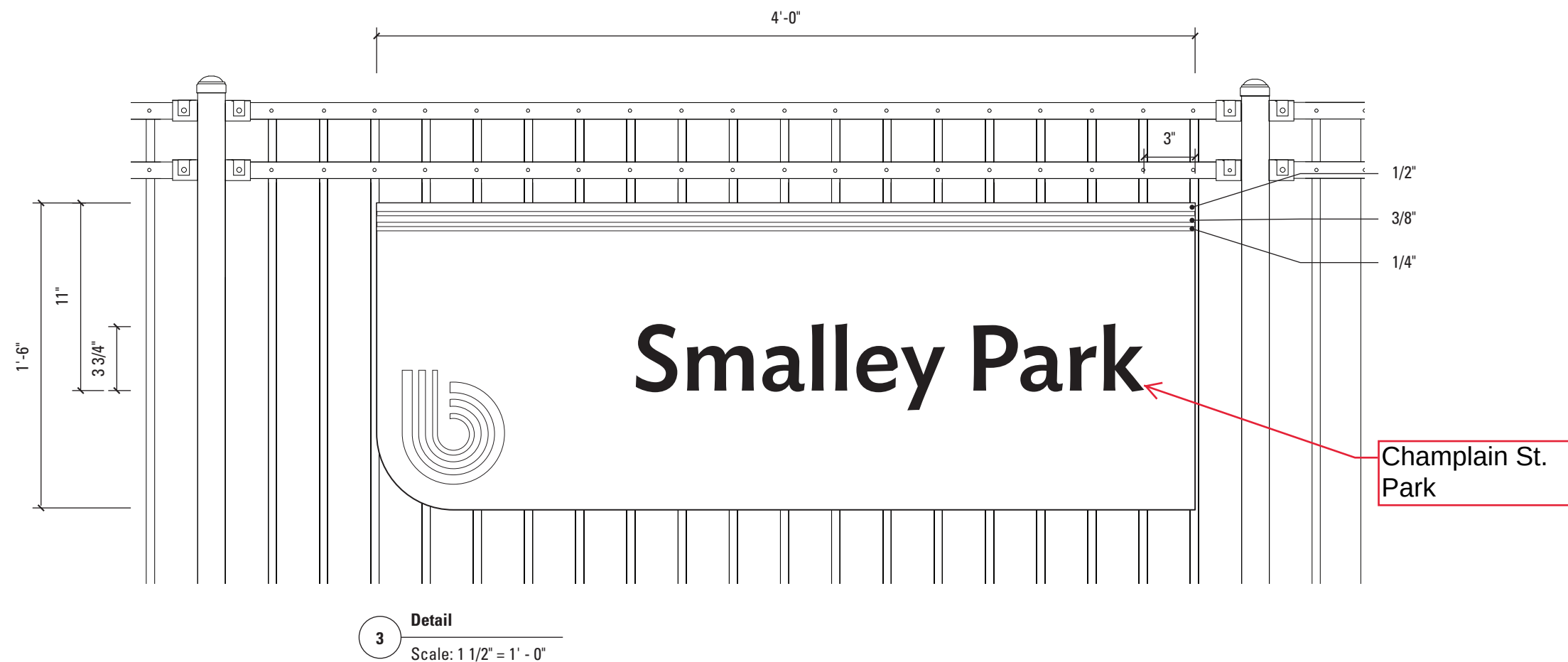
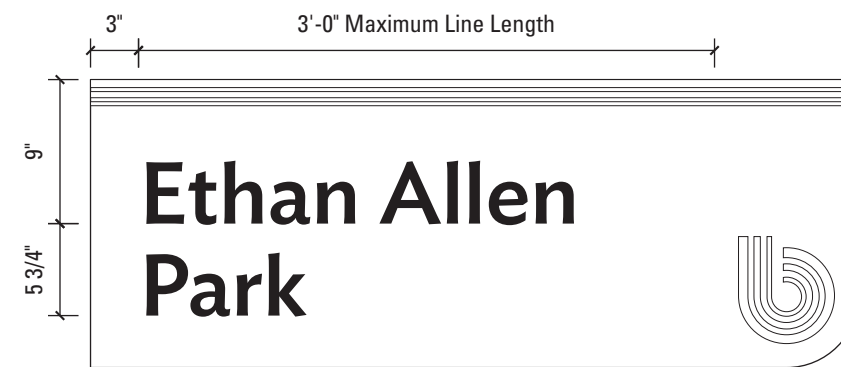
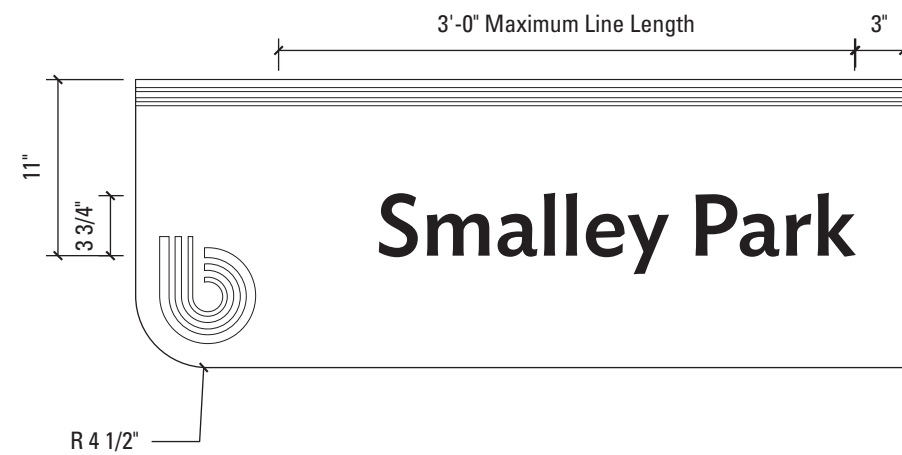


2 Front
Scale: 1/2" = 1' - 0"



3 Front Detail
Scale: 1" = 1' - 0"

PARK IDENTIFICATION: SMALL

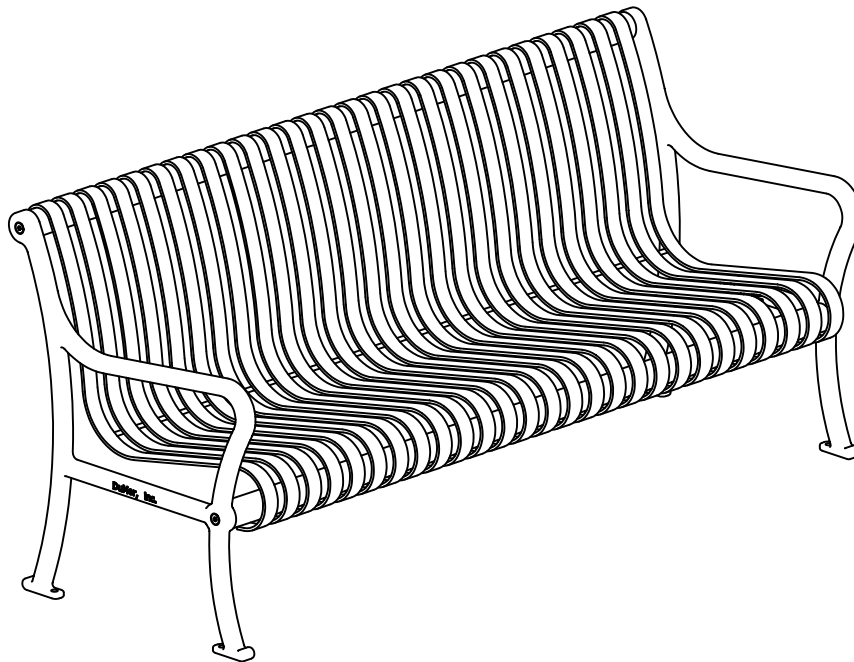
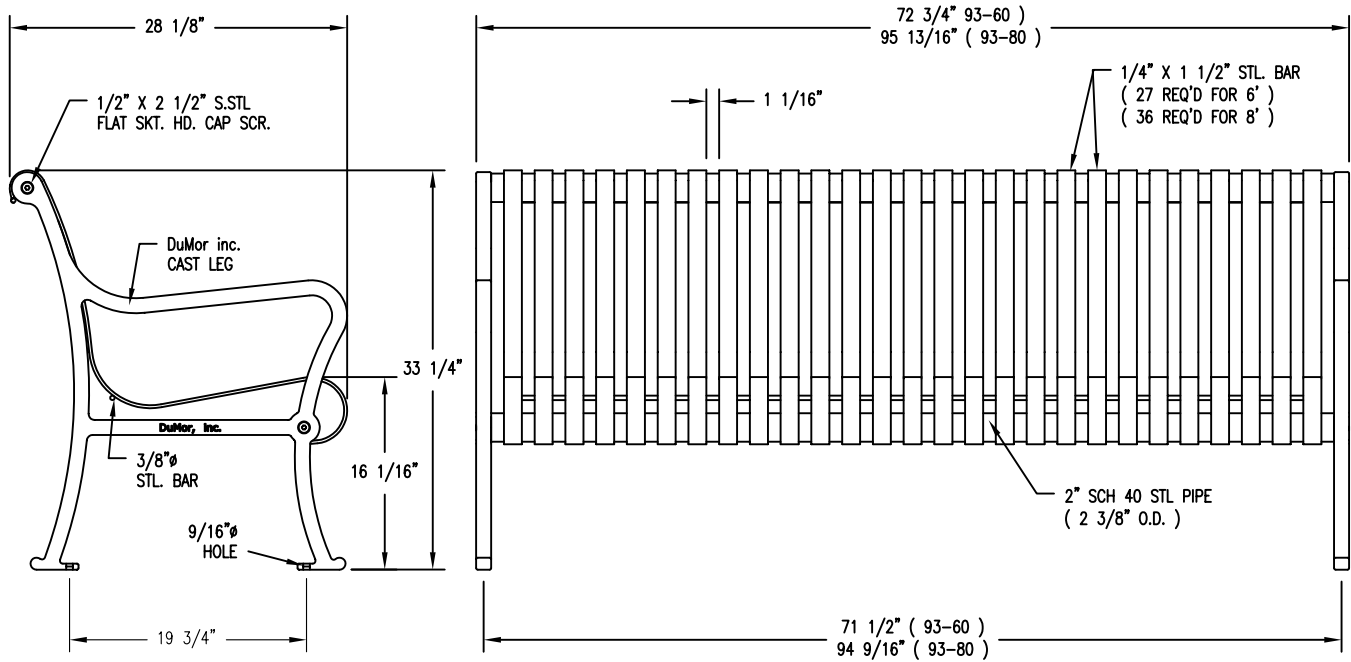


PARK IDENTIFICATION: SMALL

DESIGN INTENT ONLY - NOT FOR CONSTRUCTION

S A S A K I
Sasaki Associates, Inc.
64 Pleasant Street / Watertown, MA 02472 USA
t 617.923.3300 / f 617.924.2748





NOTES:

- 1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- 2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED
- 3.) BENCH IS SHIPPED UNASSEMBLED.

Color: Black

LENGTH OPTIONS

- ☒ 6' BENCH
- ☐ 8' BENCH

DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
DATE DRAWN : 3/22/94
DRAWN BY : AH
DATE REV. : 5/7/08
REV. BY : AH

TITLE :

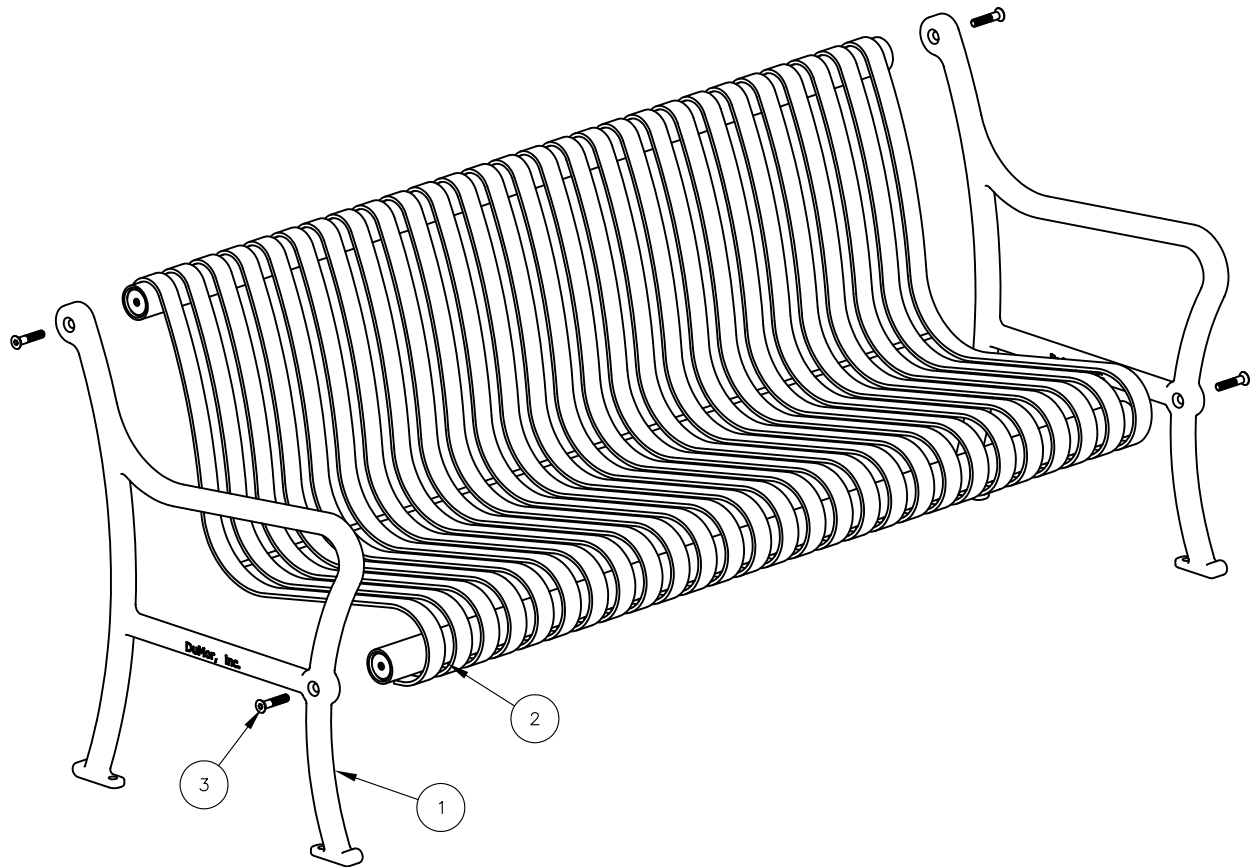
BENCH

REV.
G

DRAWING
NUMBER

93 SERIES

SHEET
1 OF 2



NOTE:

- 1.) DURING ASSEMBLY PROCEDURE;
DO NOT COMPLETELY TIGHTEN HARDWARE.
- 2.) THE ACTUAL PARTS WILL NOT BE NUMBERED:
NUMBERS ONLY APPLY TO DRAWING.

STEP 1:

- USE 2 - PCS. CAST SUPPORT (1)
 1 - PC. 6' ALL STL SEAT ASSEMBLY (2)
 4 - PCS. 1/2" X 2 1/2" FLT. SKT. HD. CAP SCR. (3)
 ATTACH CAST SUPPORT (1) TO 6' ALL STL SEAT ASSEMBLY
 (2) USING HARDWARE (3). TIGHTEN TO SNUG FIT.

STEP 2:

UPON COMPLETION OF BENCH ASSEMBLY SQUARE ALL
 COMPONENTS THEN TIGHTEN ALL HARDWARE.

STEP 3:

MOUNT AND ANCHOR AS SPECIFIED.

ITEM	QTY	PART NO	DESCRIPTION
1	2	0-93-00-02	CAST IRON BENCH SUPPORT
2	1	0-93-60	6' STL SEAT ASSEMBLY
3	4	1-12-065	1/2" X 2 1/2" FLT SKT HD CAP SCR

DuMor, inc.
 P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
 DATE DRAWN : 3/22/94
 DRAWN BY : AWH
 DATE REV. : 5/7/08
 REV. BY : AH

TITLE : BENCH ASSEMBLY

REV.
G

DRAWING
NUMBER 93 SERIES

SHEET
2 OF 2



Agenda for Ward 6 NPA Meeting

Thursday, October 7th, 2021

6:30 PM - 8:30 PM

Hybrid Meeting (Held via Zoom and at the Greek Orthodox Church)

Agenda:

6:30 Public Forum

6:40 Panel discussion about the size and role of the Burlington Police Department

Panel:

Karen Paul, City Councilor

Joan Shannon, City Councilor

Melo Grant, Burlington Police Commission

Oren Byrne, Burlington Police Department

Joseph Carrow, Burlington Police Department

7:10 Burlington Voter Redistricting

Rama Kocherlakota, Ward 6 Rep to the Ad Hoc Committee on Redistricting

Karen Paul, City Councilor

7:25 Burlington City Council Update - Joan Shannon, City Councilor

7:35 Net Zero Energy Revenue Bond Proposal

Darren Springer, Burlington Electric Department

7:50 VT House of Representatives Update

Tiff Bluemle, Chittenden 6-5 Representative

Gabrielle Stebbins, Chittenden 6-5 Representative

8:05 Champlain Pocket Park - Max Madalinski, Burlington Parks, Recreation and Waterfront

Online Meeting Information:

1. Join via Zoom: <https://us02web.zoom.us/j/81027856568> (Meeting ID: 810 2785 6568, No Password)

2. Call in for Zoom audio only: 1-929-205-6099 Meeting ID: 810 2785 6568

3. Watch online via YouTube: for livestream viewing only

<https://www.youtube.com/playlist?list=PLljLFn4BZd2P9f16v7BtN6C9kos1zGEmG>

In-Person Meeting Information:

Greek Orthodox Church, [600 South Willard Street](#), Burlington, VT 05401

Parking entrance is off of Ledge Road on the east side of the Rotary. Overflow parking is at the foot of Willard Street or Christ the King School. Walk up the paved walkway from Willard Street directly to the Church.

Agenda Items and Actions:

No Public Comments.

Karen Paul- passed on comment, and was wanting to hear from BPD and their thoughts. Joan Shannon- has received numerous concerns from constituents of the uptick of crime. The data is presented is not accurate. The reduction of Police Force = increase of crime. Lack of Police presence in the downtown area alone has allowed lower-level crimes happening more openly. Thefts, bike thefts, car vandalism and our behaviors due to the crime increase have started to change. Her vision would like to see more community policing and long with more mental health assistance.

Officer Bryne Dispatch system is based on instances decline is due to the reduction of instances. Crimes are not being reported. Mental Health issues are on the rise as services are more difficult. The vision is to have policing in other ways, but to have to systems in place with data before a police reduction.

Mike Nguyen The statistics are domestic is down, shooting is up along with aggravated assault. Property crimes have doubled, along with car vandalism, drugs and overdoses. Staffing is way down and people are leaving. Narcotics do not have the man power and the drug unit is disappearing.

Public questions: revolved around how the calls were measured, how are specialized units going to be prioritized. Public concern over Sears Lane, and A New Place. Residences and Business Owners have reported property crimes have doubled and feeling like the lack of Police Force does not make it worth the trouble of reporting the crimes, because they feel like it won't matter. Paralysis/Analysis.

Milo Grant- Stated that she felt as though the personal experiences within areas is different within the community and the areas where people reside and what they are willing to accept. Would like to see an increase in Mental Health Services. There is public support to CAHOOTS (Crisis Assistance Helping Out On The Streets) within the Burlington area with a budget available from the City Mental Health Summit.

Karen Paul- Agrees with crime up with the result of reduction in Police Force. The City Council is working on a Recruitment/Retention with a 10,000 bonus for the Police Department. Joan Shannon added that she supports CAHOOTS. And firmly believes that community collaboration needs to happen with supporting policing policies. She also touched base on the reason for voting No on the \$40 million capitol bond was that she felt the first priority should be the High School. And second there was no list to what is to be paid.

Rama Kocherlakota- Reviewed the Ad-Hoc meeting for the Burlington Voter Redistricting.

Darren Springer, BED - Reviewed the Net Zero Energy Bond to include; grid updates, incentives for transitions, more EV charging stations. Home owner double incentives to reduce greenhouse gases with heat pump improvements within the home.

Matt Madalinski – Burlington Parks, Recreation and Waterfront. Reviewed Plans for the Pocket Park on Champlain Street and provided a survey link for public outreach. The goal for this park is totally geared towards children.

Survey from Burlington Parks and Rec <https://www.surveymonkey.com/r/ChamplainStParkSurvey1>



Wards 2 and 3 Neighborhood Planning Assembly

October 14, 2021, 6:30-8:15pm

HYBRID FORMAT: In-person at the ONE Community Center, 20 Allen St.

and via Zoom: <https://us02web.zoom.us/j/85860854764>

6:30 pm Announcements | 5 min

- Introduction of Steering Committee Members
- NPA bylaw vote notification (at November meeting)
- Steering Committee Openings - join the team!
- Next meeting notification: November 11
- Recordings can be found on [youtube](#) or [cctv](#)'s website

6:35 pm Public Forum | 10 min

NOTE: 2 minutes maximum

6:45 pm Ad Hoc Redistricting Committee Update | 10 min

George Love (Ward 2) and Dan Munteanu (Ward 3)

Public meeting schedule and how people can provide feedback.

6:55 pm Housing Development Updates

1. 157 S. Champlain St. | 20 min

Don Welch Architecture

Proposed changes to development will increase units from 32 to 48.

2. 111 North Winooski Ave. | 10 min

Daniel Trahan

Proposed removal of existing structure and construction of 6-unit building with parking.

7:25 pm Net Zero Energy Revenue Bond proposal | 15 min

Darren Springer, Burlington Electric Department

Ballot question in November. More info:

<https://www.burlingtonelectric.com/mayor-weinberger-and-burlington-electric-department-propose-net-zero-energy-revenue-bond/>

7:40 pm Champlain Street Park Improvements | 15 min

Max Madalinski, Burlington Parks, Recreation and Waterfront

BPRW is seeking feedback on plans for the neighborhood pocket park.

7:55 pm Representative Updates | 20 mins

APPENDIX 1: ZOOM INFO

When: Oct. 14, 2021 6:30 PM

Join the webinar: <https://us02web.zoom.us/j/85860854764>

WebinarID: 858 6085 4764

Or iPhone one-tap: US: +19292056099,,85860854764#

Or Telephone: +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900 6833

APPENDIX 2: WARD 2 and WARD 3 NPA BYLAWS for review and vote Nov. 11

Please note that each NPA has its own set of bylaws that include a provision for joint operation.

WARD 2 DRAFT: <https://drive.google.com/file/d/1imGwR3kmjKvcLW7K2Ak0ISA8m8iUR-P4/view?usp=sharing>

WARD 3 DRAFT:
<https://drive.google.com/file/d/1eGWwe4aNCgkwOm1Qd3xHIOkdI4RLUm8/view?usp=sharing>

A section of Burlington City Council resolution first adopted in 1982 establishing provisions for a Neighborhood Planning Assembly in each City ward.

...Neighborhood Planning Assemblies shall... help provide citizens with information concerning city programs and activities; help obtain citizen views of city needs; help provide citizens with the opportunity to participate in making recommendations with respect to governmental decisions including the allocation of revenues.

...Assemblies shall also be encouraged to provide advice to the appropriate commission or this council with respect to community development, housing programs, this City's Comprehensive Plan and its waterfront planning activities, and the city's budget among other issues....

Wards 2 and 3 NPA Steering Committee:

TO EMAIL FULL STEERING COMMITTEE: wards2and3npa@googlegroups.com

Andrew Champagne	Ward 2	802-540-0717
Kevin Deutermann	Ward 2	kdootz@gmail.com
Patrick Johnson	Ward 2	superdogirie@gmail.com
Charlie Giannoni	Ward 3	charliecpg@gmail.com
Jessica Hyman	Ward 3	jessicahymanvt@gmail.com
Mollie Klepack Flanigan	Ward 3	mollieklepack@gmail.com
Barbara McGrew	Ward 3	bmcgrew@aol.com
Tony Redington	Ward 3	TonyRVT99@gmail.com

Burlington City Elected Officials Wards 2 and 3

Mayor Miro Weinberger	Democrat	802-865-7272	mayor@BurlingtonVT.gov
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City Councilors:

Central District (Wards 2 & 3)	Perri Freeman	Progressive	203-623-9490	pfreeman@burlingtonvt.gov
Ward 2	Max Tracy	Progressive	802-373-1968	mtracy@burlingtonvt.gov
Ward 3	Joe Magee	Progressive	(802) 279-5513	jmagee@burlingtonvt.gov

School Board Members:

Central District (Wards 2 & 3)	Jean Waltz		355-7856	jwaltz@bsdvt.org
Ward 2	Stephen Carey			scarey@bsdvt.org
Ward 3	Polly Vanderputten			pvanderputten@bsdvt.org

Vermont State House Representatives

Chittenden-6-3	Jill Krowinski	Democrat	802.363.3907	jkrowinski@leg.state.vt.us
Chittenden-6-3	Curt McCormack	Democrat	802.318.2585	cmccormack@leg.state.vt.us
Chittenden-6-4	Brian Cina	Progressive/ Democrat	802.448.2178	bcina@leg.state.vt.us
Chittenden-6-4	Selene Colburn	Progressive	802.540.0546	scolburn@leg.state.vt.us
Chittenden-6-2	Emma Mulvaney Stanak	Progressive/ Democrat	802.828-2228	emulvaneystanak@leg.state.vt.us

Vermont State Senators (Chittenden County)

Philip Baruth	Progressive/Democrat	802.503.5266	pbaruth@leg.state.vt.us
Thomas Chittenden	Democrat	802.879.0054	tchittenden@leg.state.vt.us
Ginny Lyons	Democrat	802.863.6129	vlyons@leg.state.vt.us
Chris Pearson	Progressive/Democrat	802.860.3933	cpearson@leg.state.vt.us
Kesha Ram	Democrat	802.881.4433	kram@leg.state.vt.us
Michael Sirotkin	Democrat	802.999.4360	msirotkin@leg.state.vt.us

Neighborhood Planning Assembly Minutes

NPA:

(choose one) Wards

1 & 8 Wards

2 & 3 Wards

4 & 7 Ward

5 Ward

6



Date of Assembly: 10/14/2021 Start Time: (Commence): 6:32 PM

Location: ONE Community Center and Zoom

Finish Time: (Adjourn): 8:36 PM

Note taker: Tony Redington

Please forward these official minutes to: Phet Keomanyvanh

Steering Committee Members in Attendance:

Charlie Giannoni (Ward 3), Jessica Hyman (Ward 3), and Tony Redington (Ward 3)

Discussion Topics

- 6:30 pm Announcements
- 6:35 pm Public Forum
- 6:45 Ad Hoc Redistricting Committee Update - George Love (Ward 2) and Dan Munteanu (Ward 3)
- 6:55 Housing Development Updates - 157 S. Champlain St. and 111 North Winooski Ave.
- 7:25 pm Net Zero Energy Revenue Bond proposal - Darren Springer, Burlington Electric Department
- 7:40 pm Champlain Street Park Improvements - Max Madalinski, Burlington Parks, Recreation and Waterfront
- 7:55 pm Representative Updates

Actions Taken / Decisions Made

- Motion by Jessica Hyman and seconded by Tony Redington to nominate Chris Haessly to the Ward 3 NPA SC.
- Motion by Mayumi Cornell to self-nominate for the Ward 2 NPA SC. Seconded by Megan Humphrey.
- Nominations for the Wards 2&3 NPA will be voted on at the NPA's November 11th meeting.

Attendance:

In-Person:

Charlie Giannoni	Daniel Munteanu	Jess Hyman	Max Tracy
Chris Haessly	Ethan Fellows, CEDO	Kirsten Wilson, CEDO	Nancy Haiduck
Curt McCormack	George Love	Luna Zeitlyn, CCTV	Neal Haiduck

Zoom:

Abigail	Emma Mulvaney-Stanak	Kesha Ram	Michael Alvanos
Darren Springer	Erik	Max Madalinski-BPRW	Nathan Dagesse

Deb Light	Jason Fitzgerald	Mayumi	Sarah Kenney
Elena Juodisius	Joe Magee (he/they)	Megan Humphrey	Tony Redington
Emily Stebbins-Wheelock, Burlington Electric Department	John Rooney	Meghan O'Rourke	

Agenda Items and Actions:

Steering Committee member Jessica Hyman is moderator and other Steering Committee members attending, Charlie Giannoni and Tony Redington

Announcements

Public Forum Tony Redington spoke on North Street unsafely and a way to make it safe with roundabouts.

Ad Hoc Redistricting Committee Update - *George Love (Ward 2) and Dan Munteanu (Ward 3)*

Housing Development Updates - *157 S. Champlain St. (Don Welch Architecture) and 111 North Winooski Ave. (Daniel Trahan)*

Net Zero Energy Revenue Bond proposal - *Darren Springer, Burlington Electric Department*

Champlain Street Park Improvements - *Max Madalinski, Burlington Parks, Recreation and Waterfront*
<https://www.surveymonkey.com/r/ChamplainStParkSurvey1>

Representative Updates – *Councilors Magee and Tracy, Representatives Curt McCormack and Mulvaney-Stanak,*

Additional notes

1. Steering Committee member Jessica Hyman is moderator; other Steering Committee members attending, Charlie Giannoni and Tony Redington
2. Two persons were nominated to the Steering Committee and they will be voted on at the November meeting: (1) Mayumi Cornell from Ward 2; and Chris Hasselly from Ward 3.
3. Redistricting: Our NPA representatives to the City Redistricting Advisory Committee George Love (Ward 2) and Dan Munteanu (Ward 3) reported on early actions to date.
4. Two housing projects presentations:
 - a. 157 S. Champlain: 32 units for sale with mostly 2-3 bedrooms shifted now 48 rental—24 0 bedroom (studio), 16 1 bedroom and 8 2 bedroom Most units one parking space and looking to do shared parking and also looking at car share

approach; EV charging stations; disabled parking. 20% are “affordable” with 1-bedroom “affordable” under the inclusionary zoning about \$1,100 for a one bedroom apartment.

b. Michael Alvanos and John Rooney on a 111 North Winooski housing project—6 2-bedroom units behind the existing house. No rent information is available.

The barn which is now collapsed was for sale a decade ago and Charlie Giannoni made an offer—the City wanted the barn preserved and at that time the interior of the barn was in fair condition and you could go onto the second floor. Giannoni said he was sorry to see this historic building has been lost. Disability access only for the two lower units—not the upstairs ones.

5. Energy bond vote in November: Darren Springer, Burlington Electric manager, speaks on the revenue bond Net Zero One Energy Bond to be voted on in November. These bonds are paid for by customers not the City. The climate goals are furthered by spending under these bond funds. Projections shows as 1% little rate effect. Rep. Curt McCormack asks Springer’s help is getting police to just let vehicle operators know that engine idling is a real waste and against the law.

6. Champlain Street Park Improvements : Max Madalinski of Burlington Parks, Recreation and Waterfront, presented improvements to the Champlain Street Park.

7. Elected Representatives. City Councilors Max Tracy (Ward 2) and Joe Magee (Ward 3) spoke. State Rep. Curt McCormack explained his efforts on climate change—with his District 32% have no car and use transit and walking to work. The carbon footprint is much lower than most anywhere. Our City and State is small, but our actions show leadership for others. We need to get big cars off the road—Europe looks different because of smaller cars. Let’s have VT have a luxury car tax to get big cars off the road. A “feebate” is an alternative—higher gas consuming vehicles pay a fee and lower gas car buyers get a rebate. He will continue efforts to move a rent control bill forward—no more than consumer price index.

Rep. Emma Mulvaney-Stanak. She speaks of low income access to cell phones; fed pandemic help for low income provides \$40 for internet. VT rental emergency bill—more funding for both rent and utilities (must apply by October 24). Motel housing ends shortly—not sure whether Governor will extend it even another 30 days (about 1,000 people affected right now!). People protesting and camping out at State House. Work on eliminating TIP minimum wage as part of state minimum wage law. Require reliable work schedule regulations not in place.

Sen. Kesha Ram noted efforts arising statewide to welcome refugees, particularly from Afghanistan. The removal in the offing of the Sears Lane homeless encampment was noted. Sen. Ram said the Governor has stated he supports housing for the “poor.” Redington in a comment in response noted 10% of Burlington population (non-college student) is on the Housing Authority waitlist and not a single unit of state developed housing touches their need—only federal housing vouchers do. He said the word “affordable” used to describe housing is equal to the myth that the 2020 election was stolen.

8. Next meeting is November 11, 2021.

The meeting ended at 8:35 pm.

Tony Redington
TonyRVT99@gmail.com

Ward 5 NPA Meeting Agenda
October 21, 2021

October 21, 6:45-8:30 pm

(Hybrid: Department of Public Works and on Zoom)

6:45 - 7:00 - Public Forum: Voice your concerns, questions, announcements.

7:00 - 7:15 - Planned Improvements for Champlain Street Park (a City Pocket Park located at 187 South Champlain Street) (Max Madalinski)

7:15 – 7:45 – Redistricting in Two Parts: (1) Overview of Legislative Redistricting (Rep. Kesha Ram Hinsdale) (2) Update on Burlington Wards Ad Hoc Committee on Redistricting (Greg Shepler)

7:45 - 8:15 - Net Zero Energy Revenue Bond Proposal, Burlington Electric Department (Darren Springer)

8:15 - 8:30 - Flynn Avenue and the potential to relocate the CSWD Drop Off Center (Chapin Spencer)

Department of Public Works (DPW) is located at 645 Pine Street, Suite A

Zoom Info

<https://us02web.zoom.us/j/89574495720>

Or One tap mobile :

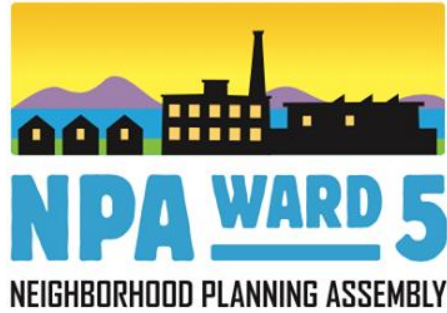
US: +13017158592,,89574495720# or +13126266799,,89574495720#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

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

Webinar ID: 895 7449 5720



Meeting NOTES
Thursday, 10/21/2021
6:45 – 8:30 PM

I. Participation

- a. Steering Committee Attendance & [Contact Information](#): Billy Clark; Joe Dery; Nate Lantieri; Scott Pavek, Andrew Simon; Ben Traverse
- b. Total Attendees: 30

II. Meeting Notes

- a. 6:45 – 7:00 PM: Public Forum: Your concerns, questions, announcements
 - i. Spencer Smith concern expressed regarding the impact of the planned Champlain Connector on green space north of Flynn Ave and on Englesby Brook
 - ii. Two Calls to Action from Rep Gabrielle Stebbins:
 - 1. Opportunity to share your thoughts/desires re: how federal funding should be spent in our community: Thursday, 11/4 from 5:30 – 6:30 PM
 - 2. Opportunity to visit with Burlington House Dems on 11/15 from 6:15 PM – 7:15 PM
 - iii. Terry Rivers expressed expressed surrounding proposed budget for the new Burlington High School.
 - iv. Christopher Costello shared his desire to see more permanently affordable housing and an interest in exploring whether the city could sell the Gateway Block to Champlain Housing Trust.
- b. 7:00 – 7:15 PM: [Planned improvements for Champlain Street Park](#) (a City pock park located at 187 South Chaplain Street) with [Max Madalinski](#), Associate Parks Project Coordinator
 - i. Max to action to complete the design survey ([link here!](#)) and share their interests in what residents would like to see as the park is renovated.
 - ii. Residents commented on need to design a space that reflects community interests and preserves appropriate public behaviors in public spaces.
- c. 7:15 – 7:45 PM: Redistricting in Two Parts (1) overview of legislative redistricting ([Sen Keshia Ram Hinsdale](#)); (2) Update on Burlington Wards Ad Hoc Committee on Redistricting (Greg

Shepler); (slides linked here) Join the upcoming Ad Hoc Committee on Redistricting Planning Meeting on 10/26 from 5 – 7 PM.

- d. 7:45 – 8:15 PM: [Net Zero Energy Revenue Bond Proposal](#), Burlington Electric Department (Darren Springer); [Net Zero Energy Roadmap for the City of Burlington](#)
- e. 8:15 – 8:30 PM: Flynn Avenue and the potential to relocate the CSWD Drop Off Center ([Chapin Spencer](#)); [view memorandum here](#) discussing process to explore and preserve the option to relocate the CWSD location to 195-201 Flynn Avenue

SPECIAL MEETING

November 4th @ 7:00 PM @ DPW, 645 Pine Street & via Zoom

NEXT REGULARLY SCHEDULED MEETING

November 18th @ 7:00 PM @ DPW, 645 Pine Street & via Zoom

Visit [CEDO website](#) or [NPA Ward 5 website](#) for agenda & zoom information and [follow on Facebook!](#)

Ward 6 NPA Meeting Agenda

Thursday, May 5, 2022

In-person option at the Greek Orthodox Church

The Greek Orthodox Church is located on 600 South Willard Street, on the corner of South Willard and Ledge Road at the rotary. Parking is available in the church lot, entrance off of Ledge Road. Additional parking can be found along Willard Street, as well as in front of Christ the King on Locust Street.

There are several ways to tune in for the meeting:

1. Join via Zoom: <https://us02web.zoom.us/j/81027856568> (Meeting ID: 810 2785 6568, No Password)
2. Call in for audio only: 1-929-205-6099 meeting ID:81027856568
3. Watch live online <https://www.youtube.com/playlist?list=PLIjLFn4BZd2P9f16v7BtN6C9kos1zGEmG>

6:30 **Public Forum**

6:40 **Vermont Make Music Day**

David Schein, Big Heavy World

6:50 **Champlain Street Park Design Feedback**

Max Madalinski, Burlington DPRW

7:10 **Burlington DPW 2022 Construction Plans**

Robert Goulding, Burlington DPW

7:30 **Mammals in the Queen City**

Declan McCabe, Professor of Biology, St. Michael's College

7:50 **The Future of Ward 6 NPA**

An open conversation about agenda topics, meeting format, and a call for new Steering Committee members.



Neighborhood Planning Assembly Draft Minutes

NPA:
(choose one)

Wards 1 & 8	Wards 2 & 3	Wards 4 & 7	Ward 5	Ward 6
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Date of Assembly : 04 / 07 / 22 Start Time: (Commence): 6:30pm

Location: Zoom/Greek Church Finish Time: (Adjourn): 8:10pm

Note taker: N Martelle Please forward these official minutes to: L Daugherty

Steering Committee Members in Attendance:

Dale Azaria, Nelson Martelle

Discussion Topics

- These can be copied from agenda items
- Content of discussion not required

Actions Taken / Decisions Made

- Immediately following Agenda Item
- Generally includes: electing a new steering committee member, voting as a body to send a formal communication to the City, decisions to spend money.

Agenda Items and Actions:

Please Remember to Enter Adjournment Time!

- I. **6:30-6:35 Public Comment**
 - a. No comments
- II. **6:35-6:45 Vermont Make Music Day**
 - a. David Shein of Big Heavy World noted upcoming celebration of World Music Day on June 21st.
 - b. <https://bigheavyworld.com/makemusicvt>
 - c. David also mentioned an upcoming meeting to discuss the future of Memorial Auditorium on Monday, May 9th.
- III. **6:45-7:05 Champlain Street Park Design Feedback**
 - a. Max Madalinski presented design progress for improvements to the Champlain Street Park and solicited feedback from attendees.
- IV. **7:05-7:25 Burlington DPW 2022 Construction Plans**
 - a. Robert Goulding provided an update on recent and upcoming DPW construction projects, including wastewater/stormwater improvements, sidewalk and paving repairs, Shelburne Street Roundabout, Champlain Parkway and other street improvements.
- V. **7:25-7:50 Mammals in the Queen City**
 - a. Declan McCabe, St. Michael's College Professor of Biology, discussed the presence of mammals in the greater Burlington area as an important indicator of overall ecological health.
- VI. **7:50-7:55 Call for Ward 6 Steering Committee Members and Future Meeting Topics**

Meeting adjourned: 8:00pm



Wards 2 and 3 Neighborhood Planning Assembly

Thursday, May 12, 2022, 6:30-8:15pm

HYBRID MEETING! In person at the ONE Community Center, 20 Allen St.

and via Zoom at <https://us02web.zoom.us/j/85860854764>

COMMUNITY DINNER IS BACK! 5:30-6:15pm - RSVP required:

<http://onecommunitydinner.weebly.com/rsvp-for-may-12-dinner.html>

Moderator: Chris Haessly

Notetaker: Tony Redington

6:30 pm Announcements | 10 min

- Introduction of Steering Committee Members
- Agenda suggestions/ Request time slot via [CEDO's submission form](#)
- **Next meeting:** June 9 at Burlington City Hall
- Recordings can be found on [youtube](#) or [cctv's](#) website
- NPA Community Input Survey: Please fill out this survey to share your thoughts on the role of the Ward 2&3 NPA: <https://forms.gle/9QDyEhx7kY8uZzxU7>
- **Previous Business:** NPA Resolution Votes, See Appendix 2

6:40 pm Public Forum | 10 min

NOTE: 2 minutes maximum

6:50 pm Champlain Street Park Renovations and Community Input | 15 mins

Max Madalinski, Parks, Recreation, and Waterfront, City of Burlington

Presentation and community feedback on design concepts for Champlain Street Park.

7:05 pm Department of Public Works 2022 Construction Plans | 20 mins

Robert Goulding, Department of Public Works, City of Burlington

Overview and Q&A on the city's plans for paving, sidewalk, water and sewer work this year in Wards 2&3.

7:25 pm Burlington's Integrated Water Quality Plan 20 mins

Jenna Olson, Department of Public Works, City of Burlington

Overview and Q&A on the city's update to the Integrated Water Quality Plan, including information on the next phase of the project and work planned.

7:45 pm Vermont Make Music Day | 10 mins

David Schein, Big Heavy World

Overview and invitation to join Vermont Make Music Day on June 21, 2022, part of World Music Day.

7:55 pm City Councilor, School Board, State representatives, Senators Updates | 20 mins

5 mins each group

8:15 pm Adjourn

APPENDIX 1: ZOOM INFO

When: May 12, 2021 6:30 PM

Join the webinar: <https://us02web.zoom.us/j/85860854764>

WebinarID: 858 6085 4764

Or iPhone one-tap: US: +19292056099,,85860854764#

Or Telephone: +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900
6833

APPENDIX 2: RESOLUTIONS

1. The Wards 2 & 3 Neighborhood Planning Assembly endorses the establishment of a temporary Shelter Pod Village and Community Resource Center on Elwood Avenue to support community members who are experiencing homelessness and we encourage the city to take proactive efforts to keep abutting neighbors informed about development plans and activities at the site.
 - Introduced by Jess Hyman, Ward 3
 - More info: [https://www.burlingtonvt.gov/CEDO/Ending-Homelessness & FAQ](https://www.burlingtonvt.gov/CEDO/Ending-Homelessness&FAQ) at <https://www.burlingtonvt.gov/sites/default/files/tiles/Document%20to%20edit%20FAQ%20for%20Shelter%20Village%20and%20Community%20Resource%20Center%204%2027%2022.pdf>
2. Redistricting proposal (resolution TBA)
 - Introduced by Chris Haessly, Ward 3

About the NPAs:

A section of Burlington City Council resolution first adopted in 1982 establishing provisions for a Neighborhood Planning Assembly in each City ward.

...Neighborhood Planning Assemblies shall... help provide citizens with information concerning city programs and activities; help obtain citizen views of city needs; help provide citizens with the opportunity to participate in making recommendations with respect to governmental decisions including the allocation of revenues.

...Assemblies shall also be encouraged to provide advice to the appropriate commission or this council with respect to community development, housing programs, this City's Comprehensive Plan and its waterfront planning activities, and the city's budget among other issues....

Wards 2 and 3 NPA Steering Committee:

TO EMAIL FULL STEERING COMMITTEE: wards2and3npa@googlegroups.com

Andrew Champagne	Ward 2	802-540-0717
Mayumi Cornell	Ward 2	mayumi.cornell@gmail.com
Kevin Deutermann	Ward 2	kdootz@gmail.com
Patrick Johnson	Ward 2	superdogirie@gmail.com
Mollie Klepack Flanigan	Ward 3	mollieklepack@gmail.com
Charlie Giannoni	Ward 3	charliecpg@gmail.com
Chris Haessly	Ward 3	haessly@adelphia.net
Jessica Hyman	Ward 3	jessicahymanvt@gmail.com
Barbara McGrew	Ward 3	bmcgrew@aol.com
Tony Redington	Ward 3	TonyRVT99@gmail.com

Burlington City Elected Officials Wards 2 and 3

Mayor Miro Weinberger	Democrat	802-865-7272	mayor@BurlingtonVT.gov
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City Councilors:

Central District (Wards 2 & 3)	Perri Freeman	Progressive	203-623-9490	pfreeman@burlingtonvt.gov
Ward 2	Gene Bergman	Progressive		gbergman@burlingtonvt.gov
Ward 3	Joe Magee	Progressive	802-279-5513	jmagee@burlingtonvt.gov

School Board Members:

Central District (Wards 2 & 3)	Jean Waltz	802-355-7856	jwaltz@bsdvt.org
Ward 2	Faizo Hassan	802-578-1259	hassanfaizo@gmail.com
Ward 3	Polly Vanderputten	802-578-8653	pvanderputten@bsdvt.org

Vermont State House Representatives

Chittenden-6-3	Jill Krowinski	Democrat	802.363.3907	jkrowinski@leg.state.vt.us
Chittenden-6-3	Curt McCormack	Democrat	802.318.2585	cmccormack@leg.state.vt.us
Chittenden-6-4	Brian Cina	Progressive/ Democrat	802.448.2178	bcina@leg.state.vt.us
Chittenden-6-4	Selene Colburn	Progressive	802.540.0546	scolburn@leg.state.vt.us
Chittenden-6-2	Emma Mulvaney Stanak	Progressive/ Democrat	802.828-2228	emulvaneystanak@leg.state.vt.us

Vermont State Senators (Chittenden County)

Philip Baruth	Progressive/Democrat	802.503.5266	pbaruth@leg.state.vt.us
Thomas Chittenden	Democrat	802.879.0054	tchittenden@leg.state.vt.us
Ginny Lyons	Democrat	802.863.6129	vlyons@leg.state.vt.us
Chris Pearson	Progressive/Democrat	802.860.3933	cpearson@leg.state.vt.us
Kesha Ram Hinsdale	Democrat	802.881.4433	kram@leg.state.vt.us
Michael Sirotkin	Democrat	802.999.4360	msirotkin@leg.state.vt.us

Tony Redington May 12, 2022 Draft Rev. 1

Draft Notes NPA 2/3 May 12, 2022

Meeting began at 6:42 pm and adjourned at 9 p.m.

NPA 2/3 Steering Committee members introduced—Patrick Johnson, Jess Hyman, Mollie Klepack, Chris Haessly, Charlie Giannoni, and Tony Redington. Haessly moderator and Redington note taker.

Steering Committee invites anyone to email or do the City website to request ideas, proposals for subject, or actual presentation requests.

This was a hybrid meeting with about 12-15 in attendance at the Community Center Event Hall and about 28-30 online participants.

Thanks to Mascoma Bank which provided meals at the Community Center.

Elmwood Podville

The bulk of the meeting extending from about 6:40 pm through 7:51 pm meeting over discussion and then two votes on an NPA resolution on the Elmwood Podville proposal for 30 units of individual housing pods and a separate washhouse designed for a 3-year life.

“The Wards 2 & 3 Neighborhood Planning Assembly endorses the establishment of a temporary Shelter Pod Village and

Community Resource Center on Elwood Avenue to support community members who are experiencing homelessness and we require the city to take proactive efforts to keep abutting neighbors informed about development plans and activities at the site.”

After long discussion a vote was taken to table the question, 11 Yes, 26 No. Then the resolution passed 23 Yes, 8 No. The City Council will be informed of the NPA 2/3 action.

Here is a sample of comments by about a dozen individuals made during the discussion.

Redington pointed out that the City and State has never funded a single unit of actual affordable housing support and security, 30% of income max rent happily enjoyed by one in four of Burlington renters today, about 2,500. Redington said the City can provide such assistance like the penny for parks and avoid the need for podville—that the pod rent per month is \$1,600 compared to a 1 bedroom median available rent of \$1,400 here. Later he suggested motels as a better choice than pods. Elizabeth Curry responded to motels by saying the state is ending the program next month.

Lucy Gluck spoke in favor of Podville. Another said there is no one to run the service and more information is needed. Stephen Carey asked why ONE should shoulder all the social responsibility and suggested the New North End or South End as alternative locations. Solveig Overby also stated a lack of information on the project and suggested a delay in the vote. One resident stated a lack of public outreach and asked that the resolution “require” not just “encourage” the City to

undertake proactive measures to keep neighbors informed. The word “require” in place of the word “encourage” was accepted by resolution author Jess Hyman as a friendly one and the change was made. The lack of a budget, lack of a social service agency manager, no choices for the homeless, clear regulations, “adventurous form of housing,” “formula for disaster,” same argument against housing proposals repeated for decades, etc., were stated.

South Champlain Park

Max Madalinski presented alternatives being considered for the South Champlain park.

DPW 2022 Construction Program

Robert Goulding presented the construction program for Public Works this year.

Vermont Make Music Day June 21

David Schein spoke of Big Heavy World activities for a major set of events for June 21.

There will be many outdoor Vermont musical events in this sixth year for Heavy World with over 100 cities in the US plus many more world wide—both live and virtual. Check out info at: <https://bigheavyworld.com/latest-news/2022/3/31/make-music-vermont-returns-on-june-21> Overall over 1,000 cities in a 120 countries undertake the summer solstice music events!

City Councilors

City Councilor Gene Bergman delivered a single message—the budget for the City is now being determined with hearings on various departments coming up now. Make your thoughts known to Gene, Councilor Magee and Councilor Freeman. Gene said austerity is not an answer!

School Commissioners

School Commissioner Jean Waltz pointed out the regional nature of the Technical Center which is part and parcel of the new High School. There are many sending towns whose students will be served in the Tech Center. School Commissioner Polly Vanderputten also attended.

State Representatives

Rep. Brian Cina gave a report on the Legislature which closed earlier in the evening. He praised the efforts of House Speaker Jill Krowinski—and an NPA 2/3 legislative representative—on coming within one vote of override of Gov. Scott's veto of the BTV just cause eviction ordinance approval by the Legislature—apparently she was misled by at least one legislative member who had indicated support. Still no definitive news on PCB rendition funding which could apply to Burlington High School razing or any school capital funding applicable to the new BHS project.

Adjournment 9:00 p.m.

Ward 5 NPA Meeting Agenda

Thursday April 21, 7:00pm

where: DPW Pine / Zoom (hybrid)

Zoom URL: <https://us02web.zoom.us/j/89574495720>

By phone at: +1 301 715 8592 Webinar ID: 895 7449 5720

7:00 – Intro and Public Forum (everyone): announcements, ideas, questions, gripes

7:20 – Champlain Street Park: what's next? (Max Madalinski, Parks & Rec)

7:50 – South End Innovation District (Meagan Tuttle, Charles Dillard, Planning Dept)

8:10 – Transit Depot at Lakeside Ave? (David Saladino, Jeff Dube, VHB Consultants)

Ward 5 NPA Steering Committee – 4/19/22 – Notes

SC Members present: Billy Clark, Nancy Stetson, Andy Simon, Joe Dery

Agenda

7:00 – Intro and Public Forum (everyone): announcements, ideas, questions, gripes

7:20 – Champlain Street Park: what's next? (Max Madalinski, Parks & Rec)

7:50 – South End Innovation District (Meagan Tuttle, Charles Dillard, Planning Dept)

8:10 – Transit Depot at Lakeside Ave? (David Saladino, Jeff Dube, VHB Consultants)

Public comment:

Jovial King - Announces the plans for the development on two lots adjacent to Pine St and the Barge Canal.

Andy Simon - Reports on the cleaning effort on Green Up Day for the Barge Canal. More than 100 people came by to help out, they collected 300+ bags of trash.

Billy Clark - Stepping Stones preschool is listed for sale, and there is concern the school will close, and he'd like the community to be aware.

7:20 – Champlain Street Park: what's next? (Max Madalinski, Parks & Rec)

Max speaks to the plans for the Champlain st Park, including lighting, a new path, playground, and seating.

Max also speaks to the timeline for the Calahan Park playground, slated for construction August 2022.

Survey for input and feedback on the park: <https://forms.gle/sDRtMuFJGKv4Gscs9>

[Presentation](#)

7:50 – South End Innovation District (Meagan Tuttle, Charles Dillard, Planning Dept)

Presentation

Charles Dillard speaks to the planned zoning changes to the innovation district, west of Pine st in the South End

Will allow housing, as opposed to the original plan for the district

Hundreds of new homes and neighbors

Land use - buildings will be attached, generally apartments, town homes etc

- Not planning on allowing single family detached homes, hotels, heavy manufacturing

Planning to return to Ward 5 NPA in June for a more detailed presentation

Jane Headley - asks if banks or grocery stores will be allowed, what the options will be for people who aren't as mobile?

Charles - small grocery will be allowed, as well as banks under the umbrella of small retail. The proposed transit center could increase transportation options.

Andy Simon - Requests that Planning do more outreach with the public, is concerned about a hotel being allowed in the innovation district.

Charles - City Planning is planning to come back to the June NPA

Terry Rivers - asked whether the nordic spa was permitted yet, whether it would be allowed to have a large parking lot.

Samantha Dunn - the project has not applied for permits yet.

8:10 – Transit Depot at Lakeside Ave? (David Saladino, Jeff Dube, VHB Consultants)

The City is partnering with the CCRPC to study the feasibility of a multimodal transit center to house around 550 cars in a parking facility, replacing and condensing the parking in the South End.

Andy Simon - asks about the presentation, it can now be found here

Terry Rivers - is it because we don't have enough parking in the downtown?

David - No, it's for consolidating the parking for the south end, Hula, etc

Department of Permitting & Inspections

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

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



TO: Development Review Board
FROM: Scott Gustin
DATE: March 19, 2024
RE: ZP-24-50; 75 Briggs Street

=====

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

Zone: ELM Ward: 5S

Owner/Applicant: Meraki Realty Holding, LLC / Andrea Charest

Request: Reapplication for proposed construction of new health club, climbing, and community center including related site improvements.

Background Information:

The applicant is seeking approval to construct a new health club/climbing center and related site improvements at 75 Briggs Street. This parcel is presently vacant with one remaining building left over from the former railroad use of the property. This proposal is a comprehensive redevelopment of the site involving the new 14,720 building, retention of the existing 4,000 sf building, and new parking, landscaping, and stormwater management features. The climbing center is categorized as a health club in the Comprehensive Development Ordinance and is a conditional use in the E-LM zone. As the project entails a development footprint of > 40,000 sf, major impact review is also triggered.

This project was approved by the Development Review Board in 2018. That approval expired. This new application is for a nearly identical project. The proposed building is ~1,000 sf larger with a modified entry and somewhat different fenestration. The site plan remains largely unchanged. Most ordinance standards are unchanged, except for Article 8: Parking. Given the very limited project changes, additional review by the Conservation Board and Design Advisory Board is not required.

Previous zoning actions for this property are noted below.

- 9/12/18, Approval to construct new health club/climbing center and related site improvements (expired)
- 11/21/16, Approval to remove portion of gravel lot and convert to green space
- 10/4/16, Approval to construct new grocery store and subdivide the property in two (creating the present lot)

Recommendation: Continue review to allow outstanding items, noted below, to be addressed:

I. Findings

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Section 3.5.6 (a) Conditional Use Review Standards

Approval shall be granted only if the DRB, after public notice and public hearing, determines that the proposed conditional use and associated development shall not result in an undue adverse effect on each of the following general standards:

- 1. Existing or planned public utilities, facilities or services are capable of supporting the proposed use in addition to the existing uses in the area;*

The proposed development will be served by municipal utilities. Sufficient water and sewer service are available. A State of Vermont wastewater permit will be required. A capacity letter issued by the Dept. of Public Works has been obtained but may need to be updated. **(Affirmative finding as conditioned)**

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

The subject property is located within the Enterprise – Light Manufacturing zone. This zone is intended primarily for manufacturing, distribution, processing and the like; however, other commercial uses are allowed. The proposed health club is one of those allowed uses. It is situated in a location with ready access from other nearby commercial uses and a large residential neighborhood. **(Affirmative finding)**

- 3. The proposed use will not have nuisance impacts from noise, odor, dust, heat, and vibrations greater than typically generated by other permitted uses in the same zoning district;*

The proposed health club is not expected to generate nuisance impacts from noise, odor, dust, and the like that may be more typically associated with industrial uses. The proposed construction is set relatively far from homes in the adjacent neighborhood. **(Affirmative finding)**

- 4. The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street designations and capacity; level of service and other performance measures; access to arterial roadways; connectivity; transit availability; parking and access; impacts on pedestrian, bicycle and transit circulation; safety for all modes; and adequate transportation demand management strategies;*

Traffic impacts are expected to remain unchanged from the prior proposal. The previously submitted traffic analysis contains the standard items such as crash history, total trip generation, and intersection level of service. No high crash locations are nearby, and none are expected as a result of this development. The new building is expected to result in a net increase of 37 weekday PM peak hour trip ends over existing conditions with the present facility in operation. By way of comparison, the new City Market next door anticipated 320 weekday PM peak hour trip ends including 260 vehicular trips. The anticipated increase in traffic is modest and is expected to have minimal to moderate impacts on nearby intersection level of service (LOS). The LOS for the Briggs Street/Flynn Avenue intersection is expected to remain unchanged in 2024 whether the project is built or not. The Champlain Parkway/Flynn Avenue intersection; however, is expected

to worsen from an LOS E to F under the 2024 “build” scenario. The traffic analysis includes several measures that may be implemented for mitigation of traffic impacts at this intersection. The Parkway is now under construction. As requested by Public Works with the original permit review, traffic impact fees associated with this project should be available for a period of five years following completion of the Champlain Parkway. **(Affirmative finding as conditioned)**

and,

5. *The utilization of renewable energy resources;*

No renewable energy resources are evident in the project plans. Running conduit for future rooftop installation is encouraged. **(Affirmative finding as conditioned)**

and,

6. *Any standards or factors set forth in existing City bylaws and city and state ordinances;*

Technical Review Committee comments made during the recent re-review by TRC relative to applicable City bylaws have been provided.

(b) Major Impact Review Standards

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

No significant air or noise pollution is anticipated as a result of this development. **(Affirmative finding)**

See Sec. 5.5.3 for stormwater management.

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

See Sec. 3.5.6 (a) 1.

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

See Sec. 3.5.6 (a) 1.

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

See Sec. 5.5.3.

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

See Sec. 3.5.6 (a) 4.

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

No impacts on the city’s educational system are anticipated as a result of this purely commercial development. **(Affirmative finding)**

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

The proposed development will generate additional impacts on city services; however, those impacts are expected to be relatively modest. Impacts will be mitigated by payment of impact fees following project completion. **(Affirmative finding as conditioned)**

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*
See Article 6 for effects on significant natural areas, historic buildings, and archaeological significance.

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

The proposed development is located within the E-LM zone – an area of the city specifically zoned for a variety of commercial land uses. The project will not adversely impact the city's present or future growth patterns. The development is of a relatively moderate scale and is not expected to have an undue adverse impact on the city's ability to accommodate growth. **(Affirmative finding)**

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

Several provisions of the Municipal Development Plan target the Enterprise zones for new commercial investment and development (Land Use Policies, pg. I-2; Growth Areas, pg. I-22 {The Enterprise District}). Further, this project brings about new investment to a site with significant soil contaminants (Land Use Policies, pg. I-23 {Brownfields}). As required, the new building will comply with present energy efficiency standards of the city and state (Energy Plan, pg. VIII-1). **(Affirmative finding)**

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

The proposed commercial development will have no impact on the present or projected housing needs of the city. **(Affirmative finding)**

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

Little impact on the city's park and recreation needs is expected as a result of this development. What impact there is will be mitigated by payment of impact fees. **(Affirmative finding as conditioned)**

(c) Conditions of Approval:

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

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

The proposed development will likely not generate offsite noise or glare substantial enough to require mitigation. Screening of the parking lot along Briggs Street is proposed in an effort to reduce the visual impact associated with the relatively large parking lot. **(Affirmative finding)**

2. *Time limits for construction.*

No additional time is requested with the current application, nor is a phasing plan included. The prior approval included a 2-phase construction plan. No phasing is depicted in the current project plans. As previously permitted, phase 2 contained work mostly within the street right-of-way

along Briggs Street, including, but not limited to, walkways connecting to the future public sidewalk. Work was to be done in conjunction with the Briggs Streets improvements associated with the Champlain Parkway. The Parkway is presently under construction, and a separate phase may no longer be needed. Confirmation is needed. **(No finding possible)**

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

No changes to the proposed hours of operation are noted. As previously permitted, hours of operation would be 10:00 AM – 10:00 PM, Monday – Friday; 10:00 AM – 8:00 PM Saturday, and 10:00 AM – 6:00 PM on Sunday.

Construction hours are not noted in the application. Typical construction hours within or close to residential areas are Monday – Friday from 7:30 AM – 5:30 PM. Saturday construction may occur for interior work only. No work on Sunday. **(Affirmative finding as conditioned)**

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

Any future enlargement or alteration will be reviewed under the zoning regulations in effect at that time. **(Affirmative finding)**

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

See the recommended conditions.

Article 4: Maps & Districts

Sec. 4.4.3, Enterprise Districts:

(a) Purpose

(1) Light Manufacturing (E-LM)

The subject property is located in the E-LM zone which is intended as the primary commercial/industrial center of Burlington. The proposed health club is consistent with the array of commercial uses allowed in this zone. **(Affirmative finding)**

(b) Dimensional Standards & Density

Proposed building area is 14,720 sf. Along with the existing 4,000 sf building to remain, FAR is 0.26 on the 1.68 acre lot. This FAR is well below the 2.0 FAR limit in this zone.

Proposed lot coverage will be 58.9%. This percentage is under the maximum allowable 80% coverage.

The proposed front yard setback is 23' along Briggs Street. The minimum required is 5'. Side yard setbacks are not applicable in the E-LM zone. The minimum required rear yard setback is 10% of the lot depth – in this case about 12.5,' although the rear lot line is somewhat angled. The building is set almost 60' from the rear property line.

Maximum building height will be 44' to the midpoint of the sloped shed roof and is under the maximum permissible 45' height. **(Affirmative finding)**

(c) Permitted & Conditional Uses

The proposed climbing center is a “health club” under Appendix A of the CDO and is a conditional use in the E-LM zone. **(Affirmative finding)**

(d) District Specific Regulations

Not applicable.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.3 (b) above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5, Setbacks

See Sec. 4.4.3 (b) above.

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.3 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.3 (b) above.

Sec. 5.5.1, Nuisance Regulations

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

Sec. 5.5.2, Outdoor Lighting

Sight lighting remains unchanged. New outdoor lighting is included in the application and will include illumination of the parking area, walkways, and building entries. Acceptable cutoff LED fixtures are proposed. Pole lamps illuminating the parking area are acceptable at 16’ tall. Acceptable illumination levels are depicted for the parking lot and roof deck. While illumination levels are depicted for the building entries and walkways, the summary table does not indicate average, maximum, and minimum illumination levels for these features. This information is needed in order to determine compliance with the applicable lighting standards of Sec. 5.5.2. Building entries are limited to 5.0 footcandle average, and walkways are limited to 0.5 footcandle average with no point to exceed 2.0 footcandles. **(Affirmative finding as conditioned)**

Sec. 5.5.3, Stormwater and Erosion Control

Presently, there are no stormwater management features onsite. The proposed project design includes four bioretention areas. These areas will collect stormwater runoff from the parking area and building rooftop and will attenuate flows prior to discharge to the city’s combined sewer system. The contaminated soils onsite prevent utilizing infiltration, but post-development peak flows will be significantly reduced for the one year design storm. Both the stormwater management plan and the erosion control plan have been reviewed and approved by the city’s stormwater program manager with the prior project approval. The applicant is advised to confirm with the stormwater program whether any updates to those approvals are needed. **(Affirmative finding as conditioned)**

Article 6: Development Review Standards:

Part 1, Land Division Design Standards

Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The property does not contain any important natural features as identified in the Open Space Protection Plan or as outlined in Sec. 4.5.4, *Natural Resource Protection Overlay Districts*. In fact, the property is nearly devoid of any green space at all. It is a vacant former railroad property. The proposed construction will have no impact on Burlington's diversity of important natural features. **(Affirmative finding)**

(b) Topographical alterations

The existing property is essentially flat and will remain so. Proposed grading will direct stormwater runoff into newly proposed stormwater management measures. In an effort to retain as much soil onsite as possible (rather than landfill it), a berm will be created at the north end of the property. **(Affirmative finding)**

(c) Protection of important public views

There are no significant public views from or through the subject property. The proposed construction will not adversely impact any identified public view corridor. **(Affirmative finding)**

(d) Protection of important cultural resources

The property has no known archaeological significance. It contains no archaeological site points, nor is it located within an archaeologically sensitive area. **(Affirmative finding)**

(e) Supporting the use of alternative energy

See Sec. 6.3.2 (f).

(f) Brownfield sites

The Vermont DEC Hazardous Site List specifically lists this property as a contaminated site. The applicants obtained a corrective action plan (CAP) with VT DEC to address onsite contaminants associated with the prior permit approval. Essentially, the contaminated soils will be capped onsite. Soils that cannot be retained onsite will be disposed of in a landfill. Confirmation that the CAP remains valid is needed. **(Affirmative finding as conditioned)**

(g) Provide for nature's events

See Sec. 5.5.3 for stormwater management.

The main building entry will be sheltered. There is sufficient room onsite for snow storage during the winter months. **(Affirmative finding)**

(h) Building location and orientation

The proposed building will be set fairly close to the street, reflecting similar front yard setbacks at neighboring properties. As required, the new building presents an entryway facing Briggs Street. **(Affirmative finding)**

(i) Vehicular access

The property will be served by two driveways. The southern driveway will access the existing outbuilding. The northern driveway will act as the primary vehicular access into the site for visitors. Sight triangles are clear for both driveways. **(Affirmative finding)**

(j) Pedestrian access

Pedestrian walkways are provided through the parking areas for access into the new building. Another walkway traverses the site to connect with the neighboring City Market property to the north. A previously proposed walkway within the Briggs Street right-of-way has been deleted.

A new public sidewalk is to be constructed along Briggs Street. The prior project approval included a requirement that the applicants provide a financial surety for half of the cost of installation of this sidewalk. This condition will be carried over to the current plans. **(Affirmative finding as conditioned)**

(k) Accessibility for the handicapped

Handicap parking spaces are depicted near the south-facing building entrance. Entries into the building appear to be at-grade. It is the applicant's responsibility to comply with all applicable ADA requirements. **(Affirmative finding)**

(l) Parking and circulation

Parking is set to the side and rear of the new building. Given the lengthwise orientation of the property along Briggs Street, the side parking lot also has frontage along the street. As with the original project, screening of the parking is provided along that section of parking between the two driveways.

Parking spaces and circulation isles appear to be dimensionally compliant. Most parking spaces are 9' X 18', and circulation isles are 24' wide allowing for 10' wide travel lanes and compliant back-up space. The 18' parking space depth is acceptable given that all of the spaces are peripheral. Parking spaces along the rear of the property are a full 20' deep.

Curbing is evident along much of the parking lot's edge. There is no curbing along the western edge where stormwater runoff will sheetflow into the linear bioretention area. As recommended by this criterion, the parking area is divided into smaller components with peripheral landscaping to delineate the boundaries of the parking and circulation areas.

This criterion establishes a target of 30% shading of the parking area with new shade trees. At least 1 shade tree for every 5 parking spaces is required. The new parking lot contains 64 parking spaces and requires 13 shade trees. The shade tree planting plan and related shading analysis remain unchanged. As previously permitted, 45% shading of the parking lot is achieved.

Bike racks are depicted on the site plan. They are appropriately located near the building's entry. **(Affirmative finding)**

(m) Landscaping, fences, and retaining walls

The project plans include a landscaping plan that encompasses a variety of plantings. As noted above, shade trees will be planted in and around the parking lot. Additional plantings will accent the building and site features. As previously noted, screening of the parking between the two driveways is included in the project plans.

Three new trees straddle the front property line along Briggs Street. These trees are to be planted in concurrence with the Briggs Street improvements associated with the Champlain Parkway. The current landscaping plan notes they will be planted by the city. The city arborist confirmed this will be the case if the trees are actually within the street right-of-way (otherwise, planting by the applicant is required). Confirmation is needed. It is the applicant's responsibility to provide adequate soil quality for the trees to be planted within. Specifically, the applicant will be required to excavate this entire area in a continuous strip running parallel to the road to a minimum depth of 3.5 ft. and backfill with quality soil to support the trees. **(Affirmative finding as conditioned)**

(n) Public plazas and open space

No public plazas or open space are included in this proposal. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

The site plans depict a trash/recycling/compost area behind the building to be screened with 6' tall slatted wooden fencing. An electrical transformer box is depicted next to the trash/recycling/compost area and is screened. All new utility lines must be buried. **(Affirmative finding as conditioned)**

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(a) Relate development to its environment

1. Massing, Height, and Scale

The proposed building contains 14,720 sf GFA with a ~ 9,300 sf footprint. The massing of the structure is broken into distinct building components as required by this criterion. Varying roof forms and materials reinforce the perception of separate building components. Its height, as measured to the midpoint of the sloped roof, is within the 45' height limit in the ELM zone. Overall building scale fits within the context of the built environment. The recently constructed City Market next door is ~ 30,000 sf, while the remaining building on the subject site is 4,000 sf. Significantly larger commercial buildings exist to the north, while significantly smaller residential structures are to the east. **(Affirmative finding)**

2. Roofs and Rooflines

As noted above, the proposed building incorporates multiple roof lines. The primary roof structure is a simple sloped shed roof. Other roof sections are flat or nearly so. These roof forms are common in the ELM zone. Part of the roof area will be activated with programmatic uses. **(Affirmative finding)**

3. Building Openings

The primary building entrance is sheltered and oriented towards Briggs Street. It is somewhat revised in the new project plans, most notably containing more mass along Briggs Street and including exterior signage. The main entrance is also accessible from the parking area to the south. The primary entrance clearly reads as such. Building fenestration has been modified in the new project plans but remains consistent with the angular, boxy appearance of the building.

The function of the building's interior as a climbing center limits the placement and extent of fenestration. **(Affirmative finding)**

(b) Protection of important architectural resources

This new construction will not affect existing historic buildings in the area. No building demolition is included in this application. **(Affirmative finding)**

(c) Protection of important public views

See 6.2.2 (c) above.

(d) Provide an active and inviting street edge

The building is set relatively close to the street and presents a clearly defined sheltered entrance easily accessible from the reconstructed Briggs Street. The outdoor patio area and adjacent walkways further improve the perceived sense of invitation into the building. Ample street level glazing affords visual access into the building by patrons and passersby. **(Affirmative finding)**

(e) Quality of materials

The building will be clad in metal siding. Texture and finish will vary to limit the monotony of a singular siding type. Aluminum frame windows will be installed throughout. Wooden accents will be incorporated into the entry canopy. The proposed materials are of acceptable quality and durability for this new construction. **(Affirmative finding)**

(f) Reduce energy utilization

The new building must comply with the current energy efficiency requirements of the city and state. **(Affirmative finding as conditioned)**

(g) Make advertising features complimentary to the site

Exterior signs are depicted on the elevation plans. Sign location and area appear to be acceptable. **(Affirmative finding)**

(h) Integrate infrastructure into the building design

Project plans depict rooftop mechanical equipment. The equipment is set midway down the back of the sloping shed roof. In this location, the roof itself provides screening of the equipment as viewed from the public street. **(Affirmative finding)**

(i) Make spaces safe and secure

Entryways will be illuminated. Egress and fire safety standards will apply as administered through the offices of the fire marshal and of the building inspector. **(Affirmative finding)**

Article 8: Parking

Sec. 8.1.9, Maximum On-Site Parking Spaces

Within the Shared Use Parking District, the maximum number of onsite parking spaces is limited to 3 per 1,000 sf GFA for health clubs. Total GFA will be 18,720 sf (new building + existing accessory building), and 64 parking spaces are proposed. The onsite parking maximum is 56 spaces. While 64 exceeds the 56-space maximum, the 64 total includes 9 exempt spaces (ADA and EV). The end result is that the 64 parking spaces are acceptable. **(Affirmative finding)**

Sec. 8.1.10, Off-Street Loading Requirements

The existing 4,000 sf building will use an existing loading bay. A loading area will be provided to the rear of the new building and is noted on the project plans. **(Affirmative finding)**

Sec. 8.1.11, Parking Dimensional Requirements

See Sec. 6.2.2 (l).

Sec. 8.1.12, Limitations, Location, Use of Facilities

(a) Shared Parking for Off-Site Use

None of the parking will be provided for off-site users. The parking will serve onsite employees and visitors. **(Affirmative finding)**

(b) Front Yard Parking Restricted & Residential Driveways

(Not applicable)

(c) Availability of Facilities

As noted above, parking will be provided for onsite users. The parking areas will not be used for storage or display of vehicles or materials. **(Affirmative finding)**

Sec. 8.1.13, Parking for Disabled Persons

The site plans depict several handicap parking spaces in close proximity to pathways and the building's main entrance. Associated striping is also shown. ADA compliance is administered via the city's building permit process. **(Affirmative finding)**

Sec. 8.1.14, Stacked and Tandem Parking Restrictions

(Not applicable)

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

(Not applicable)

Sec. 8.1.16, Transportation Demand Management

(b) Applicability

As the building footprint exceeds 8,000 sf, it is subject to the standards of this section.

(c) Transportation Demand Management Program

No TDM information has yet been provided.

a. Outreach and Education:

(No finding possible)

b. TDM Strategies:

Onsite bike parking is provided. See Sec. 8.2.5.

(No finding possible))

c. Parking Management:

(No finding possible)

d. TDM Agreement:

(No finding possible)

Sec. 8.2.5, Bicycle Parking Requirements

Table 8.2.4-1, *Bicycle Parking Requirements*, does not include health club as a use. The prior permit approval used the community center standard as a “best fit.” Under that standard, the bike parking requirement for the 14,720 sf new building amounts to 9 short term spaces (3 per 5,000 sf) and 1 long term space (1 per 20,000 sf). As proposed, 10 short term spaces will be provided along with 2 long term spaces. Locations and details for the short term bike parking spaces are provided. The long term space will be provided within the employee breakroom. **(Affirmative finding)**

II. Conditions of Approval

In the event that the criteria lacking findings above are sufficiently addressed prior to close of DRB review, the following conditions are recommended.

1. **Prior to release of the zoning permit:**
 - a. Revised project plans depicting average, maximum, and minimum illumination levels for the building entries and walkways shall be submitted, subject to staff review and approval;
 - b. A new state wastewater permit, or confirmation that the prior wastewater permit remains valid, shall be obtained;
 - c. A new EPSC and stormwater approval, or confirmation that the prior approvals remain valid, shall be obtained;
 - d. A new CAP approval, or confirmation that the prior approval remains valid, shall be obtained; and,
 - e. Confirmation as to placement of the 3 trees along Briggs Street in the public right-of-way or on private property. If within the right-of-way, the applicant shall excavate this entire area in a continuous strip running parallel to the road to a minimum depth of 3.5 ft. and backfill with quality soil to support the trees.
2. The applicant shall provide a financial surety for half the cost of the new public sidewalk along Briggs Street. The surety shall be in a form and amount acceptable to the City Attorney and the City Engineer.
3. At least **7 days prior to the issuance of a certificate of occupancy**, the applicant shall pay to the Permitting & Inspections Department the impact fee as calculated by staff based on the net new square footage of the proposed development. The traffic impact fee shall be made available for a period of five years following completion of the Flynn Avenue / Champlain Parkway intersection.
4. Days and hours of operation are limited to 10:00 AM – 10:00 PM, Monday – Friday; 10:00 AM – 8:00 PM Saturday, and 10:00 AM – 6:00 PM on Sunday. Any expansion of these hours of operation will require conditional use review and approval by the DRB.
5. Days and hours of construction are limited to Monday – Friday 7:30 AM – 5:30 PM. Saturday construction may occur for interior work only. No construction activity on Sunday.
6. All new utility lines shall be buried.
7. It is the applicant’s responsibility to comply with all applicable ADA requirements.
8. Installation of conduit for future solar energy devices is encouraged.
9. All new construction is required to meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.

10. Standard Conditions 1-15.



PROJECT DESIGN TEAM:

OWNER:

STEVE & ANDREA CHAREST
MERAKI REALTY HOLDINGS, LLC
105 BRIGGS STREET
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ARCHITECT:

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VERMONT INTEGRATED ARCHITECTURE
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CIVIL ENGINEER:

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TRUDELL CONSULTING ENGINEERS
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WILLISTON, VT 05495
802-613-7063

MEP ENGINEER:

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LN CONSULTING, INC.
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802-655-1753

LANDSCAPE ARCHITECT:

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WAGNER HODGSON INC.
7 MARBLE AVENUE
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GEOTECHNICAL ENGINEER:

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SANBORN, HEAD & ASSOCIATES, INC.
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BURLINGTON, VT 05401
802-522-9789

ENVIRONMENTAL ENGINEER:

CLARE SANTOS, PE
KAS CONSULTING
368 AVENUE D, SUITE 15
P.O. BOX 787
WILLISTON, VT 05495
802-383-0486

PETRA CLIFFS CLIMBING CENTER
75 BRIGGS ST. BURLINGTON, VT

PLANNING + ZONING APPLICATION
FEBRUARY 15, 2024

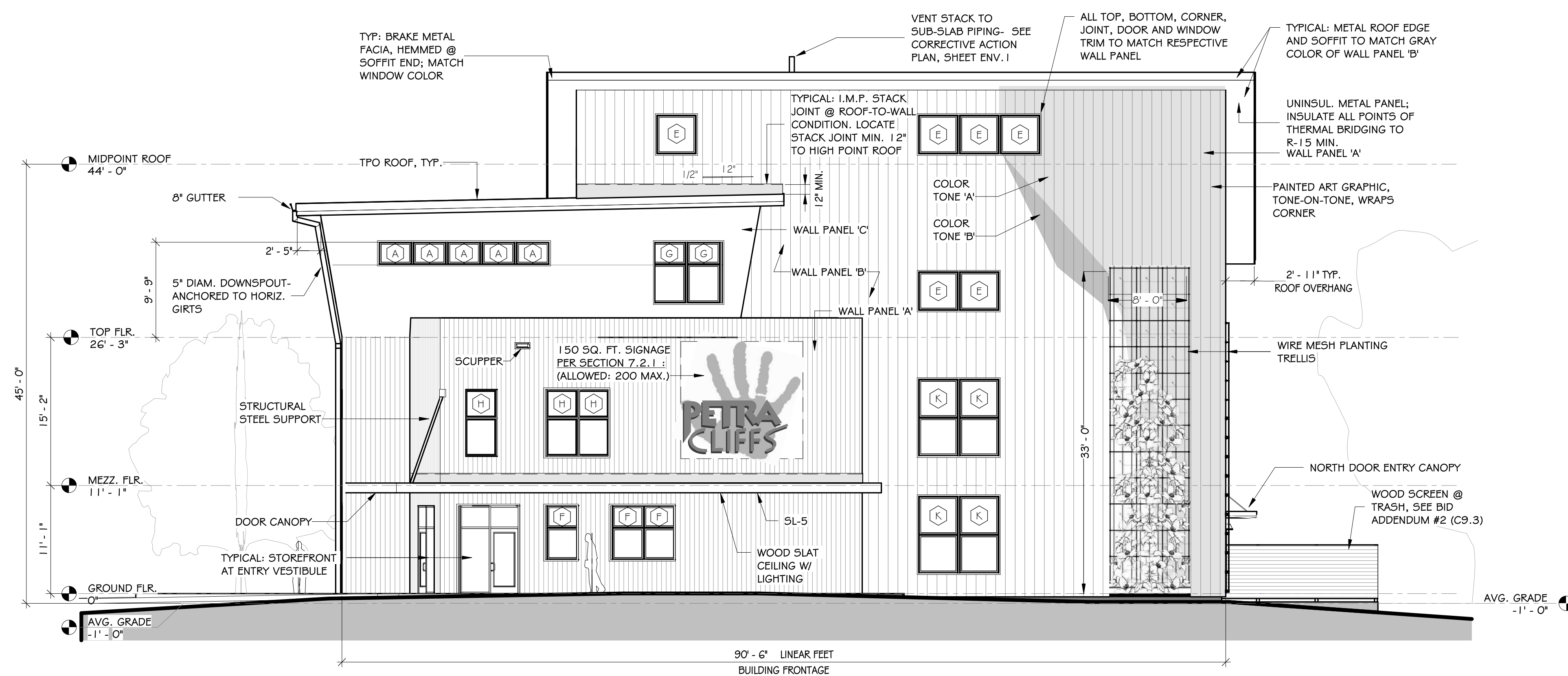


ANDREA MURRAY, AIA, NCARB, LEED AP
andrea@vermontintegratedarchitecture.com

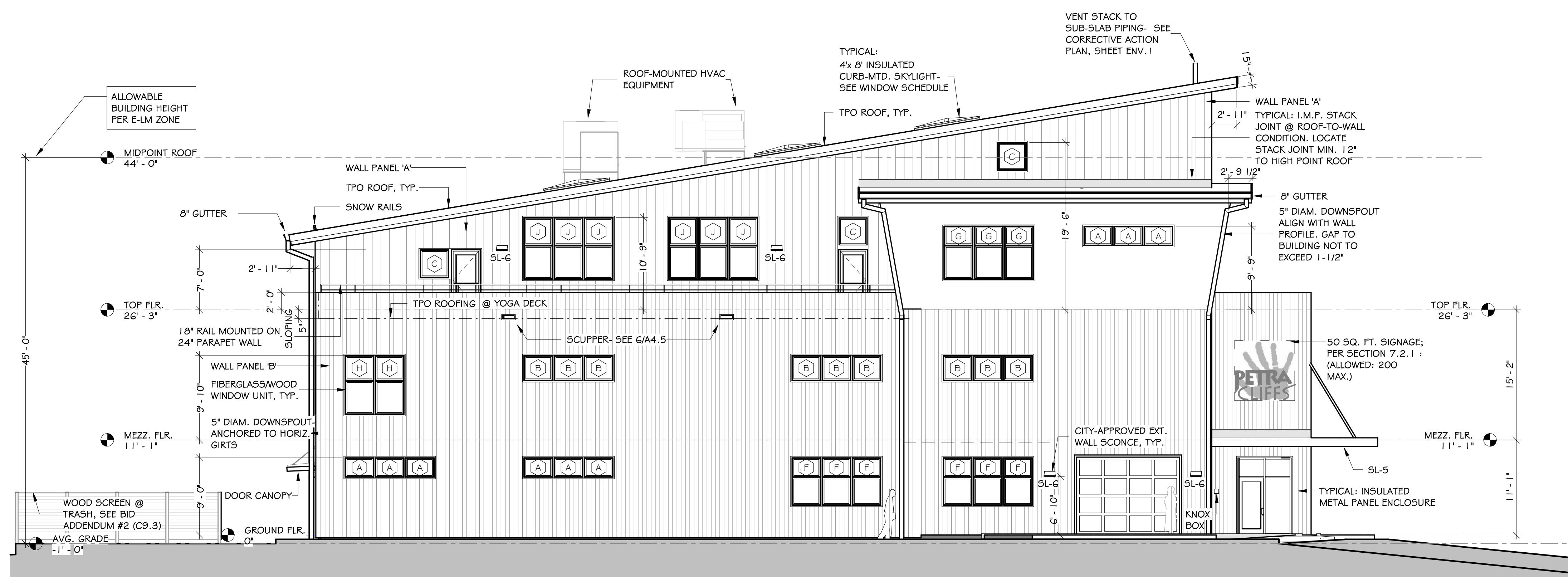
ASHAR NELSON, AIA, LEED AP
ashar@vermontintegratedarchitecture.com

P.O. Box 862
Middlebury, VT 05753
802.989.7249





BRIGGS STREET ELEVATION
1/8" = 1'-0"



2 SOUTH FACING ELEVATION
1/8" = 1'-0"

DATE ISSUED: 02/15/2024
AUTHOR: SC

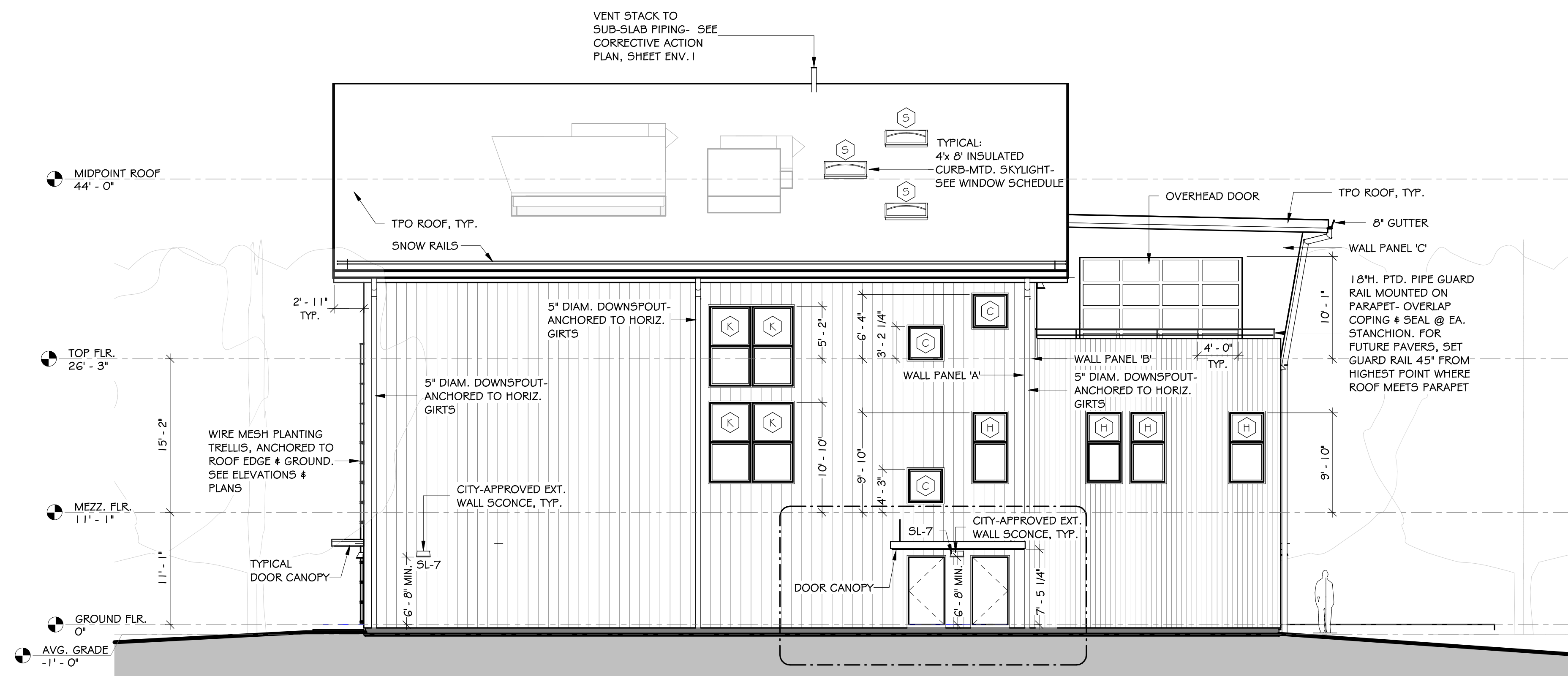
REVISIONS:

#	Date	Description
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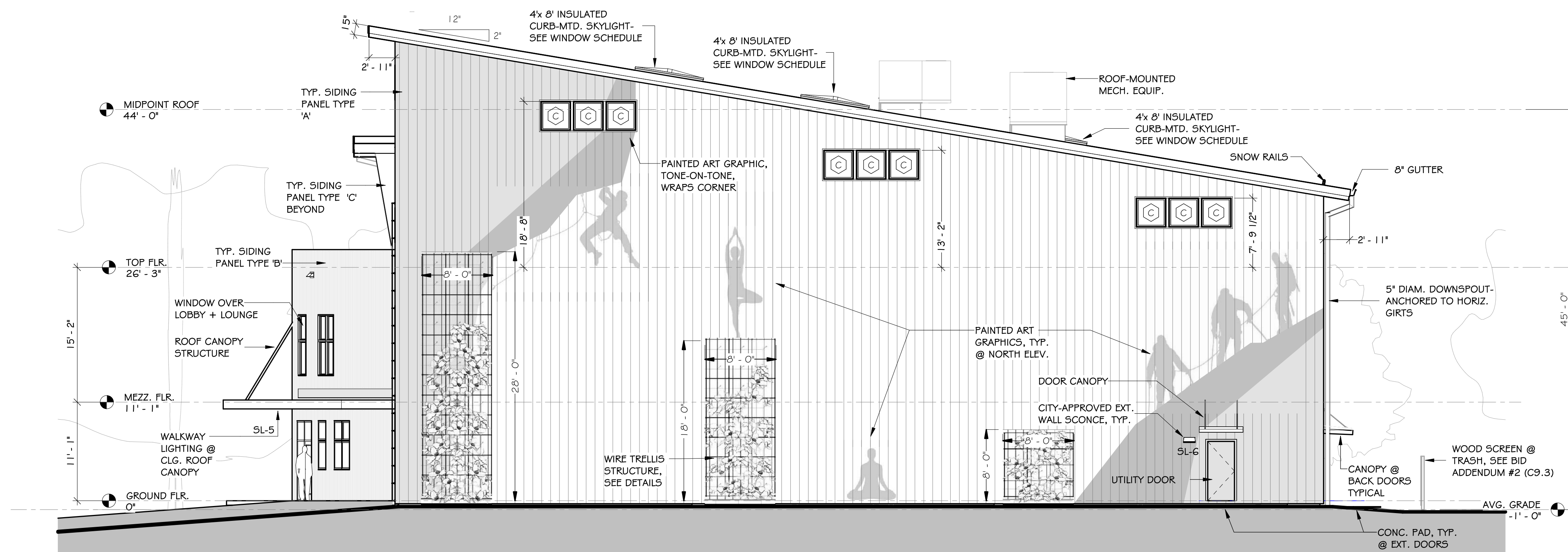
PETRA CLIFFS
CLIMBING CENTER
75 BRIGGS ST.
BURLINGTON, VT

SOUTH & EAST
BUILDING
ELEVATIONS

A2.1



2 WEST FACING ELEVATION
1/8" = 1'-0"



1 NORTH FACING ELEVATION
1/8" = 1'-0"

DATE ISSUED: 02/15/2024
AUTHOR: SC

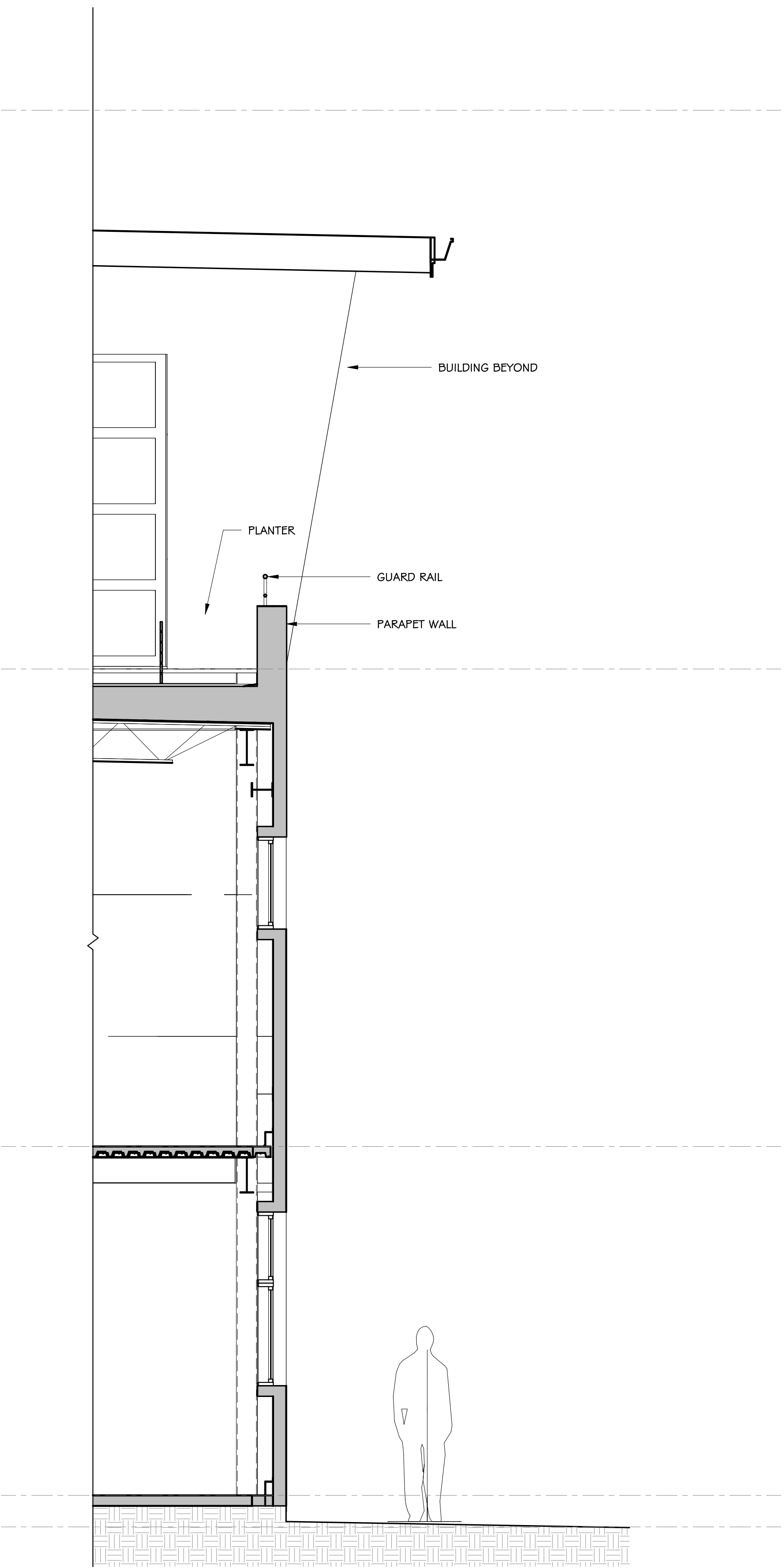
REVISIONS:

#	Date	Description
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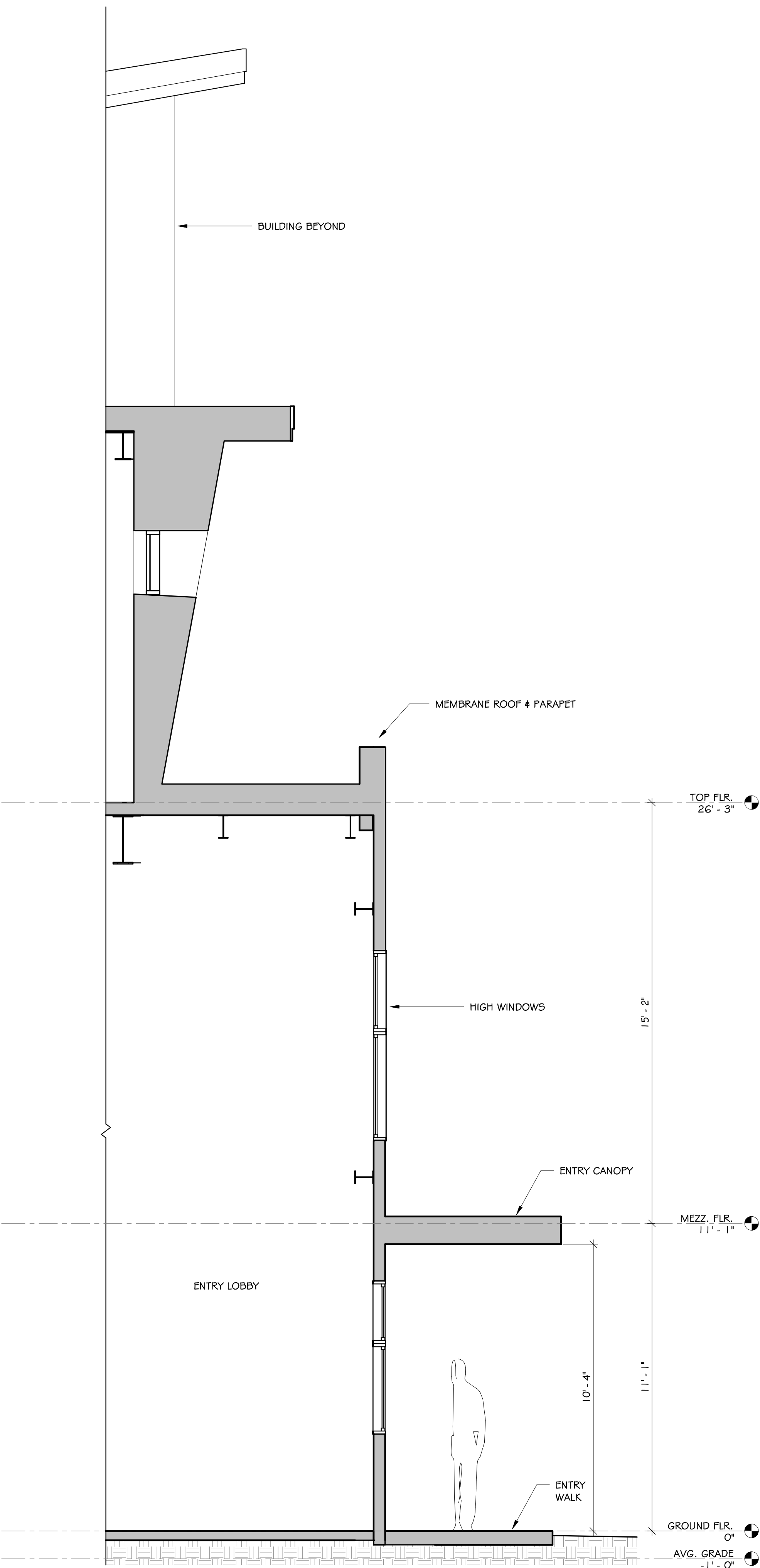
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CLIMBING CENTER
75 BRIGGS ST.
BURLINGTON, VT

NORTH & WEST BUILDING ELEVATIONS

A2.2



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



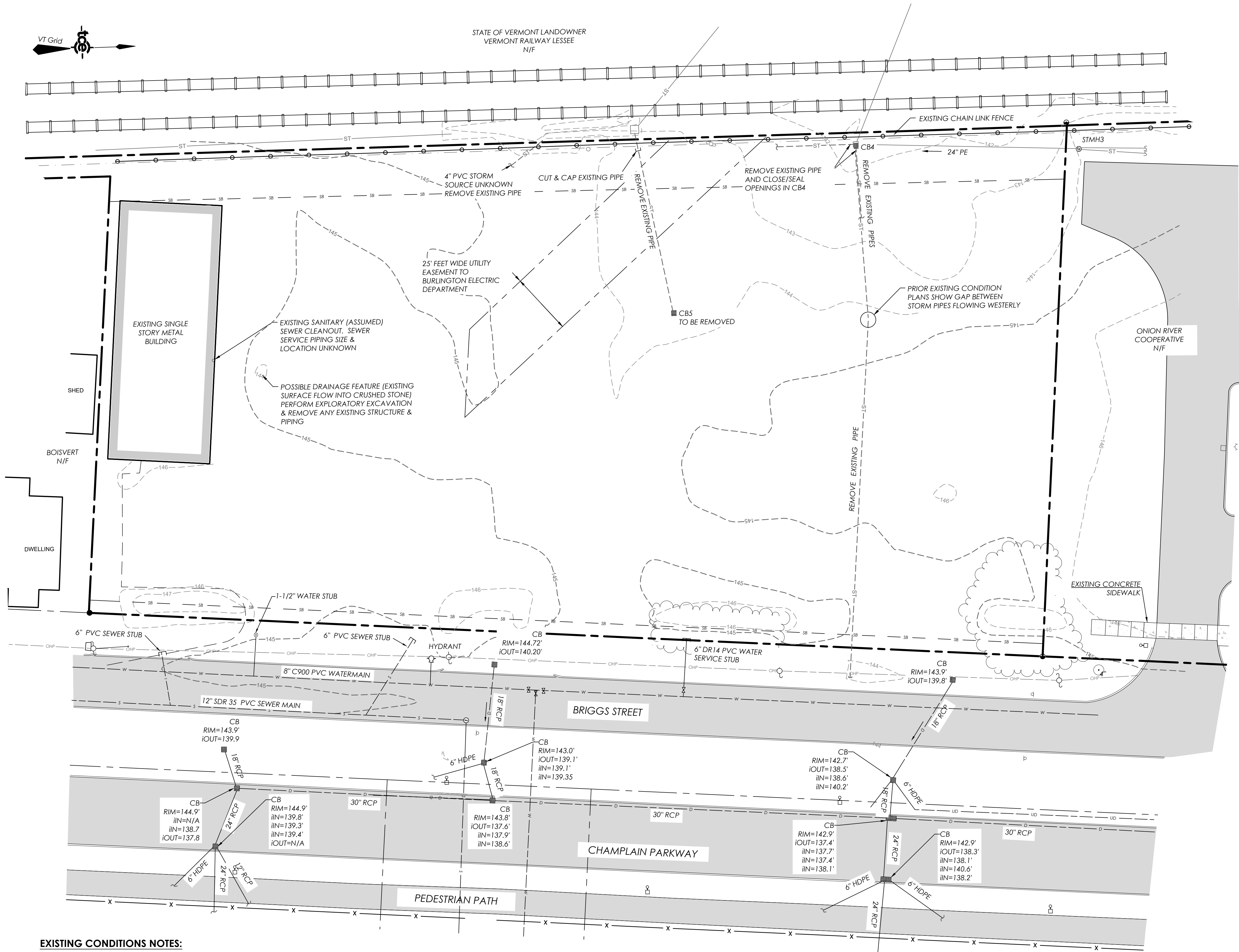
1 BRIGGS ST. (EAST) WALL SECTION
3/8" = 1'-0"

DATE ISSUED: 02/15/24
AUTHOR: SC

REVISIONS:

#	Date	Description
1	02/15/24	PLANNING + ZONING

PETRA CLIFFS
CLIMBING CENTER
75 BRIGGS ST.
BURLINGTON, VT



EXISTING CONDITIONS NOTES:

- THE PURPOSE OF THE EXISTING CONDITIONS PLAN IS TO DEPICT READILY APPARENT PERTINENT EXISTING CONDITIONS AS OF 01/09/2024.
- BEARINGS SHOWN ARE BASED UPON VERMONT GRID NORTH USING VTFRS CORRS STATION.
- VERTICAL DATUM IS BASED ON NAVD88 (GEOID 18). A CARLSON BRx7 RTK GPS UNIT WAS EMPLOYED FOR THESE OBSERVATIONS.
- COORDINATE SYSTEM IS BASED ON VERMONT STATE PLANE (U.S. SURVEY FEET).
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE BASED ON RESEARCH, AND SURFACE EVIDENCE ENCOUNTERED AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE ORDINARY STANDARD OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN ENGINEER. STORM WATER INVERTS ARE APPROXIMATE DUE TO THE LIMITATIONS OF STANDARD FIELD MEASUREMENT PRACTICES NOT BE ABLE TO COMPENSATE FOR PIPES THAT WERE RECESSED TOO FAR IN THE STRUCTURE TO PROVIDE A MORE ACCURATE MEASUREMENT. ADDITIONAL UTILITIES NOT SHOWN MAY EXIST. ENGINEER SHALL BE NOTIFIED IF ANY DISCREPANCIES ARE ENCOUNTERED. ACTUAL LOCATION OF UNDERGROUND UTILITIES MAY VARY. DIGSAFE MUST BE CONTACTED PRIOR TO ANY EXCAVATION. CALL 1-888-DIG SAFE (344-7233) OR CALL 811.
- PERIMETER BOUNDARIES SHOWN HEREON ARE BASED UPON PLANS PREPARED BY CIVIL ENGINEERING ASSOCIATES. THIS PLAN DOES NOT DEPICT A FORMAL BOUNDARY SURVEY.

CORRECTIVE ACTION PLAN

SEE THE CORRECTIVE ACTION PLAN BY KAS CONSULTING FOR SOIL MANAGEMENT REQUIREMENTS PRIOR TO, AND THROUGHOUT CONSTRUCTION.



PROJECT LOCATION

LEGEND

PAVED DRIVE OR ROAD	
PAVED DRIVE OR ROAD WITH CURB	
TREE LINE	
TOPOGRAPHIC CONTOURS	124
STORM DRAINAGE	D
OVERHEAD UTILITY	OH
PROPERTY LINE	
ADJOINING PROPERTY LINE	
EASEMENTS	
FENCE	X
SIGN	⊕ ⊗ ⊙ ⊖
SEWER, DRAINAGE OR TELEPHONE MANHOLE (SMH/DMH/TMH)	⊕ ⊗ ⊙ ⊖
CATCH BASIN (CB)	⊕ ⊗ ⊙ ⊖
VALVE	⊕ ⊗ ⊙ ⊖
FIRE HYDRANT (HYD)	⊕ ⊗ ⊙ ⊖
UTILITY POLE	⊕ ⊗ ⊙ ⊖
LUMINAIRE	⊕ ⊗ ⊙ ⊖
IRON PIPE	●
STEEL REBAR	⊕ ⊗ ⊙ ⊖

DEMOLITION NOTES:

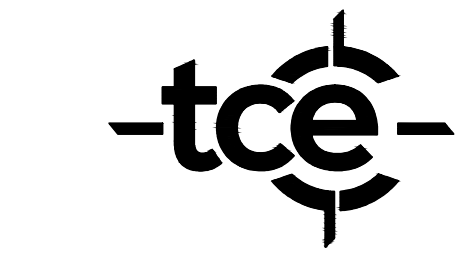
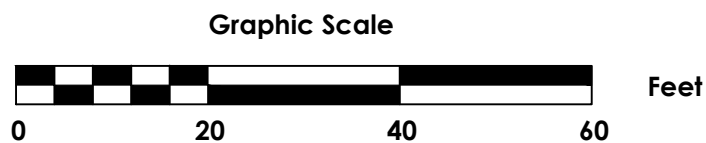
- THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF THE EXISTING SURFACES, STRUCTURES, AND UTILITIES WITH THE OWNER, UTILITY COMPANIES, AND THE CITY OF BURLINGTON.
- THE RELOCATION AND/OR TERMINATION OF EXISTING UTILITIES SHALL BE COMPLETED IN COORDINATION WITH THE UTILITY COMPANY AND OWNER, WITH WORK IN ACCORDANCE WITH THE UTILITY COMPANY'S SPECIFICATIONS FOR CONSTRUCTION.
- EXISTING FOUNDATIONS AND STRUCTURES, NOT SHOWN ON THIS PLAN, MAY EXIST BELOW GRADE ON THE SITE. IF ENCOUNTERED, THEY SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND STRUCTURAL ENGINEER. AT A MINIMUM, EXISTING FOUNDATIONS AND STRUCTURES SHALL BE REMOVED TO A DEPTH OF AT LEAST 2 FEET BELOW THE BOTTOM OF THE SUBGRADE OR ANY TRENCH BEDDING.
- WHERE REQUIRED, EXISTING UTILITY SERVICE AND ACCESS SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND PROVISION OF TEMPORARY UTILITY SERVICES AND ACCESS AS REQUIRED. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
- EXISTING STRUCTURES, PAVEMENT, SURFACES, AND UTILITIES SHALL BE REMOVED WHERE INDICATED ON THE PLANS, AND AS NECESSARY TO CONSTRUCT AND COMPLETE THE IMPROVEMENTS SHOWN ON THE PLANS. THE EXCAVATION, REMOVAL, AND DISPOSAL OF MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE LAWS, RULES, REGULATIONS, AND PROTOCOLS. THE WORK SHALL INCLUDE THE EXCAVATION, DISPOSAL, BORROW, AND PLACEMENT OF SUITABLE MATERIAL IN CONFORMANCE WITH THE LINES, GRADES, AND TYPICALS SHOWN ON THE PLANS.

UTILITY CONSTRUCTION NOTES:

- THE LOCATIONS AND PIPE MATERIAL OF THE WATER AND SEWER SERVICES AND MAINS ARE BASED UPON RECORD INFORMATION PROVIDED BY THE PUBLIC WORKS DEPARTMENT AND FIELD OBSERVATIONS. THE ACTUAL LOCATION OF THE EXISTING MAINS AND SERVICES MAY VARY FROM THAT SHOWN ON THIS PLAN.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS TO VERIFY THE HORIZONTAL LOCATION AND ELEVATION OF THE WATER AND SEWER SERVICES TO THE EXISTING BUILDING, TIES FOR, AND THE ELEVATION OF, EACH SERVICE SHALL BE REPORTED TO THE ENGINEER.
- ALL UTILITY WORK SHALL BE PERFORMED IN A MANNER THAT MINIMIZES INTERRUPTIONS IN SERVICE TO OTHER ADJACENT USERS.
- WHERE TEMPORARY INTERRUPTIONS IN UTILITY SERVICES ARE REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS AND SHALL PROVIDE WRITTEN NOTICE TO AFFECTED USERS IN ACCORDANCE WITH THE DEPARTMENT REQUIREMENTS.

CITY RIGHT OF WAY REQUIREMENTS:

- AUTHORIZATION FROM THE DEPARTMENT OF PUBLIC WORKS SHALL BE OBTAINED PRIOR TO PERFORMING ANY WORK WITHIN THE CITY'S RIGHT OF WAY.
- THE SITE CONTRACTOR SHALL IMPLEMENT TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF PUBLIC WORKS AND THE MUTCD. WORK SHALL CONFORM WITH THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 'STANDARDS' OF THE VTRANS CONSTRUCTION STANDARDS.
- ALL WORK AND DISTURBANCE WITHIN THE CITY RIGHT OF WAY SHALL BE LIMITED TO THAT SPECIFIC AREA APPROVED. WORK SHALL NOT EXTEND BEYOND THE APPROVED LIMITS OF DISTURBANCE.
- NO VEHICLE PARKING OR STORAGE OF MATERIALS SHALL BE ALLOWED WITHIN THE CITY RIGHT OF WAY, INCLUDING GREEN STRIPS, EXCEPT WHERE APPROVED BY THE CITY.



ENGINEERING • SURVEY PLANNING • ENVIRONMENTAL

478 BLAIR PARK ROAD | WILLISTON, VERMONT 05495
802 879 6531 | WWW.TCEVT.COM

Revisions	No.	Description	Date	By
XX/XX/XX	XXX			

Use of These Drawings

- Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
- By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
- Owner and Architect, are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
- Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
- These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
- It is the User's responsibility to ensure this copy contains the most current revisions.

Submitted For Local Approval

Project Title

Petra Cliffs

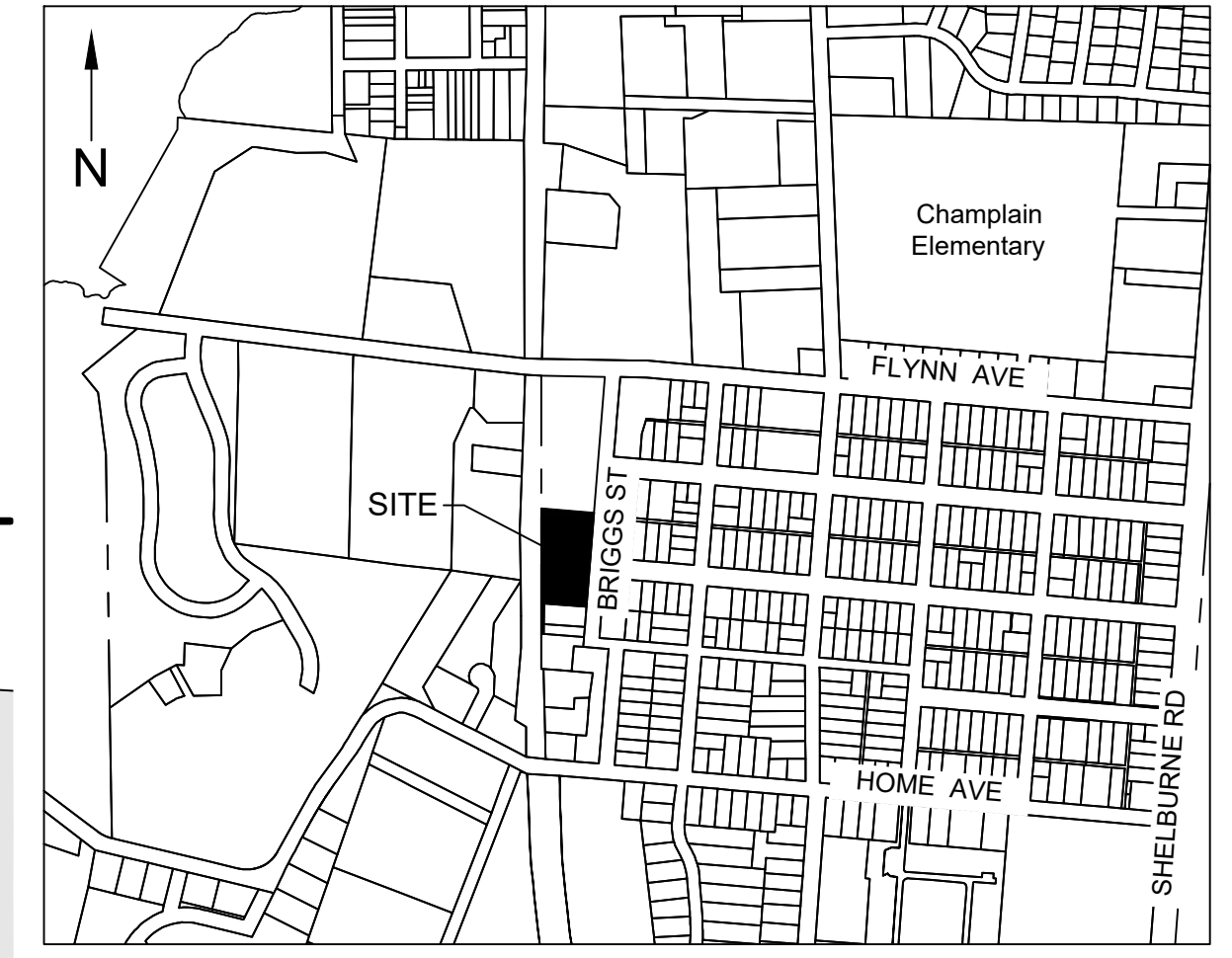
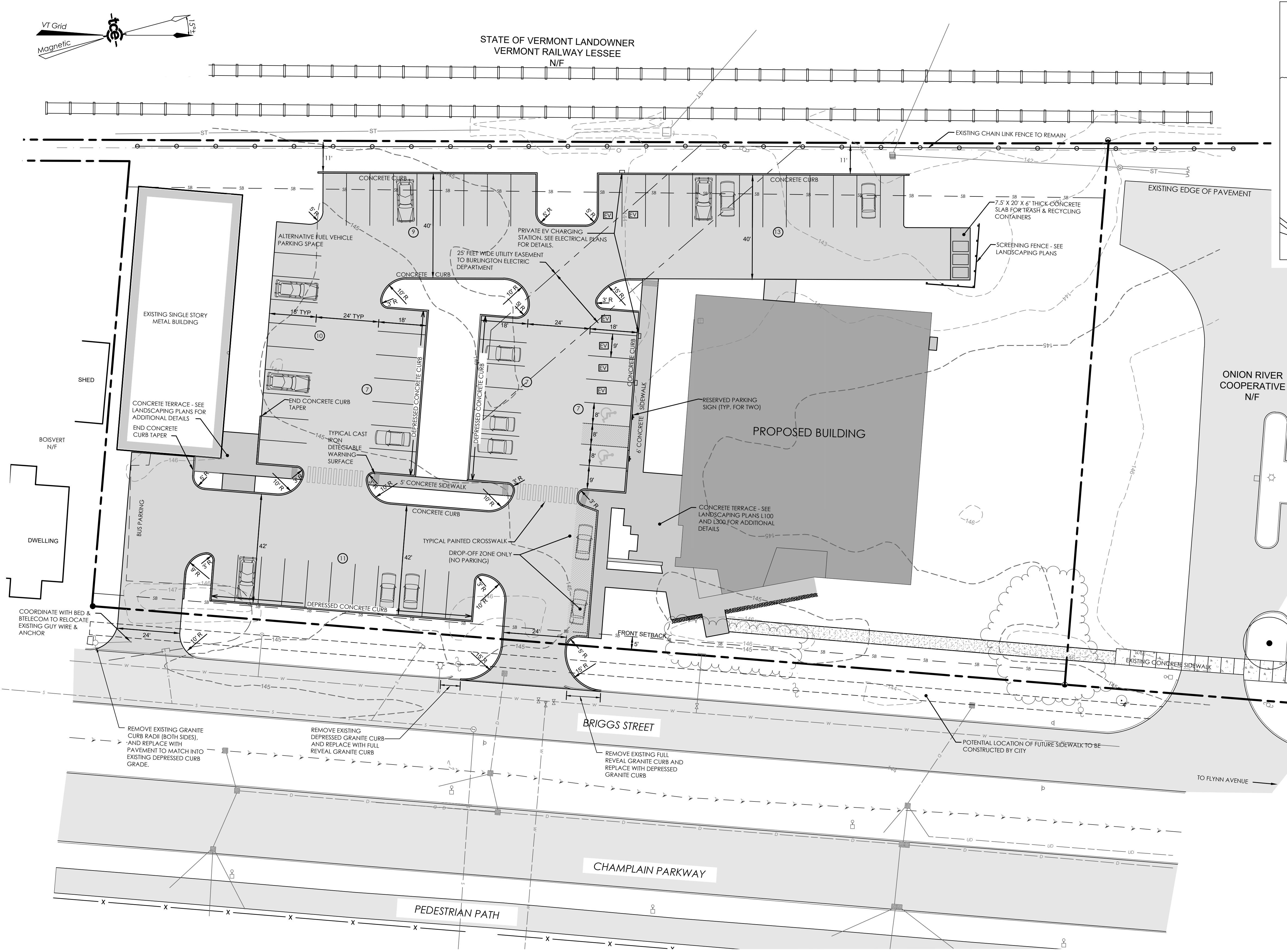
75 Briggs Street
Burlington, VT 05401

Sheet Title

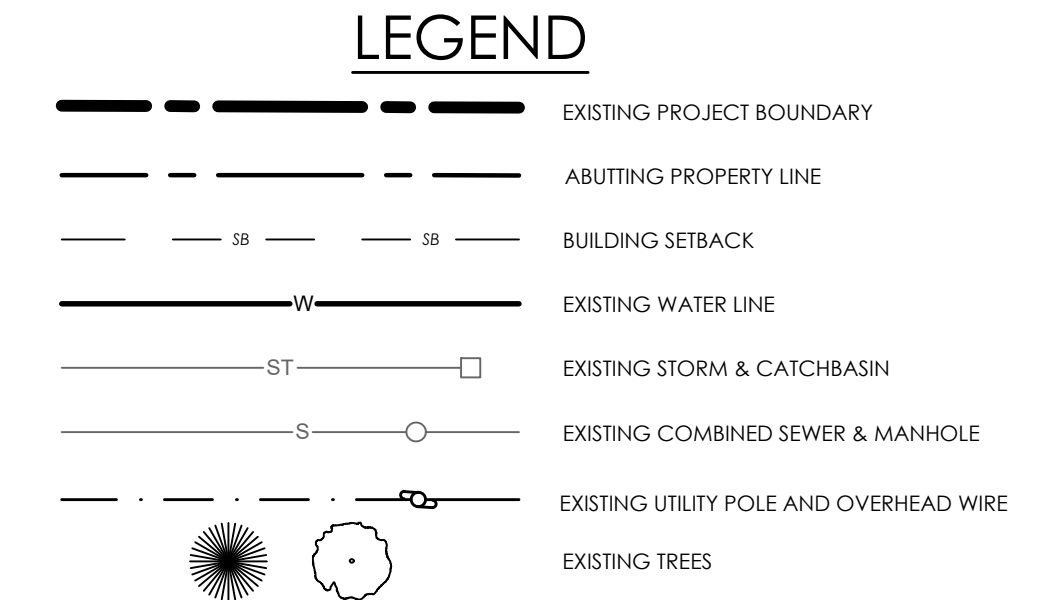
EXISTING CONDITIONS & DEMOLITION PLAN

Date:	02/09/2024
Scale:	1"=20'
Project Number:	23-271
Drawn By:	TCE
Project Engineer:	DJG
Approved By:	
Field Book:	370 AND 23-271.RWS

C1-02



LOCATION MAP
N.T.S.



PROJECT STATISTICS:
ZONING DISTRICT: ENTERPRISE-LIGHT MANUFACTURING (E-LM)
ZONING OVERLAY: DESIGN REVIEW OVERLAY DISTRICT
SHARED USE PARKING DISTRICT

DIMENSIONAL STANDARDS:
MAXIMUM INTENSITY = 2.0 FLOOR AREA RATIO
MAXIMUM BUILDING HEIGHT = 45 FEET
MAXIMUM LOT COVERAGE = 80%

MINIMUM BUILDING SETBACKS
FRONT = 5 FEET
SIDE = 0 FEET (NON-RESIDENTIAL DISTRICT ABUTTING)
REAR = VARIES (10% OF LOT DEPTH)

PER SECTION 5.2.5(D)4,
PARKING AREAS AND DRIVEWAYS MAY PROJECT INTO
REQUIRED SIDE AND REAR YARD SETBACKS PROVIDED
THEY ARE NO LESS THAN 5 FEET FROM THE SIDE OR
REAR PROPERTY LINE.

OFF-STREET PARKING STANDARDS:
MAXIMUM OFF-STREET PARKING REQUIREMENTS:
HEALTH CLUB USE:
3 SPACES / 1000 SF GFA (SHARED USE DISTRICTS)

MAXIMUM PARKING ALLOWED = 64 SPACES
(3 SPACES/1000 SF GFA X (14,720 SF ÷ 4,000 SF))

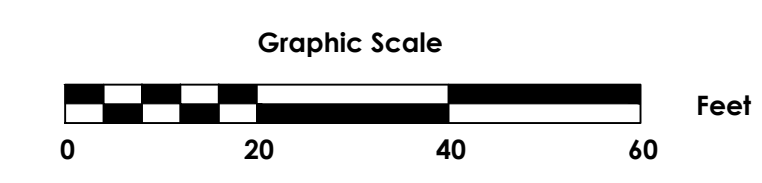
PROPOSED PARKING = 64 SPACES (TOTAL INCLUDES 3 ADA SPACES AND 6 EV SPACES)

BICYCLE PARKING STANDARDS:
SHORT TERM BICYCLE SPACES PROVIDED = 10 SPACES
LONG TERM BICYCLE SPACES PROVIDED = 2 SPACES

LOT COVERAGE	REVISED 2-5-24	
	BUILDING	TOTAL
EXISTING	4,046 SF 5.5%	68,491 SF 93.4%
PROPOSED	13,663 SF 18.6%	43,233 SF 58.9%
TOTAL LOT AREA = 73,348 SF (1.68 ACRE)		

APPLICANT
PETRA CLIFFS
CHAREST ALPINISM, LLC
105 BRIGGS STREET
BURLINGTON, VT 05401

LANDOWNER
MERAKEI REALTY HOLDINGS, LLC
105 BRIGGS STREET
BURLINGTON, VT 05401



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Revisions	No.	Description	Date	By
	1	ADD TRANSFORMER, ELIM PARKING SPACE	07-13-18	ABR
	2	REVISE BLDG FOOTPRINT, WALKWAYS	12-18-18	ABR
	3	DELETE VAULT / TRANSFORMER	01-11-19	ABR

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

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

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

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

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

6. It is the User's responsibility to ensure this copy contains the most current revisions.

Submitted For Local Approval

Project Title

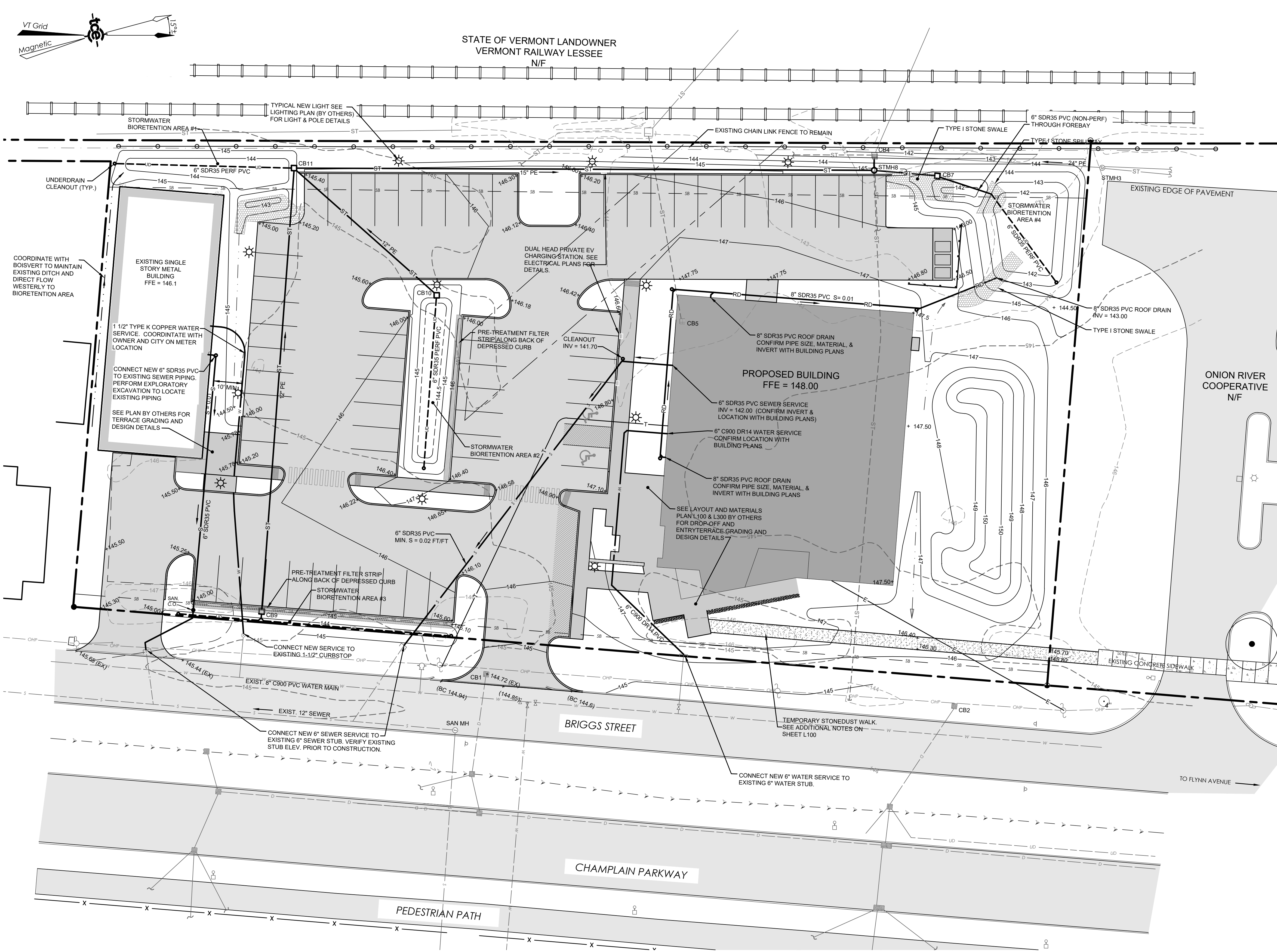
Petra Cliffs
75 Briggs Street
Burlington, VT 05401

Sheet Title

Site Plan

Date: 02-05-24
Scale: 1" = 20'
Project Number: 23-271
Drawn By: TCE
Project Engineer: DJG
Approved By:
Field Book:

C2-01



STORM STRUCTURE DATA

EXIST. CB 1
RIM = 144.72
18" RCP OUT = 140.20

EXIST. CB 2
RIM = 143.90
18" RCP OUT = 139.80

EXIST. STMH 3
RIM = 143.87
24" OUT = 135.87

EXIST. CB 4
EXIST RIM = 140.43
NEW RIM = 143.00
24" IN = 134.67 (N)
15" CMP IN = 129.7 (S)
TO BE REMOVED
15" IN = 138.0 (E)
TO BE REMOVED
NEW 18" IN = 138.0
OUT = 129.9

EXIST. CB 5
RIM = 143.16
8" OUT = 141.4
STRUCTURE TO BE REMOVED

NEW CB7
RIM = 143.25
6" UD IN = 139.17
15" OUT = 139.10

NEW STMH8
RIM = 145.50
15" IN = 138.95 (N)
15" IN = 139.10 (S)
18" OUT = 138.30

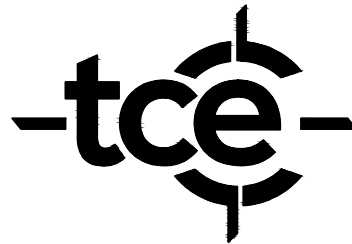
NEW CB9
RIM = 144.5
6" UD IN = 141.17
12" OUT = 141.10

NEW CB10
RIM = 145.5
6" UD IN = 141.67
12" OUT = 141.60

NEW CB11
RIM = 144.75
6" UD IN = 141.17
12" IN = 140.25
12" IN = 140.25
15" OUT = 140.20



THE CONTRACTOR SHALL
NOTIFY DIG SAFE® AT 811
PRIOR TO ANY EXCAVATION.



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Revisions

No. Description Date By

LEGEND

---	EXISTING PROJECT BOUNDARY
---	ABUTTING PROPERTY LINE
---	BUILDING SETBACK
---	EXISTING WATER LINE
---	EXISTING STORM & CATCHBASIN
---	EXISTING COMBINED SEWER & MANHOLE
---	EXISTING UTILITY POLE AND OVERHEAD WIRE
---	PROPOSED FINISH GRADE CONTOUR
---	PROPOSED WATER LINE, GATE VALVE & HYDRANT
---	PROPOSED STORM PIPE AND CATCHBASIN
---	PROPOSED SEWER PIPE AND CLEANOUT
---	PROPOSED UNDERDRAIN AND CLEANOUT
---	PROPOSED ELECTRIC CONDUIT(S)
---	PROPOSED TELECOM CONDUIT(S)
---	PROPOSED POLE MOUNTED LIGHT
---	EXISTING TREES

NOTES:

- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS AND THE LOCATION AND ELEVATION OF ALL ENTRANCES AND UTILITY SERVICES WITH THE ARCHITECTURAL & MECHANICAL PLANS.
- SEE ARCHITECTURAL PLANS FOR BUILDING CONSTRUCTION DETAILS, INCLUDING WALKWAY AND PAVEMENT FROST HEAVE PREVENTION MEASURES AT BUILDING ENTRANCES.
- SEE OTHER SHEETS OF THESE PLANS FOR ADDITIONAL SITE IMPROVEMENTS, DETAILS AND SPECIFICATIONS. SEE PLANS BY OTHERS FOR RAILING, STEPS, RETAINING WALL, LIGHTING, AND CONCRETE PATIO/WALK DETAILS.
- ALL WORK WITHIN THE CITY RIGHT OF WAY AND WORK ON THE EXISTING WATER AND SEWER SERVICES SHALL BE COORDINATED WITH THE CITY PUBLIC WORKS DEPARTMENT.
- AT THE END OF ALL NEW SIDEWALKS AND RAMPS, CAST IRON DETECTABLE WARNING PLATES SHALL BE INSTALLED THE FULL WIDTH OF THE SIDEWALK.
- SEE LIGHTING PLAN (BY OTHERS) FOR LIGHT FIXTURE AND POLE DESIGN DETAILS. SEE ELECTRICAL DESIGN PLAN (BY OTHERS) FOR ELECTRICAL DISTRIBUTION AND CONDUIT REQUIREMENTS FOR NEW LIGHTING.
- PIPE SLOPES ARE IN FEET PER FEET UNLESS OTHERWISE NOTED.

CONSTRUCTION NOTES:

- UNLESS OTHERWISE NOTED, A MINIMUM 5 FT BY 5 FT LANDING AREA SHALL BE PROVIDED AT EACH BUILDING ENTRY WITH A MAXIMUM SLOPE OF 1:50.
- A MINIMUM 5 FT BY 5 FT LANDING AREA SHALL BE PROVIDED AT EACH TURN AND AT THE BOTTOM OF EACH SIDEWALK RAMP. THE CROSS SLOPE OF THE LANDING AREA SHALL HAVE A MAXIMUM SLOPE OF 1:50.
- THE PREFERRED MAXIMUM SLOPE OF ALL NEW WALKS IS 5% (1:20). THE MAXIMUM CROSS SLOPE OF NEW WALKS SHALL BE 1:50. THE MAXIMUM SLOPE OF ANY NEW WALK OR RAMP SHALL BE 1:12 (8%), EXCEPT FOR CURB RAMPS, WHERE RAMPS EXCEED 5% WITH A RISE GREATER THAN 6". A COMPLIANT HANDRAIL IS REQUIRED ALONG THE RAMP.
- ALL TRANSITIONS BETWEEN EXISTING PAVEMENT OR CONCRETE AND NEW WALKS SHALL BE SMOOTH. IN NO CASE SHALL THERE BE A TRANSITION WITH A VERTICAL EDGE GREATER THAN 1/4".
- ALL GRASS AND LANDSCAPED AREAS ADJACENT TO THE NEW WALKS AND BUILDINGS SHALL BE GRADED TO MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING OR WALK. LOW AREAS SHALL BE FILLED WITH TOPSOIL, SEEDED AND MULCHED AS REQUIRED.
- SEE OTHER SHEETS OF THESE PLANS FOR ADDITIONAL SITE IMPROVEMENTS, DETAILS AND SPECIFICATIONS.

Submitted For Local Approval

Project Title

Petra Cliffs
75 Briggs Street
Burlington, VT 05401

Sheet Title

Utility & Grading
Plan

Date: 02-05-24

Scale: 1" = 20'

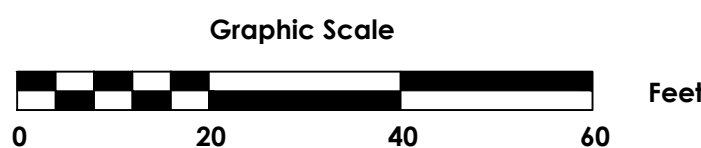
Project Number: 23-271

Drawn By: TCE

Project Engineer: DJG

Approved By:

Field Book:



C2-02

STANDARD EPSC PLAN REQUIREMENTS

THIS SECTION CONTAINS THE MINIMUM REQUIRED ELEMENTS FOR THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN. THESE ELEMENTS ARE IN ADDITION TO THE SITE SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL PRACTICES SHOWN ON THE PLANS.

EROSION PREVENTION

- THROUGHOUT CONSTRUCTION, THE AREA OF SOIL DISTURBANCE SHALL BE LIMITED TO THOSE AREA(S) THAT CAN BE ACTIVELY WORKED AND MANAGED WITH THE FORCES AVAILABLE. AREAS THAT ARE NOT ACTIVELY BEING WORKED FOR A PERIOD OF 3 DAYS OR MORE, SHALL BE TEMPORARILY STABILIZED.
- THE MAXIMUM AREA OF SOIL DISTURBANCE AT ANY ONE TIME ON THE ENTIRE PROJECT PARCEL SHALL BE 1.0 ACRE.**
- SEDIMENT BASINS, SEDIMENT TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND THE RECEIVING CHANNEL.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- ALL SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES AS A PART OF MAINTENANCE SHALL BE DISPOSED OF IN AN AREA THAT IS:
 - LESS THAN 5% IN SLOPE.
 - AT LEAST 100 FT. FROM ANY DOWNSLOPE WATER BODY OR CONVEYANCE TO A WATER BODY (INCLUDING STORM DRAIN INLET OR DITCH).
 - VEGETATED.PERMANENT STABILIZATION OF SEDIMENT SHALL BE IMMEDIATELY IMPLEMENTED FOLLOWING DISPOSAL.
- FOR ANY AREA TO BE STABILIZED FOR WINTER BY VEGETATIVE COVER, SEEDING MUST BE COMPLETED NO LATER THAN SEPTEMBER 15.
- ANY AREA TO BE STABILIZED FOR WINTER THAT DOES NOT HAVE ESTABLISHED VEGETATION BY OCTOBER 15 MUST BE STABILIZED BY ANCHORED MULCH AT THE WINTER APPLICATION RATE OF 4 TONS PER ACRE, OR OTHER APPROVED STABILIZATION MEASURES (E.G. ROLLED EROSION CONTROL PRODUCT), DORMANT SEEDING (E.G. WITH WINTER RYE) IS RECOMMENDED.
- DISTURBED AREAS BORDERING AND DRAINING TO THE STREET MUST HAVE AN APPROPRIATE SEDIMENT BARRIER SPANNING THE EDGE OF THE DISTURBANCE TO PREVENT WASHING OF SEDIMENT ONTO SIDEWALKS OR STREETS AND GUTTERS.
- HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 2 TONS PER ACRE. HAY MULCH APPLICATION DURING WINTER CONSTRUCTION SHALL BE AT A RATE OF 4 TONS PER ACRE. WHERE SUBJECT TO BLOWING, MULCH SHALL BE SECURED IN PLACE BY TRACKING WITH EQUIPMENT WITH TRACKS RUNNING PARALLEL TO SLOPE, A TACKIFIER, NETTING, OR COVERED/REPLACED WITH PROPERLY ANCHORED EROSION MATTING.
- PLACEMENT OF SEED AND MULCH SHALL OCCUR WITHIN 48 HOURS OF PLACEMENT OF TOPSOIL AND COMPLETION OF FINAL GRADING (NOT WITHSTANDING STABILIZATION REQUIREMENTS ELSEWHERE IN THIS PLAN).
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED.

STABILIZATION

- ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR PERMANENT STABILIZATION WITHIN 14 CALENDAR DAYS.** AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY.

THE FOLLOWING EXCEPTIONS APPLY:

- STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
 - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. BUILDING FOUNDATION EXCAVATION, UTILITY TRENCHES).
- MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. EXCEPT AS NOTED BELOW, ALL SITES SHALL BE SEED AND STABILIZED WITH EROSION CONTROL MATERIALS, SUCH AS MULCH OR ROLLED EROSION CONTROL PRODUCTS, INCLUDING AREAS WHERE CONSTRUCTION HAS BEEN SUSPENDED OR SECTIONS COMPLETED.
 - ON THE CUT SIDE OF STREETS/DRIVES, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK RIP-RAP OR OTHER NON-ERODIBLE LINING (E.G. RECP), OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS SOD.
 - FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, STREET IMPROVEMENTS AND AREAS WITHIN 50 FT. OF A BUILDING UNDER CONSTRUCTION, A DOWNSLOPE PERIMETER SEDIMENT CONTROL SYSTEM CONSISTING OF SILT FENCE SHALL BE INSTALLED AND MAINTAINED TO CONTAIN SOIL EXPOSED DISTURBED AREAS ADJACENT TO A CONVEYANCE THAT PROVIDES RAPID OFFSITE DISCHARGE OF SEDIMENT, SUCH AS A CUT SLOPE AT AN ENTRANCE, SHALL BE COVERED WITH PLASTIC OR GEOTEXTILE TO PREVENT SOIL LOSS UNTIL IT CAN BE STABILIZED. STABILIZED CONSTRUCTION ENTRANCES WILL BE MAINTAINED TO CONTROL VEHICLE TRACKING MATERIAL OFF SITE.
 - TEMPORARY SEDIMENT TRAPPING DEVICES SHALL NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTING DRAINAGE AREAS. SIMILARLY, STABILIZATION SHALL BE ESTABLISHED PRIOR TO CONVERTING SEDIMENT TRAPS/BASINS INTO PERMANENT (POST-CONSTRUCTION) STORMWATER MANAGEMENT PRACTICES.
 - STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
 - ALL SLOPES STEEPER THAN 3:1 (H:V), OR 33.3%, AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS SHALL, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES (RECP). AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL NOT BE DISTURBED.

WINTER CONSTRUCTION REQUIREMENTS

THE FOLLOWING REQUIREMENTS APPLY DURING THE WINTER CONSTRUCTION PERIOD, WHICH IS FROM OCTOBER 15 TO APRIL 15.

- ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR PERMANENT STABILIZATION AT THE END OF EACH WORK DAY.**

THE FOLLOWING EXCEPTIONS APPLY:

- STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
 - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. BUILDING FOUNDATION EXCAVATION, UTILITY TRENCHES).
- STABILIZED ACCESS POINTS SHALL BE ENLARGED TO PROVIDE FOR SNOW STOCKPILING WHILE STILL MAINTAINING EFFECTIVE SEDIMENT CONTROL. PACKED SNOW AND ICE MAY NEED TO BE REMOVED AND ADDITIONAL STONE PLACED TO MAINTAIN THE LOOSE STONE SURFACE AT STABILIZED CONSTRUCTION EXITS.
 - THE LIMITS OF DISTURBANCE MAY NEED TO BE REPLACED OR DRAWN IN TO REFLECT THE BOUNDARY OF WINTER WORK. THE LIMITS OF DISTURBANCE SHALL BE DRAWN IN TO EXCLUDE ALL AREAS TEMPORARILY STABILIZED FOR THE WINTER, AND AREAS WHERE DISTURBANCE DURING THE WINTER IS NOT PLANNED.
 - BASED UPON THE WINTER ACTIVITIES PROPOSED, THE ON-SITE PLAN COORDINATOR SHALL DEVELOP A SNOW MANAGEMENT PLAN THAT SHALL INCLUDE AT A MINIMUM:
 - ADEQUATE SIZE FOR SNOW STORAGE AREAS.
 - SNOW STORAGE AREAS LOCATED DOWN GRADIENT OF AREAS OF PLANNED DISTURBANCE.
 - CONTROL OF SNOWMELT RUNOFF.
 - PROHIBITING STORAGE OF SNOW IN STORMWATER TREATMENT STRUCTURES.
 - A MINIMUM 25 FOOT BUFFER BETWEEN PERIMETER CONTROLS (SUCH AS SILT FENCE) TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.

- SILT FENCE SHALL BE REINFORCED OR REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
- THE ONSITE PLAN COORDINATOR INSPECTIONS SHALL INCLUDE MAINTENANCE OF DRAINAGE STRUCTURES TO INSURE THAT THEY ARE OPEN AND FREE OF SNOW AND ICE DAMS.
- SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE SHALL BE INSTALLED AHEAD OF GROUND FREEZING. IF PRACTICES MUST BE INSTALLED OR MAINTAINED AFTER GROUND FREEZING, NO FROZEN MATERIAL SHALL BE USED IN THE CONSTRUCTION OF BERMS OR DIKES, OR INSTALLATION OF SILT FENCE.

INSPECTION & MONITORING

- THE ONSITE COORDINATOR IS _____ TO BE DETERMINED.

- THE PERIMETER OF THE SITE AND ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT THE END OF EACH WORKDAY.** IF SEDIMENT HAS TRAVELLED BEYOND THE SITE BOUNDARY, IT SHALL BE SWEEPED UP OR OTHERWISE REMOVED AND DEPOSITED ONSITE IN AN UPGRADIENT AREA AT THE END OF EACH WORK DAY.

THE ON-SITE COORDINATOR SHALL INSPECT, AND DOCUMENT IN WRITING, THE STATUS OF CONSTRUCTION ON THE PROJECT SITE AND EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES AT THE END OF EACH WORK DAY. INSPECTIONS SHALL ALSO BE CONDUCTED PRIOR TO PREDICTED STORM EVENTS, AND AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.

- THE OWNER, THE SITE CONTRACTOR / PRINCIPAL OPERATOR, AND THEIR REPRESENTATIVES SHALL ABIDE BY THE BEST MANAGEMENT PRACTICES PRESENTED ON THESE PLANS, REQUIRED BY THE PERMIT CONDITIONS, AND PRESENTED IN THE VT DEC LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.

- DURING EACH INSPECTION, THE ONSITE COORDINATOR SHALL VISUALLY MONITOR AND RECORD THE TURBIDITY OF ALL STORMWATER RUNOFF FROM THE CONSTRUCTION SITE IN ACCORDANCE WITH THE SAMPLING & TESTING REQUIREMENTS AND PROTOCOL OF THE VERMONT GENERAL PERMIT.

- INSPECTION FREQUENCY MAY BE REDUCED TO NOT LESS THAN ONE PER WEEK IF THE ENTIRE SITE IS TEMPORARILY STABILIZED AND ALL CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED. INSPECTIONS SHALL RESUME PRIOR TO RESUMING CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE REQUIREMENTS LISTED ABOVE.

- IN ADVANCE OF A PREDICTED RAINFALL OR SNOWMELT EVENT, ALL MANAGEMENT PRACTICES APPROPRIATE TO CURRENT AREAS OF DISTURBANCE MUST BE CHECKED AND REPAIRED AS NECESSARY TO ENSURE PROPER OPERATING CONDITION. IF NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE, THIS WILL INCLUDE THE TEMPORARY STABILIZATION OF ALL DISTURBED SOILS ON THE SITE IN ADVANCE OF THE ANTICIPATED RUNOFF PERIOD.

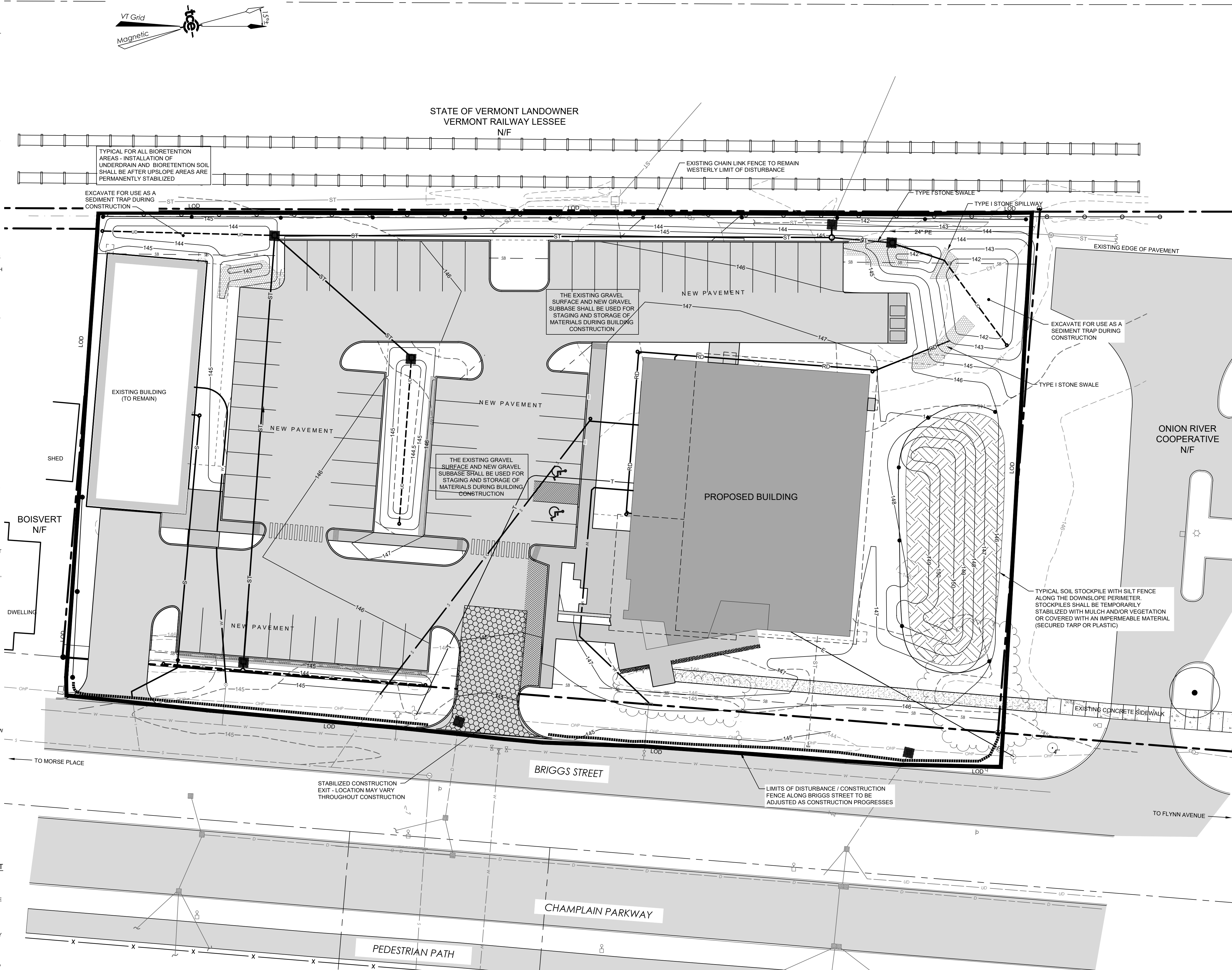
PUBLIC NOTICE AND DPW COORDINATION

A COPY OF THE CITY EPSC PLAN APPROVAL, THE STATE DISCHARGE PERMIT AND THE AUTHORIZATION TO DISCHARGE, A BRIEF DESCRIPTION OF THE PROJECT, AND THE LOCATION WHERE THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN IS AVAILABLE SHALL BE POSTED AT A LOCATION ON THE PROJECT SITE THAT IS VISIBLE TO THE PUBLIC.

- THE LANDOWNER OR SITE CONTRACTOR SHALL CONTACT THE CITY STORMWATER ADMINISTRATOR AT 540-748 OR CLASH@BURLINGTONVT.GOV AT LEAST 24 HOURS PRIOR TO ANY EARTH DISTURBANCE, AND SHALL PROVIDE THE NAME AND CONTACT INFORMATION FOR THE ONSITE PLAN COORDINATOR.

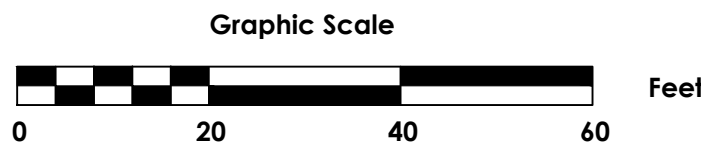
- THE ONSITE PLAN COORDINATOR SHALL NOTIFY THE CITY STORMWATER ADMINISTRATOR PRIOR TO OCTOBER 15 IF THE SITE WILL NOT BE STABILIZED BY NOVEMBER 1 OR ADDITIONAL WORK IS PROPOSED DURING THE WINTER CONSTRUCTION PERIOD.

- THE LANDOWNER OR ONSITE PLAN COORDINATOR SHALL CONTACT THE CITY STORMWATER ADMINISTRATOR TO SCHEDULE A STABILIZATION INSPECTION WHEN SITE WORK IS FINISHED AND STABILIZATION MEASURES HAVE BEEN INSTALLED.



LEGEND

- STABILIZED CONSTRUCTION EXIT
- CONSTRUCTION FENCE / LIMIT OF DISTURBANCE
- TEMPORARY SILT FENCE
- EROSION LOG (MIN 9"Ø)
- INLET PROTECTION



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Revisions	No.	Description	Date	By
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For Local Permitting Only

Project Title

Petra Cliffs
75 Briggs Street
Burlington, VT 05401

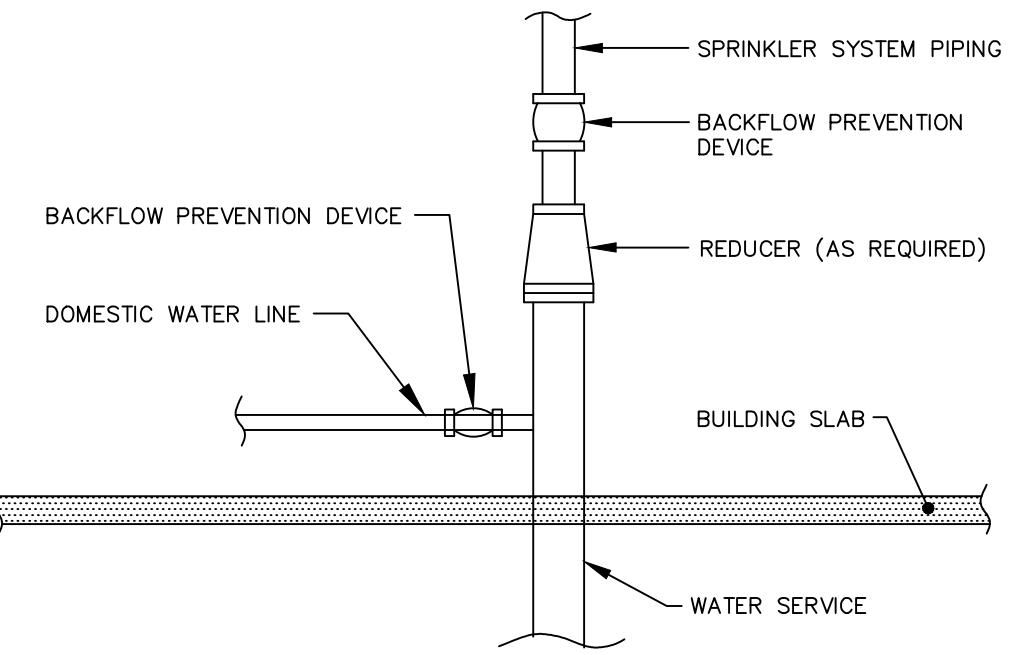
Sheet Title

Erosion Prevention & Sediment Control Plan

Date:	02/05/24
Scale:	1" = 20'
Project Number:	23-271
Drawn By:	TCE
Project Engineer:	DJG
Approved By:	
Field Book:	

C2-03

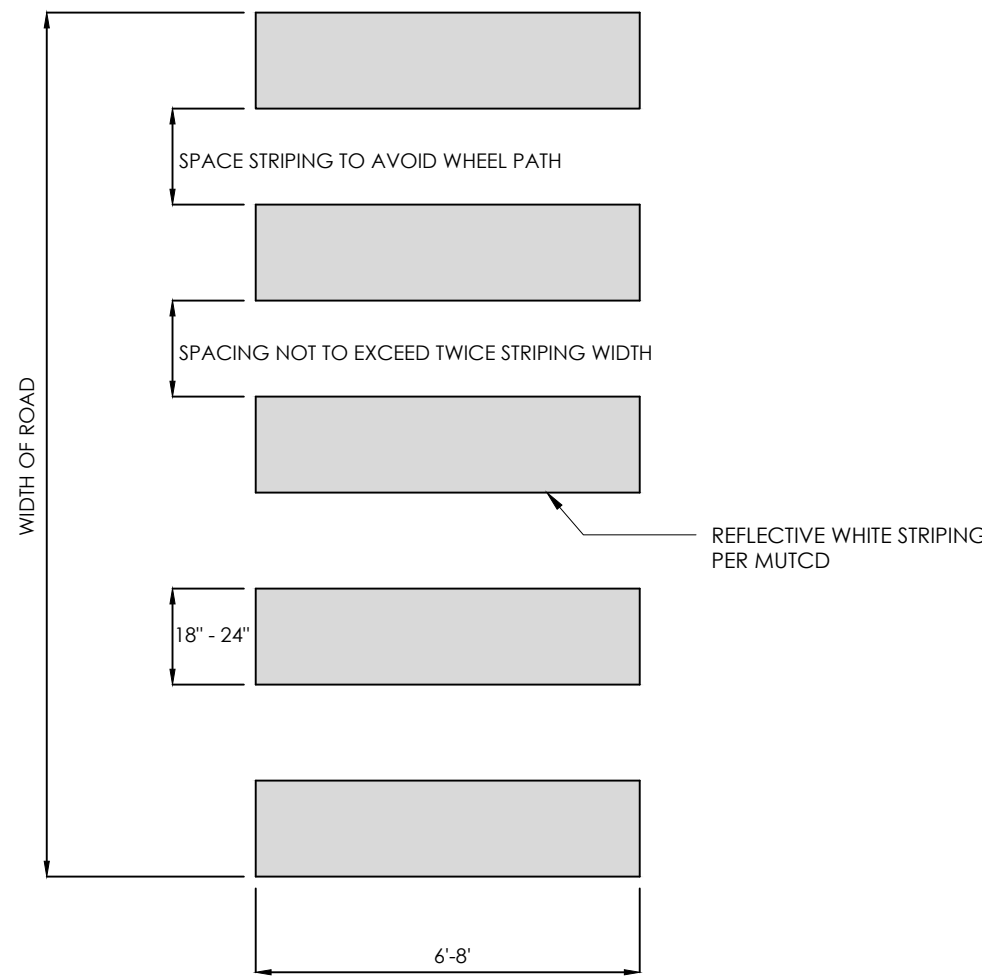
SEE SHEET D6 AND THE CITY OF BURLINGTON
WATER DEPARTMENT STANDARDS FOR
ADDITIONAL DETIALS AND SPECIFICATIONS



NOTE:
ALL DOMESTIC SERVICES AND FIRE SPRINKLER SYSTEMS THAT ARE CONNECTED TO THE PUBLIC WATER SYSTEM SHALL BE PROTECTED WITH A BACKFLOW PREVENTION ASSEMBLY, AND AN APPROPRIATE THERMAL EXPANSION SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF THE BURLINGTON WATER DEPARTMENT.

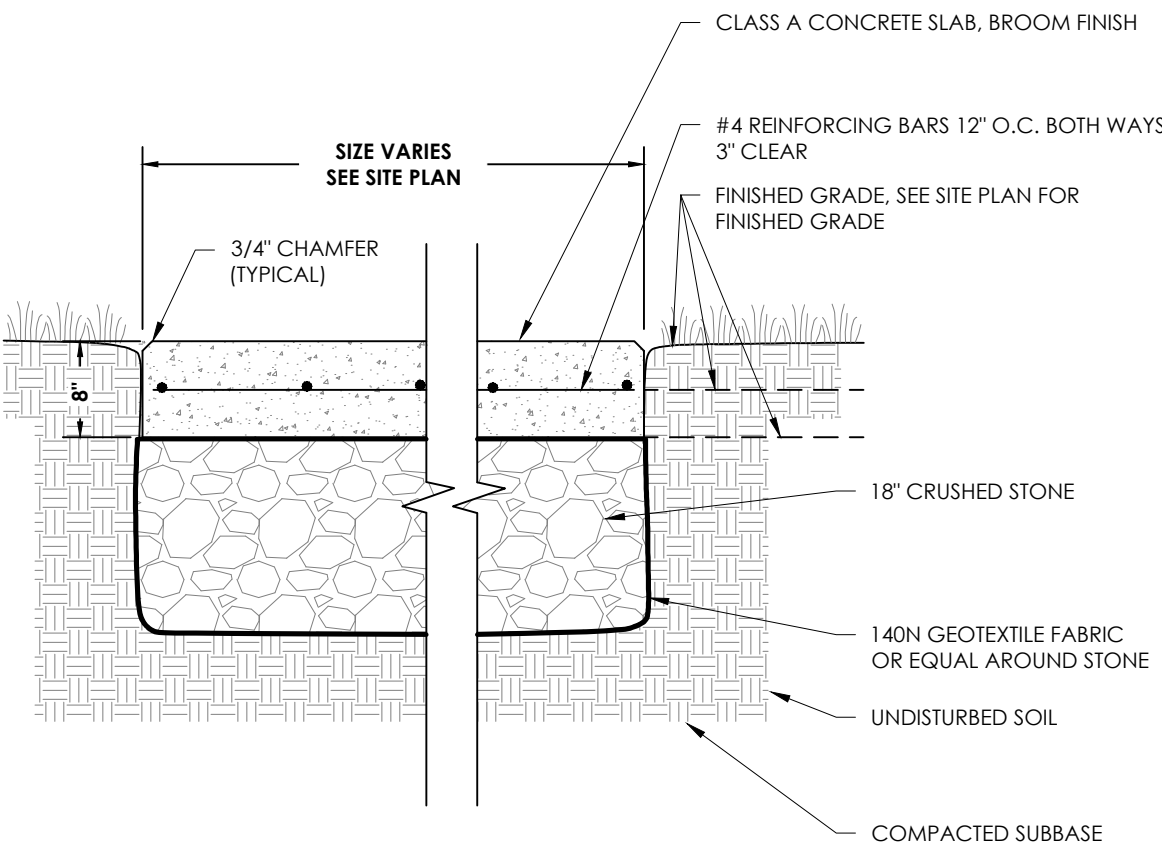
WATER SERVICE BACKFLOW PREVENTION DETAIL

NTS



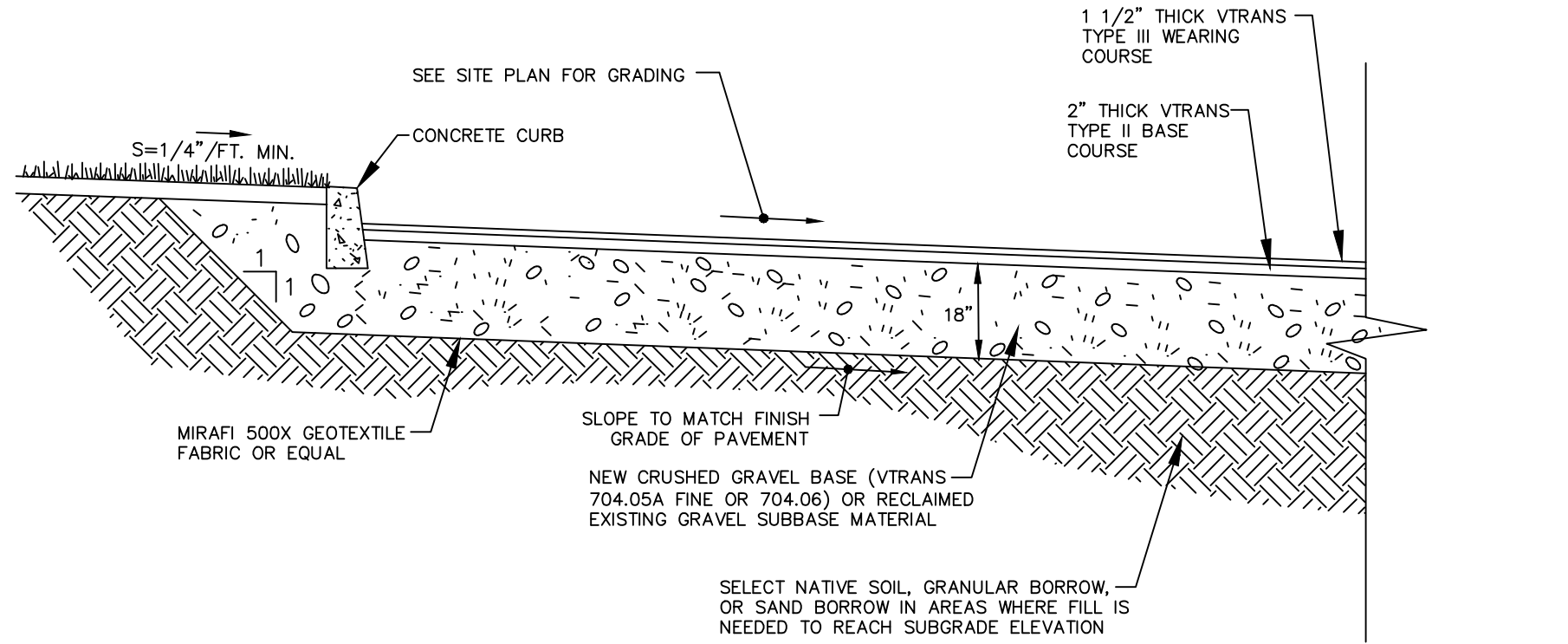
TYPICAL CROSSWALK MARKING

N.T.S.



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

REINFORCED CONCRETE DUMPSTER PAD

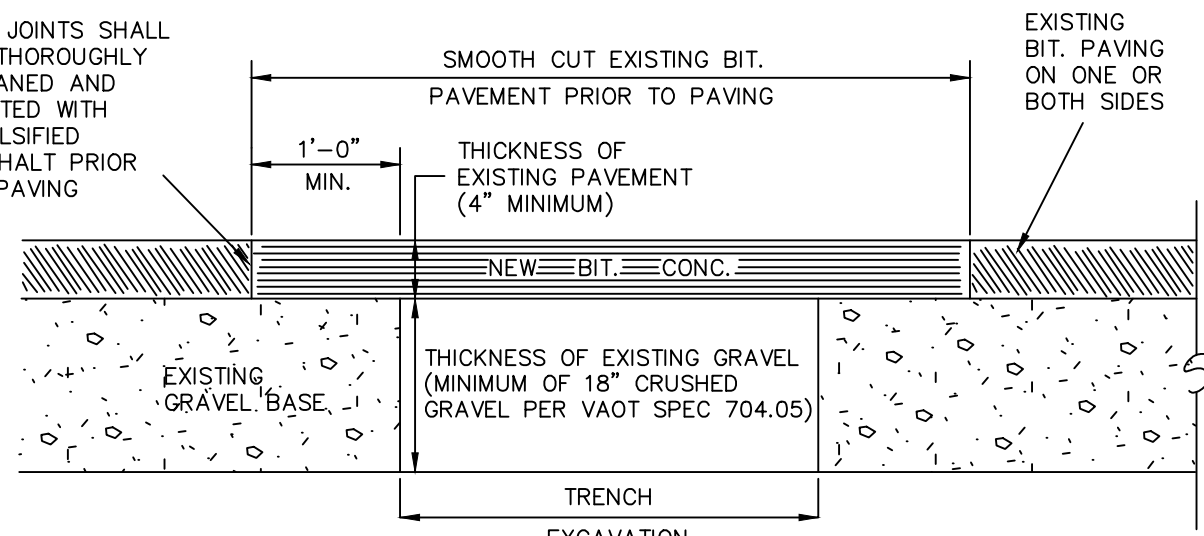


NOTES:

- AREAS OF EXISTING PAVEMENT AND GRAVEL SUBBASE MAY BE RECLAIMED AND STOCKPILED FOR RE-USE. EXISTING PAVEMENT SHALL BE RECLAIMED SUCH THAT THE BITUMINOUS CONCRETE IS PULVERIZED TO A MAXIMUM PARTICLE SIZE OF 3 INCHES AND MIXED WITH THE UNDERLYING GRAVEL SUBBASE. PRIOR TO PAVING, THE RECLAIMED MATERIAL SHALL BE FINE GRADED WITH A MINIMUM OF 2" ADDITIONAL CRUSHED GRAVEL (VTRANS 704.05A FINE OR 704.06) OR RECLAIMED EXISTING GRAVEL SUBBASE MATERIAL.
- IN AREAS WHERE THERE IS NO EXISTING PAVEMENT, NEW CRUSHED GRAVEL SUBBASE MATERIAL, OVER GEOTEXTILE FABRIC SHALL BE PLACED PRIOR TO PAVING.
- IN ALL AREAS WHERE UNSUITABLE/SUBGRADE SOILS ARE PRESENT, THE SUBGRADE SHALL BE OVER-EXCAVATED TO REMOVE THE UNSUITABLE MATERIAL AND BACKFILLED WITH SAND BORROW OR SELECT NATIVE MATERIAL.
- SUBGRADE SOIL, NEW CRUSHED GRAVEL, AND RECLAIMED MATERIAL SHALL BE ADEQUATELY COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D698).

TYPICAL NEW DRIVE & PARKING CROSS SECTION

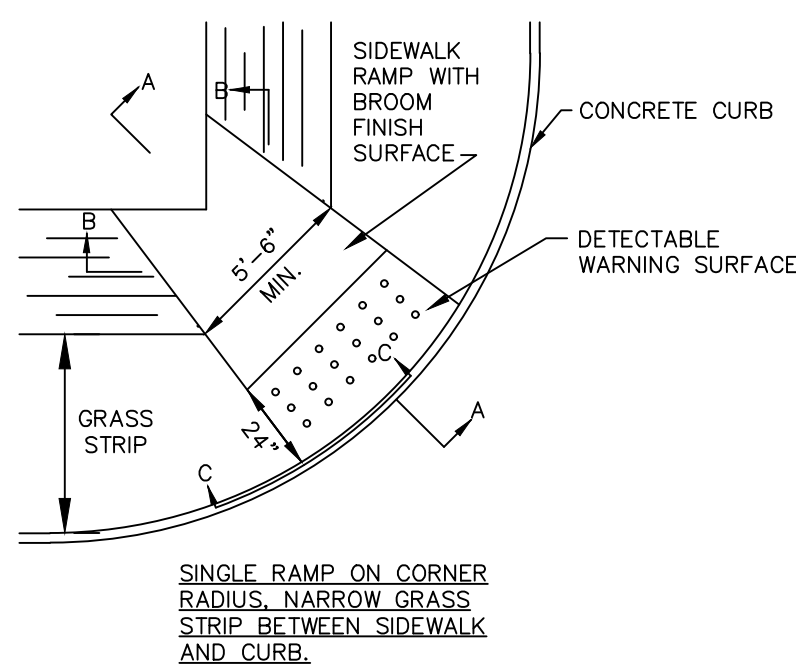
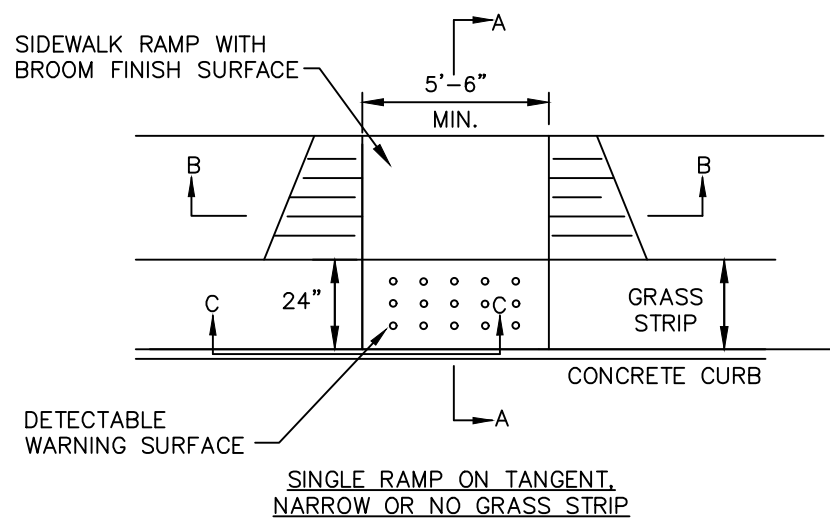
NTS



- SET UP AND MAINTAIN SIGNS AND OTHER SAFETY CONTROL DEVICES.
- RESHAPE HOLE AND PATCH AREA BY CUTTING WITH A CONCRETE SAW INTO SQUARE OR RECTANGULAR SHAPE AND CUT SIDE FACES VERTICALLY. RESHAPE DOWNWARD TO SOLID MATERIAL AND AROUND HOLE TO SOUND PAVEMENT.
- BACKFILL TRENCH IN 6" LIFTS AND COMPACT EACH LIFT TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
- REMOVE ALL LOOSE MATERIAL AND THOROUGHLY SWEEP THE HOLE AREA CLEAN OF MUD AND STANDING WATER.
- APPLY LIQUID ASPHALT TACK TO VERTICAL FACES IN A UNIFORM MANNER. DO NOT PUDDLE TACK COAT ON BOTTOM OF HOLE.
- FILL TOP OF HOLE WITH TYPE III BITUMINOUS CONCRETE. PLACE AND COMPACT IN LIFTS NO MORE THAN 2" THICK. FINAL TYPE III LIFT PRIOR TO COMPACTING SHOULD BE 1/2" TO 3/4" ABOVE ADJOINING PAVEMENT SO THAT AFTER COMPACTING THE PATCH IS LEVEL WITH THE ORIGINAL PAVEMENT. EACH LIFT SHOULD BE THOROUGHLY COMPACTED WITH A VIBRATORY PLATE COMPACTOR OR A PORTABLE ROLLER. HAND TAMP SHOULD ONLY BE USED FOR SMALL AREAS (LESS THAN 1' S.F.).
- CLEAN UP AREA. DO NOT LEAVE EXCESS FILL OR EXCAVATED MATERIAL ON THE PAVEMENT. REMOVE SAFETY SIGNS.

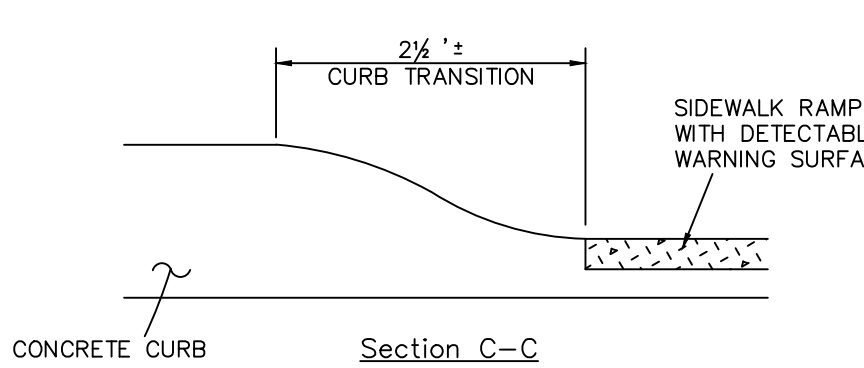
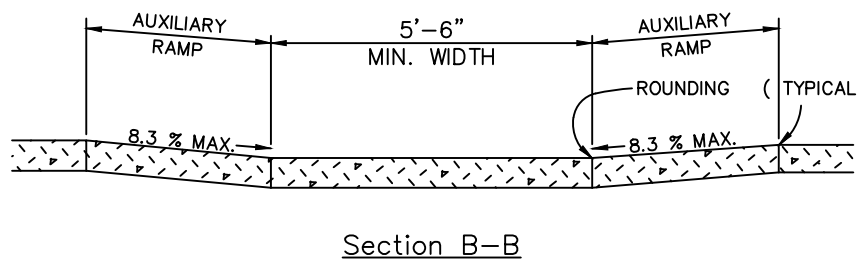
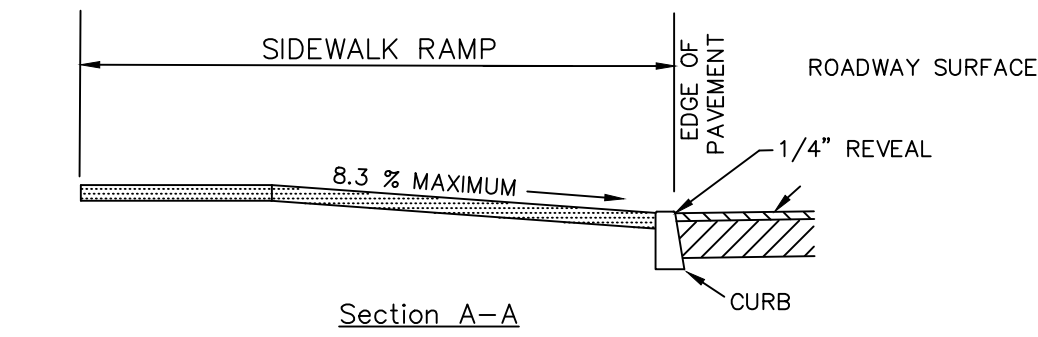
REPLACEMENT of EXISTING BITUMINOUS PAVEMENT

N.T.S.



SIDEWALK RAMPS

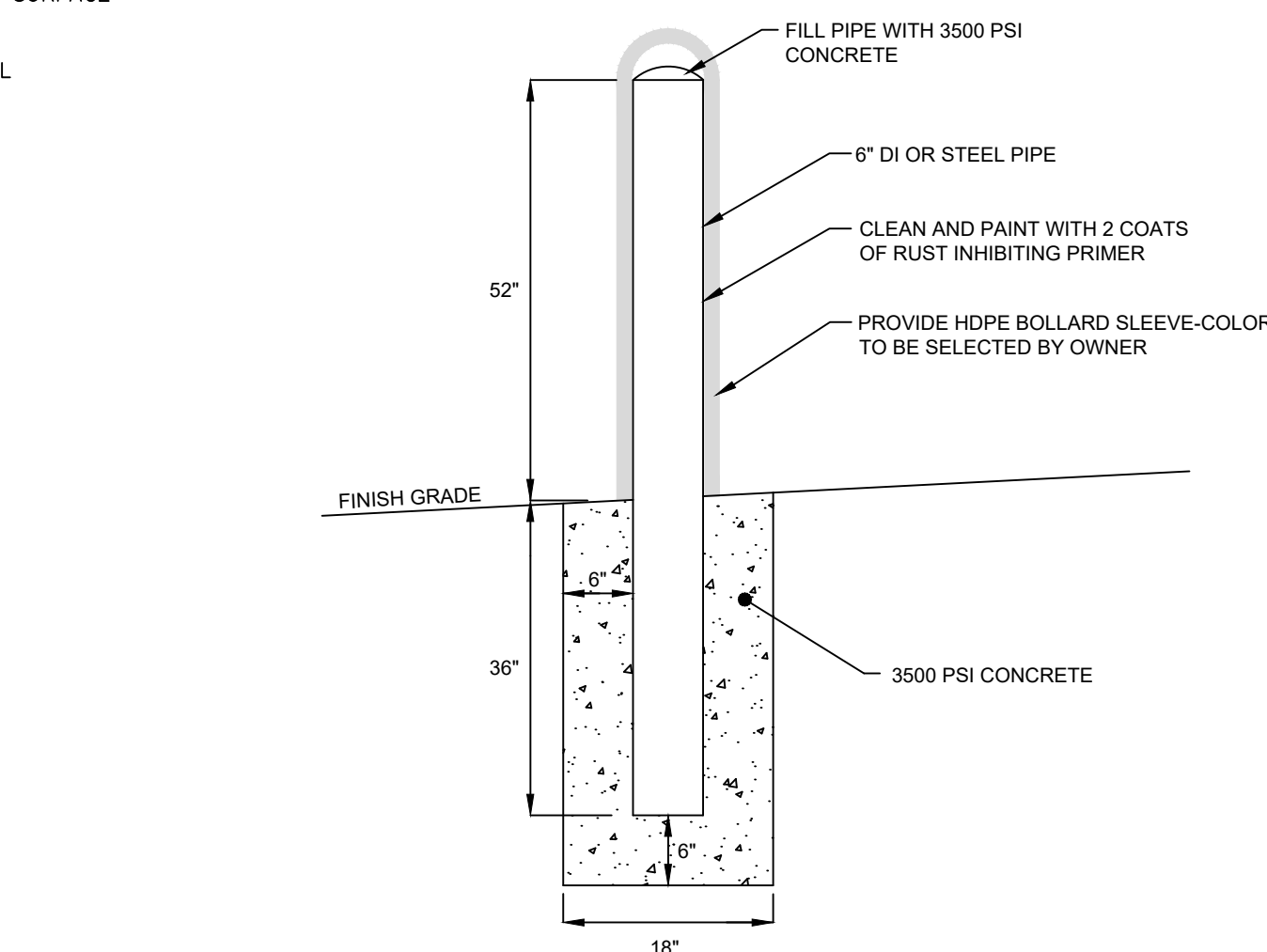
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NOTE: THE TYPE, COLOR AND MANUFACTURER OF THE DETECTABLE WARNING SURFACE SHALL BE APPROVED BY THE CITY AND OWNER.

CONCRETE SIDEWALK DETAIL

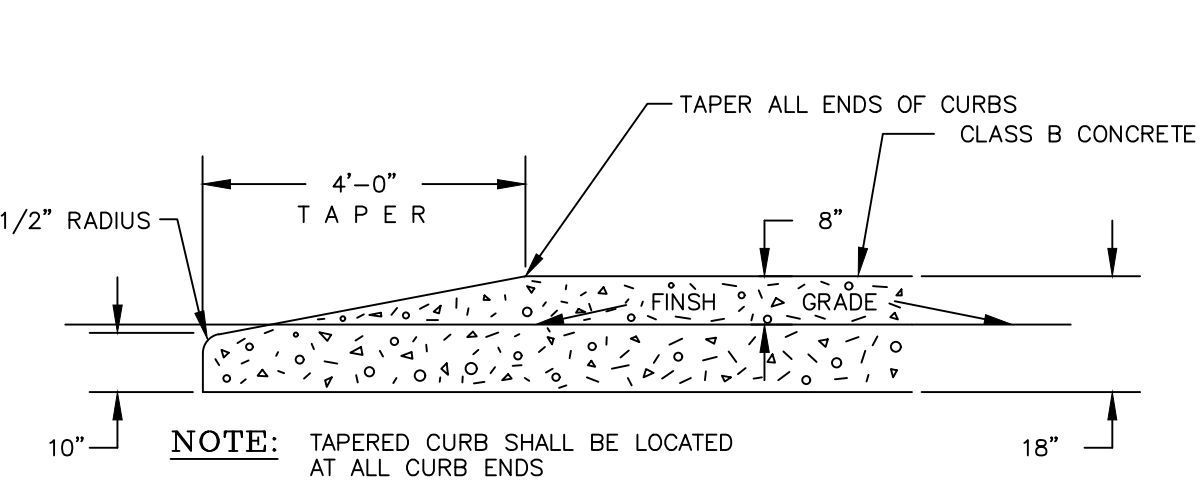
N.T.S.



THE ABOVE DETAIL SHALL BE USED FOR BOLLARDS AT THE LOADING AREA ENTRY

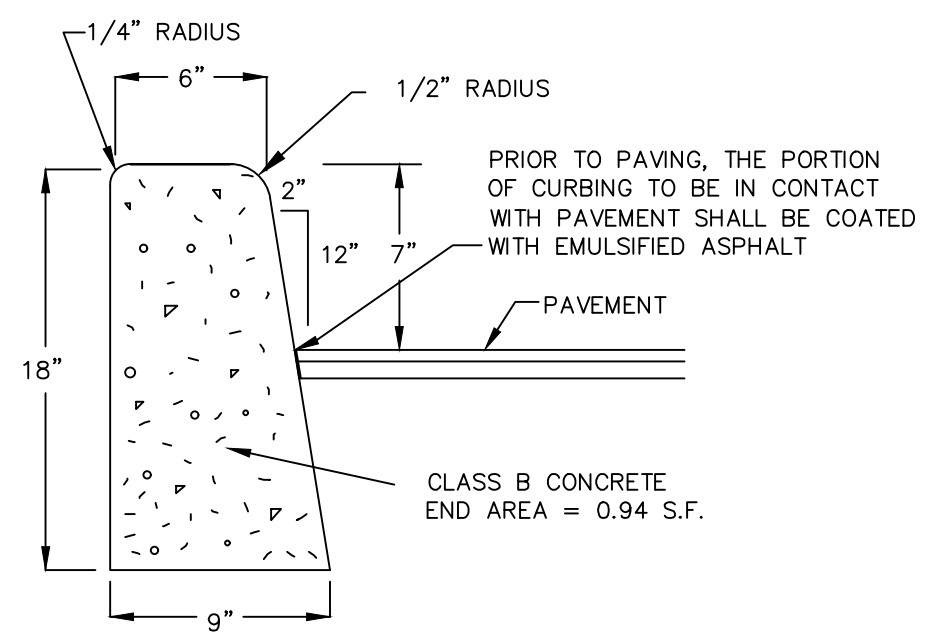
TYPICAL BOLLARD

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TYPICAL TAPERED CURB

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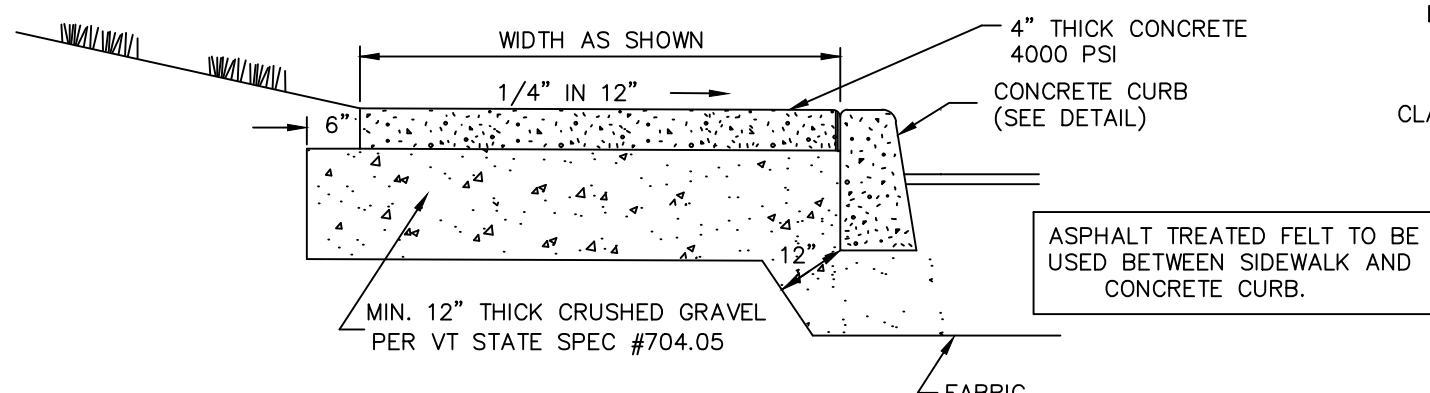


NOTES:

- CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
- CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO MSHTO DESIGNATION M-153 (1/2" SPONGE RUBBER OR CORK.)
- ALL CONCRETE SHALL BE AIR ENTRAINED NOT LESS THAN 5% AND NOT MORE THAN 7%

CONCRETE CURB

N.T.S.

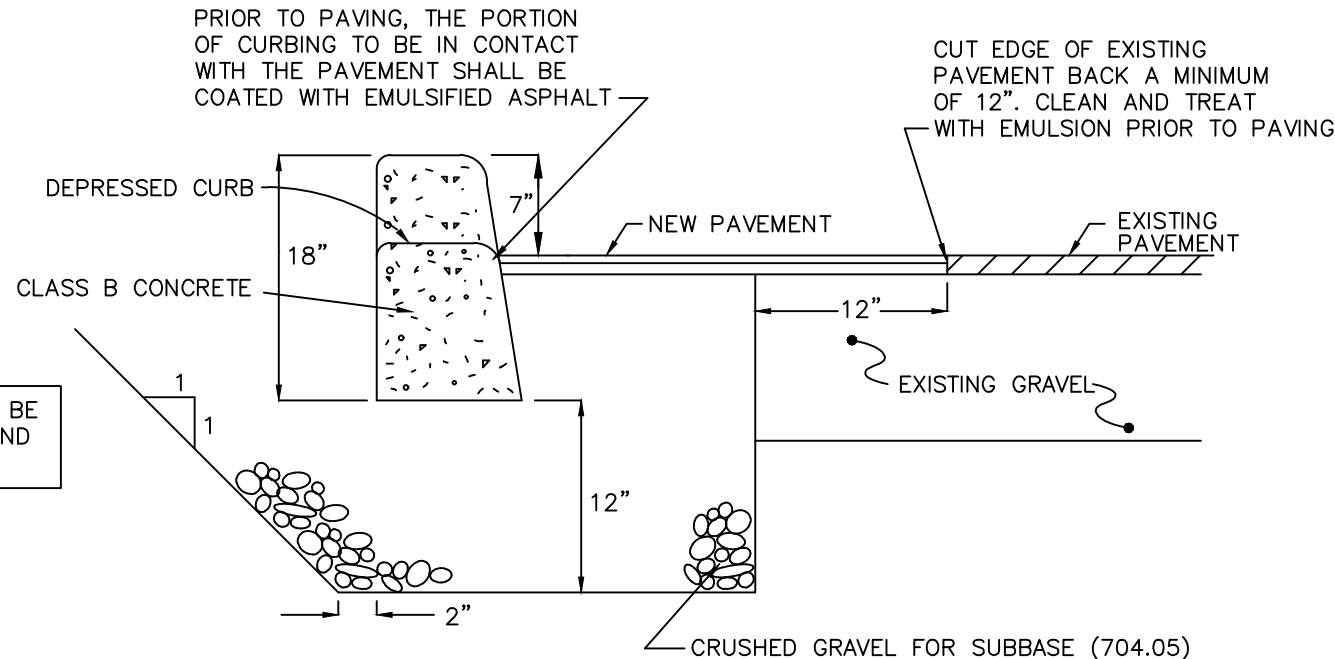


NOTES:

- CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4,000 PSI AT 28 DAYS, AIR ENTRAINED WITH AN ADMIXTURE PRODUCING AN AIR CONTENT OF BETWEEN 5% AND 7% BY VOLUME.
- HALF INCH (1/2") TRANSVERSE EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT EXCEEDING TWENTY FEET (20'). SIDEWALKS SHALL BE SCORED TO A DEPTH OF ONE INCH (1") EVERY FIVE (5) FEET. CURB AND SIDEWALK SECTIONS SHALL BE SEPARATED BY ASPHALT TREATED FELT.
- AFTER THE INITIAL CURING PERIOD IS OVER (APPROXIMATELY 28 DAYS), ALL EXPOSED SURFACES SHALL RECEIVE TWO COATS OF ANTI-SPLALLING COMPOUND.
- SEE ARCHITECTUAL PLANS AND DETAILS AT BUILDING ENTRANCE LOCATIONS FOR ADDITIONAL SIDEWALK FOUNDATION AND SUPPORT DETAILS.

GENERAL CONSTRUCTION SPECIFICATIONS

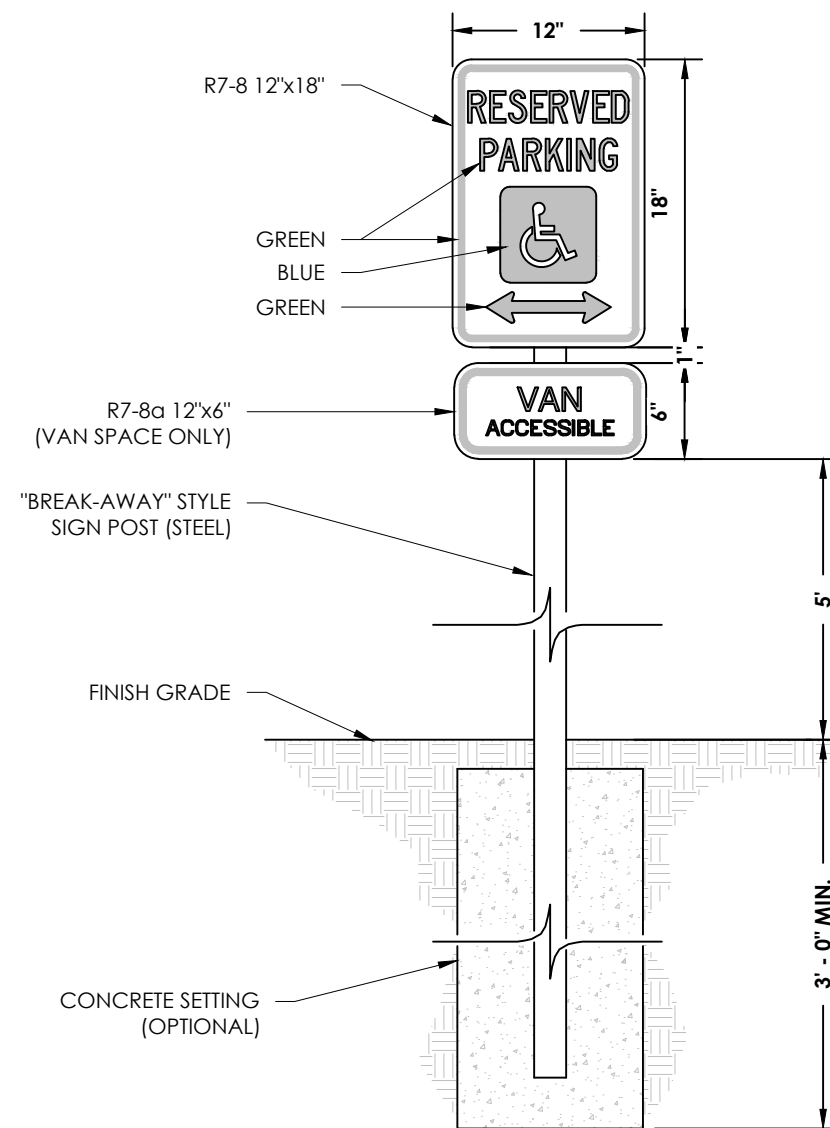
- ALL WORK AND MATERIALS SHALL BE APPROVED BY THE OWNER OR ENGINEER AND IN ACCORDANCE WITH THE LATEST VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CITY OF BURLINGTON PUBLIC WORKS REQUIREMENTS, AND THESE PLANS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIGSAFE PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING VEGETATION, PAVEMENT AND STRUCTURES NECESSARY TO CONSTRUCT THIS PROJECT UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR SHALL REMOVE ALL EXCESS OR UNSTABLE MATERIAL, DEBRIS AND TRASH FROM THE SITE UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OR HER OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER, APPLY CALCIUM CHLORIDE OR SWEEP ASPHALT ROADS WITH A POWER BROOM AS DUST CONTROL.
- ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THE CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
- THE WORK SHOWN ON THESE PLANS SHALL BE OBSERVED BY TRUDELL CONSULTING ENGINEERS, INC., WILLISTON, VERMONT, TO ENSURE COMPLIANCE WITH THE PLANS AND REQUIREMENTS. TRUDELL WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT MAY ARISE FROM THE FAILURE OF THE CONTRACTOR TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED TO INSPECT THE WORKS AND TESTS IN PROGRESS.
- FOR ANY WORK WITHIN A HIGHWAY OR STREET RIGHT-OF-WAY, A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC WILL BE REQUIRED AT NIGHT, DURING PEAK-HOURS, AND WHENEVER POSSIBLE DURING ACTUAL CONSTRUCTION ACTIVITIES. UNIFORMED TRAFFIC CONTROL OFFICERS SHALL DIRECT TRAFFIC DURING PEAK HOURS WHEN THERE IS ONE-WAY TRAFFIC OR WHEN DEEMED NECESSARY BY THE CITY.
- TEMPORARY CONSTRUCTION SIGNS AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, VTRANS E-STANDARDS AND CITY REQUIREMENTS.
- TO ASSURE COMPLIANCE WITH THE PLAN(S), THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS IN ADVANCE OF STARTING ANY WORK, CUTTING THE PAVEMENT, BEGINNING THE INSTALLATION OF ANY UTILITIES, TESTING THE UTILITIES, BRINGING IN ANY NEW GRAVEL FOR THE NEW BASE, PAVING, AND FINAL INSPECTION. PRIOR TO BEGINNING CONSTRUCTION ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER.
- AT COMPLETION OF GRADING, SLOPES, DITCHES, AND ALL DISTURBED AREAS SHALL BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL VERIFY NEW TAP LOCATIONS AND SHALL CONNECT ALL UTILITIES TO NEAREST SOURCE THROUGH COORDINATION WITH THE UTILITY COMPANY AND OWNER.
- SEE OTHER DETAIL SHEETS OF THESE PLANS FOR ADDITIONAL DETAILS, REQUIREMENTS AND SPECIFICATIONS.



NOTES:
THE NEW PAVEMENT DEPTH SHALL MATCH THE EXISTING PAVEMENT DEPTH. AT A MINIMUM, 4" OF TYPE III PAVEMENT SHALL BE PLACED IN 2 LIFTS.

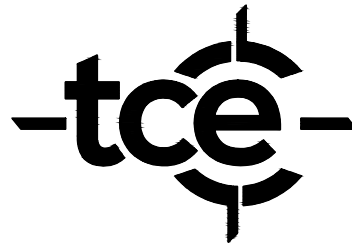
CONCRETE CURB AND PAVEMENT REPLACEMENT

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RESERVED PARKING SIGN

1"=1'



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Revisions
No. Description Date By

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2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
3. Owner and Architect, are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
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For Local Permitting Only

Project Title

Petra Cliffs
75 Briggs Street
Burlington, VT 05401

Sheet Title

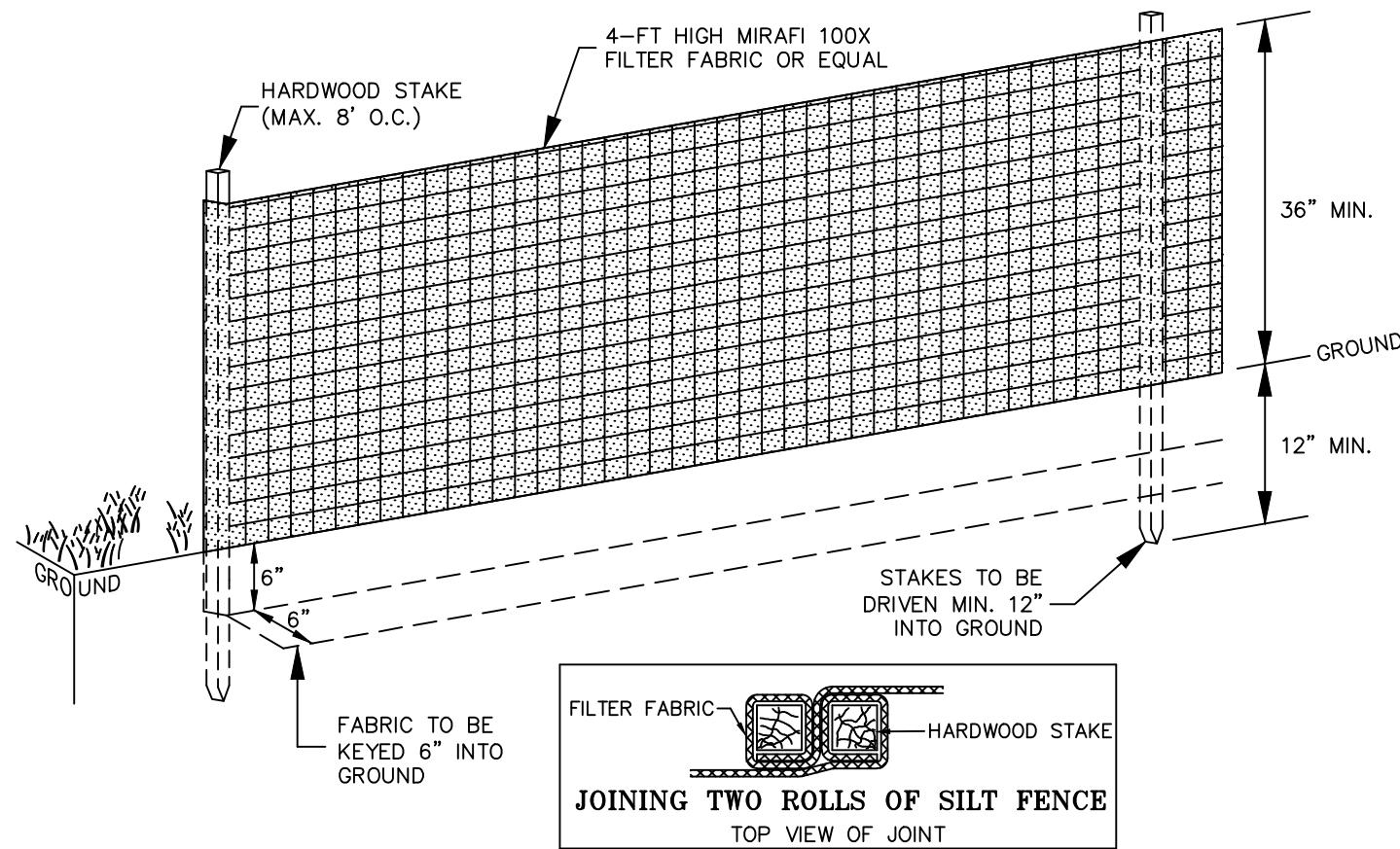
Sitework & Water Details & Specification

Date: 06-21-18
Scale: As Noted
Project Number: 23-271
Drawn By: L&D
Project Engineer: DJG
Approved By:
Field Book:

C8-01

SANITARY & STORM SPECIFICATIONS

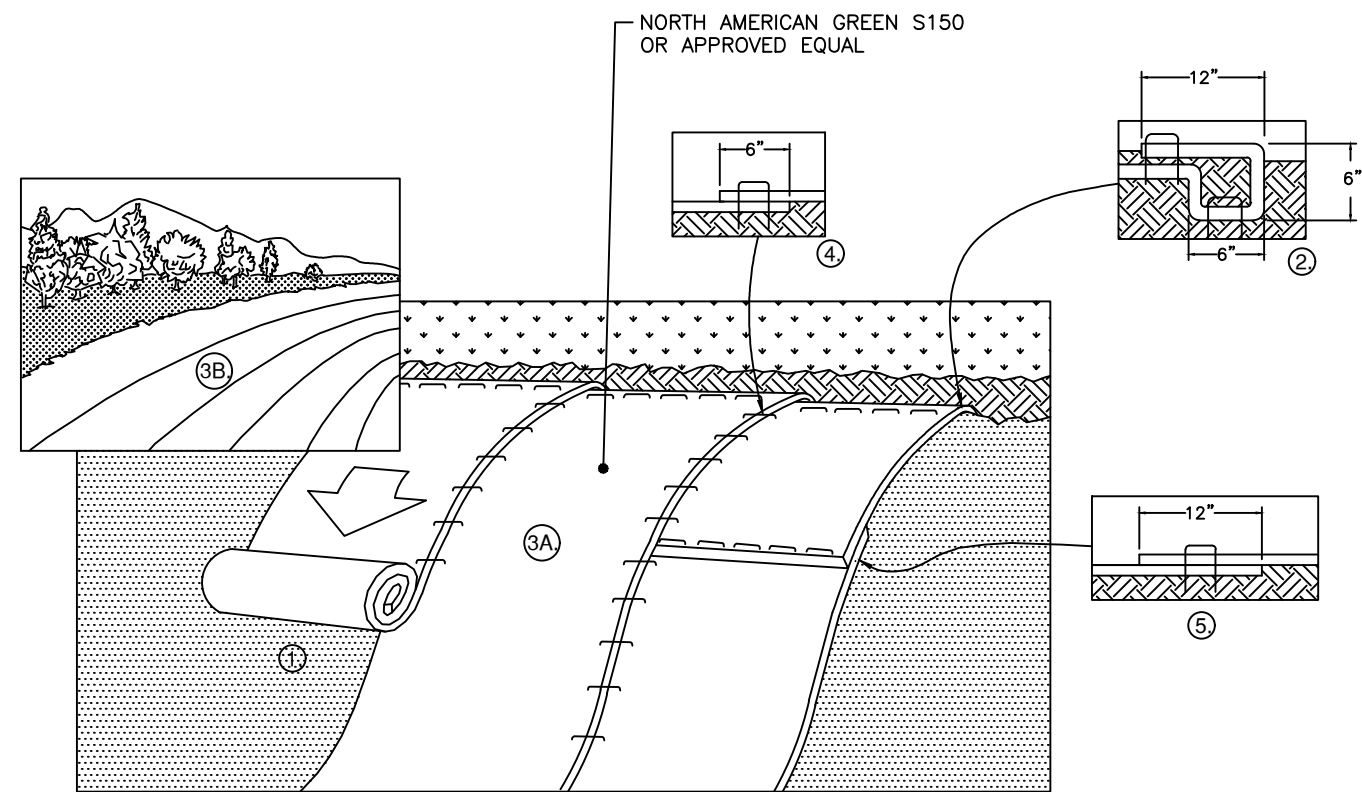
1. THE HORIZONTAL AND VERTICAL SEPARATION FOR SEWER AND WATER LINES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF THE "TEN STATE STANDARDS - RECOMMENDED STANDARDS FOR WATER WORKS".
2. SANITARY AND STORM SEWER PIPES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE PLANS. PVC PIPE SHALL BE SDR35 CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. CORRUGATED POLYETHYLENE PIPE SHALL CONFORM TO AASHTO M294-90, TYPE S. PERFORATED UNDERDRAIN PIPE SHALL BE PVC SDR35 CONFORMING TO AASHTO M278-87 OR CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INTERIOR WALL CONFORMING TO AASHTO M252-90.
3. ALL GRAVITY SANITARY SEWER PIPE SHALL BE PVC SDR 35 CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. FORCEMAIN SEWER PIPE SHALL BE PVC SDR26.
4. ALL TRENCH FILL SHALL BE PLACED IN 6" LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE AS DETERMINED BY ASTM D968 STANDARD PROCTOR.
5. ALL NEW GRAVITY SANITARY SEWER MAINS SHALL BE LEAK TESTED BY A LOW PRESSURE AIR TEST AND DEFLECTION TESTED. THE LOW PRESSURE AIR TEST WILL BE USED TO SIMULATE INFILTRATION OR EXFILTRATION INTO OR OUT OF ALL GRAVITY SANITARY SEWERS. ALL TESTING WILL BE CONDUCTED UNDER THE SUPERVISION OF THE ENGINEER. AIR TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM C828-80. THE MINIMUM ALLOWED TIME FOR A PRESSURE DROP FROM 3.5 PSI TO 2.5 PSI SHALL BE 1.2 MINUTES PER 100 FEET OF 8" SEWER. ALL TESTS SHALL BE A MINIMUM OF 3 MINUTES AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. THE DEFLECTION TEST SHALL BE PERFORMED. NO PIPE SHALL EXCEED A DEFLECTION OF FIVE PERCENT (5%). IF THE DEFLECTION TEST IN RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. ALL MANHOLE AND PIPELINE MATERIALS, METHODS AND TESTING SHALL BE IN ACCORDANCE WITH TOWN STANDARDS, STATE STANDARDS AND WITH THESE PLANS. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
6. ALL SANITARY SEWER MANHOLES SHALL BE TESTED PRIOR TO CONSTRUCTION OF THE INVERT BY THE VACUUM TEST METHOD. THE MINIMUM ALLOWED TIME FOR A VACUUM DROP FROM 10" OF MERCURY TO 9" OF MERCURY SHALL BE 2 MINUTES.
7. ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION.
8. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF THE INDIVIDUAL SERVICES WITH THE OWNER AT THE TIME OF CONSTRUCTION.
9. ALL MANHOLES AND PIPELINE MATERIALS, METHODS, AND TESTING SHALL BE IN ACCORDANCE WITH THESE PLANS AND ANY APPLICABLE CITY OR STATE STANDARDS.



- NOTES**
- 1) USE ONLY MANUAL METHODS OF INSTALLATION AND CLEANING WITHIN WETLAND AND BUFFER ZONE.
 - 2) PRIOR TO BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SILT FENCE AT THE LIMIT OF DISTURBANCE SHOWN ON THE SITE PLAN.
 - 3) FROZEN MATERIAL SHALL NOT BE USED TO KEY IN THE BOTTOM OF THE SILT FENCE. IF NECESSARY, GRANULAR BORROW SHALL BE USED BY THE CONTRACTOR TO KEY IN THE SILT FENCE RATHER THAN FROZEN NATIVE MATERIAL.
 - 4) THE CONTRACTOR SHALL INSTALL SILT FENCE AROUND THE PERIMETER OF TOPSOIL STOCKPILES AND AT OTHER LOCATIONS AS NEEDED.

TEMPORARY SILT FENCE

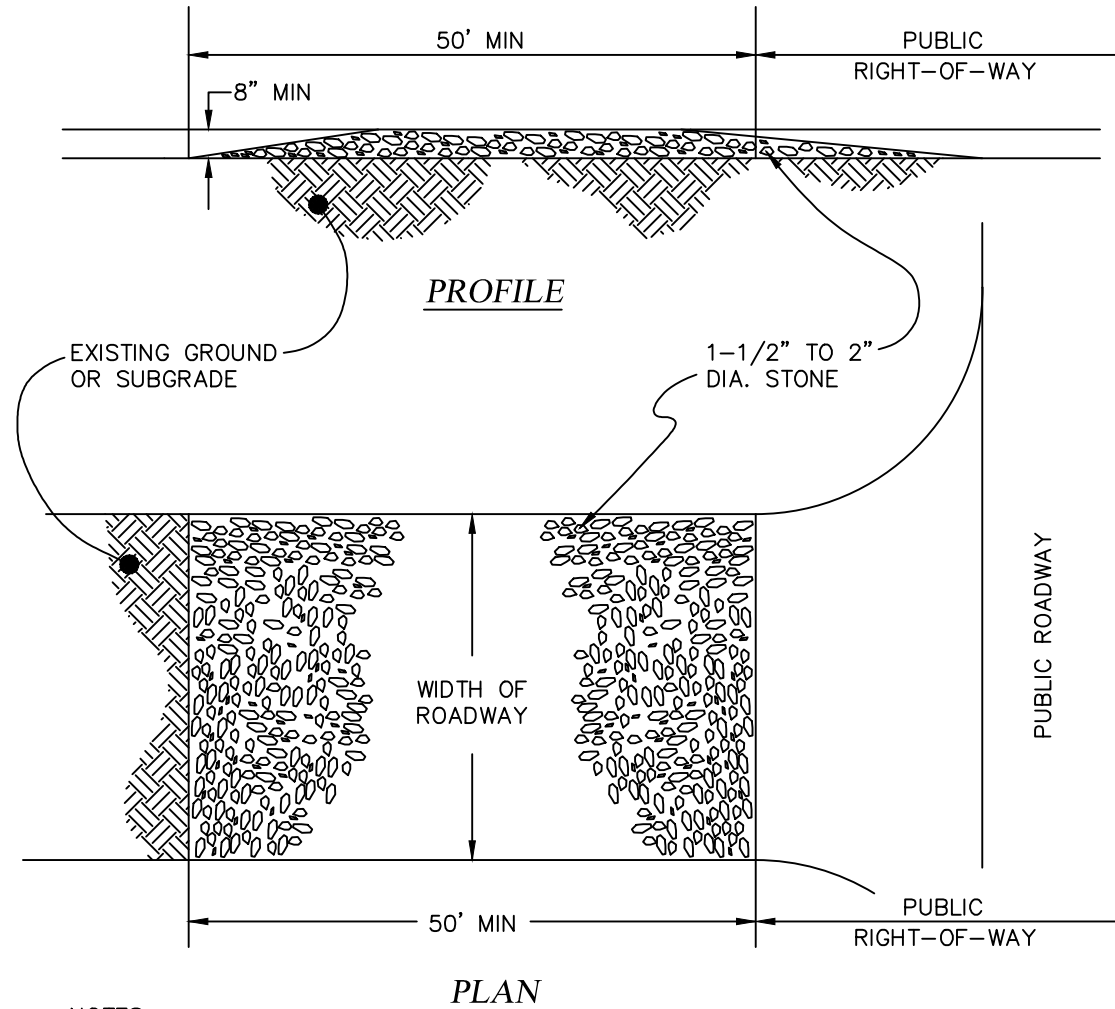
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1. EROSION MATTING WILL BE USED ON SLOPES STEEPER THAN 3H:1V OR AS SHOWN ON THE PLANS.
2. PREPARE SOIL BEFORE INSTALLING MATTING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. SOIL SURFACE SHALL BE GRADED SMOOTH WITHOUT ROOTS, STONES OR OTHER PROTUSIONS THAT WILL PREVENT THE MATTING FROM BEING APPLIED IN FULL CONTACT WITH THE SOIL SURFACE.
3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE MATTING IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF MATTING EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE MATTING WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF MATTING BACK OVER SEED AND COMPACTED SOIL. SECURE MATTING OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" PART ACROSS THE WIDTH OF THE MATTING.
4. ROLL THE MATTING (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. INSURE THAT THE APPROPRIATE SIDE OF THE MATTING IS AGAINST THE SOIL SURFACE. ALL MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE MANUFACTURER'S STAPLE PATTERN GUIDE FOR THE PARTICULAR PRODUCT AND APPLICATION. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE MATTING.
5. THE EDGES OF PARALLEL MATTING MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP DEPENDING ON MATTING TYPE.
6. CONSECUTIVE MATTING SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE - WITH THE UPPER MATTING PLACED OVER THE TOP OF THE LOWER MATTING) WITH AN APPROXIMATE 12" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE MATTING WIDTH.

EROSION MATTING FOR SLOPES

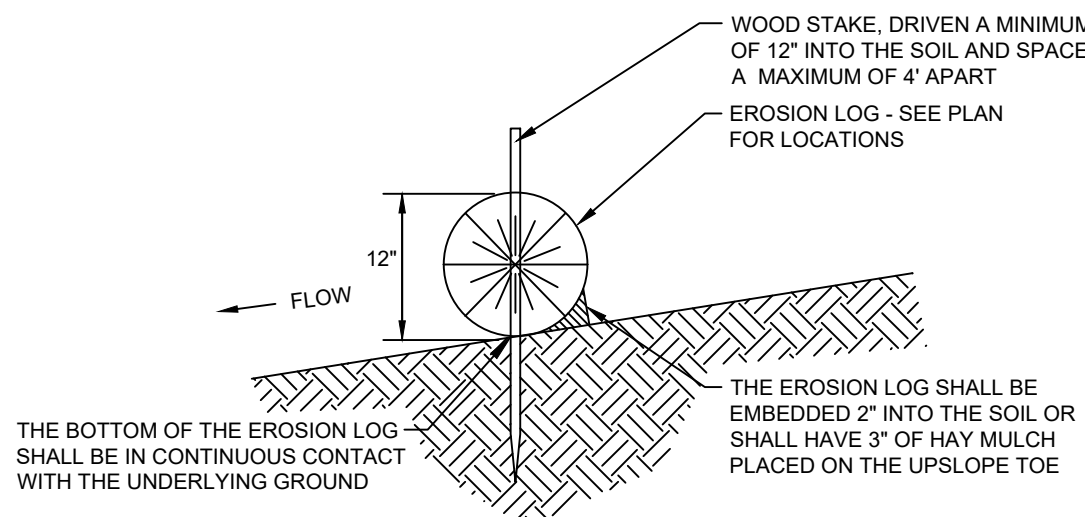
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- NOTES:**
1. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT TRACKED, SPILLED, OR WASHED ONTO PAVED STREETS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
 2. THE USE OF CALCIUM CHLORIDE OR WATER MAY BE NECESSARY TO CONTROL DUST DURING CONSTRUCTION.
 3. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION EXIT AND PUBLIC RIGHT-OF-WAY.

STABILIZED CONSTRUCTION EXIT

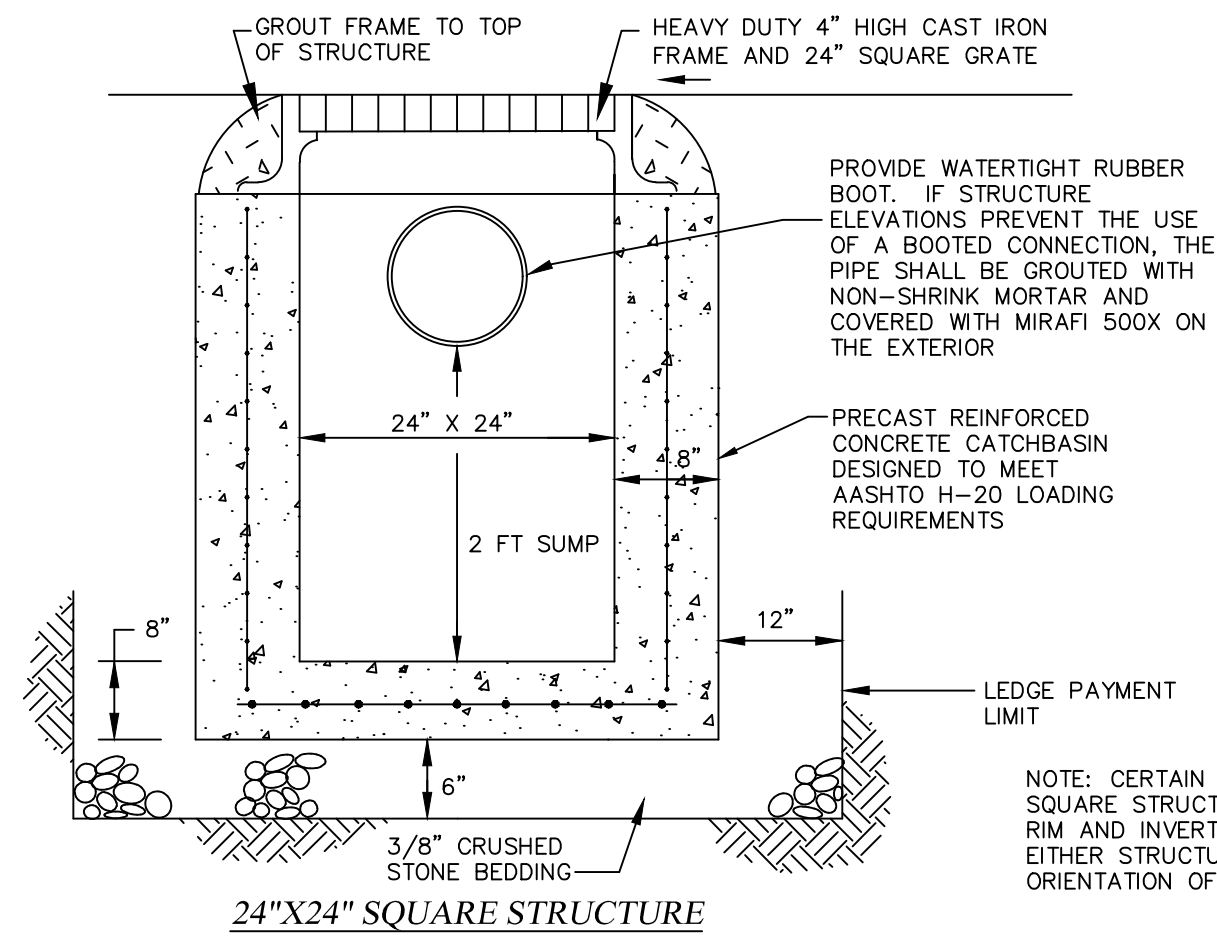
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- NOTES:**
1. TIGHTLY ABUT THE ENDS OF THE EROSION LOGS - NO GAPS.
 2. INSTALL EROSION LOGS PARALLEL TO CONTOURS AS SHOWN ON THE PLANS.

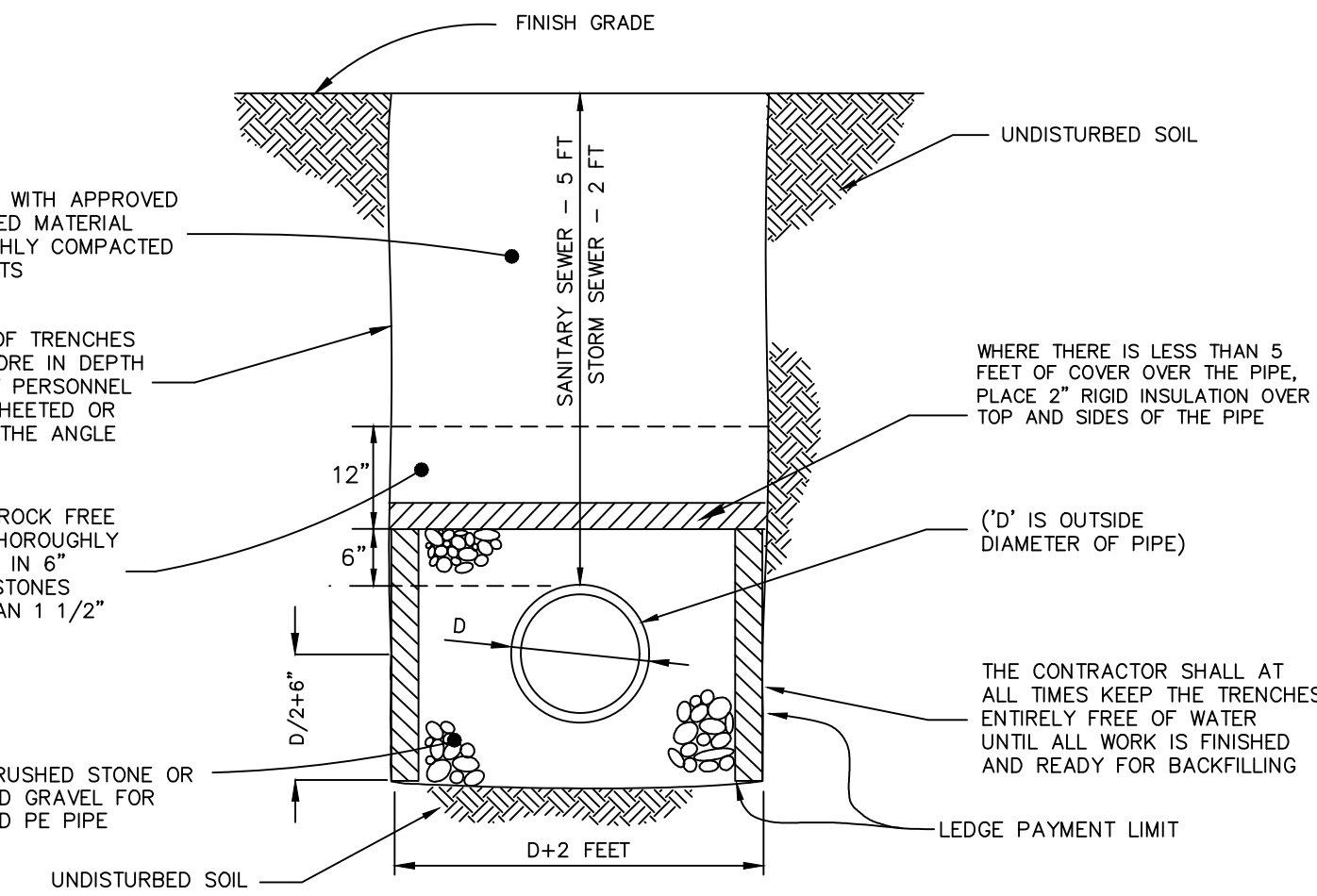
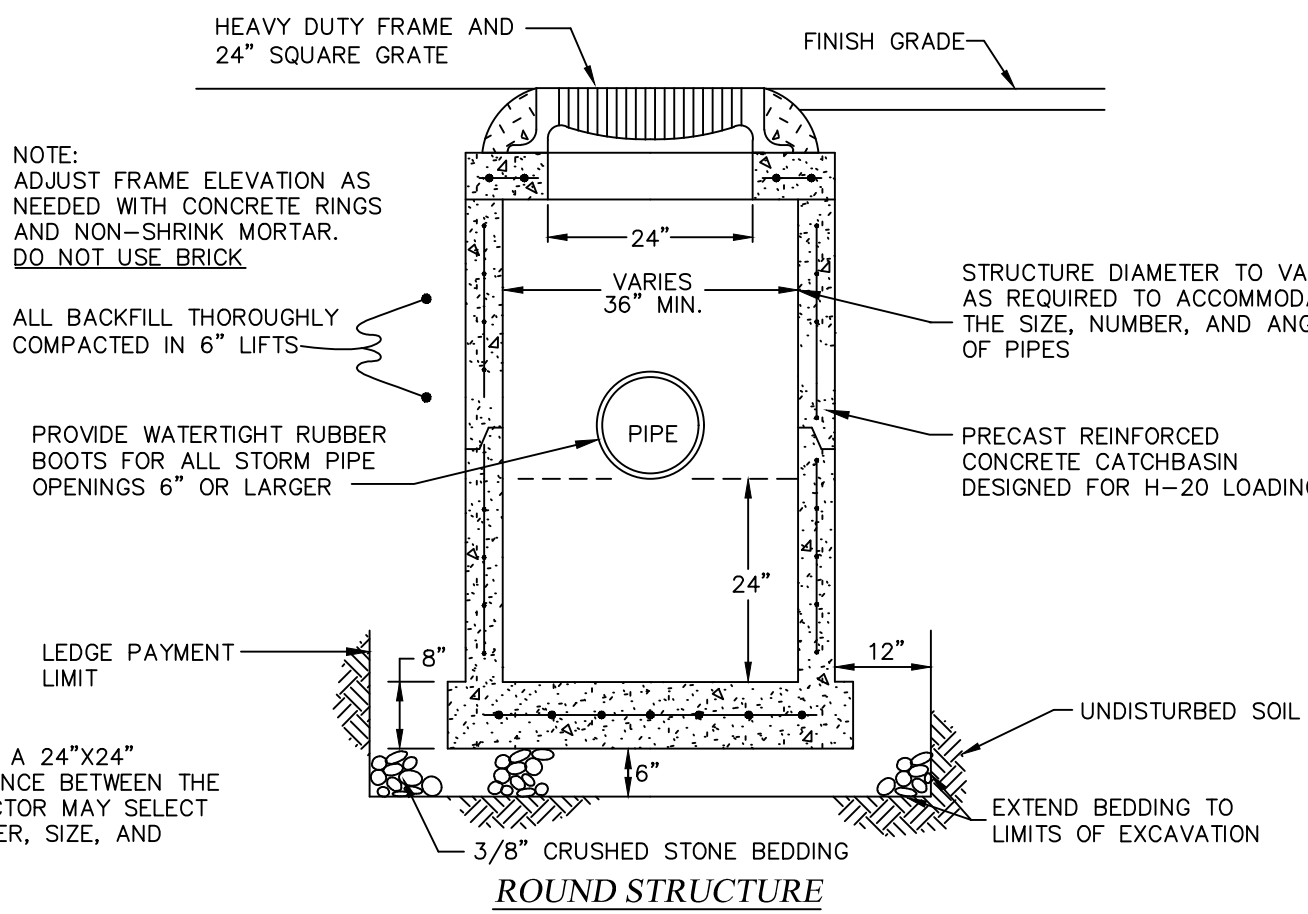
EROSION LOG SECTION

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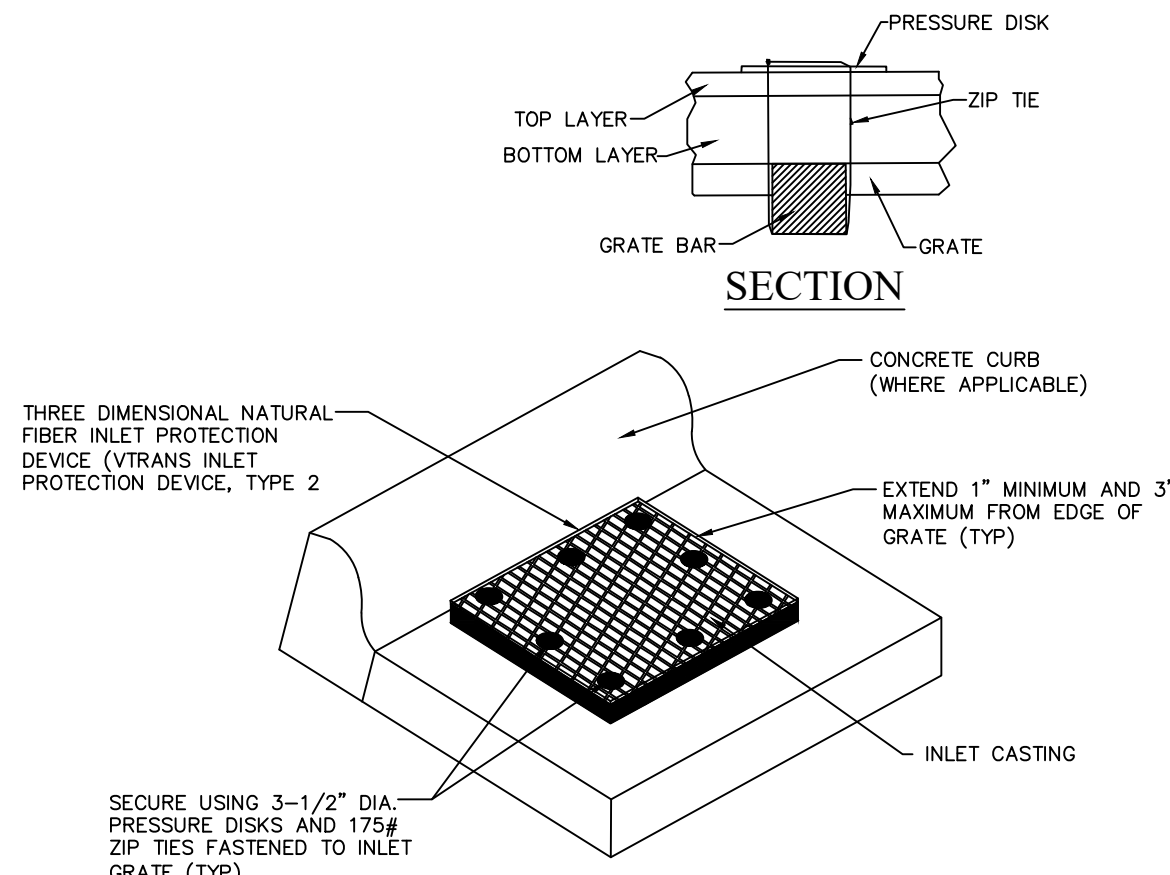
TYPICAL PRECAST CONCRETE CATCHBASIN

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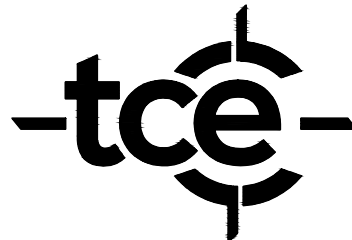
TYPICAL CLEANOUT

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FLAT TYPE INLET PROTECTION

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Project Title

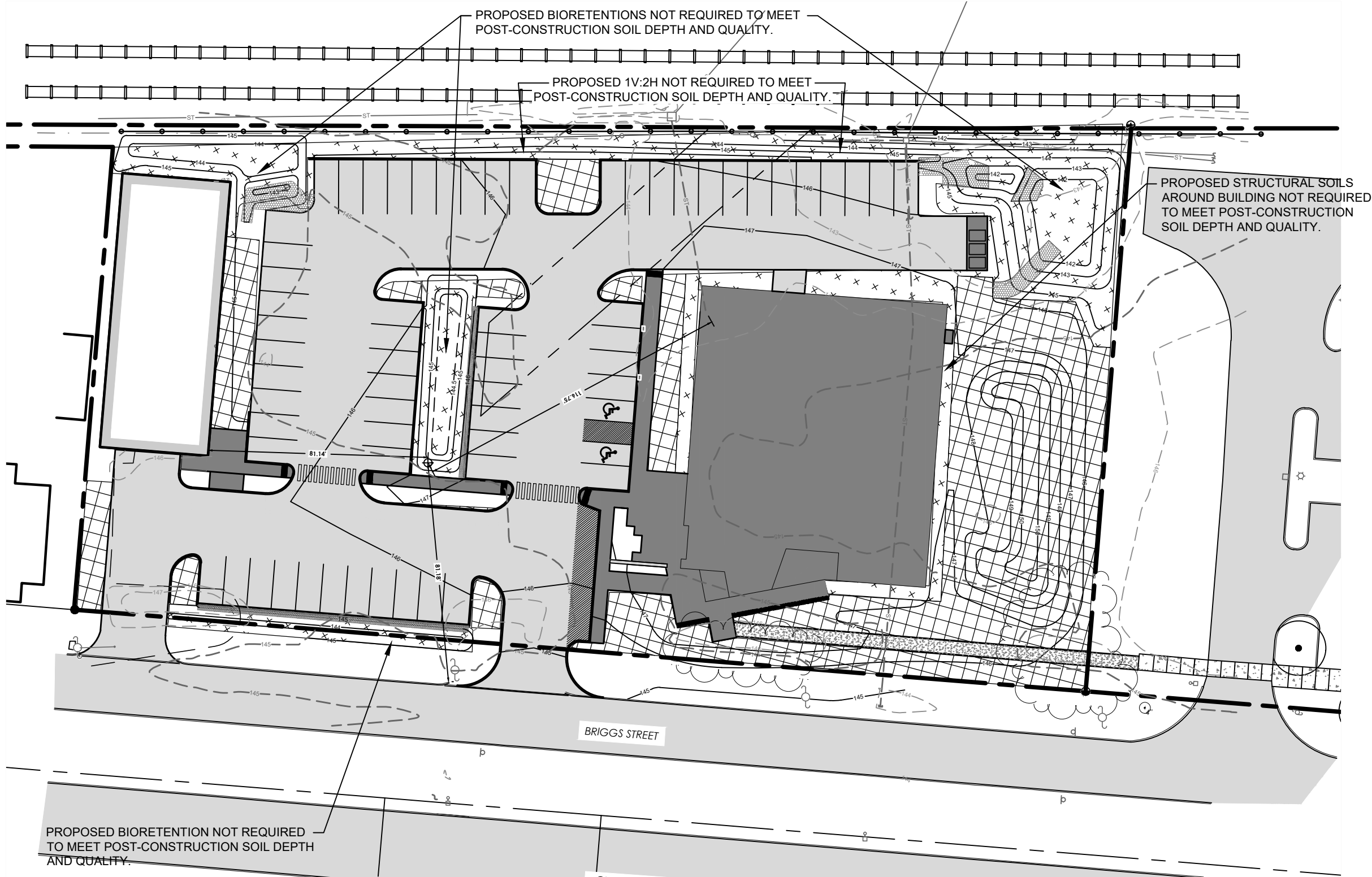
Petra Cliffs
75 Briggs Street
Burlington, VT 05401

Sheet Title

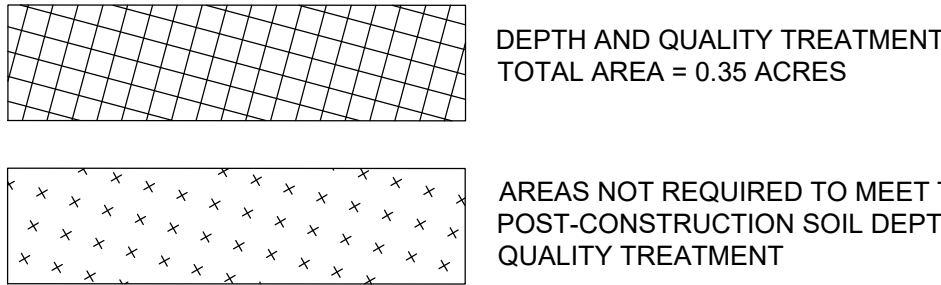
Stormwater,
Sanitary, & EPSC
Details

Date: 02-05-24
Scale: As Noted
Project Number: 23-271
Drawn By: TCE
Project Engineer: DJG
Approved By:
Field Book:

C8-02

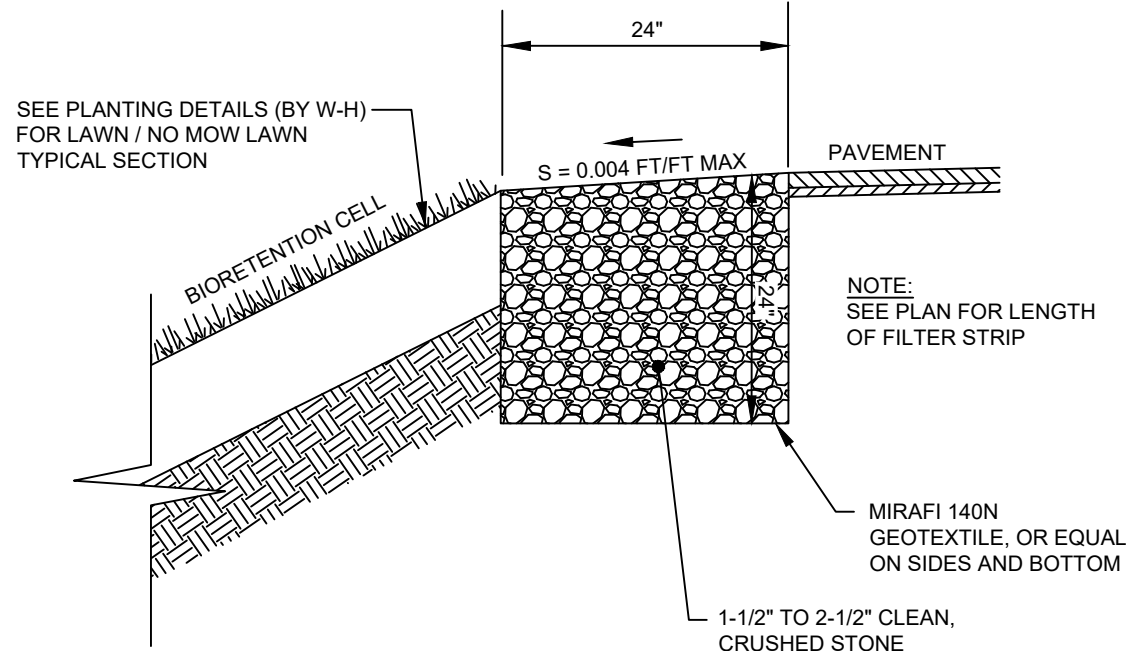


POST-CONSTRUCTION SOIL DEPTH & QUALITY PLAN

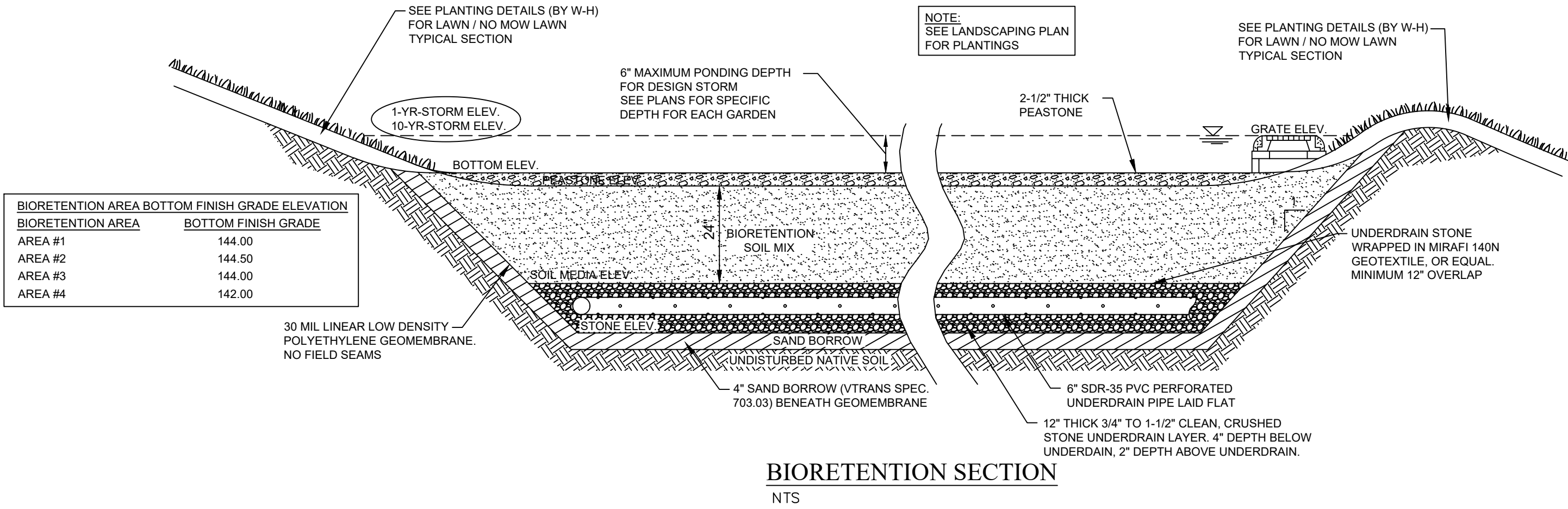


POST-CONSTRUCTION SOIL DEPTH & QUALITY TREATMENT NOTES

- POST-CONSTRUCTION SOIL DEPTH AND QUALITY TREATMENT SHALL CONFORM TO SECTION 3 OF THE "2017 VERMONT STORMWATER MANAGEMENT MANUAL AND DESIGN GUIDANCE". AT A MINIMUM, ALL AREAS IDENTIFIED ON THIS PLAN ARE SUBJECT TO THESE RULES AND THE OUTLINED TREATMENT AS INDICATED. BELOW, ANY ADDITIONAL AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING THE COMPACTION OF SOIL DUE TO THE TRACKING OF HEAVY EQUIPMENT, ARE ALSO SUBJECT TO THE STANDARDS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 4% DRY WEIGHT ORGANIC MATTER, AND SHALL BE PLACED A MINIMUM OF 4" OF DEPTH AS INDICATED ON THE PLANS. SEE ALSO PLANTING DETAILS (BY W-H) FOR LAWN / NO MOW LAWN TYPICAL SECTION.
- THE COMPOST USED TO MEET ORGANIC REQUIREMENTS SHALL CONSIST OF THE FOLLOWING:
 - A CARBON TO NITROGEN RATIO BELOW 25:1.
 - COMPOST SHALL MEET THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR THE CONTAINMENT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(g)(6-7), §6-1105(e)(8-9), AND §6-1106(e)(7-8).
 - A MAXIMUM OF 35% OF THE TOTAL SOIL VOLUME MAY CONTAIN EXCEPTIONAL QUALITY BIOSOLIDS AMENDMENTS, AND SHALL BE WELL MIXED.
- THE SOIL QUALITY REQUIREMENTS SHALL BE MET BY USING THE FOLLOWING METHOD:
 - IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DPETH.
 - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES, EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
 - PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA.
 - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER, AND WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.
- SOIL DEPTH SHALL BE ESTABLISHED AT THE END OF CONSTRUCTION AND ALL AREAS IDENTIFIED SHALL BE PROTECTED FROM COMPACTION.
- TEST HOLES SHALL BE PERFORMED BY THE CONTRACTOR BY USING A SHOVEL DRIVEN SOLELY BY THE CONTRACTORS WEIGHT. THE TEST HOLES SHALL BE 8" IN DEPTH AND USED BY THE CONTRACTOR FOR SELF VERIFICATION THAT ALL REQUIREMENTS OF THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY PLAN HAVE BEEN MET.
- TEST HOLES SHALL BE PERFORMED IN LOCATIONS NOTED ON THIS PLAN OR AS SELECTED BY THE CONTRACTOR. TEST HOLES SHALL BE SPACED AT A MINIMUM OF 50' APART. THE CONTRACTOR SHALL PROVIDE NINE (9) TEST HOLES PER ACRE OF IDENTIFIED AREA SUBJECT TO THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY TREATMENT.
- A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER ALL TURF AREAS. SEE LANDSCAPING PLAN FOR ADDITIONAL NOTES, PLANTING SCHEDULE AND SEEDING SPECIFICATIONS.



PRE-TREATMENT FILTER STRIP NTS



BIORETENTION SECTION NTS

BIORETENTION - EROSION PREVENTION AND SEDIMENT CONTROL SEQUENCING

- INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM ENTERING THE BIORETENTION DURING CONSTRUCTION.
- RUNOFF SHALL NOT BE DIRECTED INTO THE BIORETENTION FACILITY UNTIL:
 - ALL UPGRADIENT CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED.
 - THE BIORETENTION FACILITY IS COMPLETE AND ALL AREAS SUBJECT TO RUNOFF HAVE BEEN PERMANENTLY STABILIZED.
- REMOVE TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL DEVICES AFTER THE BIORETENTION IS PLACED ONLINE AND IS RECEIVING RUNOFF.
- IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BIORETENTION, THE SEDIMENT AND ALL CONTAMINATED MATERIAL (SUCH AS PEASTONE OR SOIL MIX) SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

BIORETENTION - GENERAL CONSTRUCTION SPECIFICATIONS

- THE BIORETENTION SHALL BE EXCAVATED TO THE DIMENSIONS, SIDE SLOPES, AND ELEVATIONS SHOWN ON THE DRAWINGS. THE METHOD OF EXCAVATION SHALL MINIMIZE THE COMPACTION OF THE SUBGRADE SOIL WITHIN THE FOOTPRINT OF THE BIORETENTION AREA.
- THE BIORETENTION SOIL MIXTURE SHALL BE PLACED AND GRADED USING LOW GROUND CONTACT PRESSURE EQUIPMENT. TO THE EXTENT POSSIBLE, WORK SHALL BE PERFORMED BY EQUIPMENT OPERATING ON THE ADJACENT SLOPES.
- ALL WORK RELATED TO PLACEMENT OF PEASTONE AND PLANT INSTALLATION SHALL BE ACCOMPLISHED WITH METHODS AND EQUIPMENT THAT DO NOT RESULT IN FURTHER COMPACTION OF THE BIORETENTION SOIL MIX.

BIORETENTION - MATERIAL SPECIFICATIONS:

PEASTONE
PLACE 2.5 INCHES OF 3/4" WASHED NATURAL STONE (PEASTONE) FROM HINESBURG SAND & GRAVEL OR APPROVED EQUAL. PEASTONE SHALL BE PLACED BY HAND AFTER THE PLANTINGS ARE IN PLACE.

BIORETENTION SOIL MIX
THE BIORETENTION SOIL SHALL CONSIST OF USDA SAND TO LOAMY SAND CLASSIFICATION, OR A WELL BLENDED, HOMOGENEOUS MIXTURE OF THE FOLLOWING COMPONENTS:
SAND 85-88%
SILT 8-12%
CLAY 0-2%
*ORGANICS 3-5%

*ORGANICS SHOULD CONSIST OF COMPOST THAT MEETS THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR THE CONTAINMENT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(g)(6-7), §6-1105(e)(8-9), AND §6-1106(e)(7-9).

THE BIORETENTION SOIL MIX SHALL BE FREE OF STONES, STUMPS, OR ROOTS LARGER THAN TWO (2) INCHES IN ANY DIMENSION. THE SOIL MIX SHALL BE FREE OF NOXIOUS WEEDS

EACH BIORETENTION SOIL MIX MATERIAL COMPONENT SHALL HAVE THE FOLLOWING PROPERTIES:

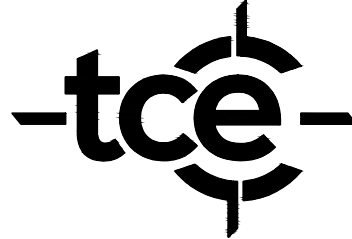
TOPSOIL: SANDY LOAM OR LOAMY SAND TEXTURE PER USDA TEXTURAL TRIANGLE, HAVING LESS THAN 5% CLAY CONTENT.

COMPOST: SHALL BE FREE OF WEED SEEDS AND COMPLY WITH EPA REQUIREMENTS FOR COMPOST. THE COMPOST SHALL HAVE A LOOSE AND GRANULAR TEXTURE. THE COMPOST SHALL POSSESS NO OBJECTIONABLE ODORS AND SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED. OTHER COMPOST REQUIREMENTS FOLLOW:

- THE UPPER 12" OF THE BIORETENTION SOIL MIX SHOULD BE AMENDED WITH A LOW-PHOSPHORUS COMPOST (PLANT-BASED LEAF LITTER/YARD WASTE / COMPOST FEEDSTOCKS ARE REQUIRED. COMPOSTS MADE WITH FOODSCRAPS, BIOSOLID OR MANURE ARE NOT PERMISSIBLE) TO ATTAIN 3-5% ORGANIC MATTER CONTENT. THE COMPOST SHOULD ONLY BE ADDED TO THE UPPER 12" OF BIORETENTION SOIL.
- THE TOTAL AMOUNT OF COMPOST ADDED SHALL NOT EXCEED 3-5% OF THE TOTAL BIORETENTION SOIL MEDIA VOLUME.
- THERE ARE TWO OPTIONS FOR TESTING THE COMPOST, INCLUDING TESTING SOLELY ITSELF, OR TESTING A SOIL MIX.
 - PHOSPHORUS TESTING OPTIONS FOR BIORETENTION SOIL MEDIA OR GRAVEL WETLAND SOIL.
 - OPTION 1: TEST THE COMPOST ONLY. UTILIZE LOW-PHOSPHORUS COMPOST HAVING LESS THAN 0.2% TOTAL PHOSPHORUS (TP). UNDERSTANDING THE COMPOST MAY ONLY COMPRISE 3% OF THE OVERALL BIORETENTION SOIL MEDIA. THE RECOMMENDED TEST TO BE PERFORMED ON THE COMPOST IS A DIGESTION METHOD, EPA 3050 OR 3051 OR SIMILAR METHOD, FOLLOWED BY P ANALYSIS. (THIS TEST FOR TOTAL P IN COMPOST IS AVAILABLE THROUGH THE UNIVERSITY OF VERMONT AGRICULTURAL AND ENVIRONMENTAL TESTING LAB AND MAY BE AVAILABLE THROUGH PRIVATE LABORATORIES.)
 - OPTION 2: TESTING THE BIORETENTION SOIL MEDIA OR GRAVEL WETLAND SOIL. FOUR (4.0) MG/KG IS THE LIMIT FOR AVAILABLE PHOSPHORUS, IN THE BIORETENTION SOIL MEDIA OR GRAVEL WETLAND SOIL, BASED ON THE MODIFIED MORGAN'S SOIL TEST. (THIS TEST IS AVAILABLE THROUGH THE UNIVERSITY OF VERMONT AGRICULTURAL AND ENVIRONMENTAL TESTING LAB AND MAY BE AVAILABLE THROUGH PRIVATE LABORATORIES. THE MORGAN'S SOIL TEST, AVAILABLE IN NEW YORK, WILL ALSO SUFFICE. OTHER SOIL TESTS, SUCH AS MEHLICH-3, BRAY AND OLSEN ARE NOT CONSIDERED TO BE ACCEPTABLE METHODS FOR THIS DETERMINATION.)
 - POTENTIAL LOW-P SOURCES
 - AGRESOURCE INC. PRODUCT NAME - 1/2" LEAF COMPOST (978.992.2795) OR
 - CASELLA ORGANICS IN RHODE ISLAND PRODUCT NAME - EARTH LIFE ORGANIC COMPOST (803.228.6428) ARE KNOWN SUPPLIERS OF A LOW-PHOSPHORUS SOIL MIX.

BIORETENTION MONITORING AND MANAGEMENT

WHAT TO LOOK FOR	PROBLEMS	YES/NO	POSSIBLE CAUSES	ACTIONS
AESTHETICS	ARE WEEDS PRESENT?	YES	YOUNG PLANTS HAVE NOT YET COVERED THE GROUND. THERE ARE NEARBY SOURCES OF WEED SEEDS.	REMOVE WEEDS. IRRIGATE IF NECESSARY TO INCREASE VIGOR OF DESIRED SPECIES. REPLACE ANY PLANTS THAT ARE MISSING BECAUSE OF MORTALITY. APPLY A THIN LAYER OF WOOD CHIP MULCH OVER ANY BARE SOIL. REMOVE SEED SOURCES.
		NO		CHECK AGAIN NEXT TIME.
	IS THE PLANTING ATTRACTIVE?	YES		CHECK AGAIN NEXT TIME.
		NO	THE MIX OF SPECIES HAS DEVIATED FROM ORIGINAL DESIGN.	CONTACT DESIGNER TO DEVELOP ENHANCEMENT PLAN. INSTALL RECOMMENDED PLANTINGS.
LOSS OF SPECIES DIVERSITY	IS LITTER PRESENT?	YES		REMOVE LITTER. INVESTIGATE POSSIBLE SOURCES AND REMOVE, OR IMPROVE LITTER COLLECTION PRACTICES.
		NO		CHECK AGAIN NEXT TIME.
	HAS MORTALITY CAUSED THE DISAPPEARANCE OF SPECIES?	YES	THE ADAPTATIONS OF THE PLANT SPECIES DO NOT MATCH THE HYDROLOGY.	CONTACT DESIGNER TO ASSESS HYDROLOGY AND SUITABILITY OF SPECIES. INSTALL RECOMMENDED SPECIES TO FILL GAPS.
		NO		CHECK AGAIN NEXT TIME.
HEALTH OF PLANTS	DO PLANTS EXHIBIT LOW VIGOR?	YES	THE SOIL HAS INADEQUATE NUTRIENTS. SOIL pH IS OUT OF THE ACCEPTABLE RANGE. PLANTS ARE NOT ADAPTED TO THE HYDROLOGY OF THE RAIN GARDEN. SUBSTANCES TOXIC TO PLANTS HAVE ENTERED THE RAIN GARDEN.	COLLECT AND SUBMIT SOIL SAMPLES FOR ANALYSIS. CORRECT NUTRIENT DEFICIENCIES OR IMBALANCES. BECAUSE RAIN GARDEN PLANTS DO NOT HAVE HIGH NUTRIENT REQUIREMENTS, BE CONSERVATIVE WITH FERTILIZER APPLICATION. COLLECT AND SUBMIT SOIL SAMPLES FOR ANALYSIS. CORRECT pH LEVEL USING SULFUR OR GROUND LIMESTONE, AS PRESCRIBED. CONTACT DESIGNER TO ASSESS HYDROLOGY AND MAKE RECOMMENDATIONS FOR MORE SUITABLE SPECIES. INSTALL RECOMMENDED SPECIES. CONTACT DESIGNER TO ASSESS PLANT AND SOIL SYMPTOMS AND DEVELOP STRATEGY FOR ADDRESSING TOXINS.
		NO		CHECK AGAIN NEXT TIME.
	ARE PLANTS OVERLY VIGOROUS OR FALLING OVER?	YES	THE SOIL HAS EXCESSIVE NUTRIENTS.	FERTILIZER SHOULD NEVER BE APPLIED TO A RAIN GARDEN UNLESS THE NEED IS DEMONSTRATED. CHECK THE CONTRIBUTING WATERSHED FOR SOURCES OF EXCESS NUTRIENTS AND REMOVE IF POSSIBLE. ASSESS SPECIES SUITABILITY IN LIGHT OF HIGH NUTRIENT LEVELS.
		NO		CHECK AGAIN NEXT TIME.
BIORETENTION FUNCTION	ARE ONE OR MORE SPECIES ENCRORACHING ON OTHERS?	YES	CONDITIONS ARE IDEAL FOR THE OVERLY VIGOROUS SPECIES. SPECIES THAT ARE BEING CROWDED OUT ARE NOT WELL SUITED TO THE SOIL OR HYDROLOGY.	IN EARLY SUMMER, CUT STEMS OF THE OVERLY VIGOROUS PLANTS TO THE GROUND WHERE THEY ENCRORACH ON NEARBY SPECIES. CONTINUED ISSUES MAY REQUIRE THAT THE EXCESS PLANT CROWNS BE DUG OUT. CONTACT THE DESIGNER TO ASSESS THE SUITABILITY OF THE LOW-VIGOR SPECIES AND MAKE RECOMMENDATIONS.
		NO		CHECK AGAIN NEXT TIME.
	IS STANDING WATER ABSORBED WITHIN 48 HOURS AFTER A RAIN EVENT?	YES	OUTLET DRAIN IS BLOCKED.	CLEAR OR UNCLUG DRAIN.
		NO	SOIL IS NOT PERMEABLE ENOUGH. EXCESSIVE WATER IS BEING DIRECTED INTO RAIN GARDEN.	CONTACT DESIGNER TO ASSESS INFILTRATION RATE AND DEVELOP STRATEGY TO IMPROVE IT. CONTACT DESIGNER TO INVESTIGATE WATER FLOW AND DEVELOP PLAN TO MODIFY INLET IF NECESSARY.
ACCUMULATION OF PLANT DEBRIS	IS BIORETENTION RARELY INUNDATED OR INUNDATED FOR ONLY SHORT PERIODS OF TIME?	YES	INLET IS BLOCKED. ADEQUATE WATER IS NOT FLOWING TOWARDS INLET. OUTLET STRUCTURE IS LEAKING BELOW THE RIM.	CLEAN DEBRIS FROM INLET. MODIFY THE INLET OR FLOW PATHS OVER CONTRIBUTING IMPERVIOUS SURFACES. REPAIR THE OUTLET STRUCTURE.
		NO		CHECK AGAIN NEXT TIME.
	IS EROSION, SEDIMENTATION, OR BARE SOIL PRESENT?	YES	GAPS BETWEEN PLANTS ARE NOT STABILIZED BY ROOTS. OTHER INFLOW(S) OF WATER BESIDES THE PLANNED ONE EXPOSES SOIL TO EROSION. SEDIMENT IS BEING CARRIED WITH RUN-OFF INTO THE RAIN GARDEN.	CONTACT DESIGNER TO EVALUATE WHETHER MORE OR ALTERNATIVE SPECIES ARE NECESSARY TO STABILIZE SOIL. INSTALL ADDITIONAL PLANTINGS. BLOCK THE EXTRA INFLOW OR ARMOR THE ROUTE OF INFLOW WITH STONES TO KEEP SOIL IN PLACE. STABILIZE OR REMOVE SEDIMENT SOURCE. DETERMINE THE CAUSE AND PREVENT IT FROM HAPPENING. REPLACE ANY MISSING PLANTS AS SOON AS POSSIBLE. MULCH WITH A THIN LAYER OF WOOD CHIPS.
		NO		CHECK AGAIN NEXT TIME.
	DOES BIORETENTION VEGETATION ATTRACT BIRDS AND POLLINATORS?	YES		CHECK AGAIN NEXT TIME.
		NO	NOT ENOUGH OF THE RIGHT KINDS OF PLANTS ARE PRESENT. FLOWERS ARE NOT BLOOMING AT THE PROPER TIME TO BENEFIT DESIRED SPECIES. THE END OF THE GROWING SEASON RESULTS IN DEAD HERBACEOUS STEMS. SHRUB STEMS LOSE VIGOR WITH AGE.	CONTACT DESIGNER TO INVENTORY SPECIES AND MAKE RECOMMENDATION FOR SUPPLEMENTING WITH ONES THAT ARE MORE BENEFICIAL. INSTALL NEW PLANTS. ADD MORE FUNCTIONAL SPECIES. LEAVE STEMS STANDING OVER THE WINTER TO PROVIDE SEEDS AND COVER FOR BIRDS. PROTECTION FOR SOIL. CUT DEAD STEMS TO 6 - 12" ABOVE THE SOIL IN LATE APRIL. REMOVE STEMS FROM RAIN GARDEN. AFTER SHRUBS HAVE REACHED MATURITY, REJUVENATE BY PERIODICALLY PRUNING AWAY LESS VIGOROUS STEMS, CLEANLY CUTTING AT GROUND LEVEL. RETAIN ADEQUATE TOP GROWTH TO SUPPORT ROOTS.
	IS THERE A SUBSTANTIAL AMOUNT OF DEAD STEMS PRESENT?	YES		CHECK AGAIN NEXT TIME.
		NO		CHECK AGAIN NEXT TIME.



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Revisions
No. Description Date By

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

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

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

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

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

6. It is the User's responsibility to ensure this copy contains the most current revisions.

For Local Permitting Only

Project Title

Petra Cliffs
75 Briggs Street
Burlington, VT 05401

Sheet Title

Stormwater Details

Date: 02-05-24

Scale: As Noted

Project Number: 23-271

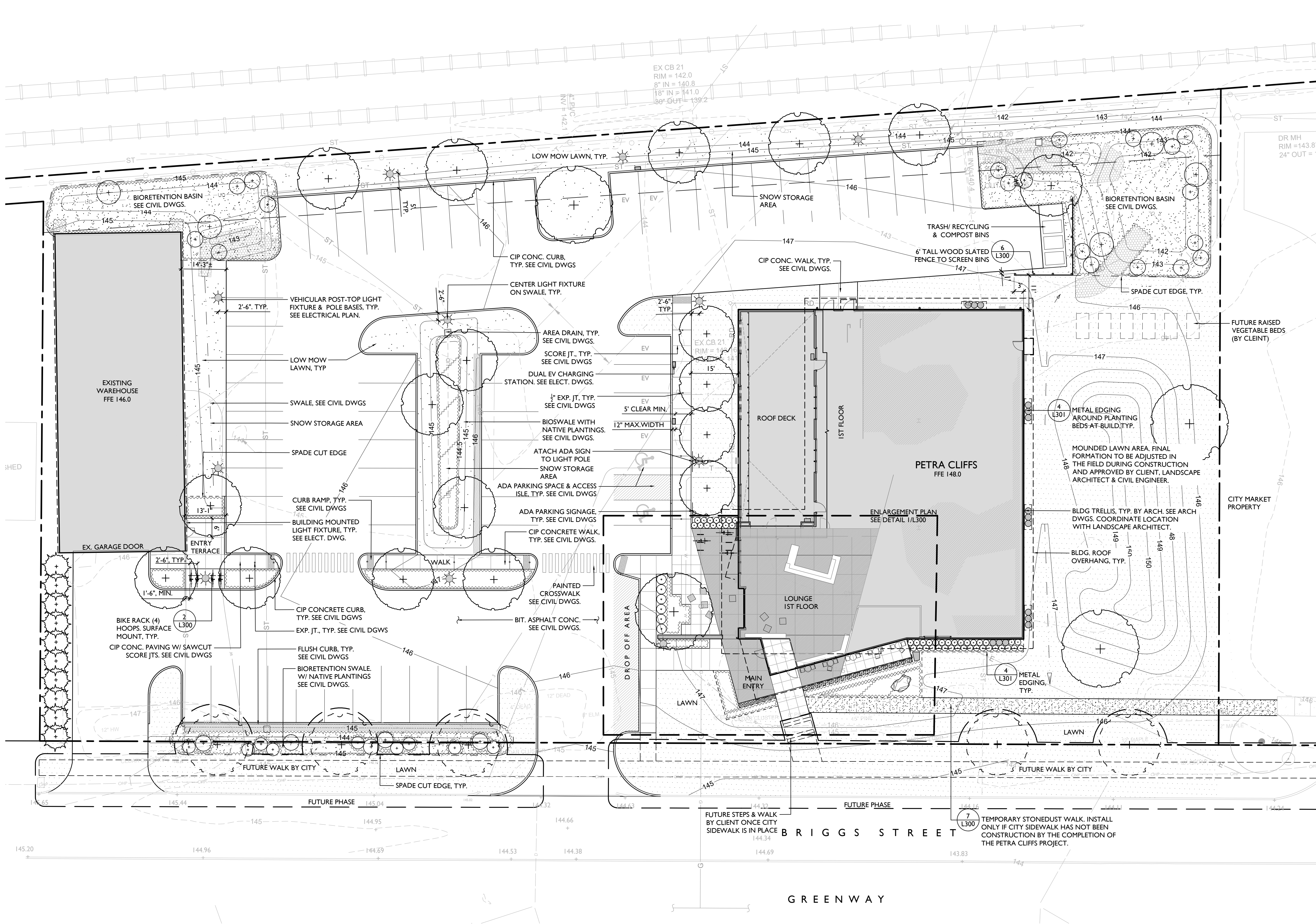
Drawn By: TCE

Project Engineer: DJG

Approved By:

Field Book:

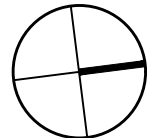
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GENERAL NOTES

1. Contractor is responsible for all damage due to his operations inside and outside the contract limit line.
2. Contractor is responsible for checking spot elevations and verifying proposed grades by providing grade stakes. Grades must be approved by Landscape Architect prior to proceeding.
3. Contractor shall blend new work smoothly with existing grades at contract limit line and/or limit of construction line.
4. Contractor to verify that subgrades are 6 inches below finished grade prior to spreading top soil for seeded areas.
5. All walks shall have 2% cross pitch, and all step trends and wall caps shall have 1% cross pitch unless otherwise noted.
6. Light fixture locations may be field adjusted with prior Landscape Architect approval.
7. Walkway layout to be approved by Landscape Architect prior to construction.
8. Site furniture and wall locations to be verified by Landscape Architect prior to installation.
9. General Contractor is responsible for all erosion control measures during construction.
10. It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.
11. Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
12. Base survey prepared by Lamoureux & Dickinson
13. See Civil Engineer drawings for standard paving, curbs stormwater and utility details.
14. Existing subgrade to be loosened 6"-8" as approved by the Civil Engineers to improve soil drainage (infiltration) so that standing water does not occur at the interface of the planting soil and existing subgrade.
15. All planting soil shall be imported, tested and approved by Landscape Architect prior to installation. See Landscape Specifications for requirements.
16. Contractor shall perform percolation tests as outlined in the Landscape Specifications to assure planting bed soils will drain adequately.
17. Notify the Landscape Architect in writing of all soil or drainage conditions which are considered detrimental to growth of plant material, as outlined in the specifications.
18. Existing on-site soil are known to be of poor quality, therefore if a hardpan soil layer exists the contractor shall implement the following: Drill 6-inch- (150-mm-) diameter holes, 24 inches (600 mm) apart, into free-draining strata or to a depth of 10 feet (3 m), whichever is less, and backfill with free-draining material, as outlined in the specifications.
19. See Corrective Action Plan for Soil Cap details.
20. See Planting Plan (L200) and Details (L301) for soil depth requirements per plant type with respect to the Soil Cap.
21. See Civil Plans for overall Site Grading and the Enlargement Plan on Sheet L300 for Detailed Grading of the terrace areas and the vehicular drop-off zone sidewalk.

PERMITTING
NOT FOR CONSTRUCTION



16 0 16 32
SCALE OF FEET

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DATE ISSUED: 12/01/2023
AUTHOR: AH

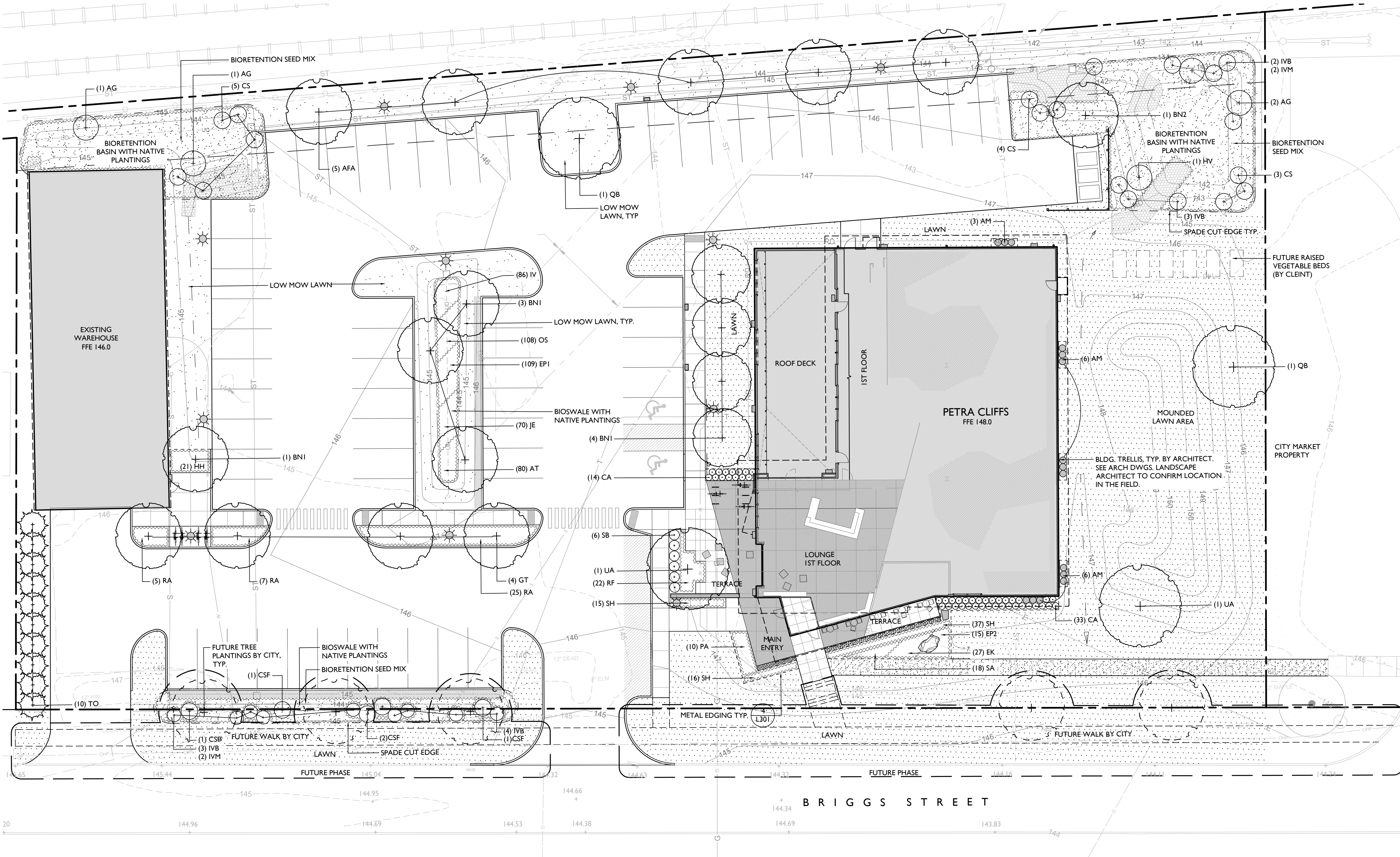
REVISIONS:

1 02/15/24 PLANNING + ZONING

PETRA CLIFFS
CLIMBING CENTER
75 BRIGGS ST.
BURLINGTON, VT

LAYOUT AND
MATERIAL PLAN

L1.0



PLANT SCHEDULE

KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
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DECIDUOUS & EVERGREEN TREES

AFA	6	Acer freemanii 'Autumn Blaze'	FREEMAN MAPLE	2.5"-3" Cal.	SEE PLAN
BN1	8	Betula Nigra 'Heritage' (Single- stem)	HERITAGE RIVER BIRCH	2"-2.5" Cal.	SEE PLAN
BN2	1	Betula Nigra 'Heritage' (Multi-stem)	HERITAGE RIVER BIRCH	10'-12' Ht.	SEE PLAN
GT	4	Gleditsia tricanthus 'Skyline'	HONEY LOCUST	2.5"-3" Cal.	SEE PLAN
QB	2	Quercus bicolor	SWAMP WHITE OAK	2.5"-3" Cal.	SEE PLAN
TO	10	Thuja occidentalis 'Pyramidalis'	EASTERN ARBORVITAE	8'-10' Ht.	SEE PLAN
UA	2	Ulmus davidiana var. japonica 'Morton'	ACCOLADE ELM	2.5"-3" Cal.	SEE PLAN

SHRUBS

AG	4	Amelanchier canadensis	SERVICEBERRY (Multi-stem)	#3	SEE PLAN
CS	12	Cornus stolonifera 'Arctic Fire'	DWARF RED-TWIG DOGWOOD	#3	3' O.C.
CSF	5	Cornus sericea 'Flaviramea'	DWARF YELLOW-TWIG DOGWOOD	#3	3' O.C.
HV	1	Hamamelis vernalis	VERNAL WITCHHAZEL	#3	SEE PLAN
IVB	12	Ilex verticillata 'Berry Poppins'	DWARF WINTERBERRY (female)	#3	3' O.C.
IVM	4	Ilex verticillata 'Mr. Poppins'	DWARF WINTERBERRY (male)	#3	3' O.C.
RA	37	Rhus aromatica 'Gro- Low'	GRO-LOW FRAGRANT SUMAC	#2	4' O.C.
SB	6	Spiraea betulifolia 'Tor'	BIRCHLEAF SPIREA	#3	3' O.C.

ORNAMENTAL GRASSES PERENNIALS & VINES

AM	15	Aristolochia macrophylla	DUTCHMEN'S PIPE	#1	24" O.C.
CA	47	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	#1	24" O.C.
EK	27	Echinacea purpurea 'Tiki Torch'	ECHINACEA	#1	18" O.C.
EP2	15	Eupatorium dubium 'Little Joe'	LITTLE JOE PYE WEED	#1	24" O.C.
HH	21	Hemerocallis 'Hyperion'	DAYLILY	#1	24" O.C.
PA	10	Perovskia atriplicifolia 'Blue Jean Baby'	RUSSIAN SAGE	#1	30" O.C.
RF	22	Rudbeckia fulgida sullivantii 'Goldstrum'	BLACK-EYED SUSAN	#1	24" O.C.
SA	18	Salvia sylvestris 'Caradonna'	SALVIA	#1	18" O.C.
SH	68	Sporobolus heterolepis 'Tara'	PRAIRIE DROPSEED	#1	24" O.C.

BIORETENTION BASINS & SWALES PERENNIALS

AT	80	Asclepias tuberosa	BUTTERFLY WEED	PLUGS	12" O.C.
EPI	109	Eupatorium dubium 'Phantom'	DWARF JOE PYE WEED	PLUGS	12" O.C.
OS	108	Onoclea sensibilis	SENSITIVE FERN	PLUGS	12" O.C.
IV	86	Iris versicolor	NORTHERN BLUE FLAG	PLUGS	12" O.C.
JE	70	Juncus effusus	SOFT RUSH	PLUGS	15" O.C.

BIORETENTION SEED MIX - HYDROSEED - SEE SPECIFICATIONS

LOW MOW SEED MIX

35.0%	Festuca rubra	CREEPING RED FESCUE
27.5%	Festuca brevipila, 'Beacon'	HARD FESCUE 'BEACON'
27.5%	Festuca ovina var. duriuscula (F. longifolia), 'Rhino'	HARD FESCUE, 'RHINO'
10.0%	Lolium multiflorum	ANNUAL RYEGRASS

* SEEDING RATE: 220 LBS/PER ACRE.

LOW-MOW COVER MIX - PDOT - L: Olive (Or Approved Equal)
This seed mix will be used for both the LAWN and LOW MOW areas specified on the plans. The maintenance of this area shall be mowed once or twice a year, similar to a meadow, once it is established. The height of the meadow is roughly 12" tall before falling over.

ALL TREE AND SHRUB PLANTING PITS REQUIRE SOIL DEPTHS GREATER THAN THE STANDARD 12" SOIL CAP SPECIFIED IN THE CORRECTION ACTION PLAN. OVER EXCAVATION OF EX. SUBGRADE MAY BE REQUIRED TO ACCOMMODATE THE NECESSARY PLANTING SOIL DEPTHS NOTED BELOW PER PLANT TYPE. THE PLANTING DETAILS ON SHEET L301 ILLUSTRATE THESE DEPTHS WITH RESPECT TO THE SOIL BARRIER (NON-WOVEN GEOTEXTILE FABRIC), CLEAN FILL AND EX. SUBGRADE. SEE CORRECT ACTION PLAN FOR ADDITIONAL INFORMATION ON THE SOIL CAP AND BARRIER.

2.5"-3" CAL. TREES
MULTI-STEMMED BIRCH
EVERGREEN TREES
SHRUBS
PERENNIALS
LAWN & NO-MOW LAWN

24" DEPTH
18" DEPTH
18" DEPTH
18" DEPTH
12" DEPTH
6" DEPTH (OVER 6" OF CLEAN FILL/ PLANTING SOIL)

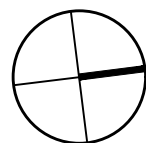
PLANTING NOTES

- All plant material in the plant schedule shall be nursery grown in accordance with ANSI in accordance with Z.601 Standards for measurement of nursery stock.
- All plants shall be guaranteed by the Contractor for a period of one year from date of receipt of Provisional Acceptance of the completed installation by the Owner.
- Replacement plantings will be required prior to Final Acceptance for any plants which are missing, not true to specifications, have died or are unhealthy or uncharacteristic of the species (due to excessive pruning, dieback or other reasons).
- All plant materials shall be selected and tagged at the nursery by Landscape Architect.
- The Landscape Architect's approval is required for any plant material substitutions.
- The Contractor is responsible for immediately notifying the Landscape Architect if any plant quantity discrepancies exist between the planting plan and the plant list.
- All shrubs and trees will be sprayed with the anti-desiccant "Wilt-Pruf" (or approved equal) prior to the first Winter (no later than November 30).
- The Landscape Contractor shall have the General Contractor locate all underground utilities in areas to be landscaped prior to commencing any excavation. Adjustments to tree locations will be allowed where utility conflicts are clearly a problem and with prior site approval by Landscape Architect.
- All plant bed, shrub and tree location shall be staked in the field by Contractor for Landscape Architects approval prior to installation.
- Adjustments to plant beds shall be approved by Landscape Architect.
- General Contractor is responsible for all erosion control measures during construction.
- All disturbed areas are to be topsoiled and seeded or sodded, as indicated in the planting plan.
- Mulch shall consist of double-shredded hardwood mulch or approved equal except where specified differently in the Plans. The Contractor is responsible for providing samples of mulch to Landscape Architect. Mulch plant materials as shown on plan and details.
- It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.
- Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
- During construction, and until the end of warranty period, existing trees that are showing signs of stress as determined by the Landscape Architect are to be deep root fertilized; two injections per caliper inch per tree at 18" - 24" depth with Peter's 20/20/20 fertilizer or Landscape Architect approved equal.
- Contractor is responsible for verifying and confirming all plant counts as supplied by the Landscape Architect with field conditions as constructed. Any discrepancies shall be reported to Landscape Architect for approval and direction.
- Prior to commencement of any construction, all existing trees to remain shall receive tree protection fence at outer edge of dripline whenever possible.
- For Bioretention Swale with plug plantings mix compost into the top 8" of soil and then top dressed 2" with bark mulch as indicated in the Planting Details & Specifications.
- All planting soil shall be imported, tested and approved by Landscape Architect prior to installation. See Landscape Specifications for requirements.
- Contractor shall perform percolation tests prior to soil cap being installed as outlined in the Landscape Specifications to assure planting bed soils will drain adequately.
- Excavation for tree pits shall be a min. of 2' deep and 8' wide and shall be completed during the soil capping phase of the project. The soil cap shall be installed to accommodate the required tree pit depths, so that final finished grades match what is noted on the Grading & Planting Plans.

MEADOW PLANTING INSTRUCTIONS
(LOW MOW & BIORETENTION SEED MIXES)

- Native Grass & Wildflower Seed Mix:** Clean material guaranteed to be 95% free from seeds other than those listed, and to have a minimum germination rate of 85%.
- Divide the required amount of seed into two equal parts, spread one-half in one direction, the remainder at right angles.
- No-till seed drill or broadcast seed at specified rate per acre.
- Water only as needed. If installation occurs in fall when seed is dormant, watering may not be necessary. Contact seed supplier for their recommendation.
- Contractor may apply mulch of straw to any seeded area which in his opinion will benefit from this treatment. In the event that mulch is applied it shall be raked off and removed from the site when the grass has attained sufficient growth to be rooted and capable of sustaining itself.
- Maintenance shall begin immediately after each portion of meadow is installed and shall continue until the end of the one year Guarantee Period.
- For the maintenance of the bioretention basin & swale meadow areas also see Civil Engineers Plans.
- Seeded area shall be mowed 2-3 times during the first year to prevent the establishment of weeds. The mower blade should be sharp (to avoid ripping seedlings out of the ground) and should be set at a height of 6". Exact mowing schedules are dictated by the growth of the vegetation, and should be performed when the weeds reach a height of 1-2 feet, or begin to flower. After the first year of growth, the seeded area should be mowed once every year at the beginning of spring.
- After completion of the work, the Contractor shall remove all debris, materials, rubbish, etc. from the site. Dispose of trash materials in a manner satisfactory to the Landscape Architect. The premises shall be left clean, presentable and satisfactory.

PERMITTING
NOT FOR CONSTRUCTION



LANDSCAPE DESCRIPTION

The landscape design for the Petra Cliff's project was driven by the program needs of a climbing gym and the ecological needs of the site. By integrating a variety of south and east facing terraces, a network of sidewalks within and extending to City Market, vegetated parking areas and a drop off zone, bike storage, bioretention facilities and seasonal plantings, a highly functional, beautiful landscape was created. The placement of native trees and shrubs were strategically located to screen parking areas as well as shade the building, parking spaces and the main terrace area to reduce heat gains throughout the site. These plantings in combination with the flowering perennials were selected to provide seasonal interest at key pedestrian areas and to support wildlife habitat throughout the year. A combination of bioretention swales and basins were designed with native plantings to treat on-site stormwater runoff and improve the overall water quality of the site.

DATE ISSUED: 12/01/2023

AUTHOR: AH

REVISIONS:

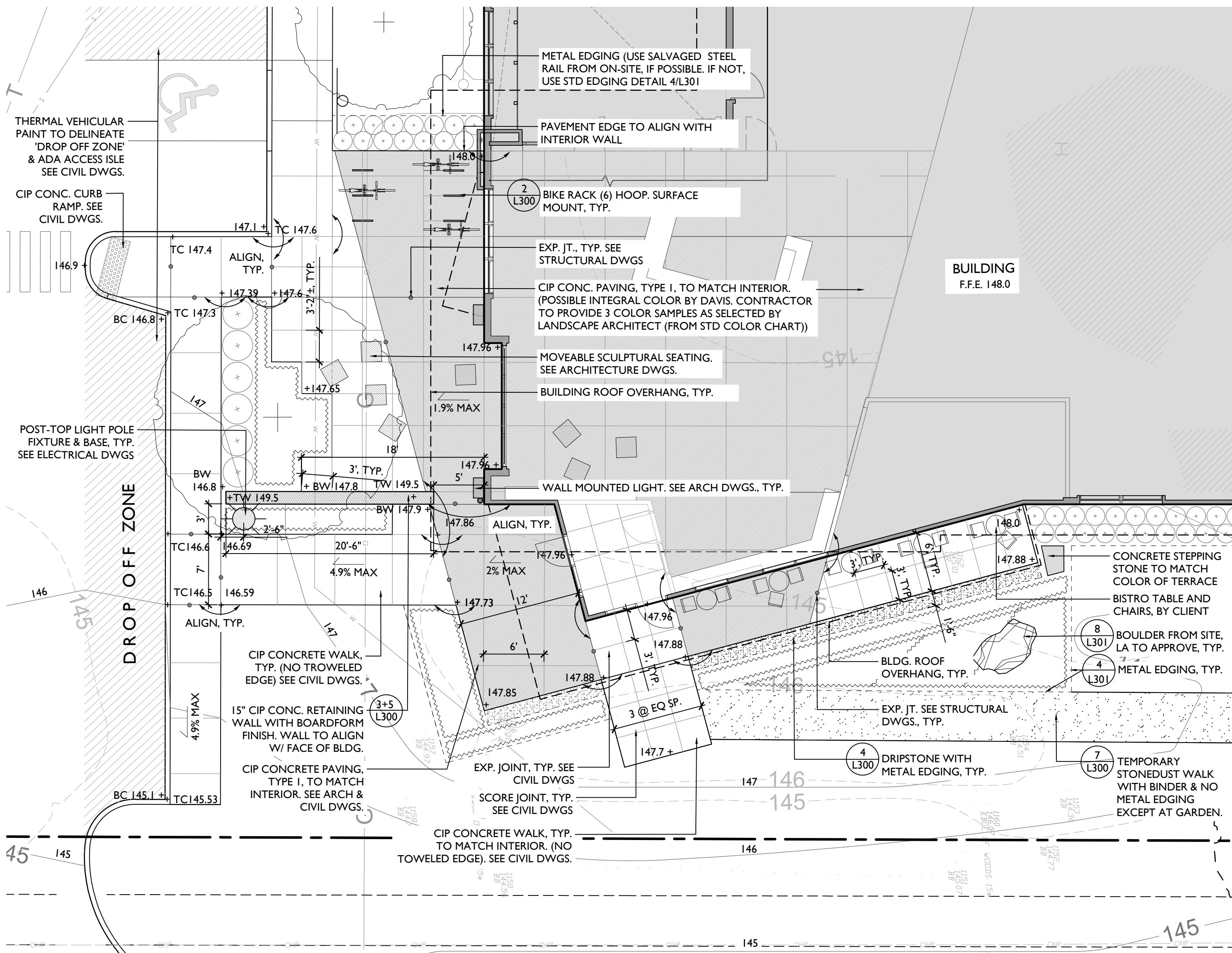
1 02/15/24 PLANNING + ZONING

PETRA CLIFFS
CLIMBING CENTER

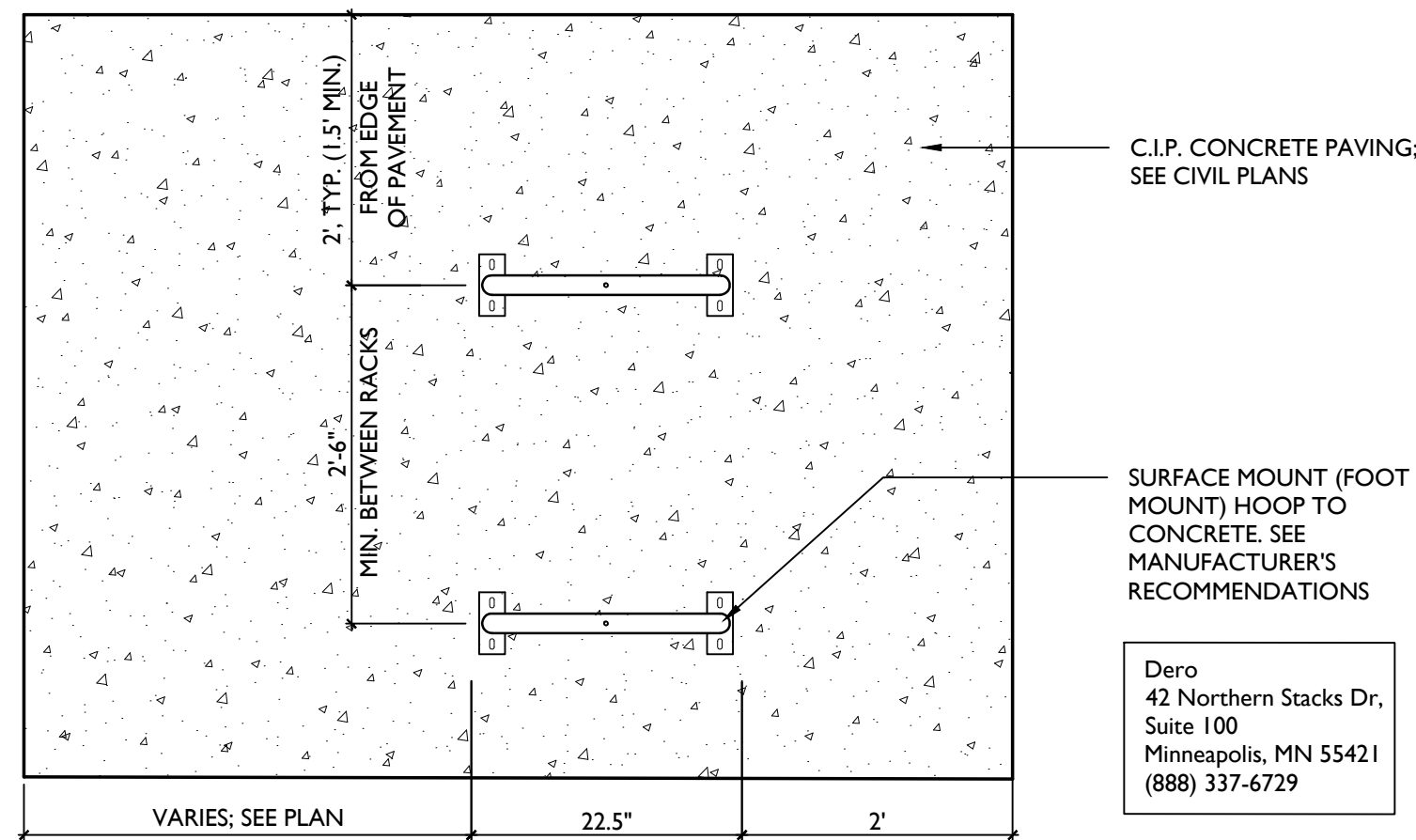
75 BRIGGS ST.
BURLINGTON, VT

PLANTING PLAN

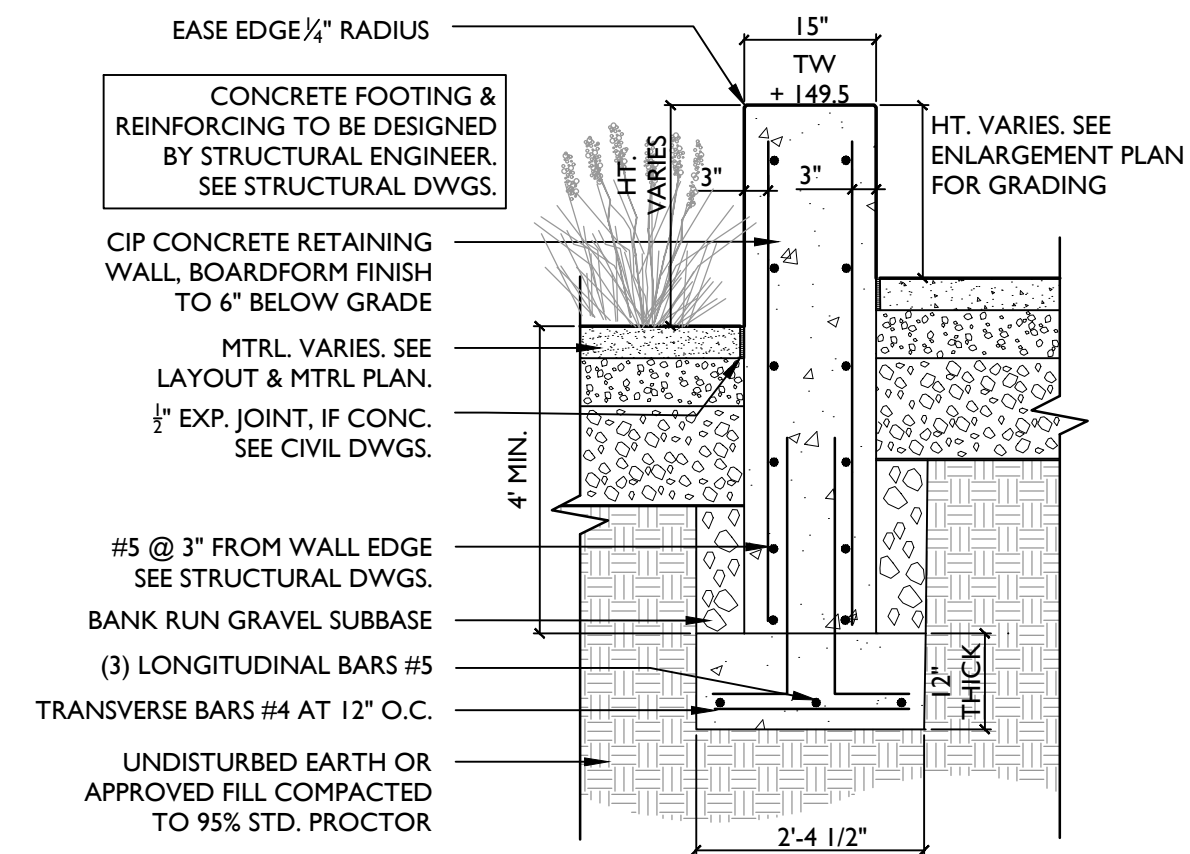
L2.0



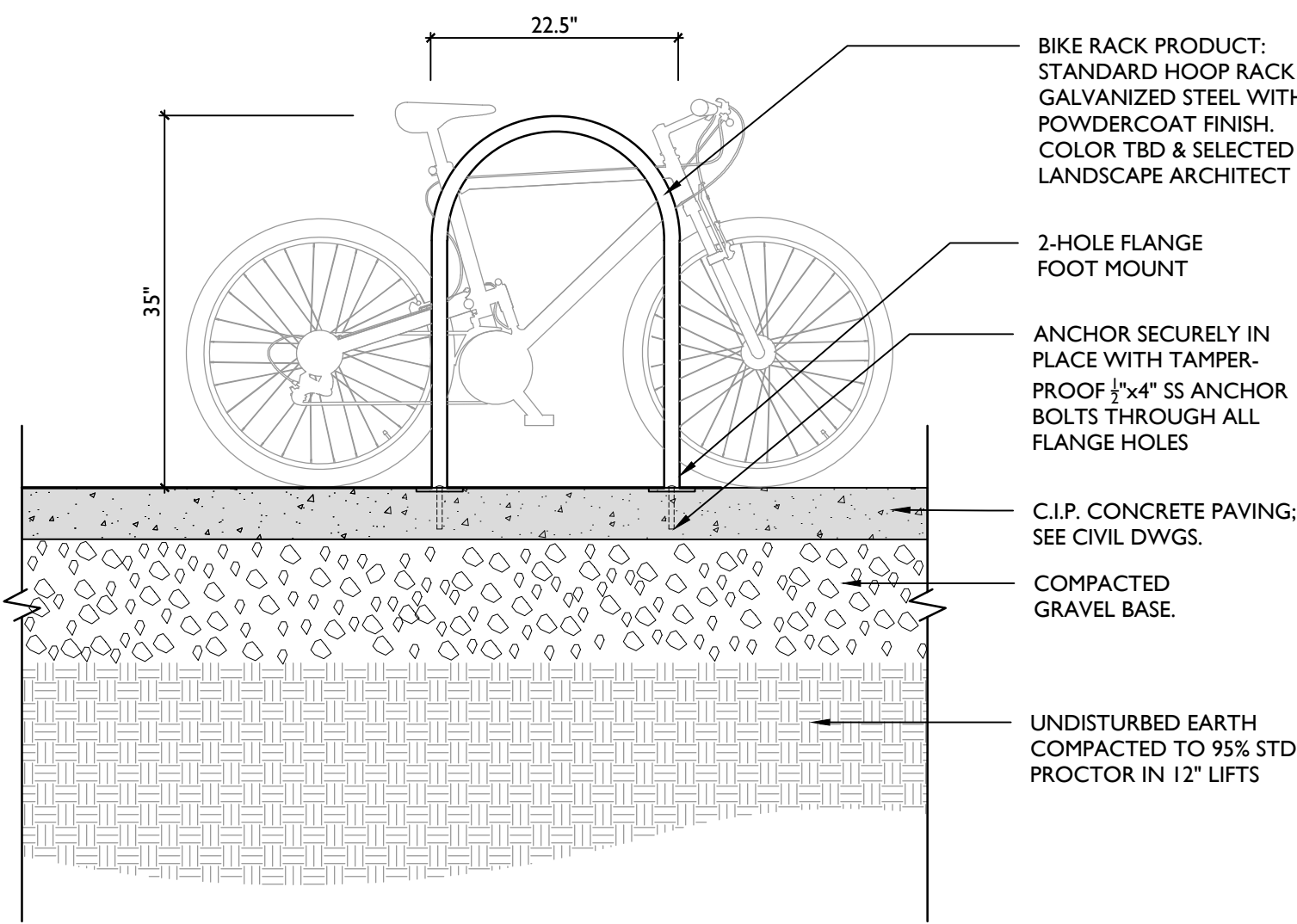
1 TERRACE ENLARGEMENT PLAN
1/2" = 1'-0"



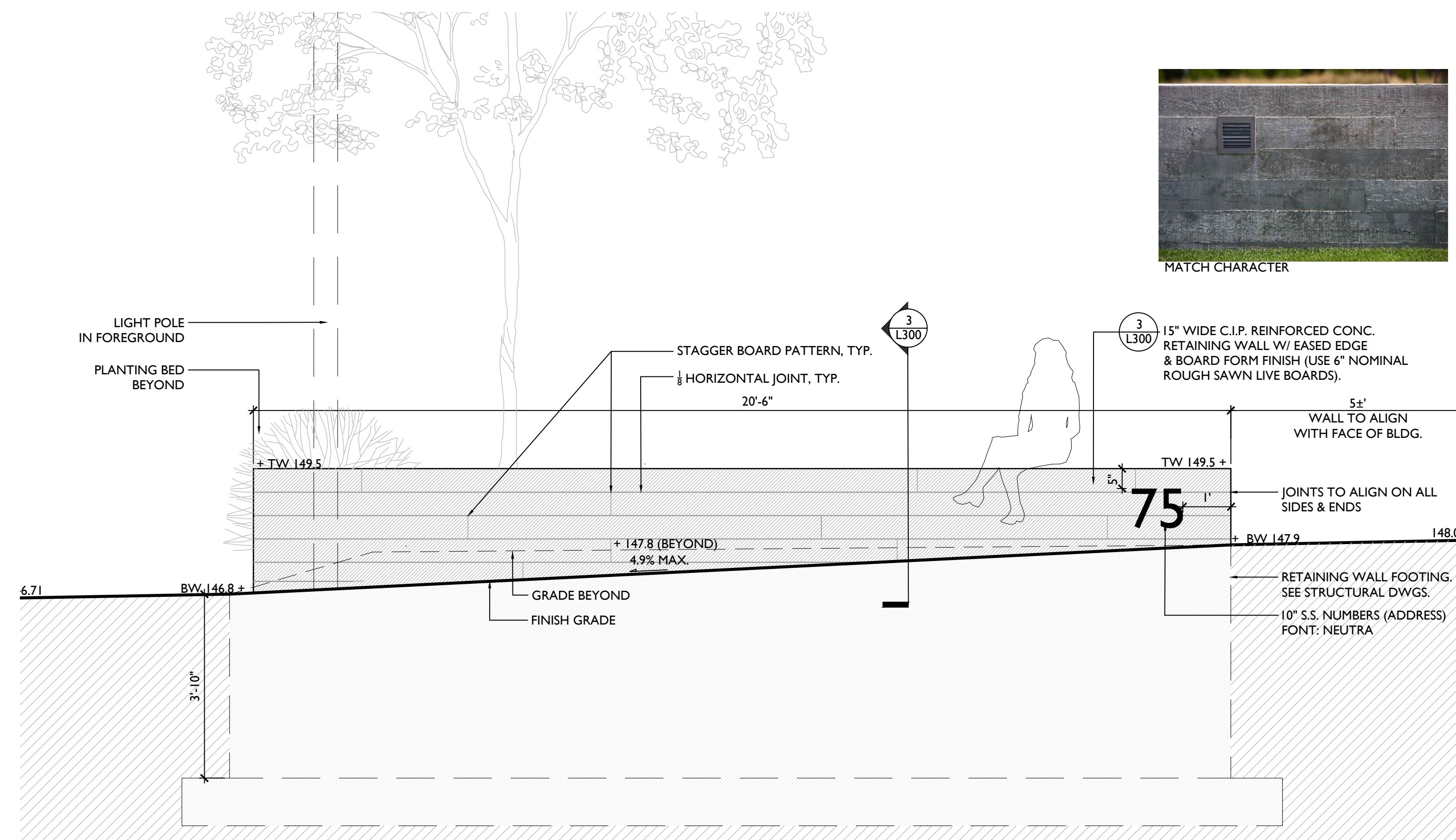
2 BIKE RACK IN CONCRETE - SURFACE MOUNT
3/4" = 1'-0"



3 BOARDFORM CONCRETE WALL
1/2" = 1'-0"

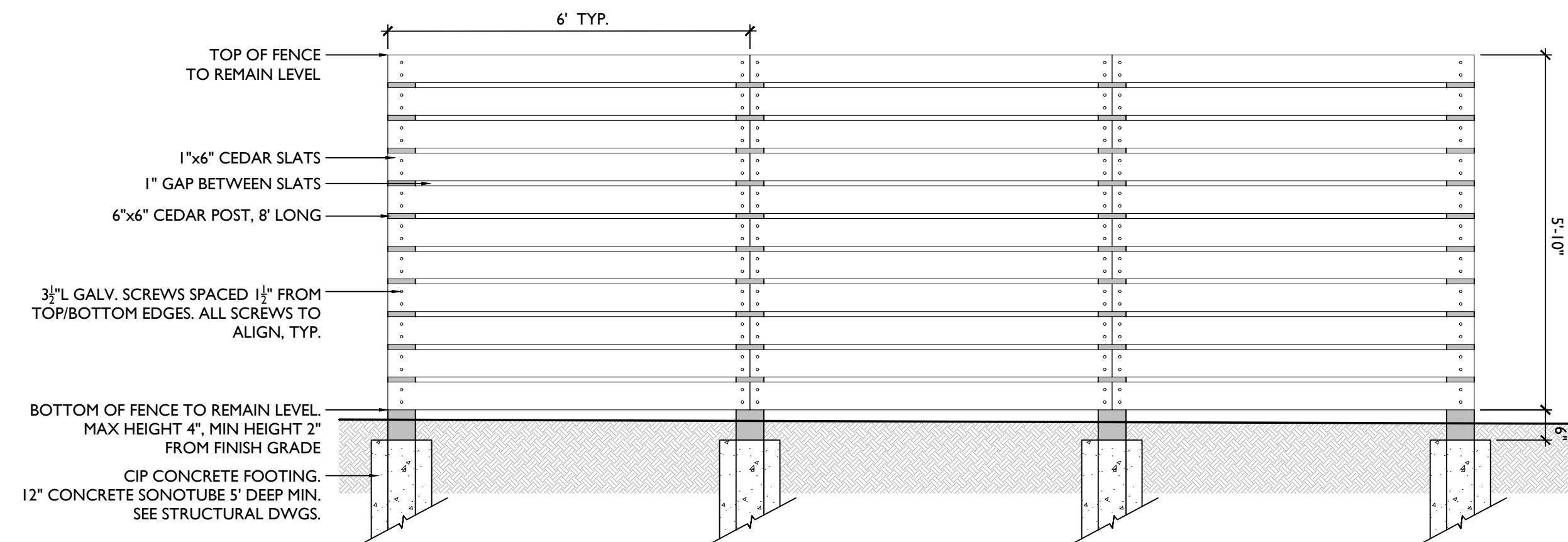


4 DRIPSTONE
1" = 1'-0"

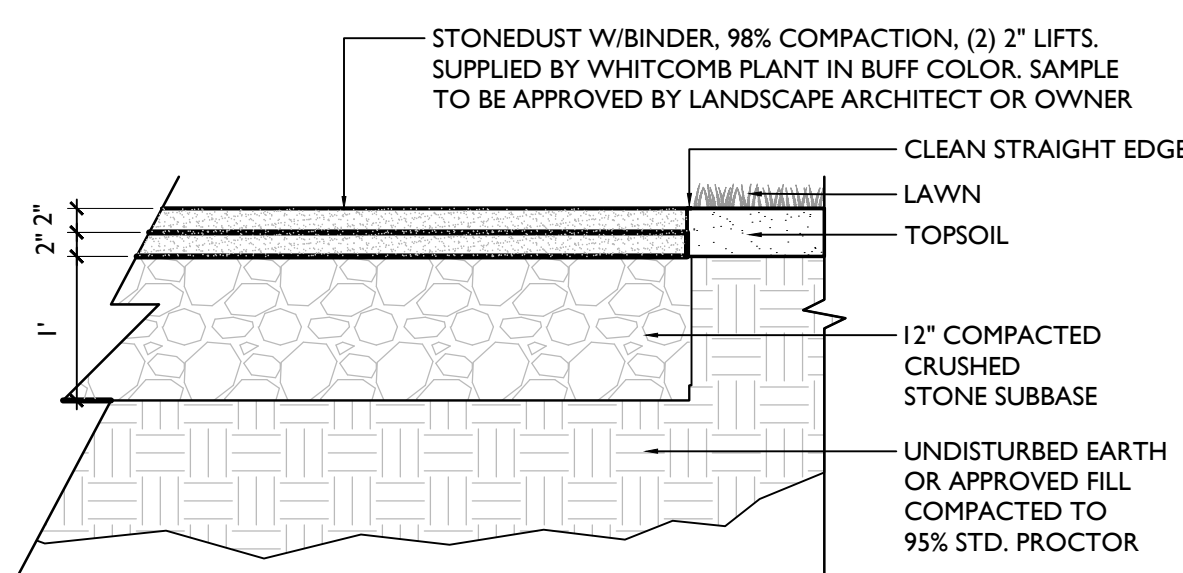


5 CIP BOARDFORM CONCRETE RETAINING WALL
1/2" = 1'-0"

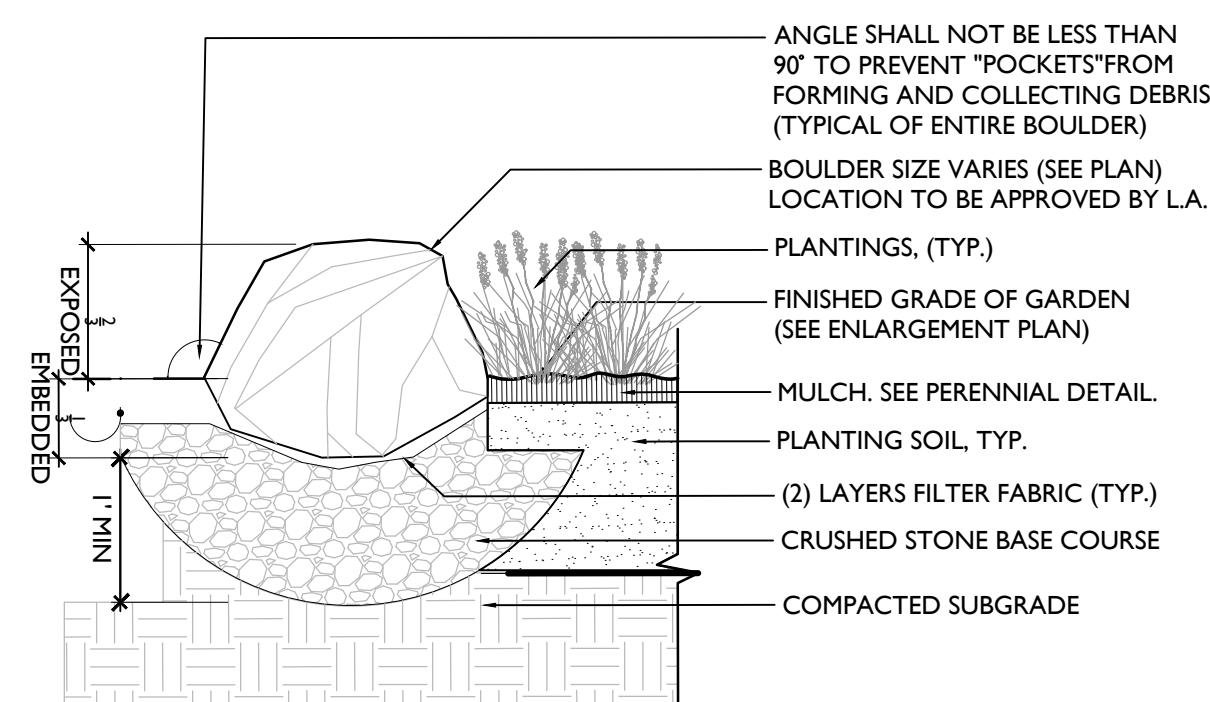
BUILDING



6 FENCE, TYP.
1/2" = 1'-0"



7 STONEDUST PAVING TEMPORARY
3/4" = 1'-0"



8 BOULDER
3/4" = 1'-0"

**PERMITTING
NOT FOR CONSTRUCTION**

DATE ISSUED: 12/01/2023
AUTHOR: AH

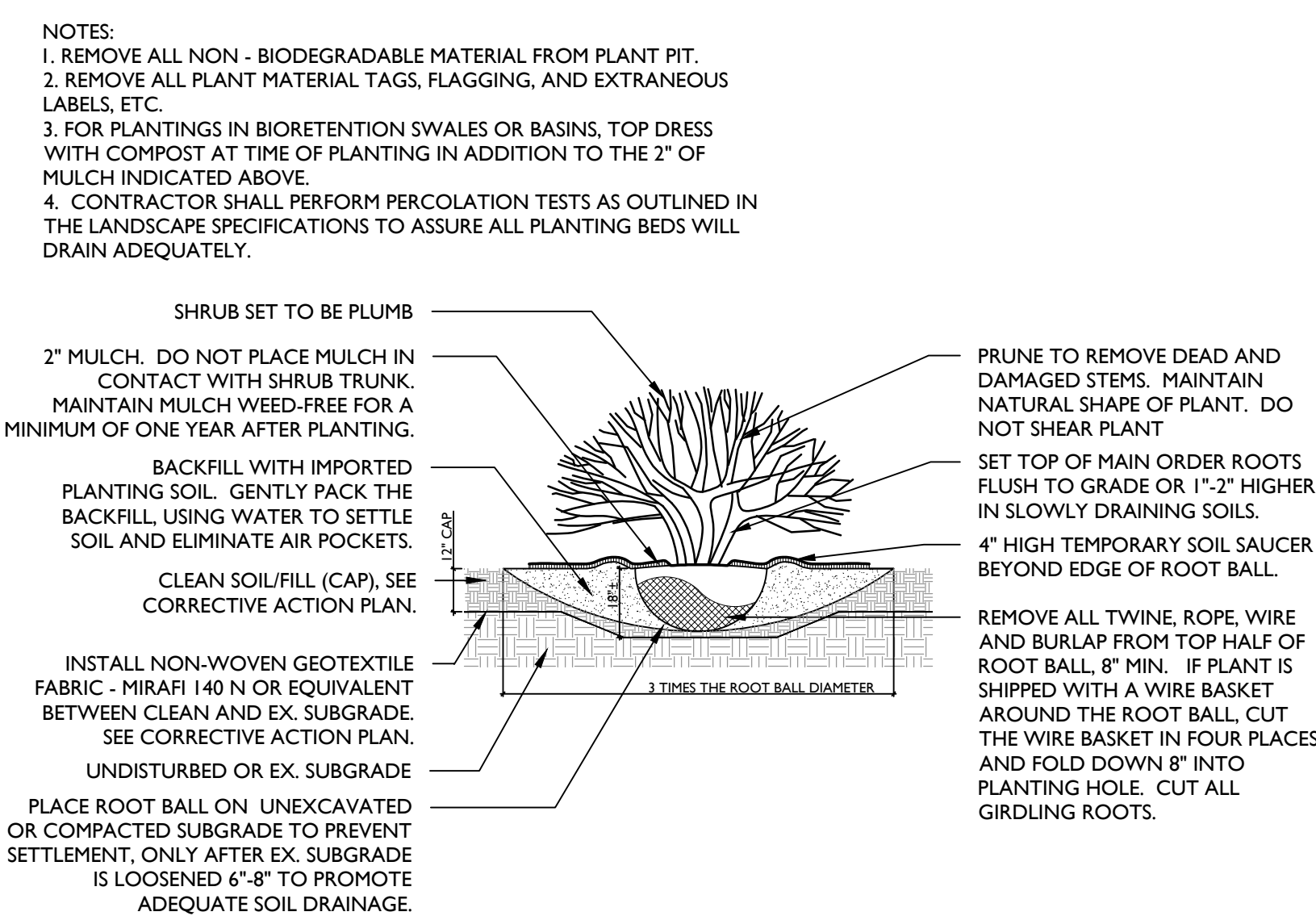
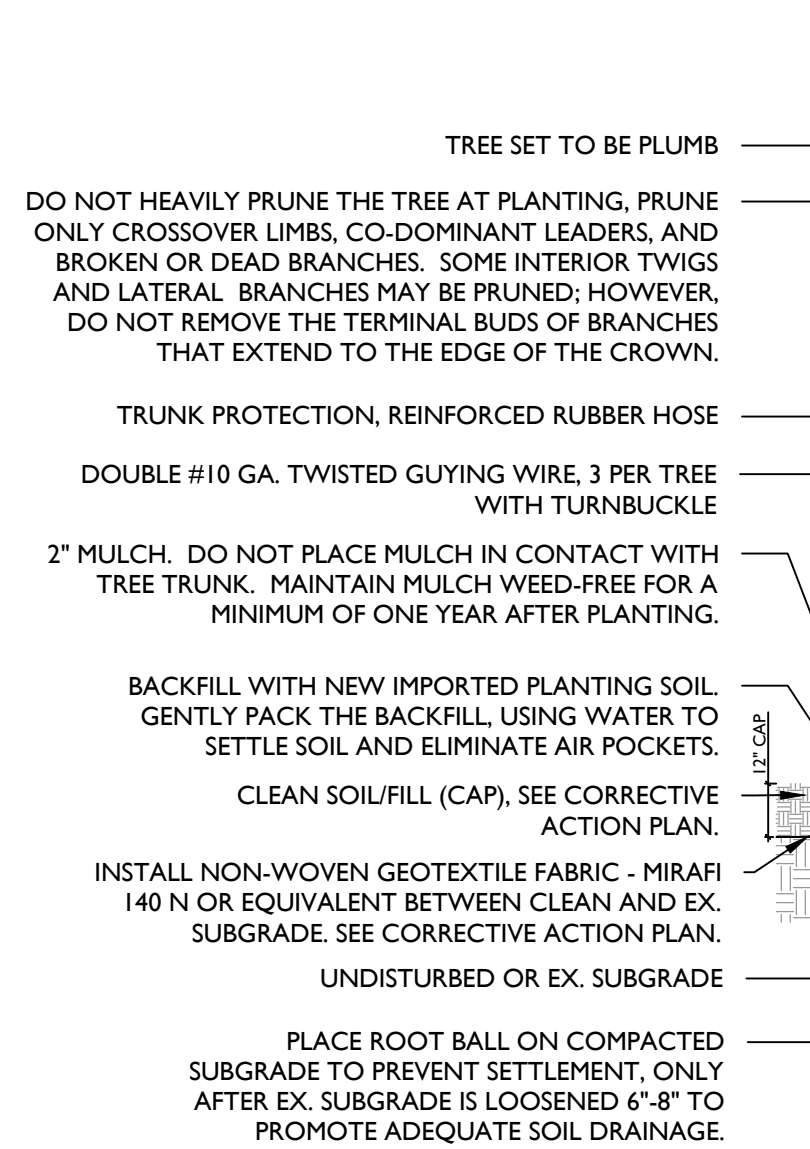
REVISIONS:

1 02/15/24 PLANNING + ZONING

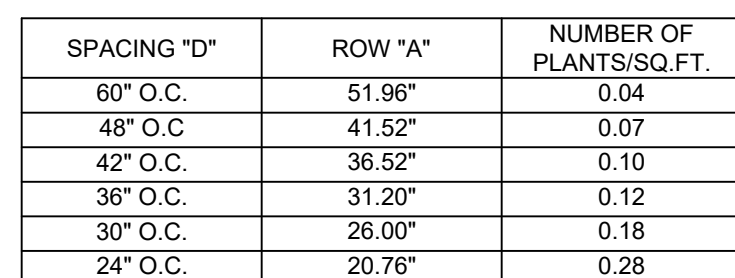
PETRA CLIFFS
CLIMBING CENTER
75 BRIGGS ST.
BURLINGTON, VT

LANDSCAPE
DETAILS

L3.0



2 EVERGREEN TREE $\frac{1}{2}" = 1'-0"$



QUANTITY OF SHRUBS AND SPACING AS NOTED IN PLANTING SCHEDULE

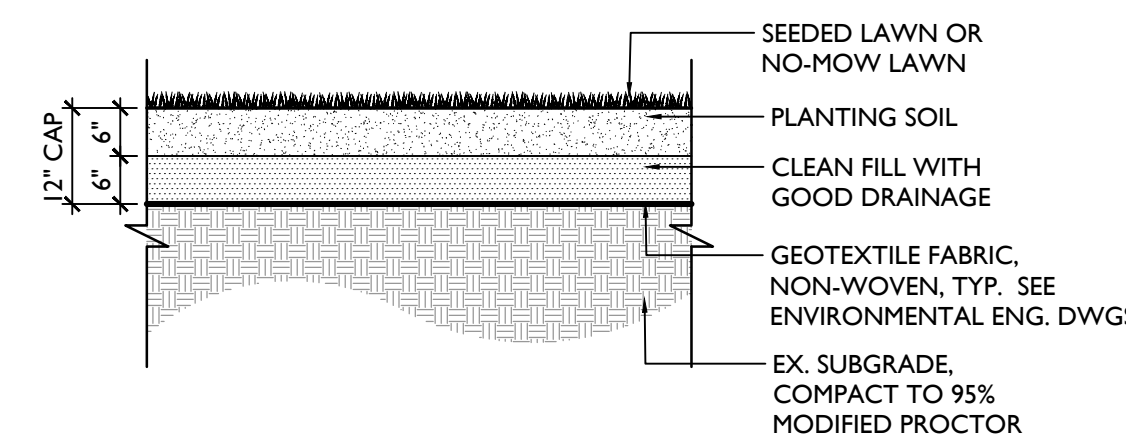
SHRUB SPACING

PLANT CENTER

PLANT ROW

ALL EQUAL OR AS SHOWN ON PLANTING PLAN

The diagram illustrates a triangular planting pattern. It consists of three rows of plants, each represented by a circle with a central dot. The plants are arranged in a staggered fashion, forming a series of triangles. The distance between the centers of two plants in the same row is labeled 'D'. The distance between the center of a plant in one row and the center of a plant in the row immediately below it is labeled 'A'. The distance between the center of a plant in one row and the center of a plant in the row immediately above it is also labeled 'D'. The diagram is labeled with 'SHRUB SPACING', 'PLANT CENTER', 'PLANT ROW', and 'ALL EQUAL OR AS SHOWN ON PLANTING PLAN'.



PLANT SPACING

6 PERENNIAL / ORNAMENTAL GRASSES / VINE PLANTING

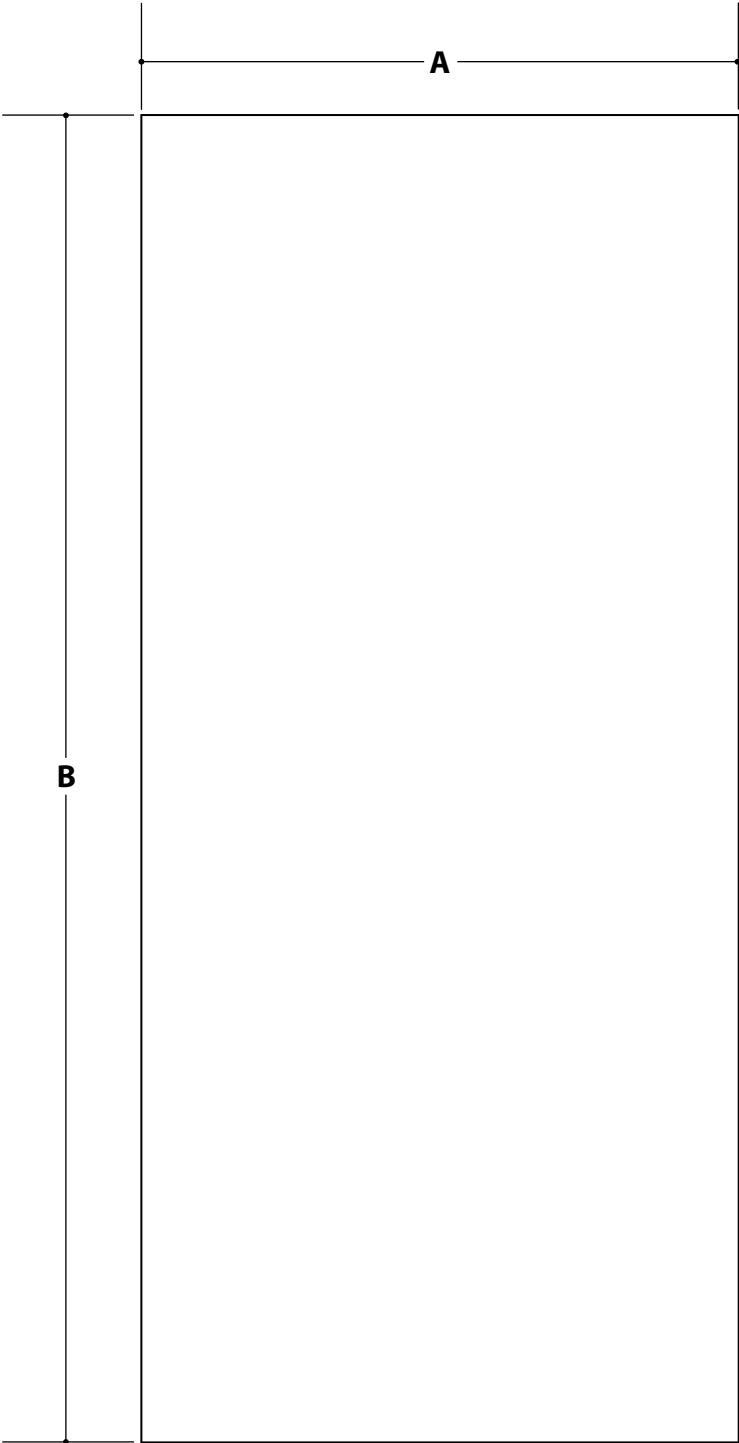
7 LAWN OR LOW-MOW LAWN
 $\frac{1}{2}"=1'-0"$

WHLA
WAGNER HODGSON
LANDSCAPE ARCHITECTURE
VT802.864.0010 NY518.567.1791 wagnerhodgson.com

1	02/15/24	PLANNING + ZONING
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L3.1

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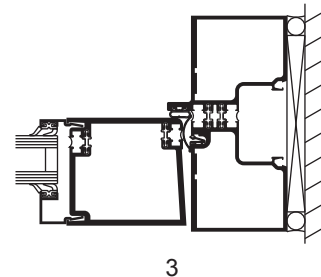
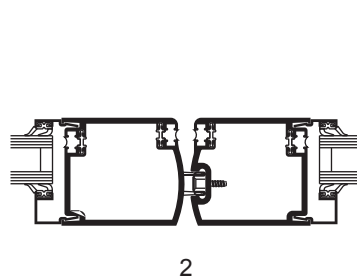
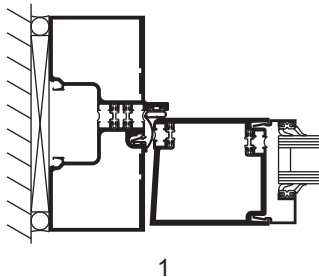
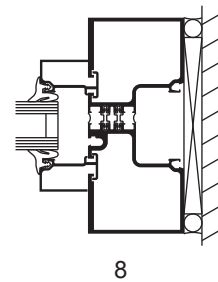
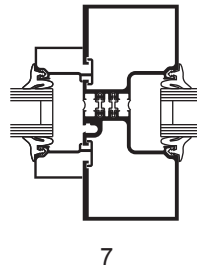
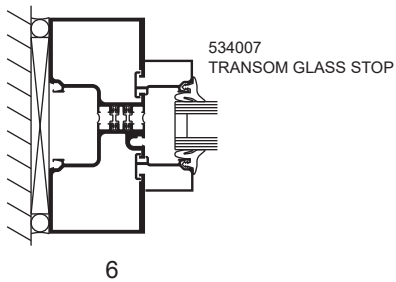
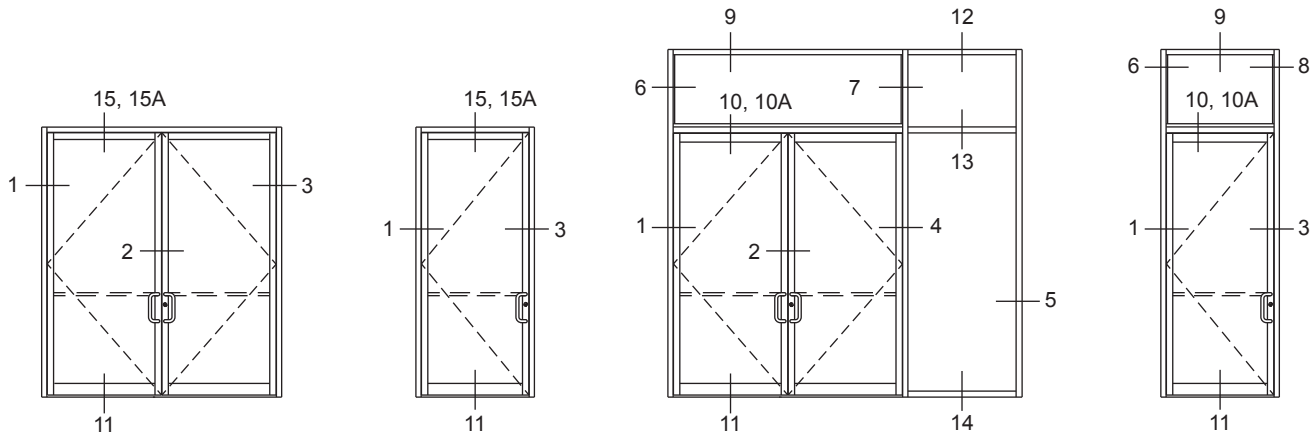


2' 0"		SF
A	23-3/4"	
B	79"	
C		
2' 4"		SF
A	27-3/4"	
B	79"	
C		
2' 6"		SF & TF
A	29-3/4"	
B	79"	
C		
2' 8"		SF & TF
A	31-3/4"	
B	79"	
C		
2' 10"		SF
A	33-3/4"	
B	79"	
C		
3' 0"		SF & TF
A	35-3/4"	
B	79"	
C		
3' 6"		SF
A	41-3/4"	
B	79"	
C		
4' 0"		SF
A	47-3/4"	
B	79"	
C		

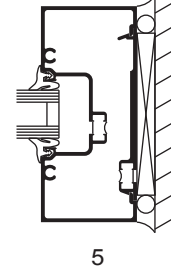
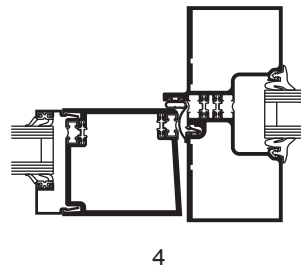
Additional information and CAD details are available at www.kawneer.com

NOTE:

1. SERIES 250T NARROW STILE DOORS ARE DETAILED, MEDIUM STILE 350T DOORS AND WIDE STILE 500T DOORS ALSO MAY BE USED.
2. TRIFAB® VG 451T CENTER, 2" x 4-1/2" (50.8 x 114.3) FRAMING IS DETAILED WITH THE DOORS FOR REFERENCE. OTHER KAWNEER FRAMING SERIES OR CURTAIN WALL SYSTEMS MAY BE USED.



SINGLE ACTING DOORS



Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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AWNING

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	11 53/64" (300)	17 53/64" (453)	23 53/64" (605)	29 53/64" (757)	35 53/64" (910)	41 53/64" (1062)
1' - 5 3/4" (451)	 ESAWN1616	 ESAWN2016	 ESAWN2616	 ESAWN3016	 ESAWN3616	 ESAWN4016
1' - 6" (457)						
1' - 5 1/2" (445)						
11 53/64" (300)						
1' - 11 3/4" (603)	 ESAWN1620	 ESAWN2020	 ESAWN2620	 ESAWN3020	 ESAWN3620	 ESAWN4020
2' - 0" (610)						
1' - 11 1/2" (597)						
17 53/64" (453)						
2' - 5 3/4" (756)	 ESAWN1626	 ESAWN2026	 ESAWN2626	 ESAWN3026	 ESAWN3626	 ESAWN4026
2' - 6" (762)						
2' - 5 1/2" (749)						
23 53/64" (605)						
2' - 11 3/4" (908)	 ESAWN1630	 ESAWN2030	 ESAWN2630	 ESAWN3030	 ESAWN3630	 ESAWN4030
3' - 0" (914)						
2' - 11 1/2" (902)						
29 53/64" (757)						

2 Wide

MO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
RO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
FS (mm)	2' - 11 1/2" (902)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)
1' - 5 3/4" (451) 1' - 6" (457) 1' - 5 1/2" (445)	 ESAWN1616	 ESAWN2016	 ESAWN2616	 ESAWN3016	 ESAWN3616	 ESAWN4016
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESAWN1620	 ESAWN2020	 ESAWN2620	 ESAWN3020	 ESAWN3620	 ESAWN4020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESAWN1626	 ESAWN2026	 ESAWN2626	 ESAWN3026	 ESAWN3626	 ESAWN4026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESAWN1630	 ESAWN2030	 ESAWN2630	 ESAWN3030	 ESAWN3630	 ESAWN4030

Details and Elevations not to scale.

Special sized units available within product size matrix.
See your Marvin retailer.

Obscure Glass option available on all units.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

AWNING

3 Wide

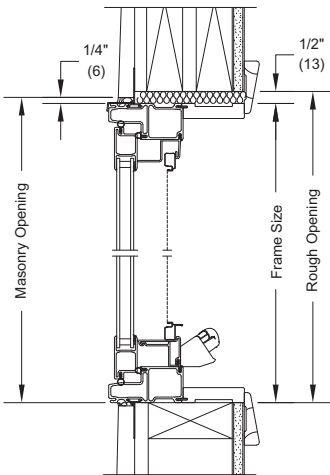
MO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
RO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
FS (mm)	4' - 5 1/2" (1359)	5' - 11 1/2" (1816)	7' - 5 1/2" (2273)	8' - 11 1/2" (2731)
1' - 5 3/4" (451)				
1' - 6" (457)	ESAWN1616	ESAWN2016	ESAWN2616	ESAWN3016
1' - 5 1/2" (445)				
1' - 11" 3/4" (603)				
2' - 0" (610)	ESAWN1620	ESAWN2020	ESAWN2620	ESAWN3020
1' - 11 1/2" (597)				
2' - 5 3/4" (756)				
2' - 6" (762)	ESAWN1626	ESAWN2026	ESAWN2626	ESAWN3026
2' - 5 1/2" (749)				
2' - 11 3/4" (908)				
3' - 0" (914)	ESAWN1630	ESAWN2030	ESAWN2630	ESAWN3030
2' - 11 1/2" (902)				

4 Wide

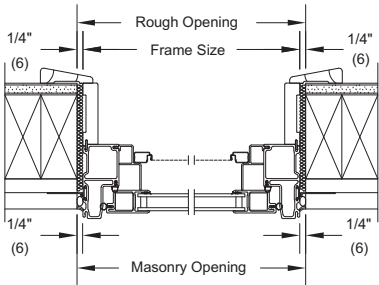
MO (mm)	6' - 0" (1829)	8' - 0" (2438)
RO (mm)	6' - 0" (1829)	8' - 0" (2438)
FS (mm)	5' - 11 1/2" (1816)	7' - 11 1/2" (2426)

1' - 5 3/4" (451)		
1' - 6" (457)	ESAWN1616	ESAWN2016
1' - 5 1/2" (445)		
1' - 11 3/4" (603)		
2' - 0" (610)	ESAWN1620	ESAWN2020
1' - 11 1/2" (597)		
2' - 5 3/4" (756)		
2' - 6" (762)	ESAWN1626	ESAWN2026
2' - 5 1/2" (749)		
2' - 11 3/4" (908)		
3' - 0" (914)	ESAWN1630	ESAWN2030
2' - 11 1/2" (902)		

Construction Details



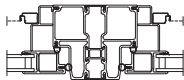
Head Jamb & Sill



Jamb



Vertical Mullion



Horizontal Mullion
Transom/Operator

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

Details and Elevations not to scale.

Special sized units available within product size matrix.
See your Marvin retailer.

Obscure Glass option available on all units.

See page 52 for specific PG Ratings.

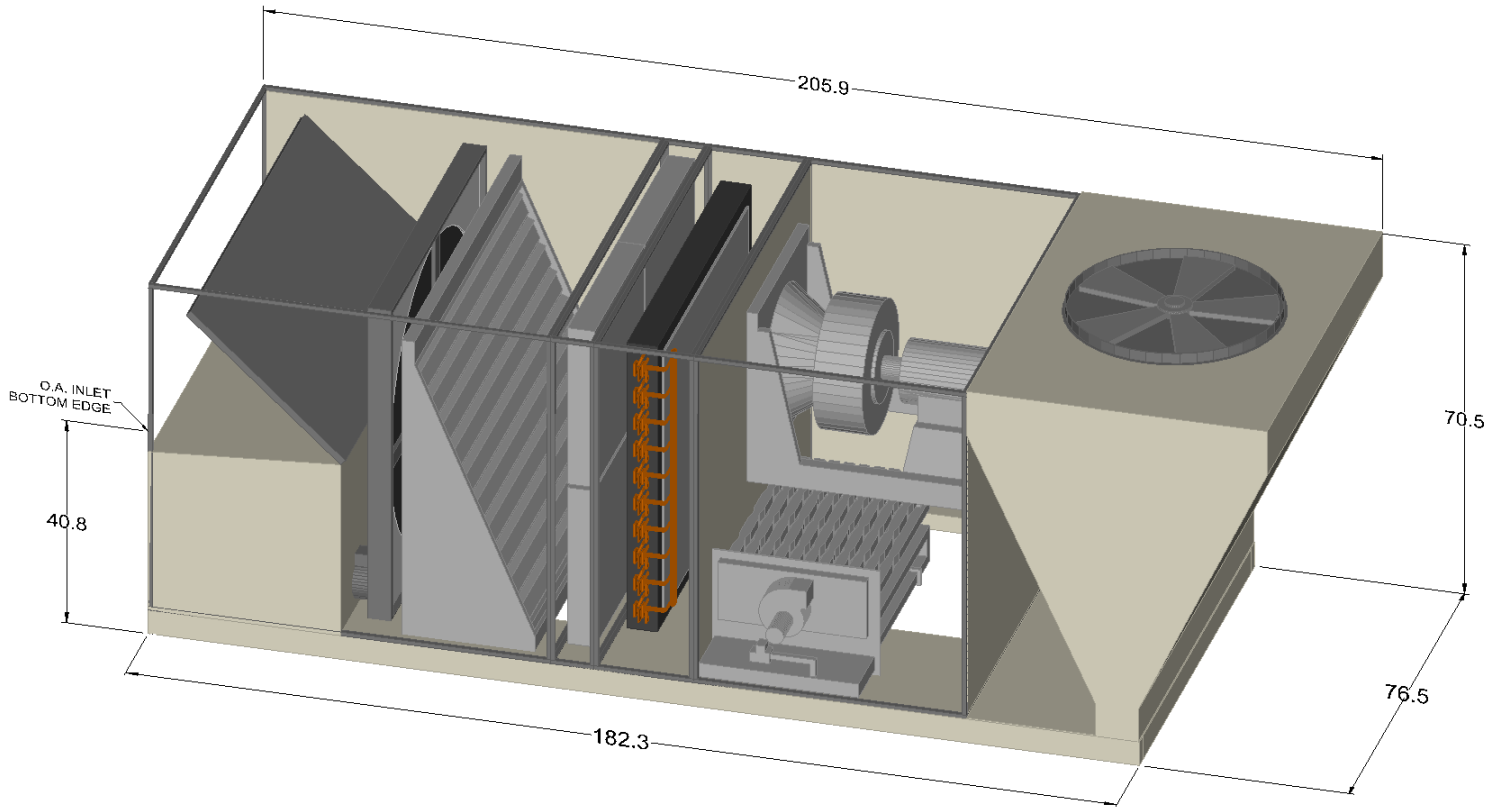
For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

Job Number: UTMCIQ
Job Name: Petra Cliffs

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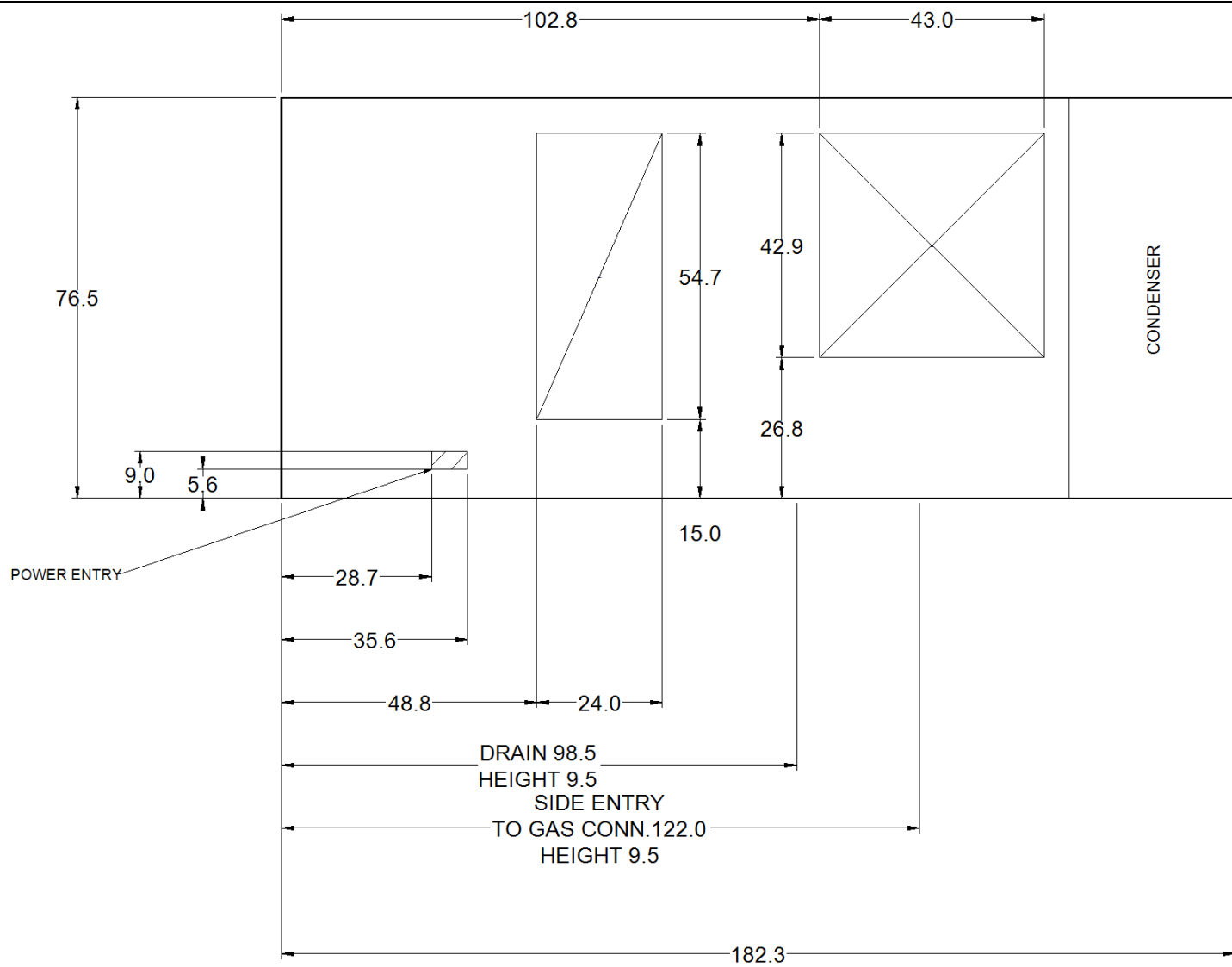
Prepared Date:

11/29/2018
www.DaikinApplied.com



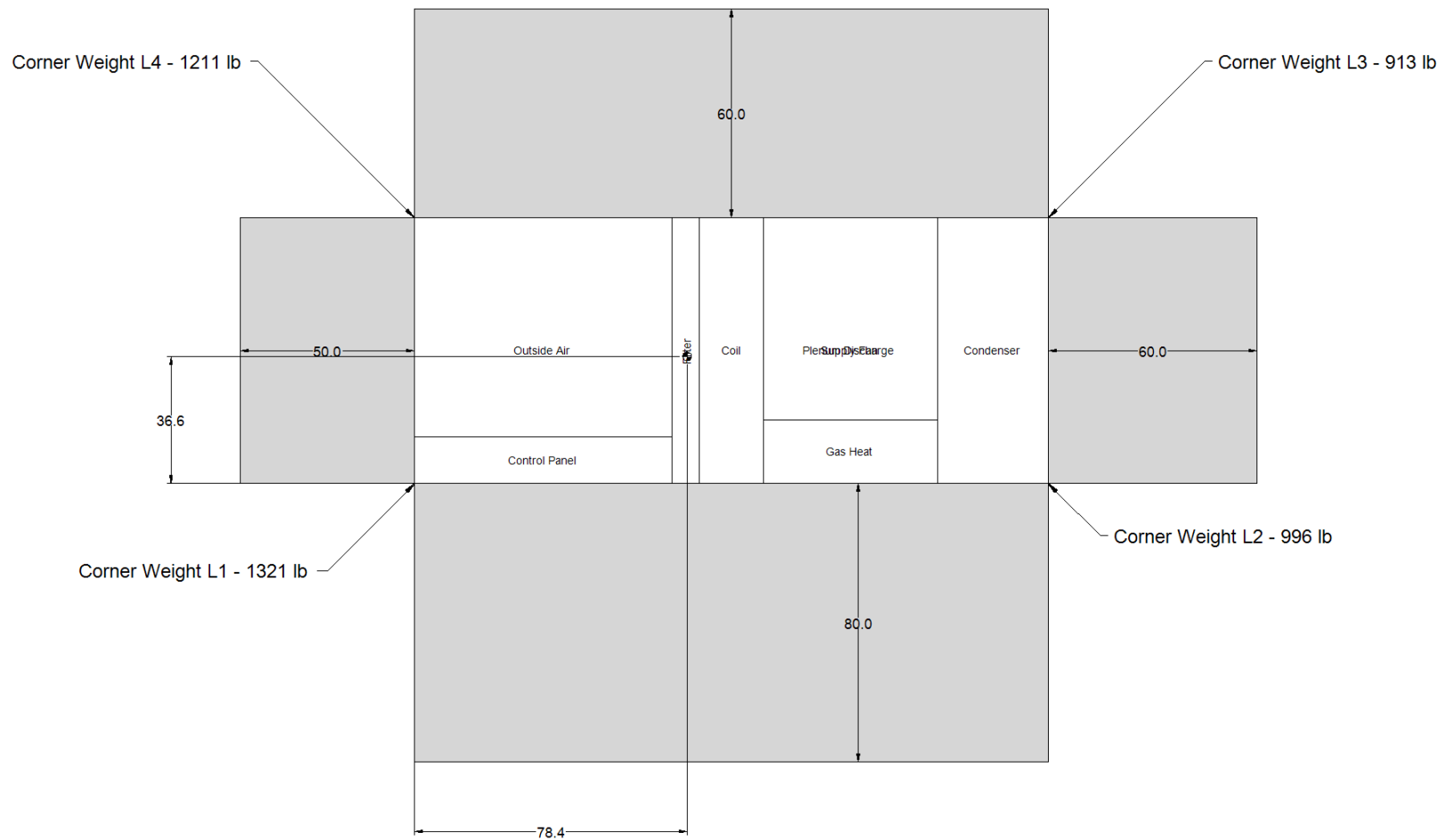
- Notes:
- (1) Recommended location for optional field cut side power connection.
 - (2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

Product Drawing		Unit Tag: RTU-1			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS020A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								



PLAN VIEW - OPENINGS & OVERALL

Product Drawing		Unit Tag: RTU-1			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS020A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

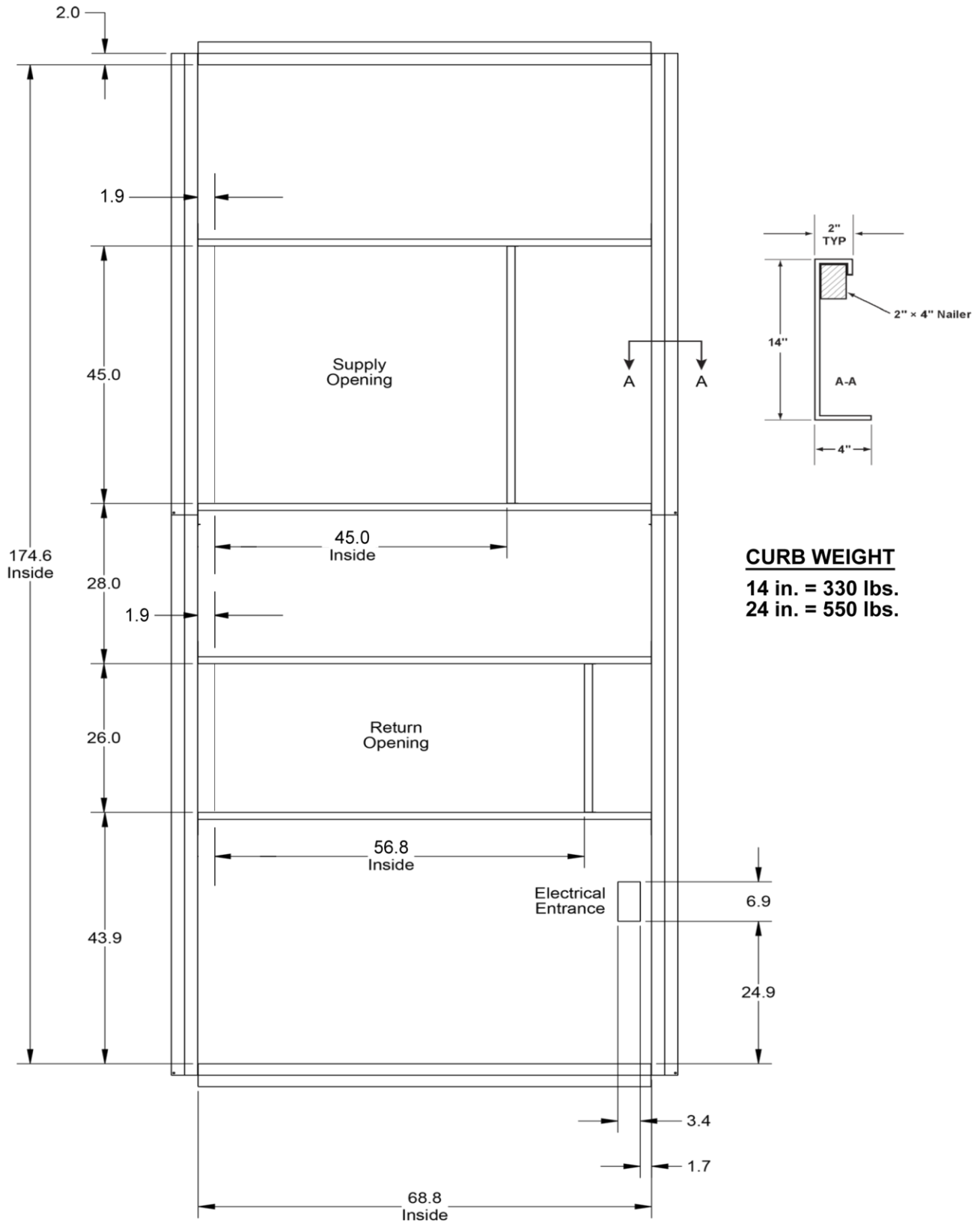


PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

- Notes:
- (1) Center of Gravity Height = 35.1
 - (2) Total Weight = 4441 lb

Product Drawing		Unit Tag: RTU-1			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS020A	Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]		
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

Cabinet C Roof Curbs ERW_Drawing for RTU-1



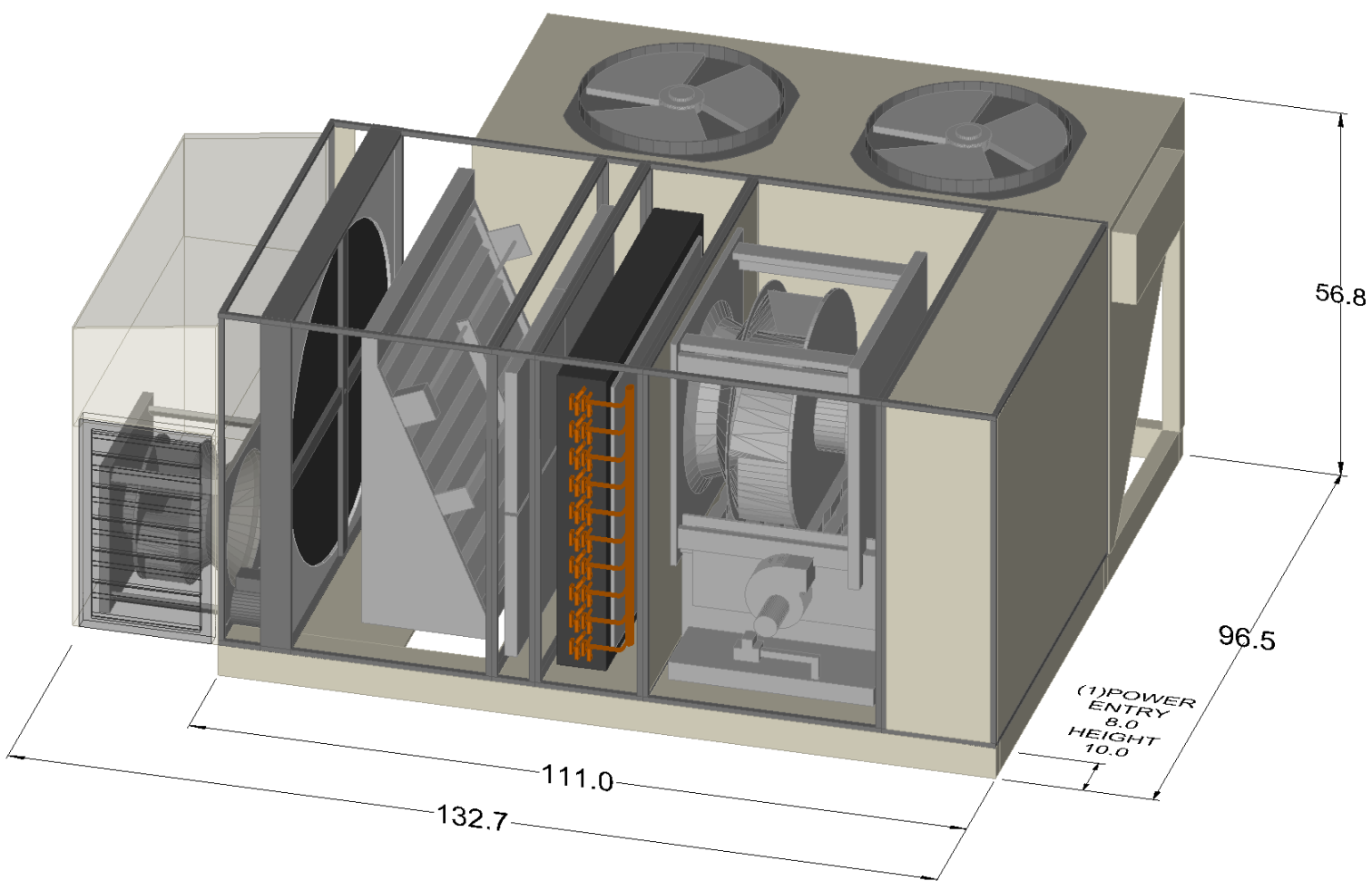
Product Drawing		Unit Tag: RTU-1			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:		Project Name: Petra Cliffs					
Model: DPS020A		Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:		Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.							

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

11/29/2018
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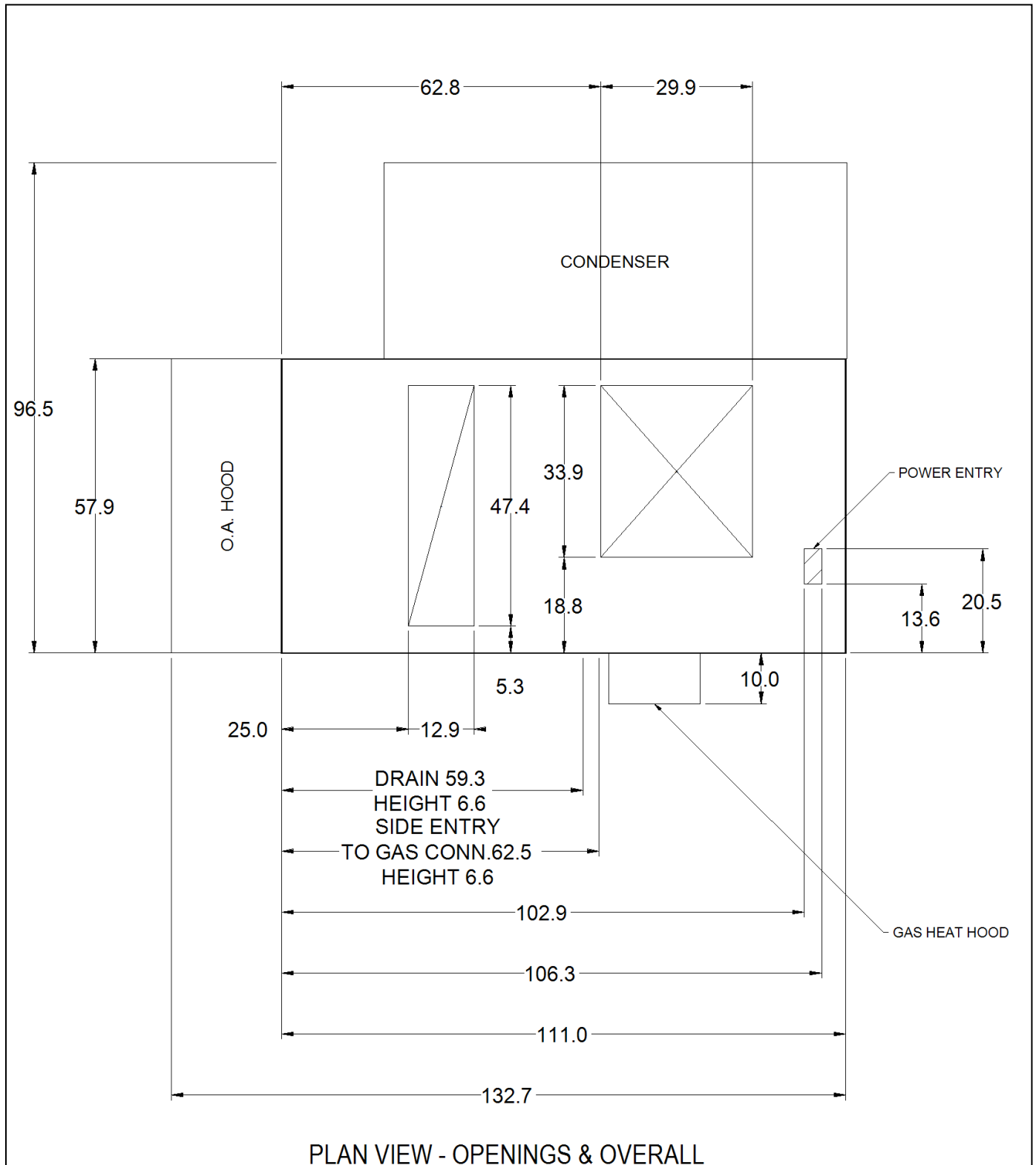


Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

Product Drawing		Unit Tag: RTU-2			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS010A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Drawings(2) for RTU-2



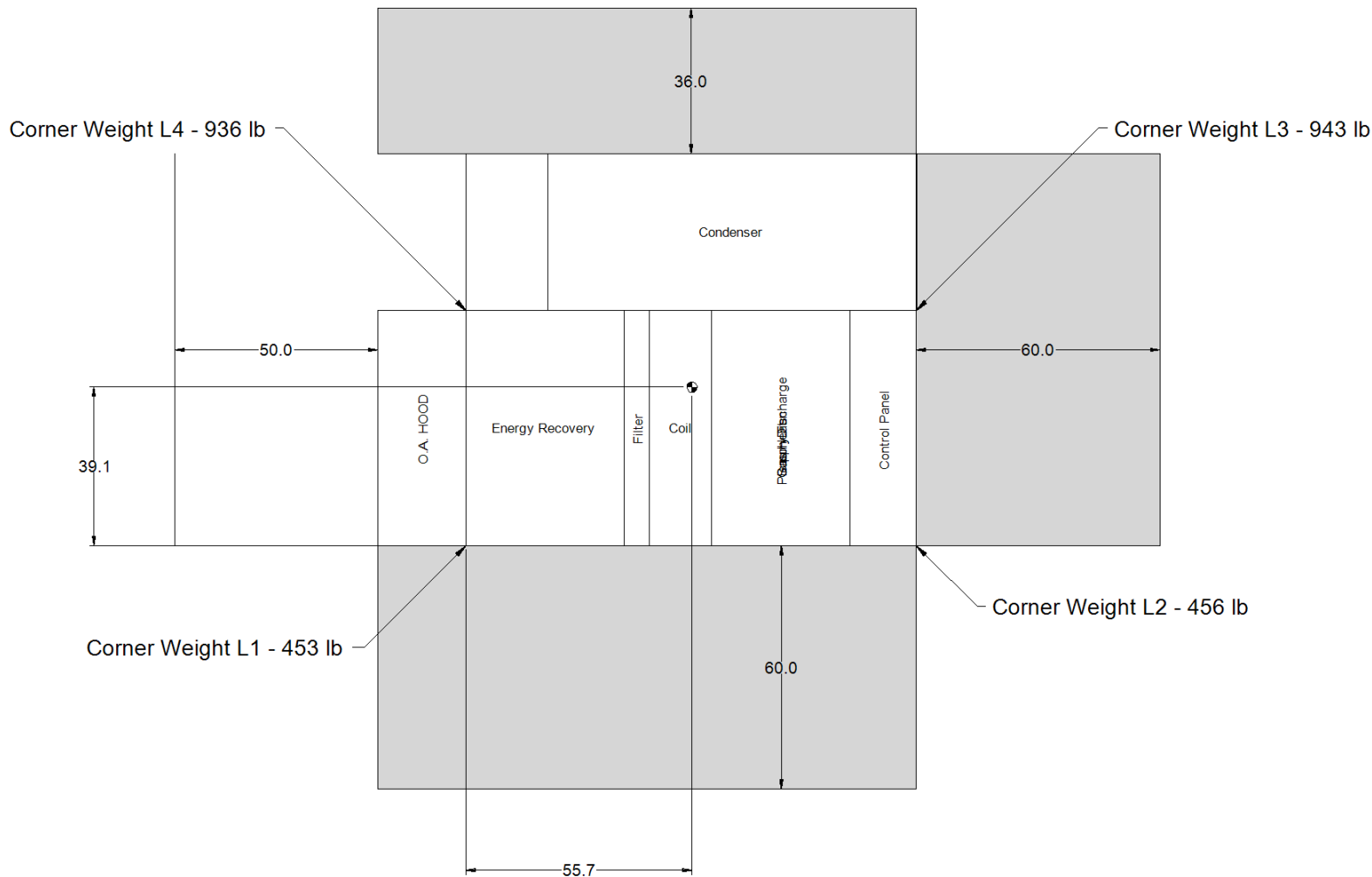
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Product:		Project Name: Petra Cliffs					
Model: DPS010A		Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:		Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.							

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

11/29/2018
www.DaikinApplied.com
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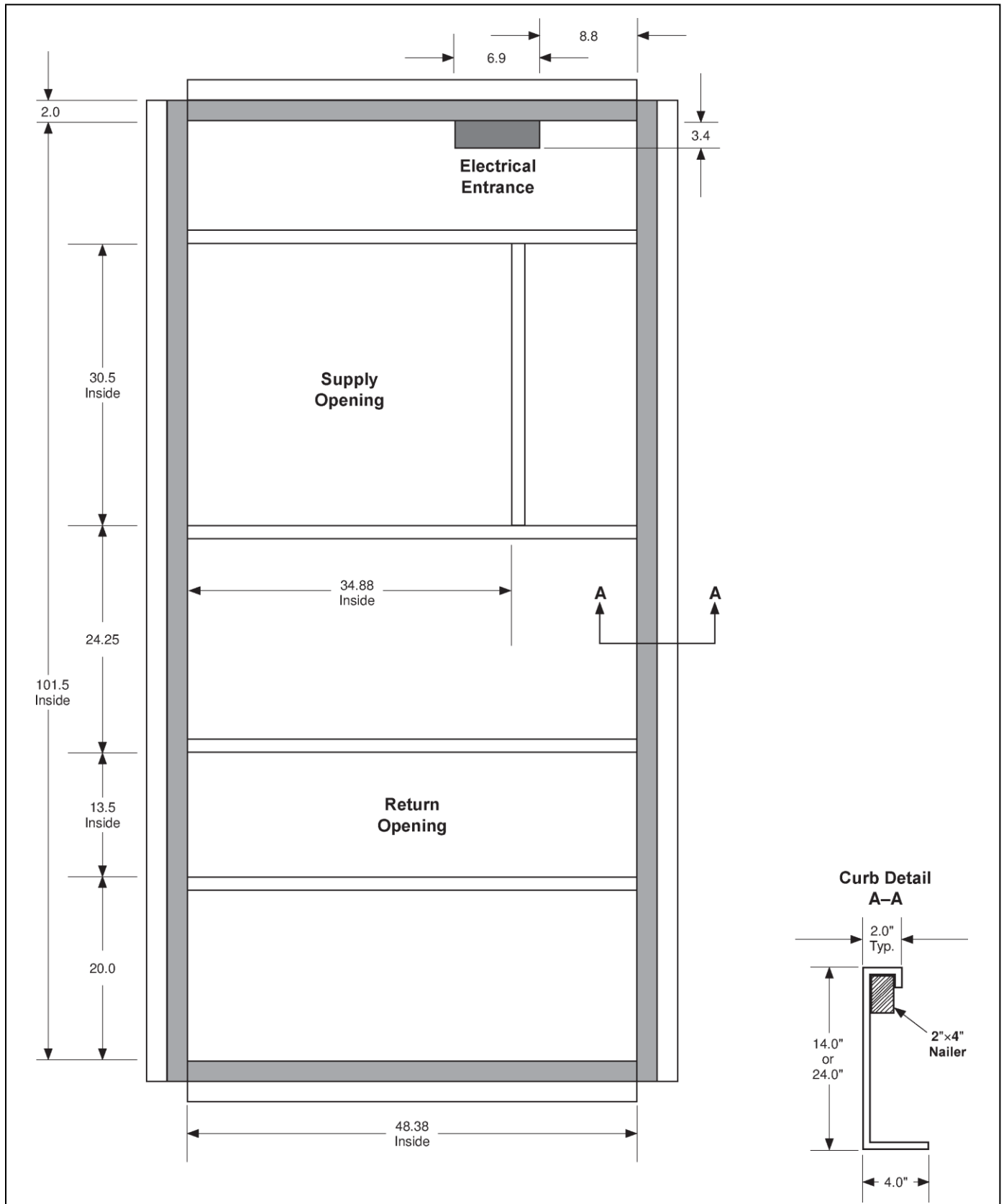


PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

Notes:
(1) Center of Gravity Height = 26.2
(2) Total Weight = 2788 lb

Product Drawing		Unit Tag: RTU-2			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS010A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

Large Box Roof Curbs ERW_Drawing for RTU-2



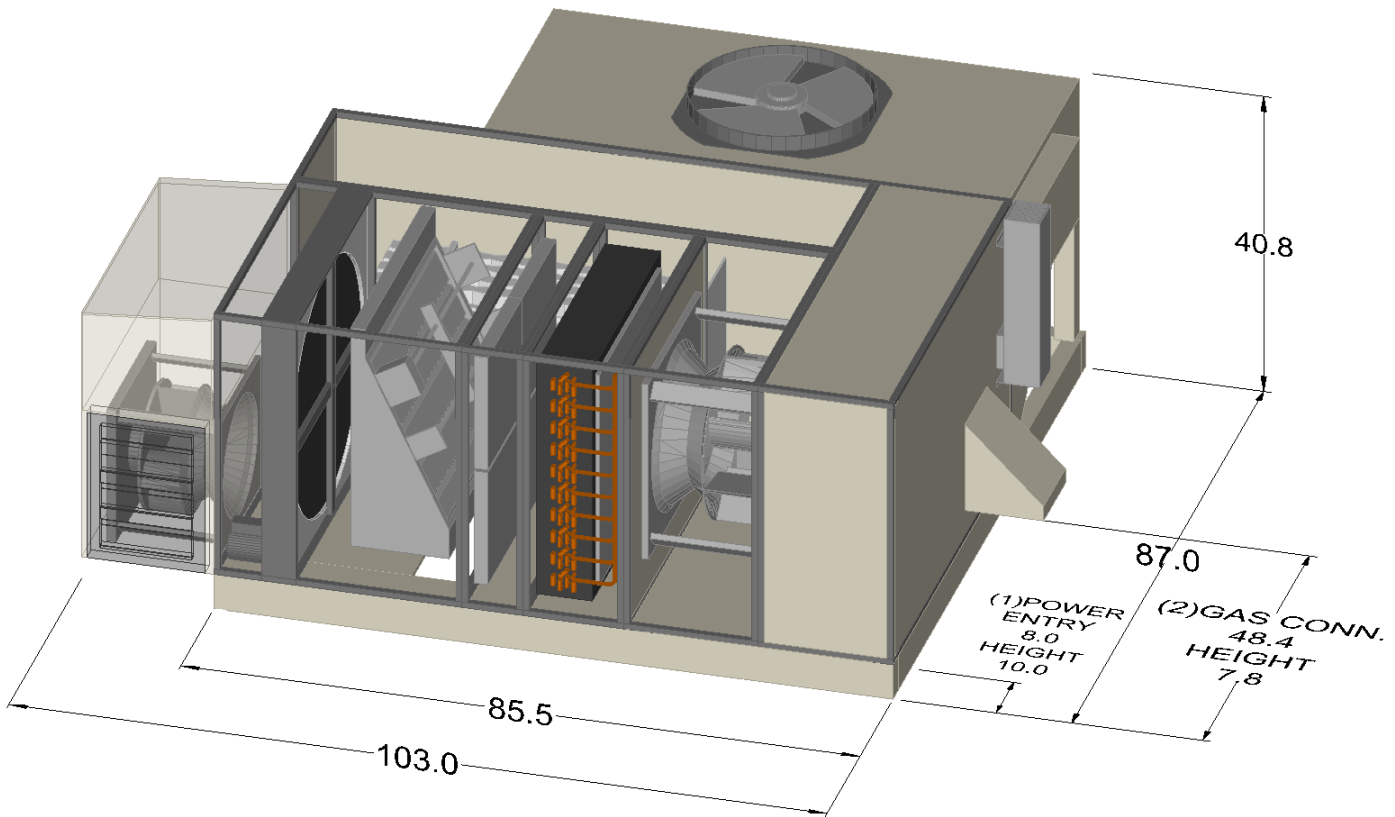
Product Drawing	Unit Tag: RTU-2			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:	Project Name: Petra Cliffs					
Model: DPS010A	Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:	Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.						

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

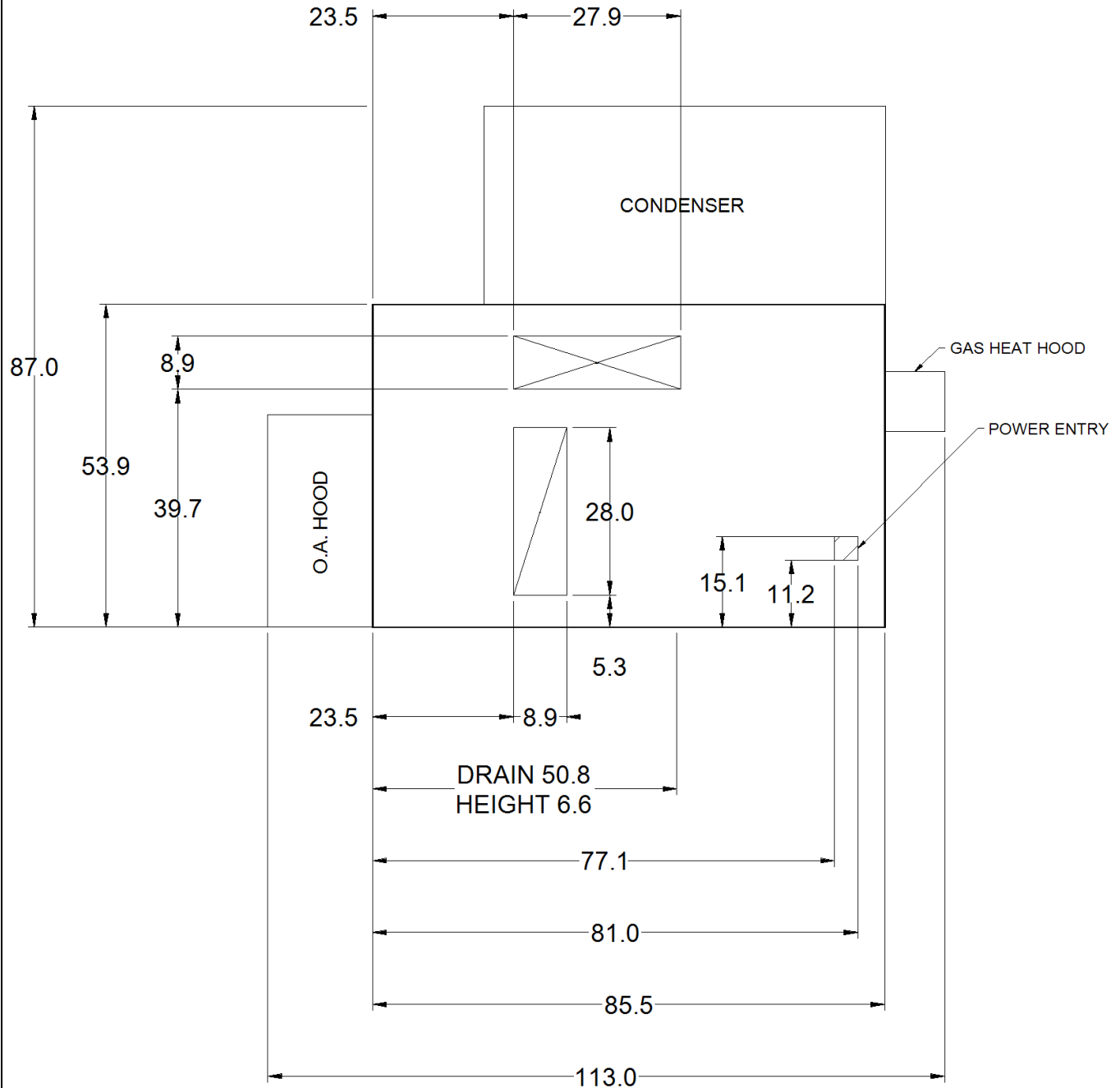
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Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

Product Drawing		Unit Tag: RTU-3			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS005A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

Drawings(2) for RTU-3



PLAN VIEW - OPENINGS & OVERALL

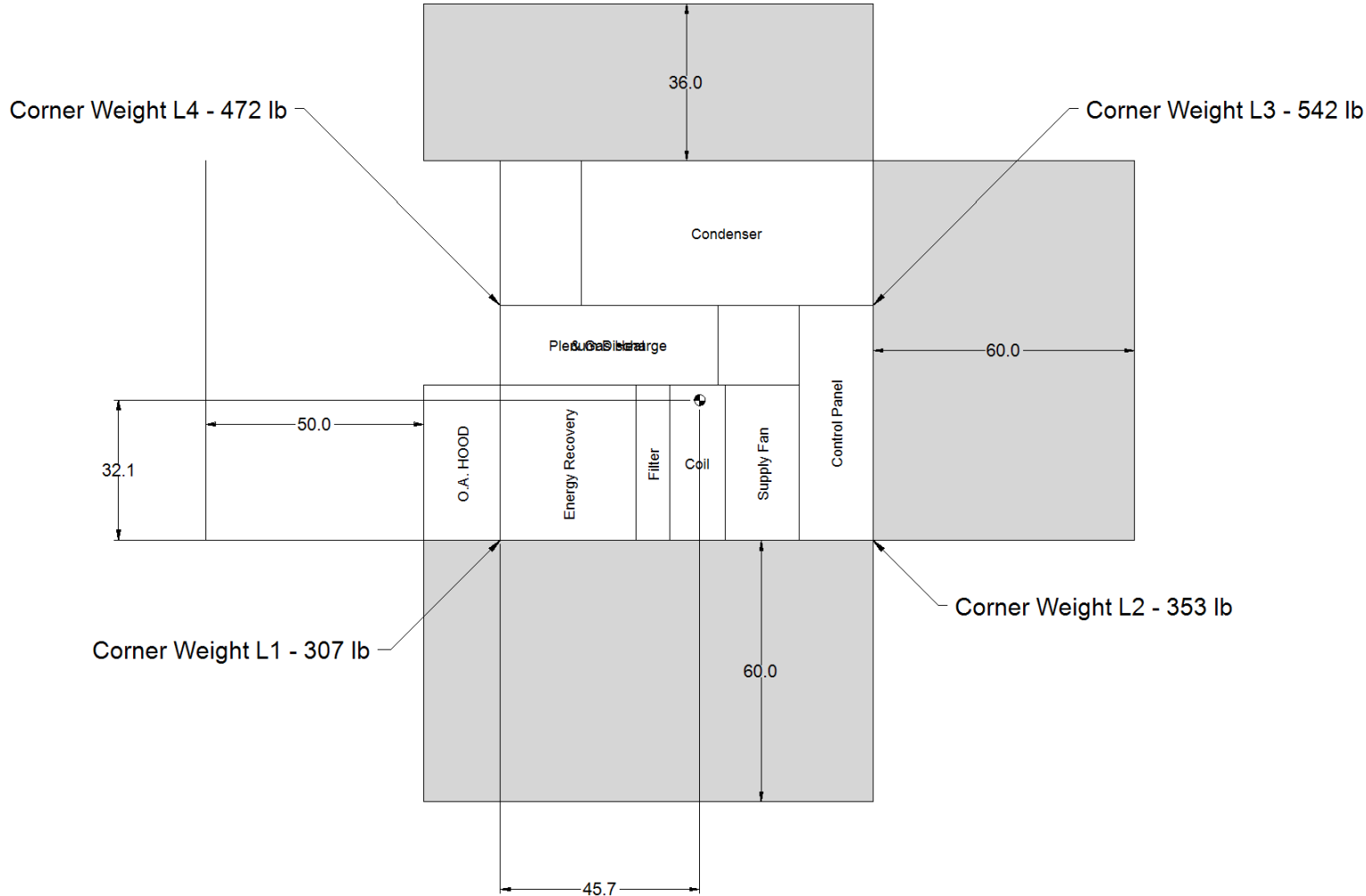
Product Drawing		Unit Tag: RTU-3			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:		Project Name: Petra Cliffs					
Model: DPS005A		Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:		Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.							

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

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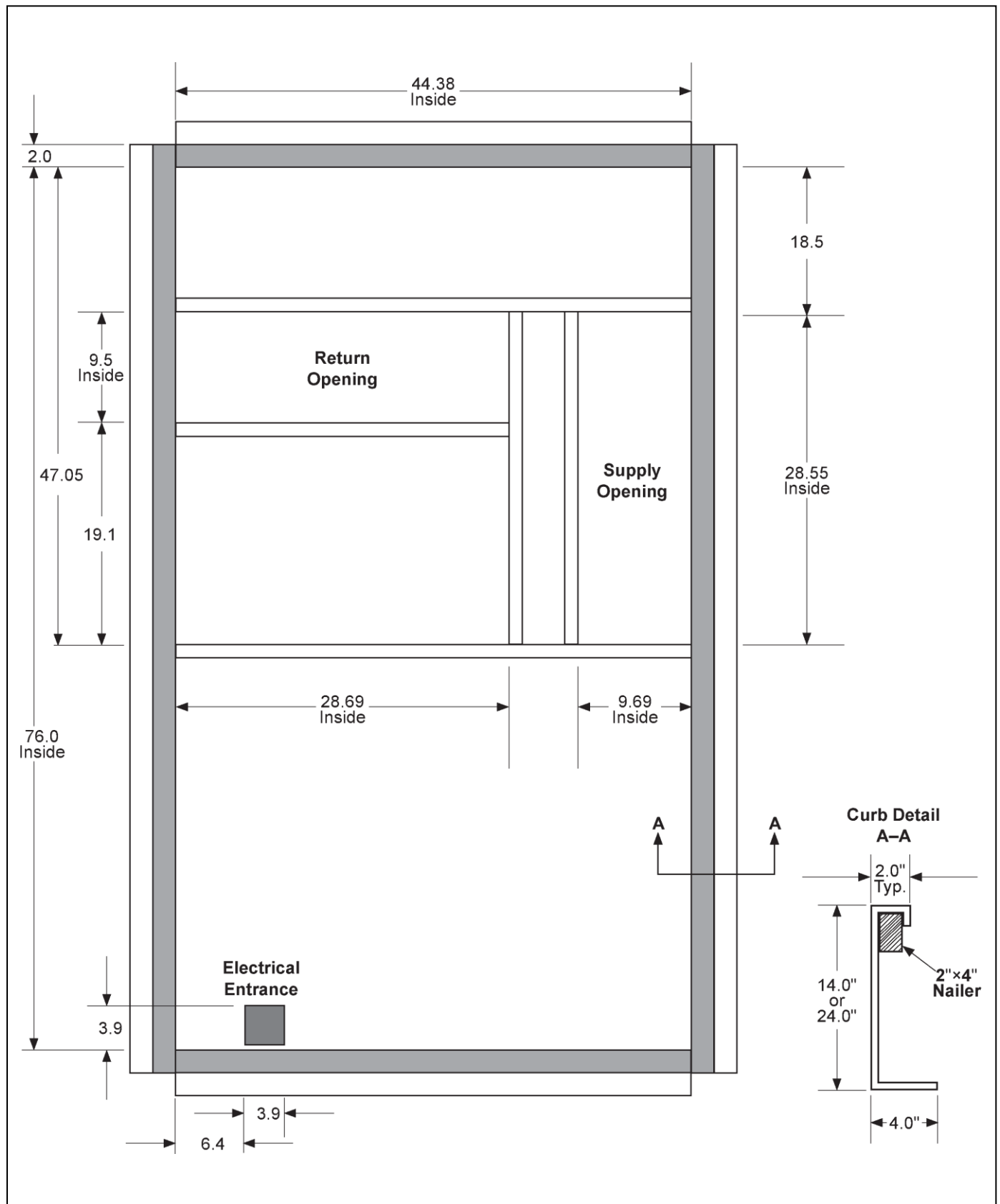
PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

- Notes:
- (1) Center of Gravity Height = 25.1
 - (2) Total Weight = 1674 lb

Product Drawing	Unit Tag: RTU-3			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:	Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS005A	Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Small Box Roof Curbs ERW_Drawing for RTU-3



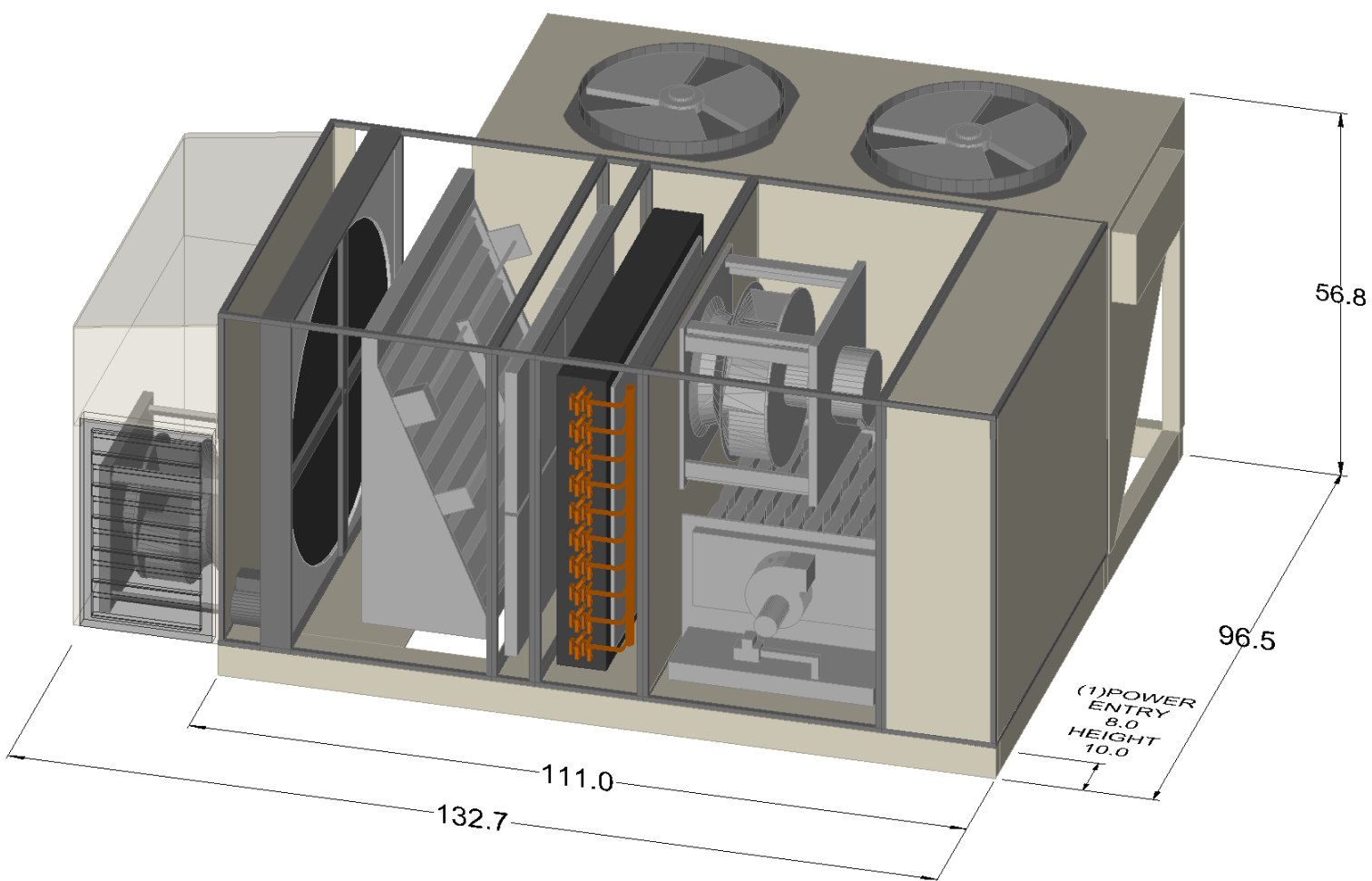
Product Drawing		Unit Tag: RTU-3			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:		Project Name: Petra Cliffs					
Model: DPS005A		Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:		Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1			
		Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]			
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.							

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

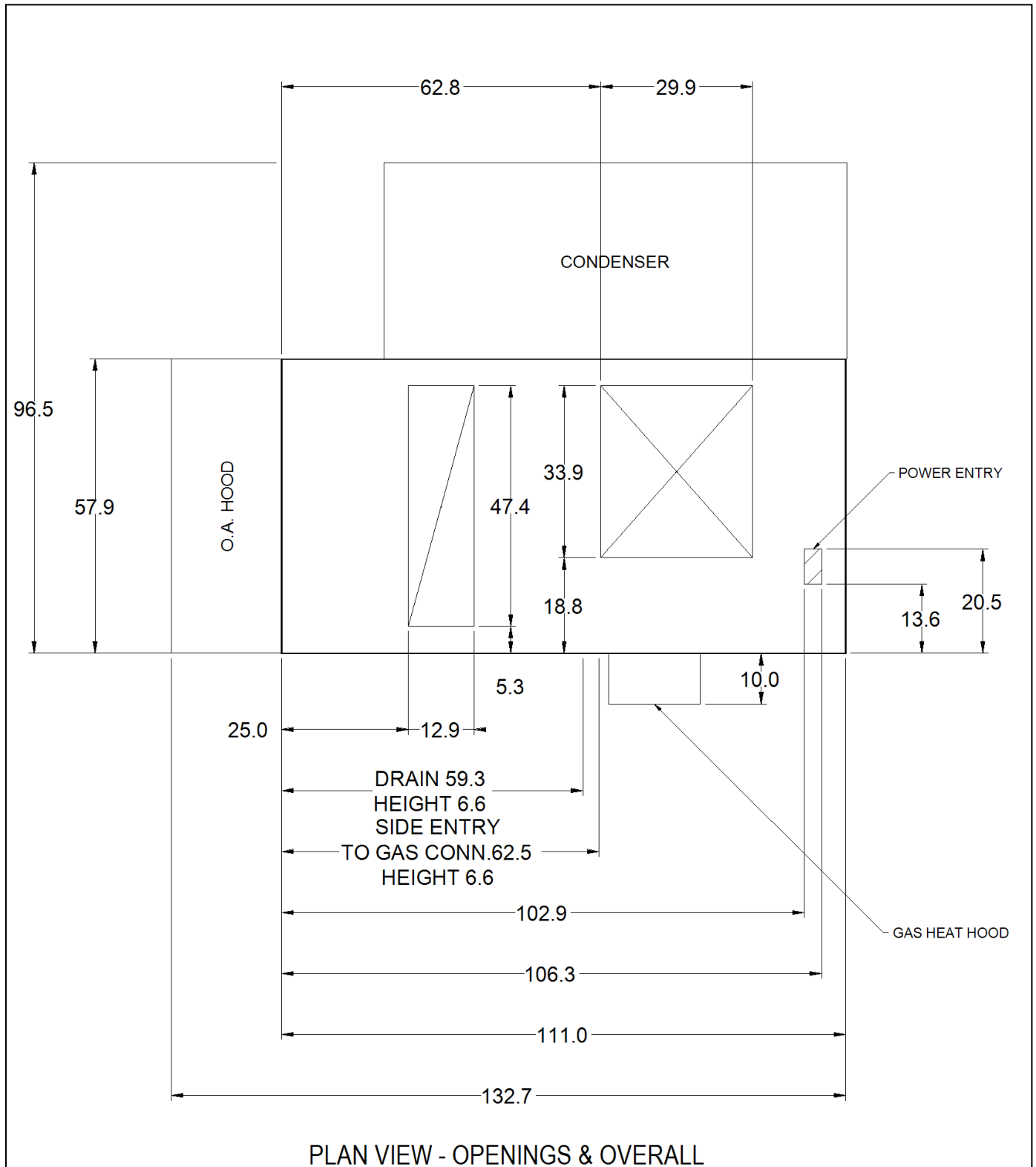
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Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

Product Drawing		Unit Tag: ERV-1			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS007A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

Drawings(2) for ERV-1



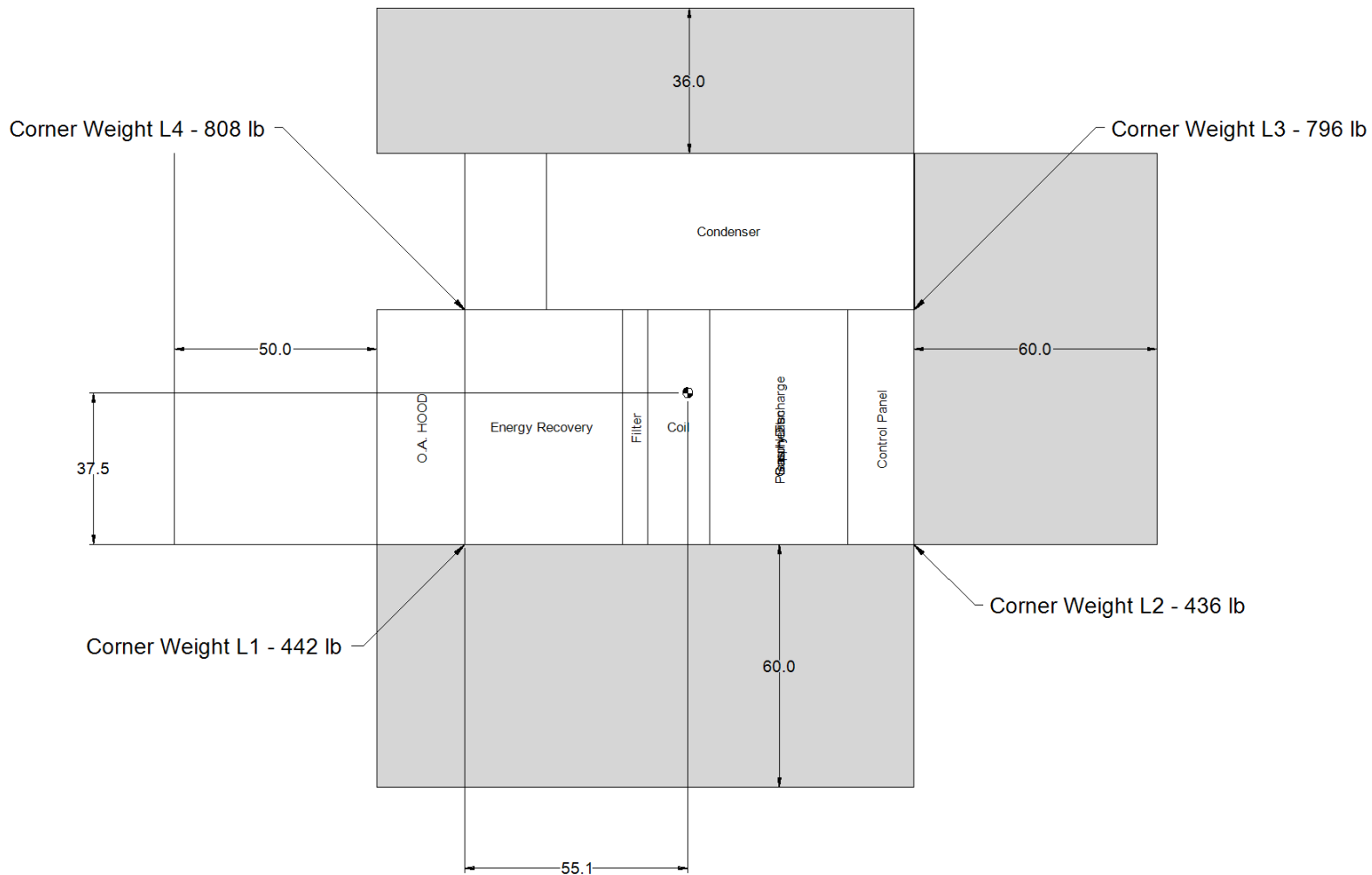
Product Drawing		Unit Tag: ERV-1			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:		Project Name: Petra Cliffs					
Model: DPS007A		Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:		Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.							

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

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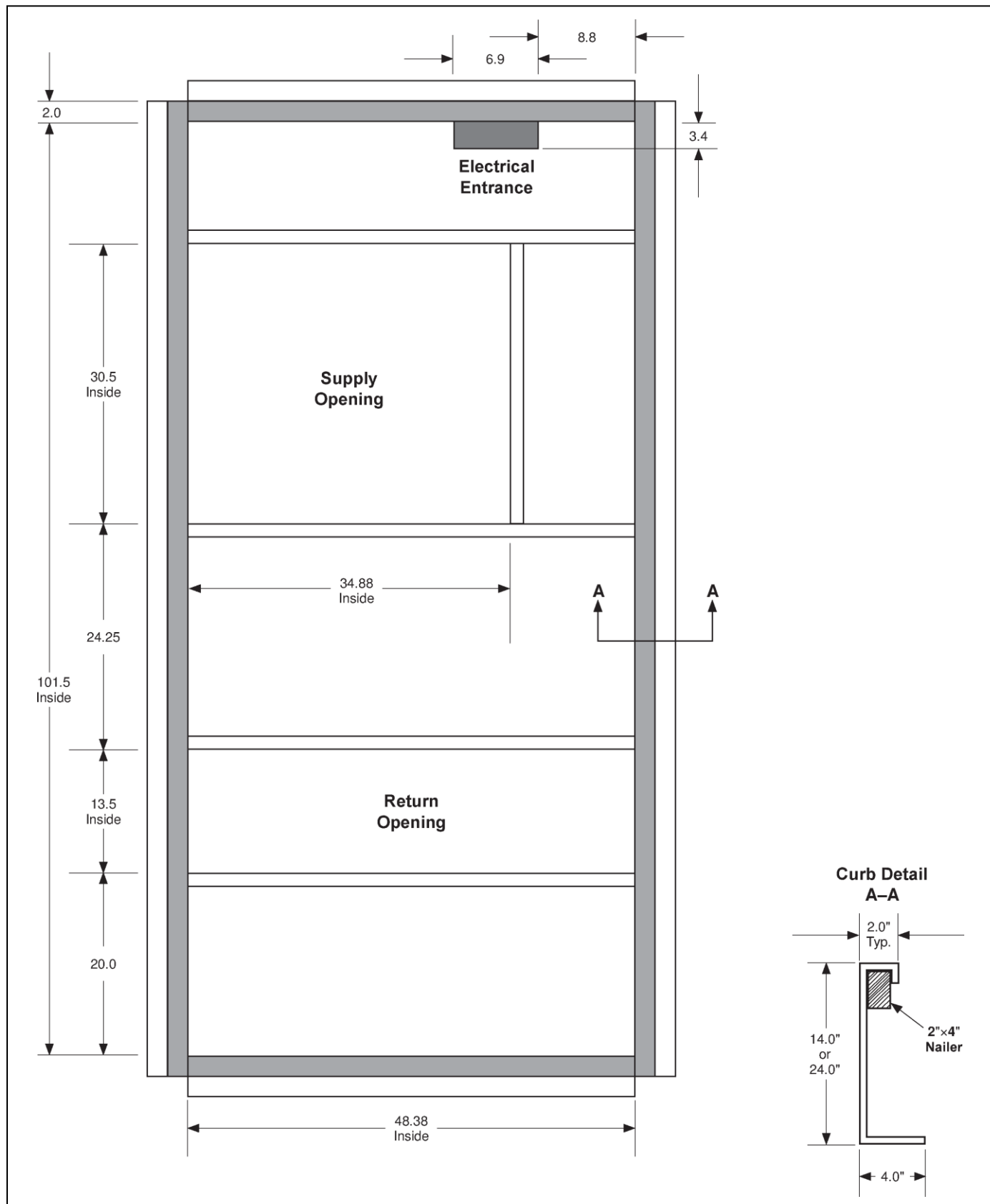


PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

- Notes:
- (1) Center of Gravity Height = 25.5
 - (2) Total Weight = 2482 lb

Product Drawing		Unit Tag: ERV-1			Sales Office: Thermal Environment Sales (Albany)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00
Product:		Project Name: Petra Cliffs			Sales Engineer:			
Model: DPS007A		Nov. 29, 2018	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.								

Large Box Roof Curbs ERW_Drawing for ERV-1



Product Drawing	Unit Tag: ERV-1			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.00		
Product:	Project Name: Petra Cliffs					
Model: DPS007A	Sales Office: Thermal Environment Sales (Albany)					
Sales Engineer:	Nov. 29, 2018	Ver/Rev:	Sheet 1 of 1			
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.						

Job Number: UTMCIQ
Job Name: Petra Cliffs

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Prepared Date:

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Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

Ouray 400



Order Code: U4 - - - - -

Pole Order Code: Series - Height - Finish - Options

U4	Series	U4 Ouray 400							
	Optics	R1 Type I Distribution	R2 Type II Distribution	R3 Type III Distribution	R4 Type IV Distribution	R5R Type V (Round) Distribution	R5S Type V (Square) Distribution	PP Plane Projector	
	Primary Mounting	S 60mm Slip Fitter	SB Short Pole Bracket	W Wall Mount	AT Adjustable Tilt	AS Adjustable Swivel	SA Single Pole Adaptor	WD Decorative Wall Box	
	Secondary Mounting	S1 ¹ Single Short Arm	S2 ¹ Double Short Arm	L1 ¹ Single Long Arm	L2 ¹ Double Long Arm	S ² 60mm Slip Fitter	W ² Wall Mount		¹ For S, AT, and AS primary mounting ² For AT and AS primary mounting ³ For SA, SB, W and WD primary mounting
		WD ² Decorative Wall Box	SB ² Short Pole Bracket	X ³ No Secondary Mounting					
	Light Engine	5G350 350mA	5G530 530mA	5G700 700mA	5G105 1050mA	5G140 1400mA			
	CCT	30 ⁴ 3000K	40 4000K						⁴ IDA Approved For other CCT, please consult factory.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120- 277	347 347V	480 480V	120 ⁵ 120V	240 ⁵ 240V	277 ⁵ 277V		⁵ Specify for HL option
	Options	DM Dimming (0-10V)	HS ⁶ House Side Shield (180°)	HL30 ^{7,8} Hi-Lo Switching Low Output 30%	HL50 ^{7,8} Hi-Lo Switching Low Output 50%	CO Comfort Optics	TLR ⁹ Twist Lock Receptacle	TLRP ^{8,9} Twist Lock Receptacle w/Photocell	GL ¹⁰ Glass
		Motion Sensor with optional photocell (0-10V)							⁶ Type I, II, III, and IV only ⁷ DM or HL only. Cannot be combined. ⁸ 120V, 240V, 277V only ⁹ Not available with DM ¹⁰ Glass is included with CO and PP options and does not need to be specified separately.

selux

Type: _____ Qty: _____

Height	Wall Thickness	EPA Information (ft ²)					Finish	Options
		70 mph	80 mph	90 mph	100 mph	110 mph		
12 12 ft.	0.125	8.4	6.0	4.3	3.2	2.6	WH White BK Black BZ Bronze SV Silver SP Specify Premium Color	BC13 Die Cast Base Cover REC GFCI Receptacle with weather-proof cover REC2 GFCI Receptacle w/ weather-proof padlockable in-use cover T30 Supplied with Ø3" Tenon, 4" high Motion Sensor w/ Optional Photocell (Meets Title 24 Requirements). See Pole Spec Sheet 3 for Order Code For PCT refer to fixture spec sheets (where applicable). For other options please consult factory.
14 14 ft.	0.125	6.7	4.6	3.1	2.2	1.7		
16 16 ft.	0.125	5.0	3.2	2.0	1.2	0.9		
Other heights available, consult factory. EPA Calculations allow for 1.3 Gust Factor								

Technical drawing of a vertical pole. The drawing shows a long, thin, vertical pole with a flange at the base. A dimension line on the left indicates the total height. A dimension line on the right indicates a distance of 18" (457mm) from the base to a small rectangular feature on the pole. A dimension line at the bottom indicates a diameter of Ø4" (102mm) for the pole's base.

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Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

Ouray 400



Order Code: U4 - - - - -

Pole Order Code: Series - Height - Finish - Options

U4	Series	U4 Ouray 400							
	Optics	R1 Type I Distribution	R2 Type II Distribution	R3 Type III Distribution	R4 Type IV Distribution	R5R Type V (Round) Distribution	R5S Type V (Square) Distribution	PP Plane Projector	
	Primary Mounting	S 60mm Slip Fitter	SB Short Pole Bracket	W Wall Mount	AT Adjustable Tilt	AS Adjustable Swivel	SA Single Pole Adaptor	WD Decorative Wall Box	
	Secondary Mounting	S1 ¹ Single Short Arm	S2 ¹ Double Short Arm	L1 ¹ Single Long Arm	L2 ¹ Double Long Arm	S ² 60mm Slip Fitter	W ² Wall Mount		¹ For S, AT, and AS primary mounting ² For AT and AS primary mounting ³ For SA, SB, W and WD primary mounting
		WD ² Decorative Wall Box	SB ² Short Pole Bracket	X ³ No Secondary Mounting					
	Light Engine	5G350 350mA	5G530 530mA	5G700 700mA	5G105 1050mA	5G140 1400mA			
	CCT	30 ⁴ 3000K	40 4000K						⁴ IDA Approved For other CCT, please consult factory.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120- 277	347 347V	480 480V	120 ⁵ 120V	240 ⁵ 240V	277 ⁵ 277V		⁵ Specify for HL option
	Options	DM Dimming (0-10V)	HS ⁶ House Side Shield (180°)	HL30 ^{7,8} Hi-Lo Switching Low Output 30%	HL50 ^{7,8} Hi-Lo Switching Low Output 50%	CO Comfort Optics	TLR ⁹ Twist Lock Receptacle	TLRP ^{8,9} Twist Lock Receptacle w/Photocell	GL ¹⁰ Glass
		Motion Sensor with optional photocell (0-10V)							⁶ Type I, II, III, and IV only ⁷ DM or HL only. Cannot be combined. ⁸ 120V, 240V, 277V only ⁹ Not available with DM ¹⁰ Glass is included with CO and PP options and does not need to be specified separately.

selux

Type:

_Qty:

A40

Series

Height

Finish

Option

Height	Wall Thickness	EPA Information (ft ²)					Finish	Options
		70 mph	80 mph	90 mph	100 mph	110 mph		
12 12 ft.	0.125	8.4	6.0	4.3	3.2	2.6	WH White BK Black BZ Bronze SV Silver SP Specify Premium Color	BC13 Die Cast Base Cover
14 14 ft.	0.125	6.7	4.6	3.1	2.2	1.7		REC GFCI Receptacle with weather-proof cover
16 16 ft.	0.125	5.0	3.2	2.0	1.2	0.9		REC2 GFCI Receptacle w/ weather-proof padlockable in-use cover
								T30 Supplied with Ø3" Tenon, 4" high
								Motion Sensor w/ Optional Photocell (Meets Title 24 Requirements). See Pole Spec Sheet 3 for Order Code For PCT refer to fixture spec sheets (where applicable). For other options please consult factory.
Other heights available, consult factory. EPA Calculations allow for 1.3 Gust Factor								

Pole Shaft - Pole shaft is extruded from seamless 6061 alloy aluminum which is heat treated to a T6 temper.

Anchor Base - Anchor base is cast from 356 alloy aluminum which is heat treated to a T6 temper. The anchor base casting and shaft are joined by a continuous circumferential weld at the outside top and inside bottom of the anchor base.

Access Hole - The opening measures 2 ³/₈" x 4" (60 x 100mm). Cover is supplied with tamper resistant fasteners. ³/₈-16 ground lug is located inside pole, opposite the hand hole.

Anchor Bolts - Pole is supplied with four 3/4 x 17" steel hot dip galvanized anchor bolts each with two nuts, two flat washers and one lock washer.

Base Cover - Standard two-piece base cover is made from

die-cast 356 alloy aluminum
which is heat treated to produce
a T6 temper, measuring 5³/₁₆"
(131mm) height by 12¹/₂" (316mm)
diameter.

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

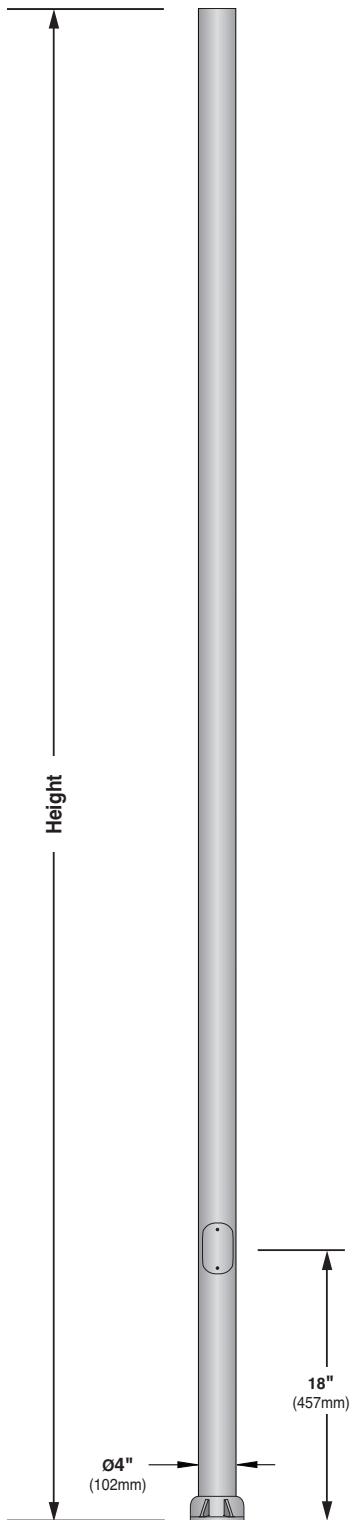
Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

All Poles are constructed per AASHTO standards for structural supports for highway signs, luminaires and traffic signals as published in 1994.

A consideration of field conditions such as (but not limited to) wind zone, height, vibration must be given by the designer/specifier for the appropriate application.

Performance of poles is dependent upon proper support/attachment of pole to adequate foundation design. Selux does not design or offer recommendations for foundations. EPA values assume that the bottom of the pole is at grade level.

Call Selux (1-800-SELUXCS) if there are any questions, or for any assistance in determining suitability with appropriate fixtures.



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In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.us are the most recent versions and supercede all other printed or electronic versions.

Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

Ouray 400



Order Code: U4 - - - - -

Pole Order Code: Series - Height - Finish - Options

U4	Series	U4 Ouray 400						
	Optics	R1 Type I Distribution	R2 Type II Distribution	R3 Type III Distribution	R4 Type IV Distribution	R5R Type V (Round) Distribution	R5S Type V (Square) Distribution	PP Plane Projector
	Primary Mounting	S 60mm Slip Fitter	SB Short Pole Bracket	W Wall Mount	AT Adjustable Tilt	AS Adjustable Swivel	SA Single Pole Adaptor	WD Decorative Wall Box
	Secondary Mounting	S1 ¹ Single Short Arm	S2 ¹ Double Short Arm	L1 ¹ Single Long Arm	L2 ¹ Double Long Arm	S ² 60mm Slip Fitter	W ² Wall Mount	¹ For S, AT, and AS primary mounting ² For AT and AS primary mounting ³ For SA, SB, W and WD primary mounting
		WD ² Decorative Wall Box	SB ² Short Pole Bracket	X ³ No Secondary Mounting				
	Light Engine	5G350 350mA	5G530 530mA	5G700 700mA	5G105 1050mA	5G140 1400mA		
	CCT	30 ⁴ 3000K	40 4000K					⁴ IDA Approved For other CCT, please consult factory.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color	
	Voltage	UNV 120- 277	347 347V	480 480V	120 ⁵ 120V	240 ⁵ 240V	277 ⁵ 277V	⁵ Specify for HL option
	Options	DM Dimming (0-10V)	HS ⁶ House Side Shield (180°)	HL30 ^{7,8} Hi-Lo Switching Low Output 30%	HL50 ^{7,8} Hi-Lo Switching Low Output 50%	CO Comfort Optics	TLR ⁹ Twist Lock Receptacle	TLRP ^{8,9} Twist Lock Receptacle w/Photocell
								GL ¹⁰ Glass
		Motion Sensor with optional photocell (0-10V)						⁶ Type I, II, III, and IV only ⁷ DM or HL only. Cannot be combined. ⁸ 120V, 240V, 277V only ⁹ Not available with DM ¹⁰ Glass is included with CO and PP options and does not need to be specified separately.

selux

Type:

_Qty:

A40

Series

Height

Finish

Option

Height	Wall Thickness	EPA Information (ft ²)					Finish	Options
		70 mph	80 mph	90 mph	100 mph	110 mph		
12 12 ft.	0.125	8.4	6.0	4.3	3.2	2.6	WH White BK Black BZ Bronze SV Silver SP Specify Premium Color	BC13 Die Cast Base Cover
14 14 ft.	0.125	6.7	4.6	3.1	2.2	1.7		REC GFCI Receptacle with weather-proof cover
16 16 ft.	0.125	5.0	3.2	2.0	1.2	0.9		REC2 GFCI Receptacle w/ weather-proof padlockable in-use cover
								T30 Supplied with Ø3" Tenon, 4" high
								Motion Sensor w/ Optional Photocell (Meets Title 24 Requirements). See Pole Spec Sheet 3 for Order Code For PCT refer to fixture spec sheets (where applicable). For other options please consult factory.
Other heights available, consult factory.							EPA Calculations allow for 1.3 Gust Factor	

Pole Shaft - Pole shaft is extruded from seamless 6061 alloy aluminum which is heat treated to a T6 temper.

Anchor Base - Anchor base is cast from 356 alloy aluminum which is heat treated to a T6 temper. The anchor base casting and shaft are joined by a continuous circumferential weld at the outside top and inside bottom of the anchor base.

Access Hole - The opening measures 2 $\frac{3}{8}$ " x 4" (60 x 100mm). Cover is supplied with tamper resistant fasteners. $\frac{3}{8}$ -16 ground lug is located inside pole, opposite the hand hole.

Anchor Bolts - Pole is supplied with four 3/4 x 17" steel hot dip galvanized anchor bolts each with two nuts, two flat washers and one lock washer.

Base Cover - Standard two-piece base cover is made from

die-cast 356 alloy aluminum
which is heat treated to produce
a T6 temper, measuring 5³/₁₆"
(131mm) height by 12¹/₂" (316mm)
diameter.

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

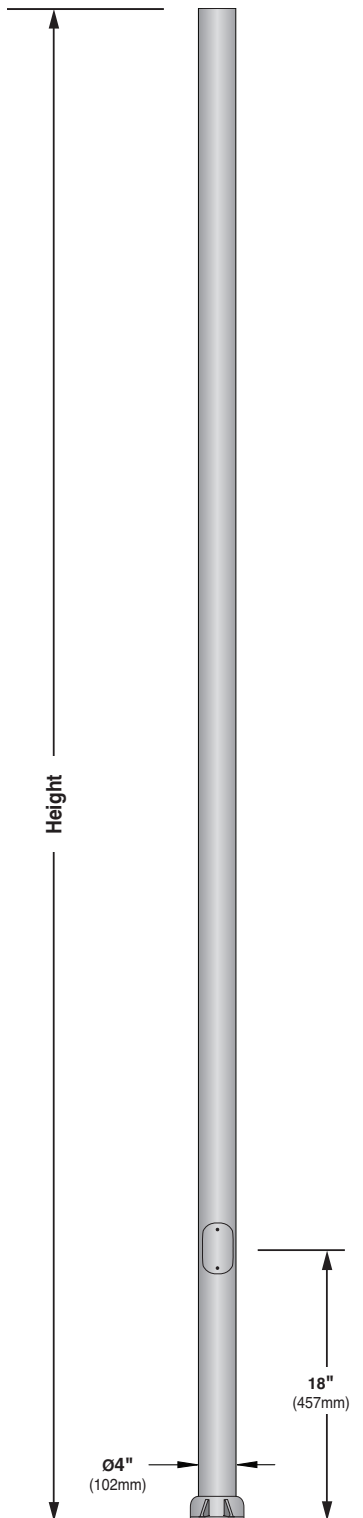
Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

All Poles are constructed per AASHTO standards for structural supports for highway signs, luminaires and traffic signals as published in 1994.

A consideration of field conditions such as (but not limited to) wind zone, height, vibration must be given by the designer/specifier for the appropriate application.

Performance of poles is dependent upon proper support/attachment of pole to adequate foundation design. Selux does not design or offer recommendations for foundations. EPA values assume that the bottom of the pole is at grade level.

Call Selux (1-800-SELUXCS) if there are any questions, or for any assistance in determining suitability with appropriate fixtures.



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Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

Ouray 400



Order Code: U4 - - - - -

Pole Order Code: Series - Height - Finish - Options

U4	Series	U4 Ouray 400						
	Optics	R1 Type I Distribution	R2 Type II Distribution	R3 Type III Distribution	R4 Type IV Distribution	R5R Type V (Round) Distribution	R5S Type V (Square) Distribution	PP Plane Projector
	Primary Mounting	S 60mm Slip Fitter	SB Short Pole Bracket	W Wall Mount	AT Adjustable Tilt	AS Adjustable Swivel	SA Single Pole Adaptor	WD Decorative Wall Box
	Secondary Mounting	S1 ¹ Single Short Arm	S2 ¹ Double Short Arm	L1 ¹ Single Long Arm	L2 ¹ Double Long Arm	S ² 60mm Slip Fitter	W ² Wall Mount	¹ For S, AT, and AS primary mounting ² For AT and AS primary mounting ³ For SA, SB, W and WD primary mounting
		WD ² Decorative Wall Box	SB ² Short Pole Bracket	X ³ No Secondary Mounting				
	Light Engine	5G350 350mA	5G530 530mA	5G700 700mA	5G105 1050mA	5G140 1400mA		
	CCT	30 ⁴ 3000K	40 4000K					⁴ IDA Approved For other CCT, please consult factory.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color	
	Voltage	UNV 120- 277	347 347V	480 480V	120 ⁵ 120V	240 ⁵ 240V	277 ⁵ 277V	⁵ Specify for HL option
	Options	DM Dimming (0-10V)	HS ⁶ House Side Shield (180°)	HL30 ^{7,8} Hi-Lo Switching Low Output 30%	HL50 ^{7,8} Hi-Lo Switching Low Output 50%	CO Comfort Optics	TLR ⁹ Twist Lock Receptacle	TLRP ^{8,9} Twist Lock Receptacle w/Photocell
								GL ¹⁰ Glass
		Motion Sensor with optional photocell (0-10V)						⁶ Type I, II, III, and IV only ⁷ DM or HL only. Cannot be combined. ⁸ 120V, 240V, 277V only ⁹ Not available with DM ¹⁰ Glass is included with CO and PP options and does not need to be specified separately.

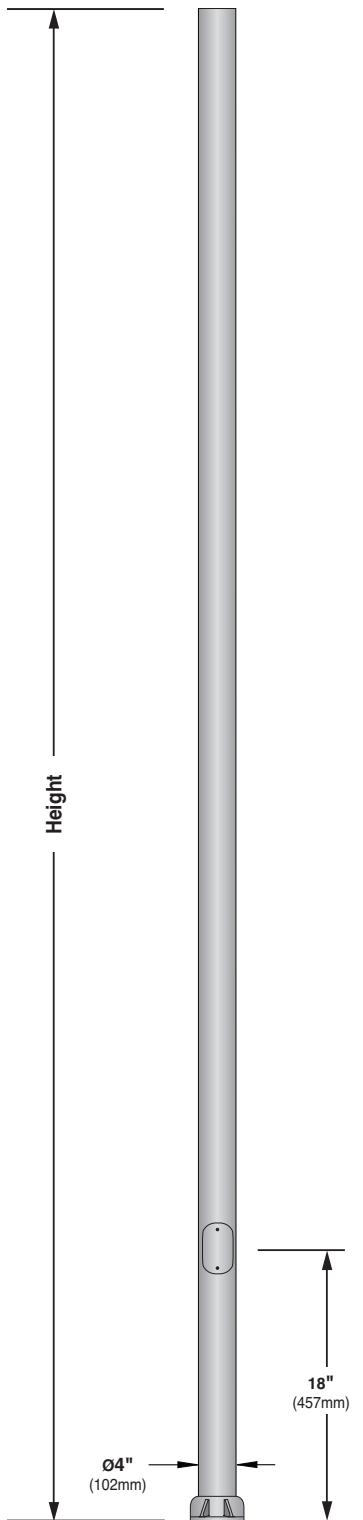
A40 4" Round Straight Aluminum Pole

selux

Project: _____

Type: _____ **Qty:** _____

Ordering Format: **A40** - _____ - _____ - _____
 Series Height Finish Option



Height	Wall Thickness	EPA Information (ft ²)					Finish	Options
		70 mph	80 mph	90 mph	100 mph	110 mph		
12 12 ft.	0.125	8.4	6.0	4.3	3.2	2.6	WH White	BC13 Die Cast Base Cover
14 14 ft.	0.125	6.7	4.6	3.1	2.2	1.7	BK Black	REC GFCI Receptacle with weather-proof cover
16 16 ft.	0.125	5.0	3.2	2.0	1.2	0.9	BZ Bronze	REC2 GFCI Receptacle w/ weather-proof padlockable in-use cover
							SV Silver	T30 Supplied with Ø3" Tenon, 4" high
							SP Specify Premium Color	Motion Sensor w/ Optional Photocell (Meets Title 24 Requirements). See Pole Spec Sheet 3 for Order Code
Other heights available, consult factory. EPA Calculations allow for 1.3 Gust Factor								For PCT refer to fixture spec sheets (where applicable). For other options please consult factory.

Standard Specifications

Pole Shaft - Pole shaft is extruded from seamless 6061 alloy aluminum which is heat treated to a T6 temper.

Anchor Base - Anchor base is cast from 356 alloy aluminum which is heat treated to a T6 temper. The anchor base casting and shaft are joined by a continuous circumferential weld at the outside top and inside bottom of the anchor base.

Access Hole - The opening measures 2 3/8" x 4" (60 x 100mm). Cover is supplied with tamper resistant fasteners. 3/8"-16 ground lug is located inside pole, opposite the hand hole.

Anchor Bolts - Pole is supplied with four 3/4 x 17" steel hot dip galvanized anchor bolts each with two nuts, two flat washers and one lock washer.

Base Cover - Standard two-piece base cover is made from

die-cast 356 alloy aluminum which is heat treated to produce a T6 temper, measuring 5 3/16" (131mm) height by 12 1/2" (316mm) diameter.

Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

All Poles are constructed per AASHTO standards for structural supports for highway signs, luminaires and traffic signals as published in 1994.

A consideration of field conditions such as (but not limited to) wind zone, height, vibration must be given by the designer/specifier for the appropriate application.

Performance of poles is dependent upon proper support/attachment of pole to adequate foundation design. Selux does not design or offer recommendations for foundations. EPA values assume that the bottom of the pole is at grade level.

Call Selux (1-800-SELUXCS) if there are any questions, or for any assistance in determining suitability with appropriate fixtures.

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 TEL (845) 834-1400
 FAX (845) 834-1401
 www.selux.us
 A40-0118-01 (ss-v2.27)

Union Made Affiliated
 with IBEW Local 363

Made in the USA

In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.us are the most recent versions and supercede all other printed or electronic versions.

Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

M125 LED Recessed



Order Code: _____

	Series	L125R1 L125 Recessed Flanged	L125R2 Recessed Flanged with Flush Endcaps	L125 For Concrete Pour Only						
	Light Engine	1B45 ^{1,2} 1116lm/11.9W per foot	1B40 ¹ 1009lm/10.6W per foot	1B35 ¹ 888lm/9.3W per foot	1B30 ¹ 758lm/7.8W per foot	1B25 ¹ 680lm/6.9W per foot	1B20 ¹ 513lm/5.1W per foot	¹ Values calculated from a 4' fixture @4000K using LI Shielding and DIM driver. For additional information please see page 2.		
		2B45 ^{1,2} 2025lm/23.5W per foot	2B40 ¹ 1830lm/20.9W per foot	2B35 ¹ 1610lm/18.3W per foot	2B30 ¹ 1376lm/15.3W per foot	2B25 ¹ 1233lm/13.5W per foot	2B20 ¹ 930lm/10.1W per foot	² Not available with DC2, DC3, or DCE drivers for 4' fixtures.		
	CCT	27 2700K	30 3000K	35 3500K	40 4000K					
	Shielding	LI Clear Glass with LED Optimized Inlay	MI Clear Lens with Micro- prismatic Inlay	PC ³ Prismatic Lens	SD ³ Satine Lens	³ IK10 Rated				
	Mounting	SH Suspension Bracket	TS 1" Studs (factory installed)	RC Rotating Crossbar	PM Perimeter Mount	MTB Metal Box Concrete Pour (for use with L125 housing only)				
	Nominal Fixture Length	02 2 ft.	03 3 ft.	04 4 ft.	XX ⁴ Runs are available in 2', 3' or 4' nominal increments. Round up to the nearest foot and replace the "xx" with the # (i.e. 16=16' nominal)			⁴ See page 2 for details		
	Finish	WH White	BK Black	BL Semi-Matte Black	SV Silver	SP Specify Premium Color	Custom colors are available, Please consult factory			
	Voltage	UNV 120 thru 277 50/60hz capable	347 ⁵ 347 Volt	480 ⁵ 480 Volt				⁵ Available only with 1B35 and 2B35 light engines, using DIM, DIL, and DC3 drivers.		
	Driver	DIM 0-10V (Linear)	DIL 0-10V (Logarithmic)	DED eldoLED ECODrive DALI (Logarithmic)	DC2 ⁷ Lutron 2-Wire	DC3 ⁷ Lutron 3-Wire	DCE ⁷ Lutron Eco-System	DC5 Lutron 5-Series	SR ⁶ Philips Xitanium SR (DALI)	⁶ For use with external sensors, by others ⁷ Not available with 4'1B45 or 2B45 light engines.
	Fixture Options	MT ⁸ Media Trunking	FS Single Fusing	NC ⁹ Nipple Connector	TR Tamper Resistant	SS Separate Switching (consult factory)	NF Natatorium Finish (consult factory)		⁸ SH and TS mountings only ⁹ Not required when MT is used	
		EFB ⁹ End Feed Both Ends (for conduit daisy chain)	EFC End Feed Left (for conduit)	EFR End Feed Right (for conduit)						
	Emergency Options	EC ¹⁰ Emergency Circuit Wiring	EMR Remote Micro Inverter (consult factory)							¹⁰ See page 8 for full details and restrictions



IP65 IK10

Date:	Approved:
Type:	
Fixture:	
Project:	

FCW1020

Die-Cast Aluminum Exterior Architectural
Wall Mount.



ORDERING

EXAMPLE: FCW1020-120V-39W MH G12-BK-SP-D

SERIES	VOLTAGE	SOURCE/TEMPERATURE	LED LUMENS	FINISH	LED OPTICS	ACCESSORIES
FCW1020	120V	LED 27K 3K 35K 4K	1200 Lumens	BK Black	SP Spot	ADJ Adjustable Arm, 15° tilt
	277V	HID 39W MH G12		BZ Bronze	NFL Narrow Flood	D Dimming (PL only)
		70W MH G12		CC Custom Color	FL Flood	PCL Polycarbonate Lens (PL & LED only)
		PL 13Q 18Q 26Q		SL Silver	WFL Wide Flood	BBU Emergency Backup, Remote (PL only, LED△)
				WH White		LD LED Dimming
						PE Photo Eye

SPECIFICATION

MOUNTING

- Mounts directly to standard outlet box.
- Installation:** <http://tinyurl.com/z46byel>

CONSTRUCTION

- Marine grade, corrosion resistant, heavy walled, high pressure die-cast aluminum.
- Lens is 1/8" thick, clear tempered glass.
- Forward throw reflector is semi-specular aluminum formed for maximum reflectance.
- Extruded silicone to provide maximum protection against contaminants. Captive and recessed stainless steel, tamper resistant hex socket screws.

LED

- Lumens stated are the minimum delivered out of the luminaire. LED lifetime is greater than or equal to 70,000 hours with the lumen depreciation greater than L70. All of our luminaires are LM-80 tested and are ≥ CRI80, with a 4-step MacAdam Ellipse color consistency. Integral power supply standard. Input voltage 120V or 277V standard.

FINISH

- Six stage chemical pre-treatment process that includes iron phosphate, to prepare the substrate for a UV stable, super durable standard polyester powder coat.

ELECTRICAL

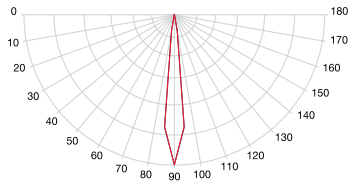
- Socket** PL: Four pin plug-in type compact fluorescent lamp holder (*lamp by others*). HID: 2-Pin G12 single (pulse rated 4KV) porcelain (*lamp by others*).
- Ballast** PL: Fluorescent high power factor electronic, UL listed ballast standard. Ballast has a manufacturer issued 5 year warranty. Electronic universal voltage 120V or 277V is standard. Please consult factory for other voltage options.
- Power factor (120V/277V) >0.9.

LISTING

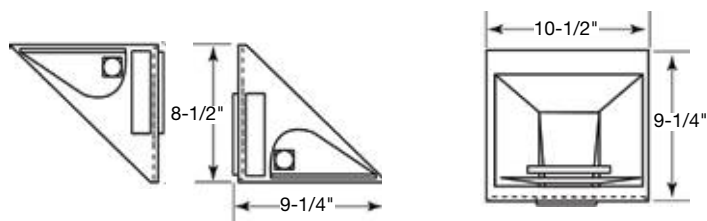
- ETL listed for wet location in up or down position. IP65 rating.

PHOTOMETRY

FCW1020 120V LED 4000K 1200 Lumens Spot Distribution



DIMENSIONS



Date:	Approved:
Type:	
Fixture:	
Project:	

FCW1020

Die-Cast Aluminum Exterior Architectural
Wall Mount.



ORDERING

EXAMPLE: FCW1020-120V-39W MH G12-BK-SP-D

SERIES	VOLTAGE	SOURCE/TEMPERATURE	LED LUMENS	FINISH	LED OPTICS	ACCESSORIES
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	277V	HID 39W MH G12		BZ Bronze	NFL Narrow Flood	D Dimming (PL only)
		70W MH G12		CC Custom Color	FL Flood	PCL Polycarbonate Lens (PL & LED only)
		PL 13Q 18Q 26Q		SL Silver	WFL Wide Flood	BBU Emergency Backup, Remote (PL only, LED△)
				WH White		LD LED Dimming
						PE Photo Eye

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CONSTRUCTION

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- Lens is 1/8" thick, clear tempered glass.
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- Extruded silicone to provide maximum protection against contaminants. Captive and recessed stainless steel, tamper resistant hex socket screws.

LED

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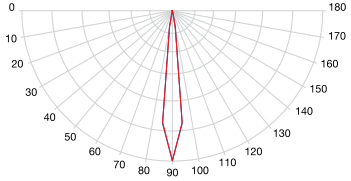
- Socket** PL: Four pin plug-in type compact fluorescent lamp holder (*lamp by others*). HID: 2-Pin G12 single (pulse rated 4KV) porcelain (*lamp by others*).
- Ballast** PL: Fluorescent high power factor electronic, UL listed ballast standard. Ballast has a manufacturer issued 5 year warranty. Electronic universal voltage 120V or 277V is standard. Please consult factory for other voltage options.
- Power factor (120V/277V) >0.9.

LISTING

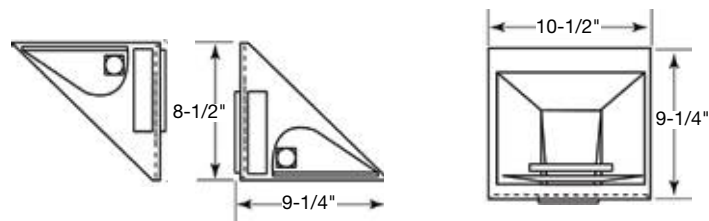
- ETL listed for wet location in up or down position. IP65 rating.

PHOTOMETRY

FCW1020 120V LED 4000K 1200 Lumens Spot Distribution



DIMENSIONS









RECEIVED
SEP 04 2018

DEPARTMENT OF
PLANNING & ZONING

City of Burlington
Department of Public Works

Technical Services Engineering Division
645 Pine Street, Suite A
Burlington, VT 05402
P 802-863-9094 / F 802-863-0466 / TTY 802-863-0450
www.burlingtonvt.gov/DPW

TO: Scott Gustin, Principal Planner & Assistant Administrative Officer, Dept. of Planning & Zoning

FROM: Norman Baldwin, P.E., Assistant Director/City Engineer 

Date: September 4, 2018

Subject: Petra Cliffs Burlington Expansion – 75 Briggs St – Traffic Impact Study

The Department of Public Works (DPW) has reviewed the Traffic Impact Study dated August 31, 2018 as provided by VHB for the Petra Cliffs Burlington Expansion Project located at 75 Briggs St.

Based on review of the Traffic Impact Study (TIS) dated August 31, 2018, City staff offers the following comments:

- While traffic modeling was performed for this development, the signalized intersection analysis for the Champlain Parkway/Flynn Ave intersection results in a Level of Service F. We note that modeling software is typically not reliable beyond Level of Service F, so the delay values reported in the TIS Appendix may not be reliable due to the limitations of available modeling software.
- This TIS takes into consideration the construction of the Champlain Parkway project. Champlain Parkway traffic volume estimates are conservative, so the actual count data from July 2018 which were utilized in this TIS are acceptable.
- This site is adjacent to the City Market South End site which also developed a Traffic Impact Study for its DRB approval in July 2016. The Petra Cliffs Development TIS was compared to the 2016 City Market TIS. The difference between the pre/post City Market operational impacts leave opportunity to assume the operational impacts predicted for the Petra Cliffs project.
- The Petra Cliffs TIS identifies several potential mitigation strategies related to the Champlain Parkway project which are outside of Petra Cliffs' control, but which DPW may consider in the future to improve the operation of the Champlain Parkway/Flynn Ave and Flynn Ave/Briggs St intersections. The TIS modeled traffic volumes for two of these potential mitigation strategies: concurrent pedestrian phasing at the Champlain Parkway/Flynn Ave intersection, and a new eastbound right-turn lane on Flynn Ave to access the Champlain Parkway.
- Briggs Street as it exists today or within the Champlain Parkway Project does not have a public sidewalk. With the increased activity associated with this project, City Staff believes it is appropriate to require Petra Cliffs to participate in the cost to build a public sidewalk along Briggs Street. More specifically City Staff would ask that Petra Cliffs contribute half the cost to develop a sidewalk along the eastern length of their parcel. Given the timing of the Champlain Parkway and Petra Cliffs project; the sidewalk shown on their site plan internal to their site would suffice for now, however would ask that Petra Cliffs contribute by placing funds in an escrow account for this purpose.
- City staff recommends that the Traffic Impact Fees for this project remain available until five (5) years after the Champlain Parkway/Flynn Ave intersection is constructed and operational. This will allow time for traffic patterns related to the Champlain Parkway to be established, and will allow for the design and construction of any modifications resulting from the Petra Cliffs development to be implemented.

DPW staff, as well as the Champlain Parkway design engineers and legal team, have reviewed the submitted Petra Cliffs Traffic Impact Study and have no objections to the proposed traffic analysis for this site development.

Should you have any questions, please contact me at NBaldwin@burlingtonvt.gov or 802-865-5826.



Memorandum

To: Andrea Charest
Petra Cliffs Climbing Center &
Mountaineering School

Date: July 27, 2018
Revised: August 31, 2018

Project #: 58100.00

From: David Saladino, P.E., AICP
Nina Truslow

Re: Petra Cliffs Burlington Expansion — Traffic Impact Study
Burlington, VT

VHB has completed a Traffic Impact Study (TIS) for the proposed relocation and expansion of the Petra Cliffs Climbing Center & Mountaineering School currently located at 105 Briggs Street in Burlington, Vermont. The current building is 7,500 square feet and is located at the intersection of Briggs Street and Morse Place. The proposed building will be approximately 13,470 square feet and located approximately one block north of the current building at the intersection of Lyman Avenue and Briggs Street. The proposed site is currently vacant except for an existing small storage building at the southern end of the site.

The scope of the traffic investigation includes the proposed intersection of the future Champlain Parkway and Flynn Avenue, and the intersection of Flynn Avenue with Briggs Street and a commercial driveway.

This Traffic Impact Study includes the following elements:

- A description of the existing roadway network near the site;
- A summary of the crash data within the study area;
- A description of the proposed development program;
- A trip generation estimate for the proposed development program;
- An evaluation of traffic operations within the study area in the future Build year of 2024; and
- Conclusions and recommendations to support the project.

EXISTING CONDITIONS

The project site is located at the intersection of Lyman Avenue and Briggs Street, between the South End City Market and a residential home located at 97 Briggs Street. The location of the site in relation to the local roadway network is shown in **Figure 1** on the following page. Since the study area includes the intersection of the proposed Champlain Parkway with Flynn Avenue, the alignment of the Parkway is shown in the figure, though it has not yet been constructed. It should be noted on Figure 1 that, with the construction of the Champlain Parkway, Briggs Street becomes a dead-end street, with all access to the existing and proposed sites occurring to and from the north on Flynn Avenue.

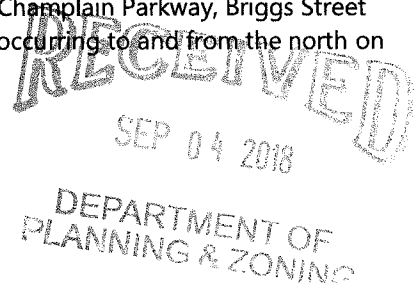


Figure 1: Site Location Map (Base Plan by CHA)



CRASH SUMMARY

A review of VTrans' most recent High Crash Location (HCL) Report (2012-2016) revealed that no intersections or roadway segments within the project study area were classified as a HCL by VTrans.¹ Additional crash data provided by VTrans were compiled and evaluated within the project study area. The detailed crash data covers the most recent 5-year period available: January 1, 2013 through December 31, 2017. Within this time, there were 30 crashes on Flynn Avenue, though none were directly adjacent to the project area (i.e., at the intersection with Briggs Street). Similarly, there have been seven reported crashes on Ferguson Avenue, Lyman Avenue, and Morse Place combined during this time period, but none of the crashes were in proximity to their respective intersections with Briggs Street. Therefore, the historic crash frequency adjacent to the project area is very low, and it is not likely that the new trips generated by Petra Cliffs' expansion will drastically change this trend. Detailed VTrans crash summaries are included in the Appendix.

¹ High Crash Location Report: Intersections and Segments (2012-2016), Vermont Agency of Transportation, 2016.

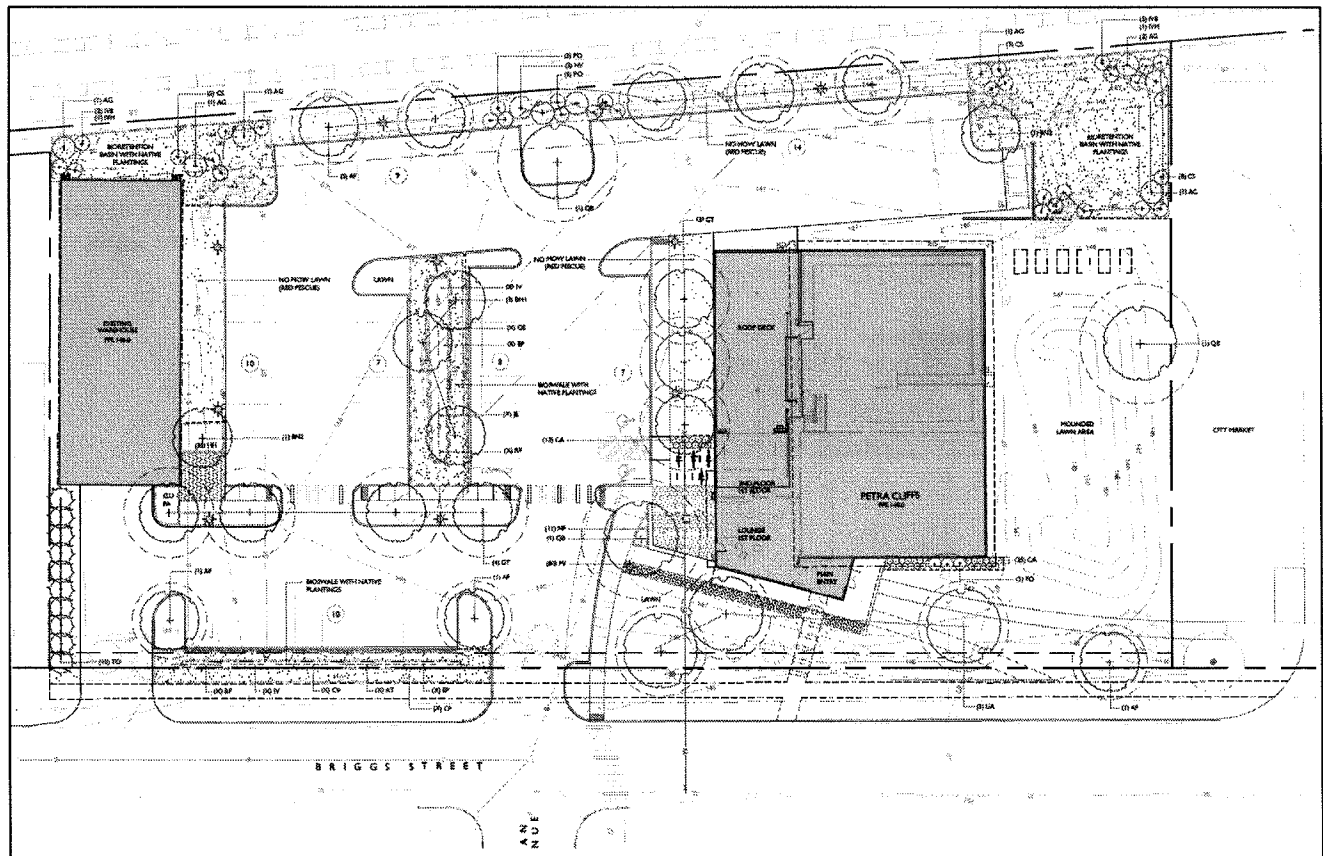
PROPOSED DEVELOPMENT

The proposed development program includes the development of a 13,470 square foot climbing facility across from the intersection of Lyman Avenue and Briggs Street. In addition to the building, the site will include green space, walkways, and vegetated stormwater runoff detention areas. A total of 66 parking spaces will be constructed to accommodate the new site-generated trips.

Primary access and egress is proposed to be provided via the main driveway, located directly across from Lyman Avenue and an additional curb cut at the southern end of the site.

The proposed layout of the project site is shown below in **Figure 2.**

Figure 2: Proposed Site Plan



TRIP GENERATION

Trip generation estimates for the proposed expansion of Petra Cliffs were calculated based on evening peak hour² counts of entering and exiting trips at Petra Cliffs' current location. The trip generation count was conducted at the Petra Cliffs' driveway by VHB staff on Wednesday, July 11, 2018.

Based on an evaluation of trip generation rates for other climbing centers, discussions with the Petra Cliffs owners, and considering that the July 11 counts were conducted during peak summer camp season, our resulting trip generation rate increase was calculated as follows³:

$$\text{Future Peak Hour Trip Rate} = \text{Current Trip Rate} \times \left[\frac{\left(\frac{\text{Future Building Size}}{\text{Current Building Size}} \right)}{2} \right]$$

Based on the trip counts and mode split observed during the July 11 count at the Petra Cliffs' driveway, it was estimated that non-vehicular trips (primarily bicycle and pedestrian trips) will account for 16% of the total trips generated by this site.

Table 1 summarizes the trip generation estimate for the proposed development during the weekday evening peak hour. After reducing the estimated future total trips by subtracting non-vehicle trips, we estimate a net increase of 99 new trips (42 entering and 57 exiting) to the site during the weekday evening peak hour. Calculations supporting the proposed trip generation estimates for the project are provided in the Appendix.

Table 1: Trip Generation Summary

Peak Period	Existing Trip Generation Total	Proposed Trip Generation Total	Bike & Ped Reduction	Net New Trips (Vehicles)
Weekday Evening			16%	
Enter	31	50	-8	42
Exit	42	68	-11	57
Total	73	118	-19	99

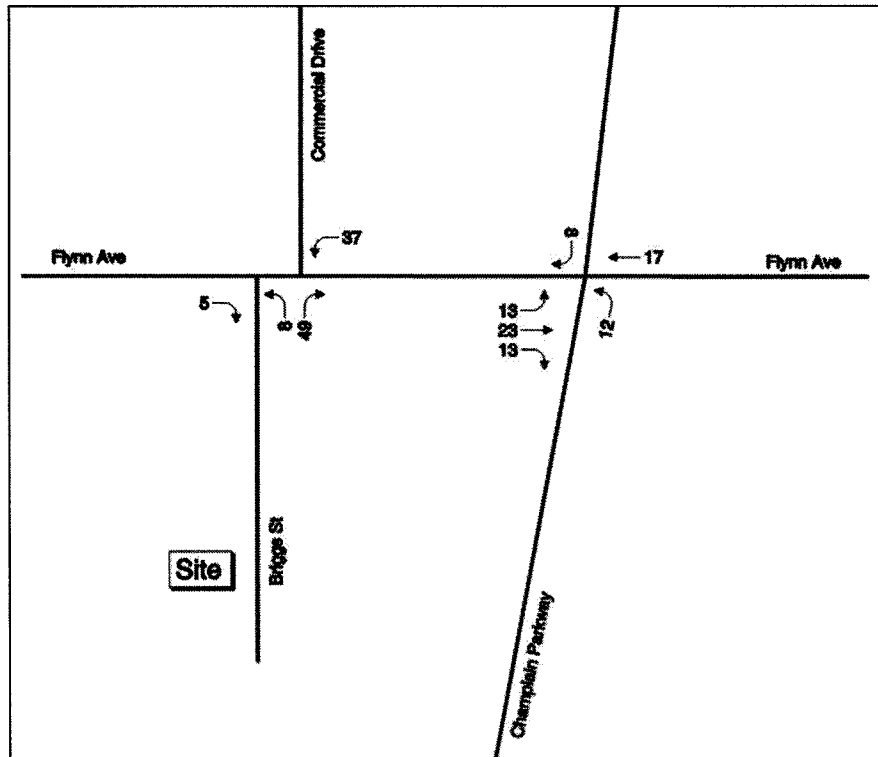
² Petra Cliffs does not open until 10 AM so the morning peak hour was not considered in this analysis.

³ The future trip rate formula was developed to account for the following factors: 1) as shown in the Appendix, trip generation counts at Petra Cliffs from 2012 and two other New England climbing walls generate an average trip generation rate of 3.17 trips/ksf during the peak hour (compared to a rate of 9.73 trips/ksf counted at Petra Cliffs on 7/11/18); 2) based on the Petra Cliffs' owner's understanding of the climbing market in the Burlington area, an 80% increase in the building footprint would not likely generate an 80% increase in customer visits; 3) the July 11th site driveway counts were conducted during a particularly busy period with a pulse of summer camp student pick-ups occurring during a fairly tight window immediately after 4:00 PM. This surge condition resulting from camp pick-up does not occur during the remainder of the year. Based on these reasons, and general engineering judgement, it was concluded that a reasonable approximation of the future trip generation rate would be equivalent to the current trip generation rate multiplied by the ratio of the new vs. old building footprint, divided by two.

TRIP DISTRIBUTION

Figure 3 below shows the estimated distribution of net new trips generated by the proposed development in the Build year 2024 with the Champlain Parkway in place. The distribution of exiting and entering traffic was estimated based on current traffic patterns and a review of traffic distribution assumptions in the Champlain Parkway FSEIS⁴ and in the South End City Market Traffic Impact Study. It should be noted that the current street network in the vicinity of the project site includes a robust street grid with multiple routing options which helps to disperse any potential traffic impacts. These adjacent streets are mostly residential which may be sensitive to any additional commercial traffic occurring prior to the construction of the Champlain Parkway. The construction of the Champlain Parkway forces all trips to access the site via Flynn Avenue.

Figure 3: 2024 Weekday PM Peak Hour Distribution of Net New Site-Generated Trips (Post-Parkway)



⁴ 2009 Champlain Parkway Final Supplemental Environmental Impact Statement scenario, "2028 PM Peak Hour Traffic Volumes C-1 Section & C-2 Section Only." CHA, 18 August 2009.

TRAFFIC NETWORKS

The weekday evening peak period was selected for analysis purposes because it represents the peak conditions for site-generated traffic (Petra Cliffs opens at 10 AM). Turning movement count data at the adjacent study intersection of Flynn Avenue/Briggs Street was collected on Wednesday, July 11, 2018 by VHB.

To evaluate the impact of the proposed development within the study area, evening peak hour traffic volumes were adjusted to design hour conditions and projected for a 5-year forecast horizon (2024). Copies of the traffic volume count data are provided in the Appendix.

Traffic Volume Variation

Since it is impractical to design for the highest volume encountered during the year, VTrans guidelines recommend a compromise between capacity and cost. Design Hourly Volume (DHV) criteria allow roads to be designed for the 30th highest hourly volume of the year. Historical data from the closest, most comparable VTrans Automatic Traffic Recorder (ATR) station on Flynn Avenue (location ID BURL129) as well as expected DHV values in the 2017 VTrans Red Book were reviewed to establish appropriate DHV adjustment factors.⁴

Background Growth

Background traffic growth is a function of expected land development in the region. To predict a rate at which traffic can be expected to grow during the forecast period, historical traffic growth was examined. The regression analysis chart in the 2017 VTrans Redbook⁵ for urban roads suggests a background growth rate of 1.03 for projecting traffic volumes from 2018 to 2024.

No Build and Build Traffic Networks

The 2024 No Build and Build traffic volumes were developed from current count data, growth factors from the VTrans regression analysis chart, and projected volumes from the Southern Connector/Champlain Parkway MEGC-M5000(1) traffic study prepared by CHA⁶, and the 2016 City Market Traffic Impact Study⁷. Under the Build scenario, it was assumed that the existing Petra Cliffs facility would continue to generate 73 peak hour trips to account for the future trip generation from that site.

The directional distribution of the new site-generated traffic was approximated based on existing and projected travel patterns in the area. Based on this distribution, the site-generated trips were added to the 2024 No Build peak hour

⁵ Continuous Traffic Counter Report (The Redbook), Vermont Agency of Transportation, 2017.

⁶ 2009 Champlain Parkway Final Supplemental Environmental Impact Statement (FSEIS) scenario, "2028 PM Peak Hour Traffic Volumes C-1 Section & C-2 Section Only," CHA, 18 August 2009.

⁷ Proposed City Market/Onion River Co-Op (South End) Traffic Impact Study (UPDATED). VHB, 27 July 2016.

traffic volumes to establish the 2024 Build network. The 2024 No Build and Build weekday evening peak hour networks are shown in **Figure 4** and **Figure 5**, respectively.

Figure 4: 2024 No Build Peak Hour Volumes

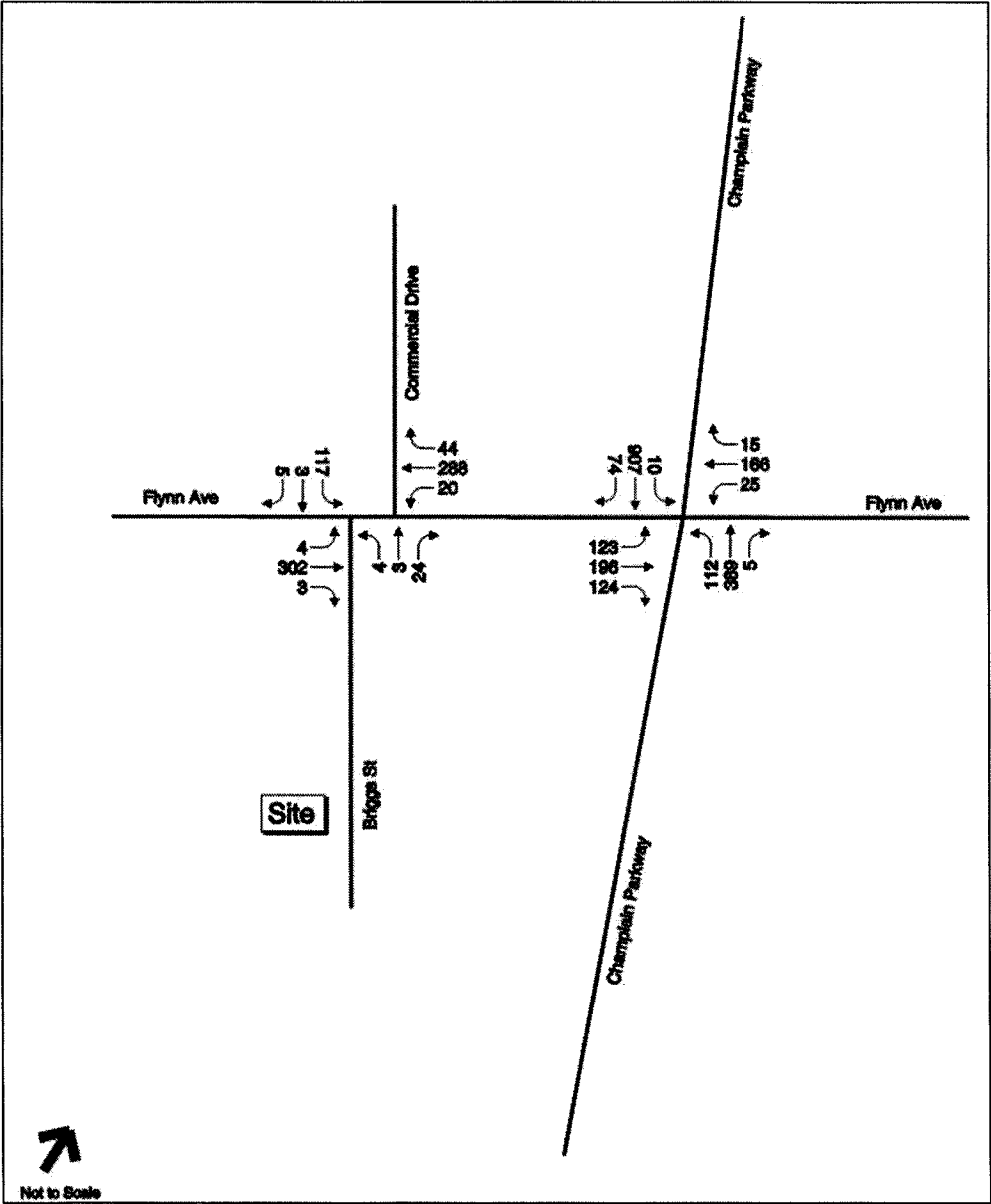
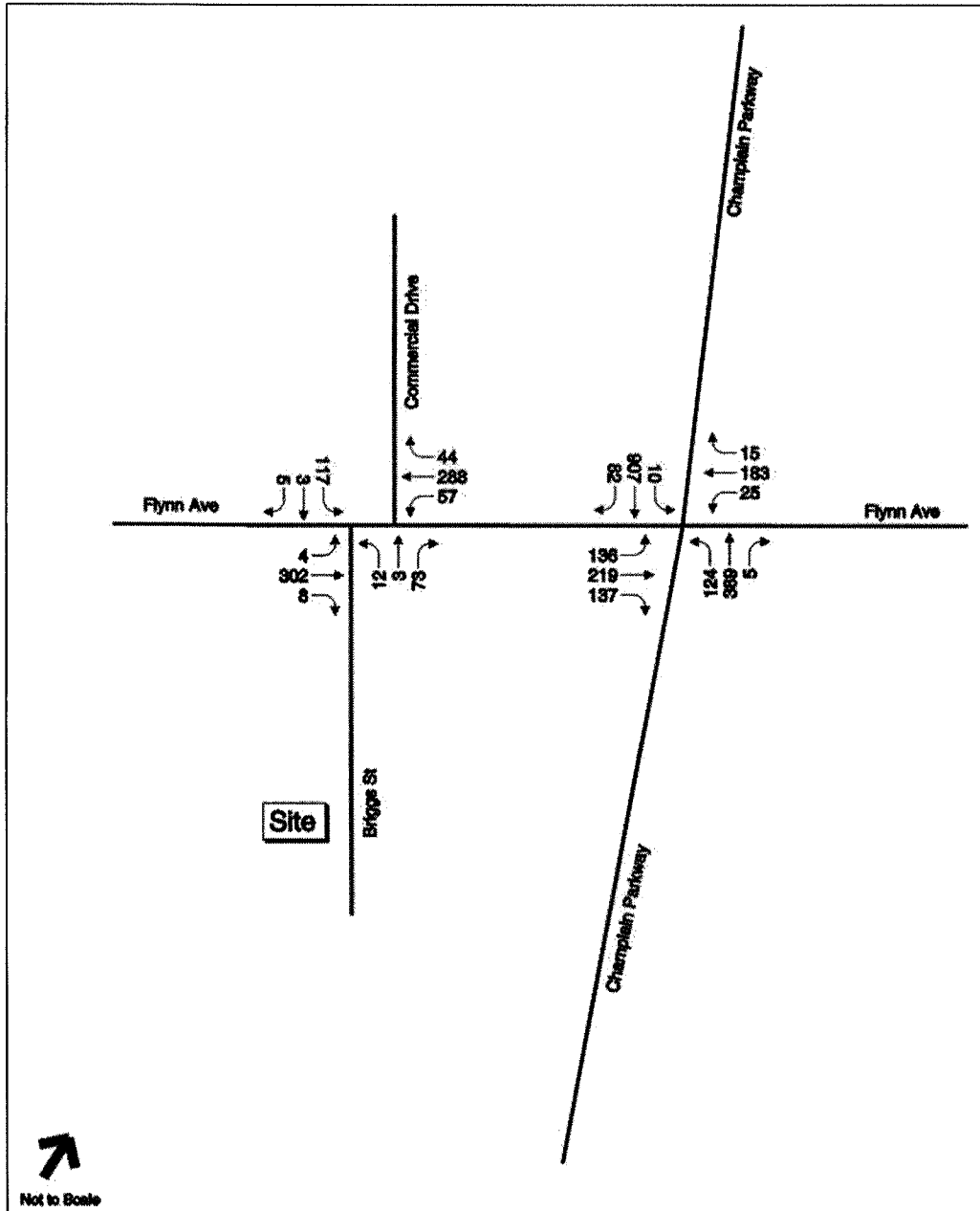


Figure 5: 2024 Build Peak Hour Volumes



TRAFFIC ANALYSES

Intersection Capacity Analyses

Intersection capacity analyses were performed for the study area intersections. Levels of service (LOS) were calculated based on the criteria published in the *2000 Highway Capacity Manual*.⁸ Level of service is the term that defines the conditions that may occur on a given roadway or at an intersection when accommodating various traffic volume loads. Levels of service range from A to F with LOS A representing generally free flowing operating conditions and LOS F representing generally congested conditions. Copies of the LOS calculations are provided in the Appendix.

Signalized Intersections

Table 2 summarizes the operational analysis at the *signalized* study intersection of Flynn Avenue at the Champlain Parkway during the 2024 evening peak hour under No Build and Build conditions (with and without additional modifications to the intersection lane geometry and signal timing). The analysis used the traffic volumes, and traffic signal timing/phasing, and other Synchro/HCM inputs from the Southern Connector/Champlain Parkway MEGC-M5000(1) Final Supplemental Environmental Impact Statement (FSEIS) to ensure consistency between the analysis conducted for the Parkway FSEIS and this traffic study⁹.

The “with modifications” scenarios summarized below include the intersection modifications recommended in the City Market Traffic Study which include switching from exclusive to leading concurrent pedestrian phasing and adding an eastbound right turn lane which runs with permitted and overlap phasing. The City Market project was constructed to accommodate additional storage for this new turn lane on Flynn Avenue if and when it is deemed to be needed. It is important to note that these modifications will not be incorporated into the Parkway design and would only be advanced at the City’s discretion following the completion of the Parkway’s construction.

Table 2 shows that the addition of the new Petra Cliffs’ traffic has minimal impacts to overall intersection operations, adding approximately 8 seconds of overall delay to the intersection with the identified modifications in place.

⁸ Highway Capacity Manual, Federal Highway Administration, Transportation Research Board, 2000.

⁹ In our opinion, the FSEIS Synchro/HCM inputs include several factors and adjustments that result in an overly conservative analysis, notably a Peak Hour Factor adjustment of 0.9 – which effectively increases all volumes (including site generated trips) by 10 and an exclusive pedestrian phase at the Flynn Avenue / Champlain Parkway intersection.

Table 2: Signalized Intersection Capacity Analysis Summary

2024 - With Champlain Parkway														
Intersection	Peak Hour	No Build			No Build with Modifications^			Build			Build with Modifications^			
		v/c*	Delay**	LOS***	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	
SIGNALIZED INTERSECTION														
Champlain Parkway & Flynn Ave	Weekday PM	1.06	80.6	F	0.98	48.3	D	1.11	98.3	F	1.03	56.7	E	

* Volume to capacity ratio

** Delay expressed in seconds per vehicle

*** Level of service

^ Modifications to Flynn Ave/Parkway intersection include concurrent pedestrian phasing and new eastbound right-turn lane

Unsignalized Intersections

Table 3 summarizes the operational analysis at the *unsignalized* study intersection during the 2024 evening peak hour under No Build and Build conditions. As shown in the table, the east and westbound Flynn Avenue approaches are expected to operate at LOS A conditions during both the No Build and Build scenarios. The northbound and southbound approaches are expected to operate at LOS B and LOS C, respectively, during the No Build scenario with the southbound 208 Flynn Avenue Commercial Driveway just passing the threshold to LOS D in the Build conditions.

Table 3: Unsignalized Intersection Capacity Summary

Intersection	Peak Hour	2024 - With Champlain Parkway					
		No Build			Build		
		v/c*	Delay**	LOS***	v/c	Delay	LOS
UNSIGNALIZED INTERSECTION							
Briggs St & Flynn Ave	Weekday PM						
EB from Flynn Ave		-	0.1	A	-	0.1	A
WB from Flynn Ave		0.02	0.6	A	0.05	1.6	A
NB from Briggs St		0.05	11.3	B	0.15	12.0	B
SB from Commercial Drive		0.34	20.0	C	0.46	29.2	D

* Volume to capacity ratio

** Delay expressed in seconds per vehicle

*** Level of service

It should be noted that the capacity analysis results for the Briggs Street/Flynn Avenue intersection do not fully account for the proximity of the intersection to the proposed signal on Flynn Avenue at the Champlain Parkway. Potential queuing on Flynn Avenue generated by the Champlain Parkway signal would impact the ability for vehicles to enter Flynn Avenue from Briggs Street and the 208 Flynn Avenue driveway. In particular, access from the 208 Flynn Avenue driveway will be significantly impacted by the proposed signal, given the lack of separation between the driveway and the signal's eastbound stop bar. This condition is attributable to the geometric design of the Flynn Avenue / Champlain Parkway intersection, not to Petra Cliffs.

TRAFFIC MITIGATION

Based on the assessment of existing site conditions, crash data, and existing and projected traffic volumes, no off-site traffic improvements were deemed necessary to mitigate the impacts of the net new peak hour trips generated by the expansion of Petra Cliffs Climbing Center & Mountaineering School.

Several operational improvements were identified to address the LOS F conditions that were calculated at the Flynn Avenue/Champlain Parkway intersection under both the 2024 No Build and Build scenarios. However, it is our understanding that any proposed changes to the currently approved Champlain Parkway FSEIS design (e.g. additional turn lanes, signal timing changes, etc.) would trigger unacceptable permitting-related impacts and schedule setbacks for the Champlain Parkway project.

Given the overall conclusions of this traffic assessment and permitting-related constraints associated with the Champlain Parkway, the recommended mitigation measures that could be implemented are listed below. It is recognized that these mitigation measures are outside of Petra Cliffs' control, but they are being recommended to improve intersection operations once modifications can be made to the intersection.

Potential Parkway Traffic Mitigation Outside of Petra Cliffs' Control:

- Restripe the eastbound approach to the Flynn Avenue/Champlain Parkway intersection to add an exclusive right-turn lane (or left-turn lane, if observed volumes and subsequent analysis shows improved performance when compared to an exclusive right-turn lane). Add appropriate vehicle detection, signal hardware, and timing changes to accommodate the new right-turn lane.
- Modify the traffic signal phasing at the Flynn Avenue/Champlain Parkway intersection to change from an exclusive pedestrian phase to a leading concurrent pedestrian phase and optimize the signal splits based on field observations (without adversely affecting the overall Parkway coordination).
- Investigate the opportunities for a new break in access on the Champlain Parkway to permit right-in/right-out access directly from Briggs Street.
- Investigate opportunities to modify the internal traffic circulation pattern on the 208 Flynn Avenue lot to create a one-way circulation pattern with traffic entering at the eastern site drive (proximate to Briggs Street) and exiting at the western site drive (proximate to the railroad tracks).

The first two items enumerated above were included in the "with modifications" congestion analysis scenarios summarized previously in **Table 2** and show overall improvement to the intersection operations.

CONCLUSIONS

The proposed Petra Cliffs climbing facility development program consists of relocating the existing 7,500 square foot facility and constructing a new 13,470 square foot on Briggs Street in Burlington, Vermont. The trip generation estimates conducted for this study indicate that the expansion of Petra Cliffs will generate approximately 118 total trips during the weekday evening peak hour. After accounting for non-automobile trips (e.g. walkers, cyclists, and transit users), the proposed facility is expected to generate approximately 99 *net new* vehicular trips during the evening peak hour.

Primary access and egress is proposed to be provided to Briggs Street via a main driveway aligned with Lyman Avenue and an additional entrance at the southern end of the site.

From a traffic operations perspective, the intersection capacity analysis results demonstrated that the east/west approaches to the Flynn Avenue/Briggs Street intersection are estimated to operate at LOS A, while the north and southbound approaches will operate at LOS B and C, respectively, during the No Build scenario with the 208 Flynn Avenue Commercial Driveway approach dropping to LOS D conditions in the Build scenario.

The Flynn Avenue/Champlain Parkway intersection is expected to operate at LOS F during both the 2024 No Build and Build conditions. While specific improvements to the Flynn Avenue/Champlain Parkway intersection are outside of Petra Cliffs' control due to Parkway permit implications, it is recommended that various striping, signalization, and geometric modifications be evaluated along the alignment of the Champlain Parkway and Flynn Avenue to improve future operations. As shown in the Congestion Analysis section, the implementation of these improvements can improve overall operations of the intersection from LOS F to LOS E, even under the Build condition.

- NOTE -

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

FINAL APPROVAL

SIGNED: [Signature] DATE: 9/12/18
Planning & Zoning Department
Burlington, Vermont [Signature]

→ For entire 18-ps. plan set.

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- METAL PANEL 'A'
- METAL PANEL 'B'
- METAL PANEL 'C'

PETRA CLIFFS CLIMBING CTR.
COLOR-RENDERED PERSPECTIVE VIEW
FROM LYMAN AVE. INTERSECTION

7.28.18
SNC.

PETRA CLIFFS CLIMBING CENTER
75 BRIGGS STREET
BURLINGTON, VERMONT

CLIENT:
CHAREST ALPINISM LLC
DESIGN PHASE:
PERMIT
DRAWINGS

PERMIT
DRAWINGS
SCALE: 1/2" = 1'-0"

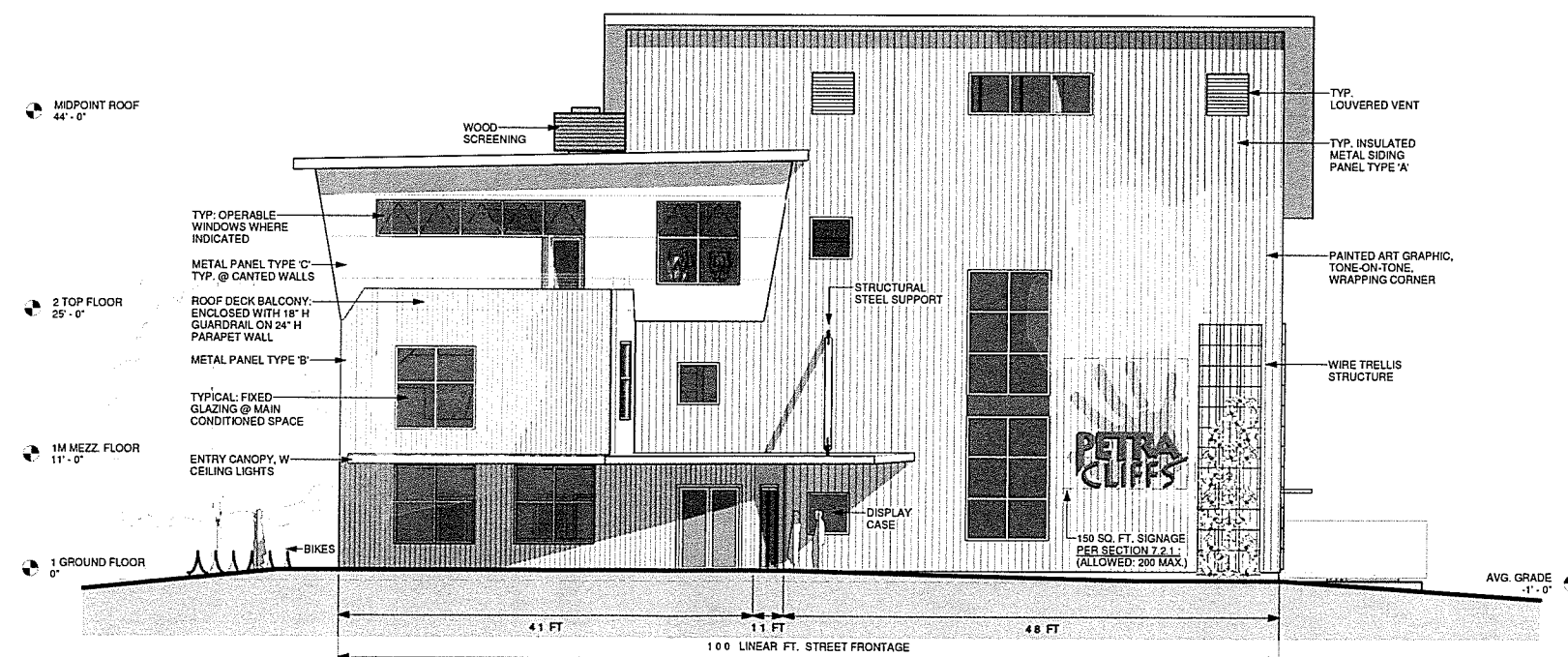
A2.0

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1 BRIGGS STREET ELEVATION
1/8" = 1'-0"

PETRA CLIFFS CLIMBING CENTER
75 BRIGGS STREET
BURLINGTON, VERMONT

CLIENT:
CHAREST ALPINISM LLC
DESIGN PHASE:
PERMIT
DRAWINGS

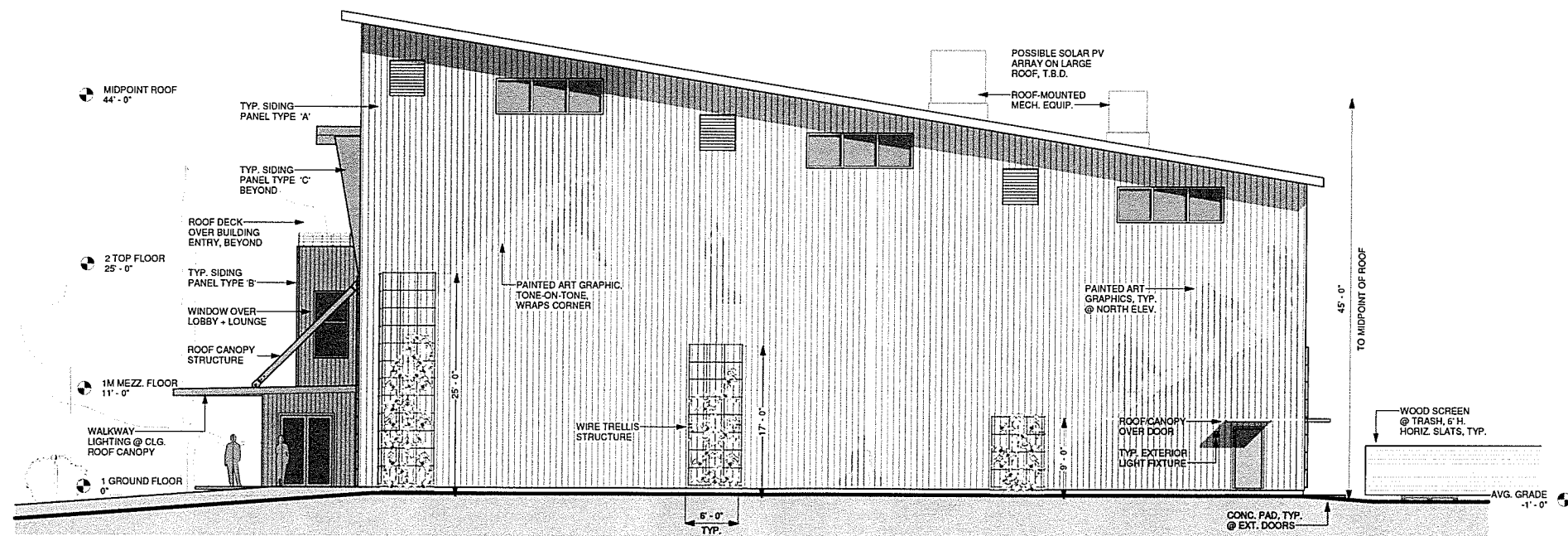
EAST
BUILDING
ELEVATION
SCALE: 1/8" = 1'-0"

A2.1

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① NORTH FACING ELEVATION
1/8" = 1'-0"

PETRA C CLIFFS CLIMBING CENTER
75 BRIGGS STREET BURLINGTON, VERMONT

CLIENT:
CHAREST ALPINISM LLC
DESIGN PHASE:
PERMIT
DRAWINGS

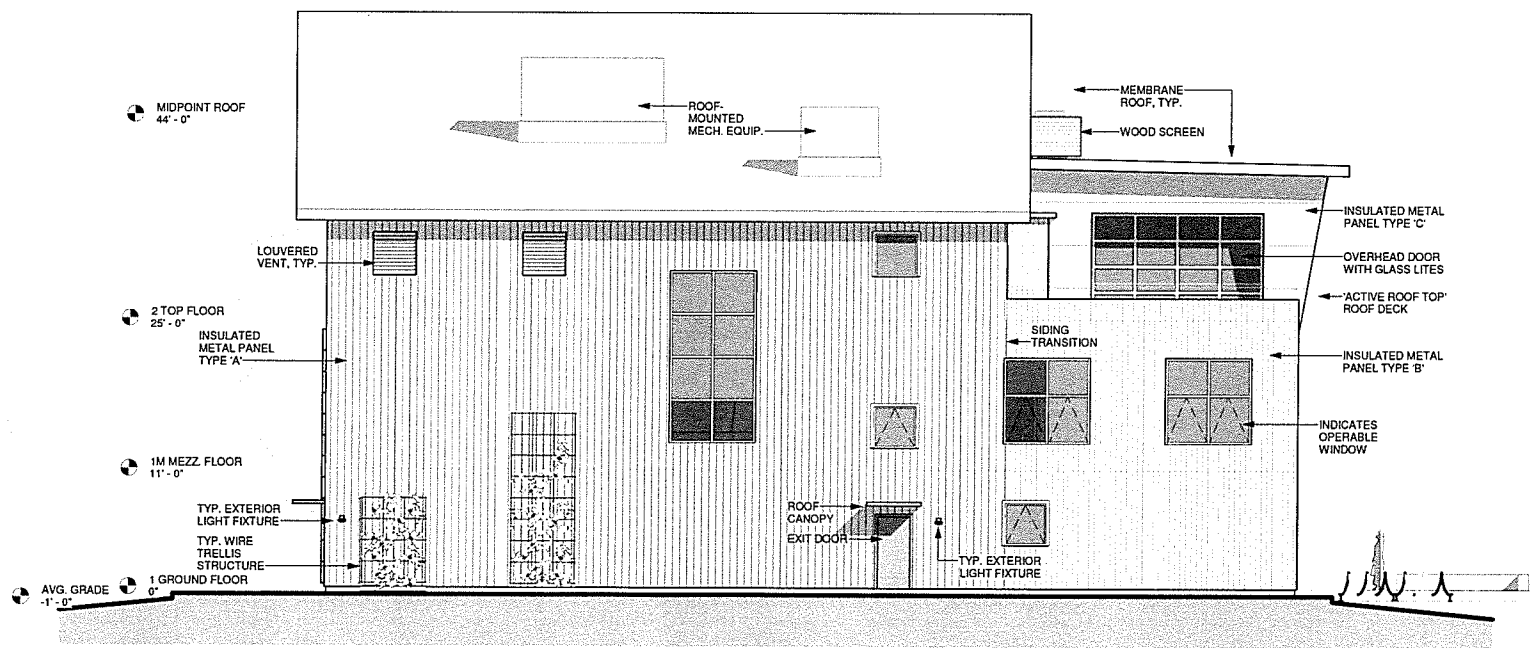
NORTH
BUILDING
ELEVATION
SCALE: 1/8" = 1'-0"

A2.2

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1 WEST FACING ELEVATION
1/8" = 1'-0"

PETRA C CLIFFS CLIMBING CENTER
75 BRIGGS STREET BURLINGTON, VERMONT

CLIENT:
CHAREST ALPINISM LLC
DESIGN PHASE:
PERMIT
DRAWINGS

WEST
BUILDING
ELEVATION
SCALE: 1/8" = 1'-0"

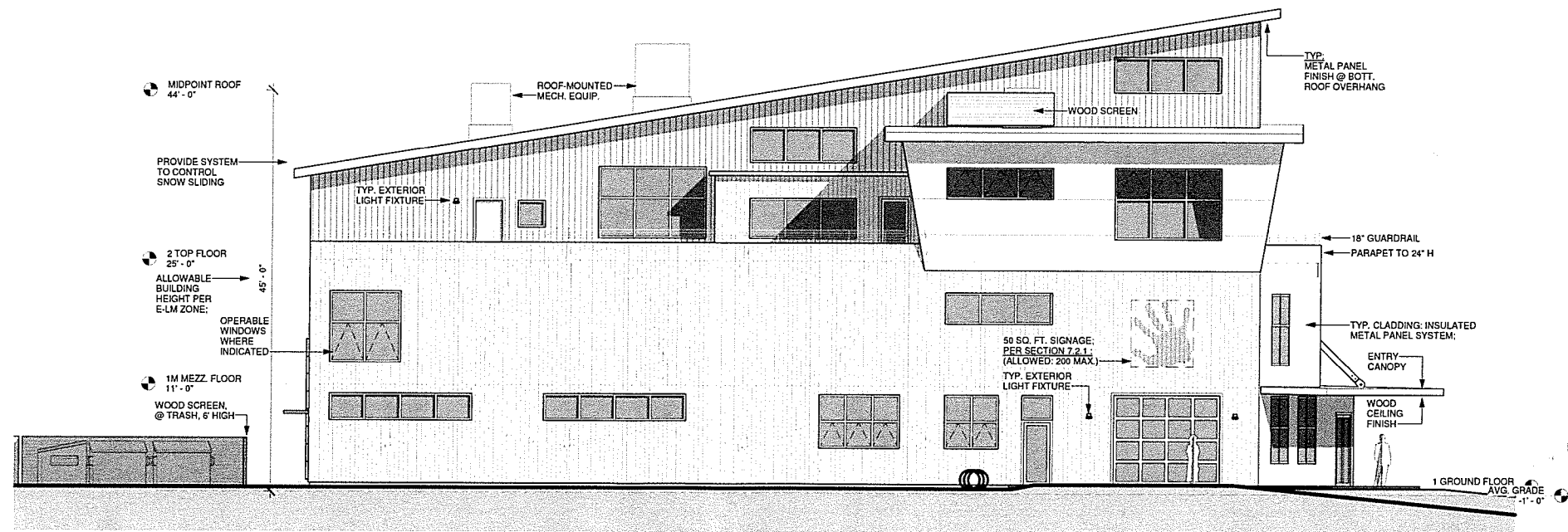
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1 SOUTH FACING ELEVATION
1/8" = 1'-0"

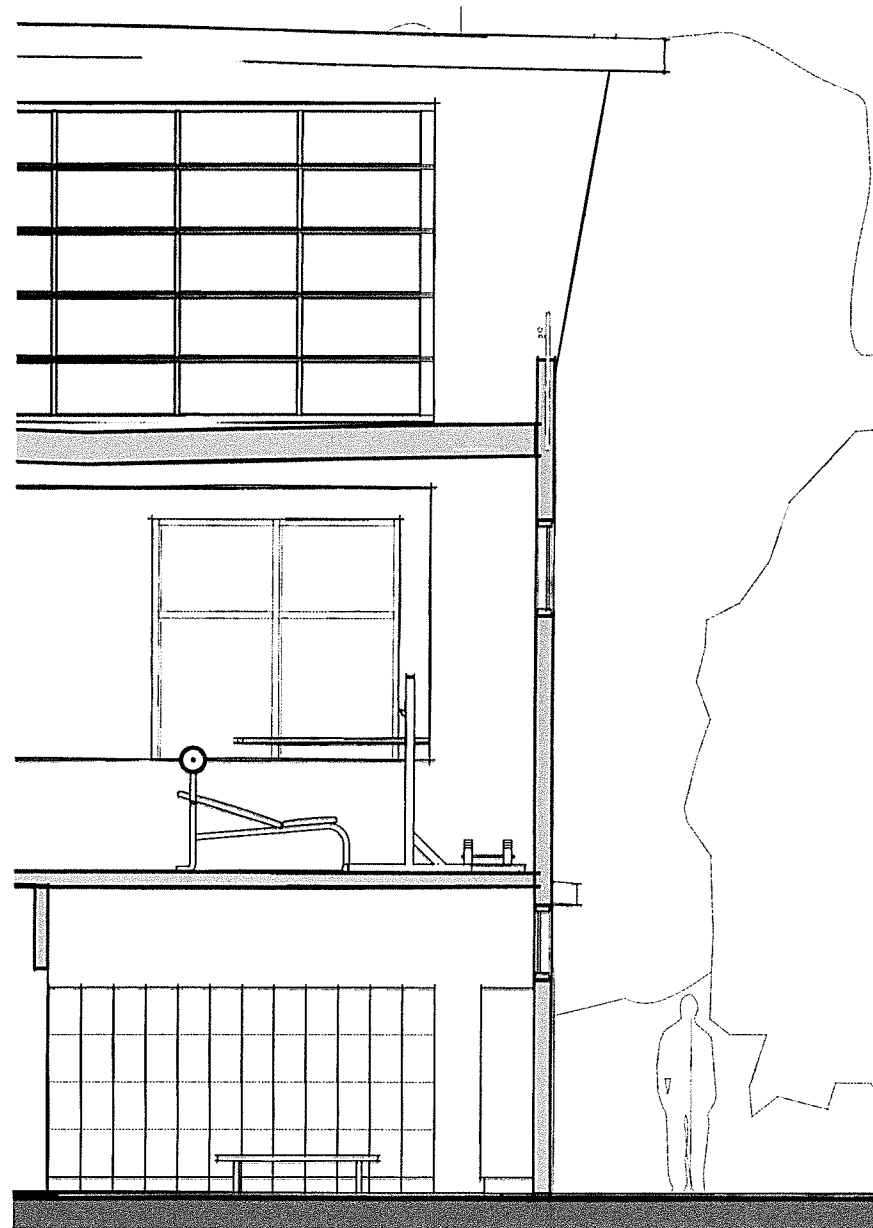
PETRA C CLIFFS CLIMBING CENTER
75 BRIGGS STREET
BURLINGTON, VERMONT

CLIENT:
CHAREST ALPINISM LLC
DESIGN PHASE:
PERMIT
DRAWINGS

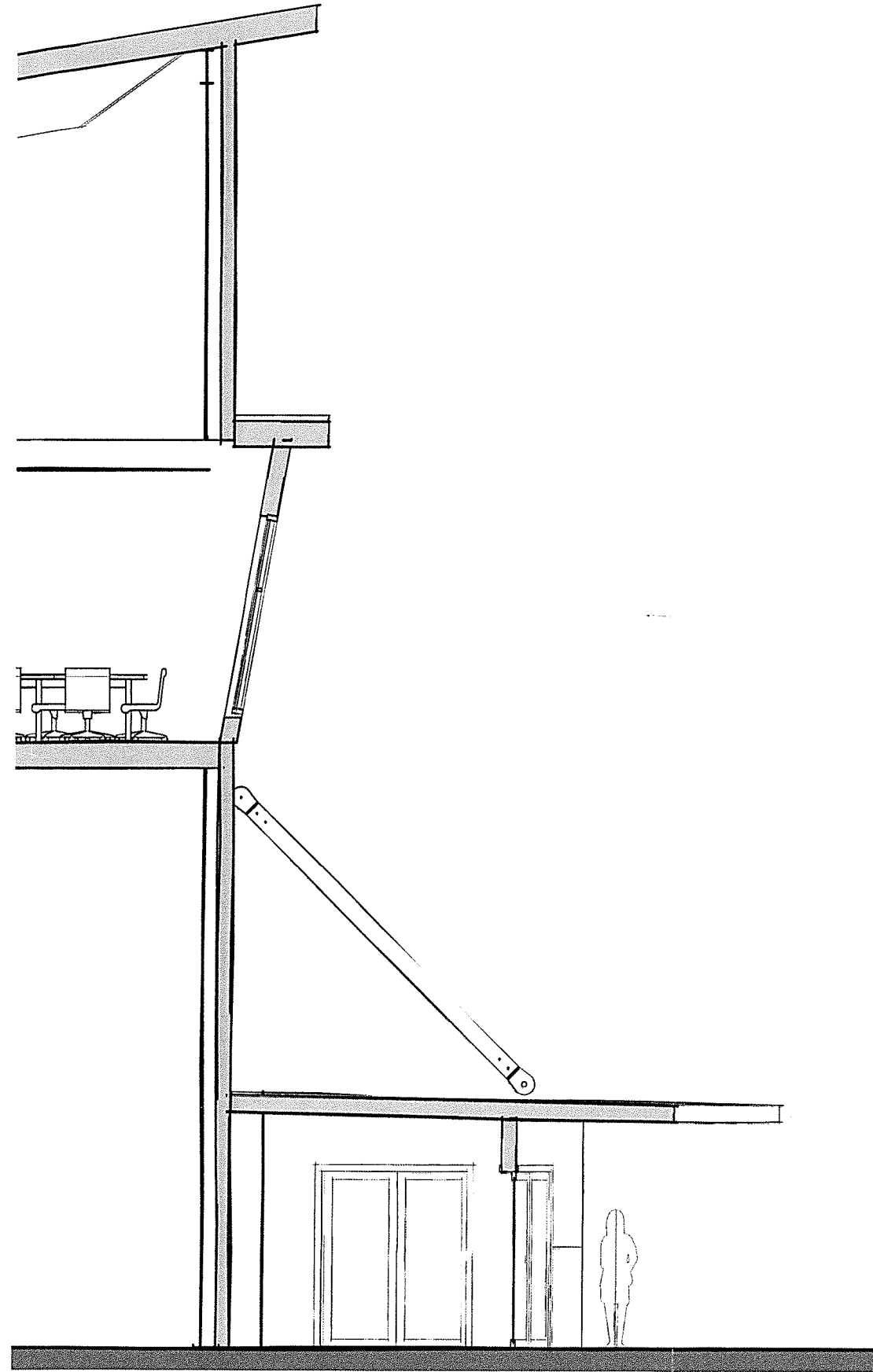
SOUTH
BUILDING
ELEVATION
SCALE: 1/8" = 1'-0"

A2.4

DATE: AUGUST 6, 2018
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② SOUTH FACADE PROFILE
3/8" = 1'-0"



① BRIGGS STREET FACADE PROFILE
3/8" = 1'-0"

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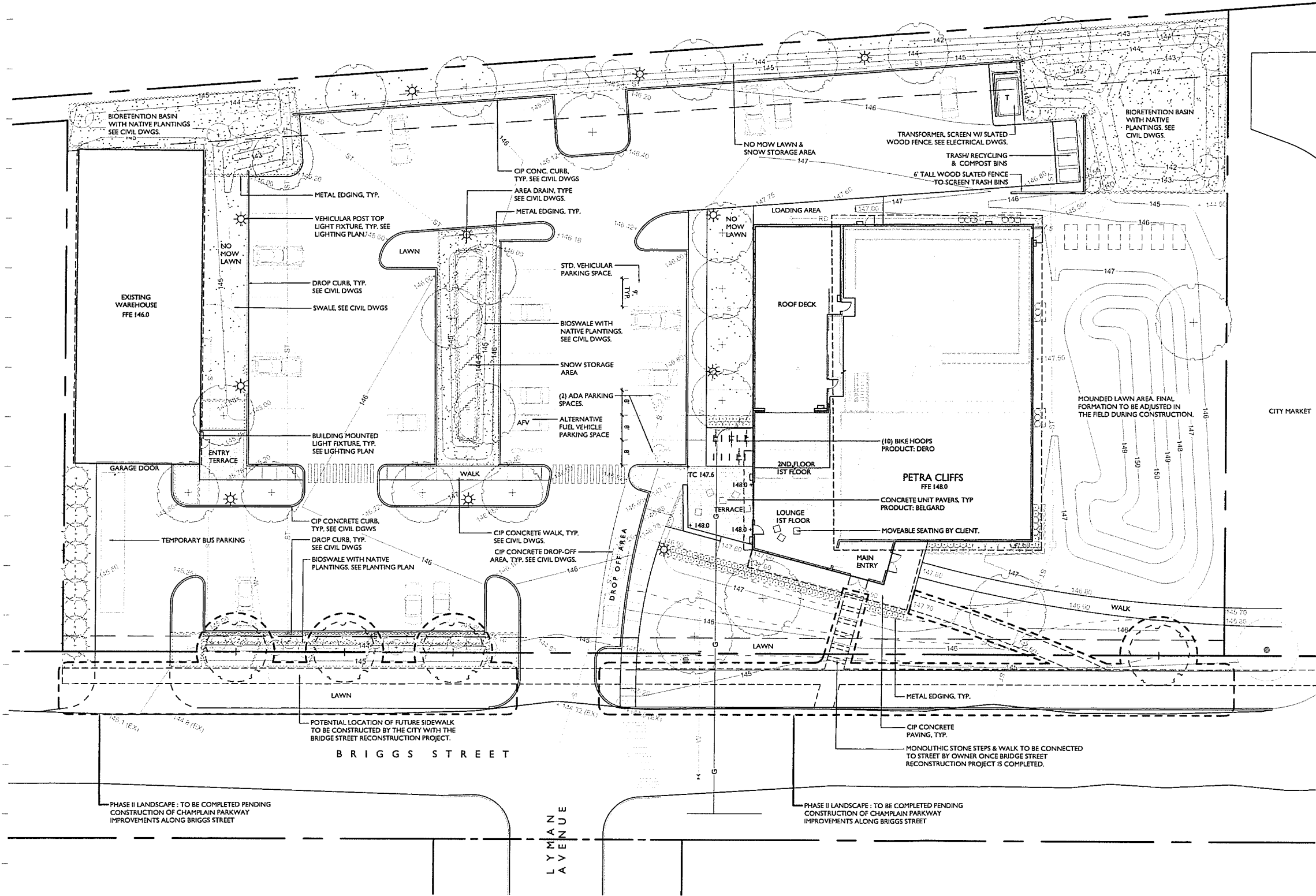
PETRA CLIFFS CLIMBING CENTER
75 BRIGGS STREET BURLINGTON, VT

CLIENT:
CHAREST ALPINISM, LLC
DESIGN PHASE:
PERMIT
DRAWINGS

FACADE
WALL
SECTIONS
SCALE: 3/8" = 1'-0"

A3

DATE: June 20, 2018
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- GENERAL NOTES**
1. Contractor is responsible for all damage due to his operations inside and outside the contract limit line.
 2. Contractor is responsible for checking spot elevations and verifying proposed grades by providing grade stakes. Grades must be approved by Landscape Architect prior to proceeding.
 3. Contractor shall blend new work smoothly with existing grades at contract limit line and/or limit of construction line.
 4. Contractor to verify that subgrades are 6 inches below finished grade prior to spreading top soil for seeded areas.
 5. All walks shall have 2% cross pitch, and all step treads and wall caps shall have 1% cross pitch unless otherwise noted.
 6. Light fixture locations may be field adjusted with prior Landscape Architect approval.
 7. Walkway layout to be approved by Landscape Architect prior to construction.
 8. Site furniture and wall locations to be verified by Landscape Architect prior to installation.
 9. General Contractor is responsible for all erosion control measures during construction.
 10. It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.
 11. Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
 12. Base survey prepared by Lamoureux & Dickinson

WAGNERHODGSON
LANDSCAPE ARCHITECTURE
VT002 6E4.0010 NYS10 567.1791 wagnerhodgson.com

LOT COVERAGE

SITE AREA - 73,395 SF (1.68 AC.)
PERVIOUS AREA - 25,313 SF = 34.5%
IMPERVIOUS AREA - 48,082 SF = 65.5%
(80% ALLOWED)

PARKING CALCULATIONS

ASSUMPTIONS
SHARED USE DISTRICT
USE - HEALTH CLUB
MIN. PRKG - 2/1000 SF
MAX. PRKG. - 3/1000 SF x 1.25

EX. BLDG. - 4,046SF
(4X3X1.25) = 15 SPACES
PROP. BLDG. - 13,000SF
(13X3X1.25) = 49 SPACES

TOTAL MAX. PRKG. SPACES = 64

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PETRA CLIFFS
75 BRIGGS STREET,
BURLINGTON, VERMONT

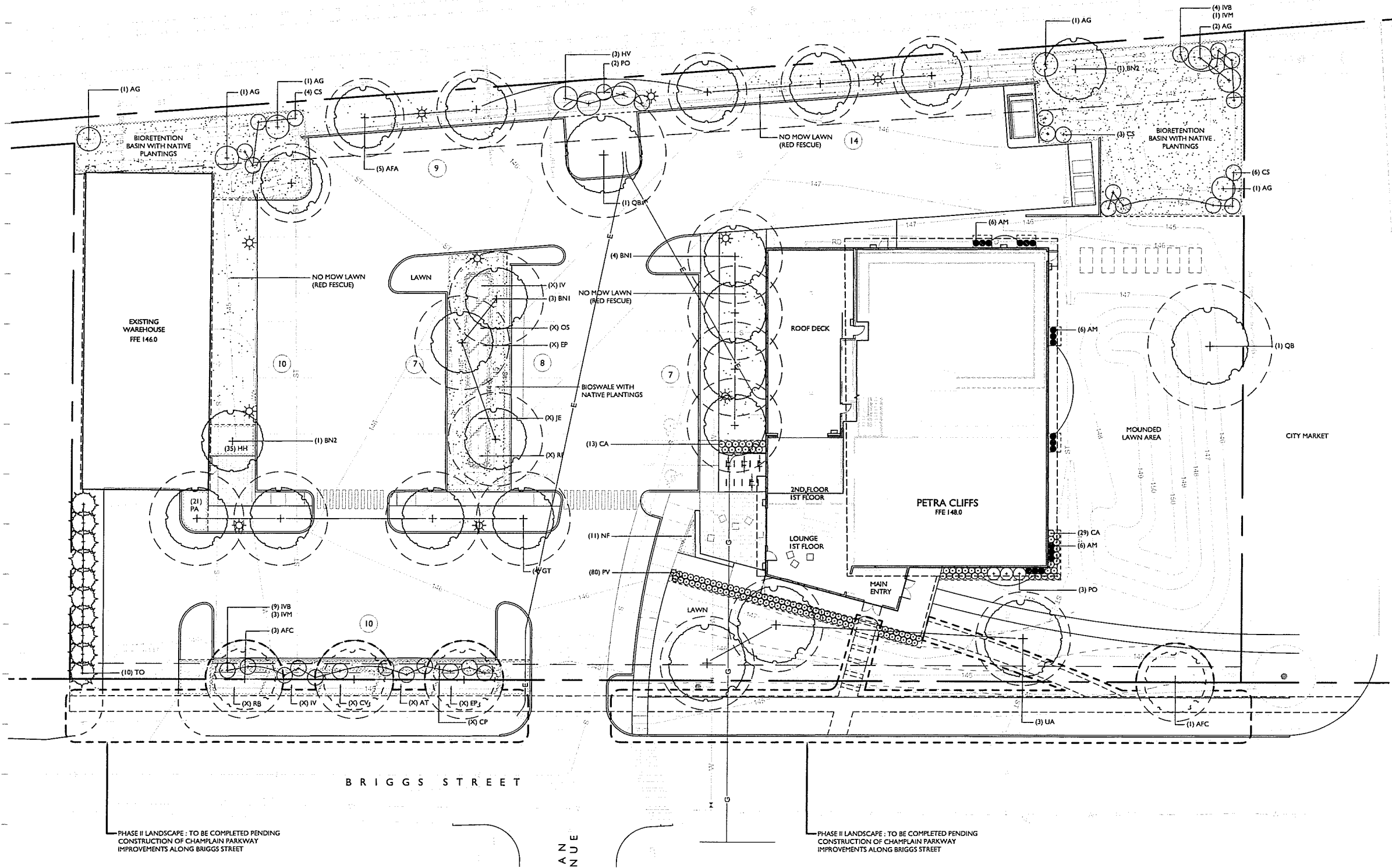
**LAYOUT AND
MATERIALS PLAN**

JOB NO. 807
SCALE 1/16"=1'-0"
DRAWN BY: AH
DATE 08.06.2018

L100

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NO. DESCRIPTION DATE
1 PLANTING PLAN REVISION 07.02.2018

PETRA CLIFFS
75 BRIGGS STREET,
BURLINGTON, VERMONT

PLANT SCHEDULE

KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
DECIDUOUS & EVERGREEN TREES					
AFA	5	Acer freemanii 'Autumn Blaze'	FREEMAN MAPLE	2.5"-3" Cal.	SEE PLAN
AFC	3	Acer freemanii 'Celebration'	CELEBRATION MAPLE	2.5"-3" Cal.	SEE PLAN
BN1	7	Betula Nigra 'Heritage'	HERITAGE RIVER BIRCH	2"-2.5" Cal.	SEE PLAN
BN2	2	Betula Nigra 'Heritage' (Multi-stem)	HERITAGE RIVER BIRCH	10'-12' Ht.	SEE PLAN
GT	4	Gleditsia tricanthus 'Shademaster'	HONEY LOCUST	2.5"-3" Cal.	SEE PLAN
QB	2	Quercus bicolor	SWAMP WHITE OAK	2.5"-3" Cal.	SEE PLAN
TO	10	Thuja occidentalis 'Pyramidalis'	EASTERN ARBORVITAE	8'-10' Ht.	SEE PLAN
UA	3	Ulmus americana 'Princeton'	AMERICAN ELM	2.5"-3" Cal.	SEE PLAN
SHRUBS					
AG	7	Amelanchier grandiflora 'Autumn Brilliance'	SERVICEBERRY (Multi-stem)	#3	SEE PLAN
CS	13	Cornus stolonifera 'Pucker Up!'	DWARF RED-TWIG DOGWOOD	#3	3' O.C.
HV	3	Hamamelis vernalis	VERNAL WITCHHAZEL	#3	3' O.C.
IVB	13	Ilex verticillata 'Berry Poppins'	DWARF WINTERBERRY (female)	#3	3' O.C.
IVM	4	Ilex verticillata 'Mr. Poppins'	DWARF WINTERBERRY (male)	#3	3' O.C.
PO	5	Physocarpus opulifolius 'Ruby Spice'	NINEBARK	#3	4' O.C.

ORNAMENTAL GRASSES PERENNIALS & VINES

AM	18	Aristolochia macrophylla	DUTCHMEN'S PIPE	#1	24" O.C.
CA	42	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	#1	24" O.C.
HH	35	Hemerocallis 'Hyperion'	DAYLILY	#1	18" O.C.
NF	11	Nepeta faassenii Blue Wonder'	CATMINT	#1	18" O.C.
PA	21	Perovskia atriplicifolia	RUSSIAN SAGE	#1	18" O.C.
PV	80	Panicum variegatum 'Shenandoah'	SWITCHGRASS	#1	24" O.C.

* NO MOW SEED MIX - RED FESCUE - 14,895 SF

BIORETENTION BASINS & BIOSWALES

AT	X	Asclepias tuberosa	BUTTERFLY WEED	PLUGS	12" O.C.
CP	X	Carex pennsylvanica	PENNSYLVANIA SEDGE	PLUGS	12" O.C.
CV	X	Carex vulpinoidea	FOX SEDGE	PLUGS	12" O.C.
EP	X	Eupatorium dubium 'Phantom'	DWARF JOE PYE WEED	PLUGS	12" O.C.
OS	X	Onoclea sensibilis	SENSITIVE FERN	PLUGS	12" O.C.
IV	X	Iris versicolor	NORTHERN BLUE FLAG	PLUGS	12" O.C.
JE	X	Juncus effusus	SOFT RUSH	PLUGS	12" O.C.
RF	X	Rudbeckia fulgida sullivanii 'Goldstrum'	BLACK-EYED SUSAN		

* WET MEADOW SEED MIX - TO BE DETERMINED - 5,650 SF

PLANTING NOTES

- All plant material in the plant schedule shall be nursery grown in accordance with ANSI in accordance with Z.60.1 Standards for measurement of nursery stock.
- All plants shall be guaranteed by the Contractor for a period of one year from date of receipt of Provisional Acceptance of the completed installation by the Owner.
- Replacement plantings will be required prior to Final Acceptance for any plants which are missing, not true to specifications, have died or are unhealthy or uncharacteristic of the species (due to excessive pruning, dieback or other reasons).
- All plant materials shall be selected and tagged at the nursery by Landscape Architect.
- The Landscape Architect's approval is required for any plant material substitutions.
- The Contractor is responsible for immediately notifying the Landscape Architect if any plant quantity discrepancies exist between the planting plan and the plant list.
- All shrubs and trees will be sprayed with the anti-desiccant "Wilt-Pruf" (or approved equal) prior to the first winter (no later than November 30).
- The Landscape Contractor shall have the General Contractor locate all underground utilities in areas to be landscaped prior to commencing any excavation. Adjustments to tree locations will be allowed where utility conflicts are clearly a problem and with prior site approval by Landscape Architect.
- All plant beds, shrub and tree location shall be staked in the field by Contractor for Landscape Architect approval prior to installation.
- Adjustments to plant beds shall be approved by Landscape Architect.
- General Contractor is responsible for all erosion control measures during construction.
- All disturbed areas are to be topsoiled and seeded or sodded, as indicated in the planting plan.
- Mulch shall consist of double-shredded hardwood mulch or approved equal and Contractor is responsible for providing samples of mulch to Landscape Architect. Mulch plant materials as shown on plan and details.
- It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.

- Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
- During construction, and until the end of warranty period, existing trees that are showing signs of stress as determined by the Landscape Architect are to be deep root fertilized, two injections per caliper inch per tree at 18" - 24" depth with Peter's 20/20/20 fertilizer or Landscape Architect approved equal.
- Contractor is responsible for verifying and confirming all plant counts as supplied by the Landscape Architect with field conditions as constructed. Any discrepancies shall be reported to Landscape Architect for approval and direction.
- Tree transplanting shall be performed by a suitable hydraulic tree spade, sized as necessary to perform the work.
- Prior to commencement of any construction, all existing trees to remain shall receive tree protection fence at outer edge of dripline whenever possible.

PLANTING PLAN

JOB NO. 807
SCALE 1/16"=1'-0"
DRAWN BY: AH
DATE 08.06.2018

L200

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NO.	DESCRIPTION	DATE
1	REVISED PHOTOMETRIC PLAN	07.10.2018

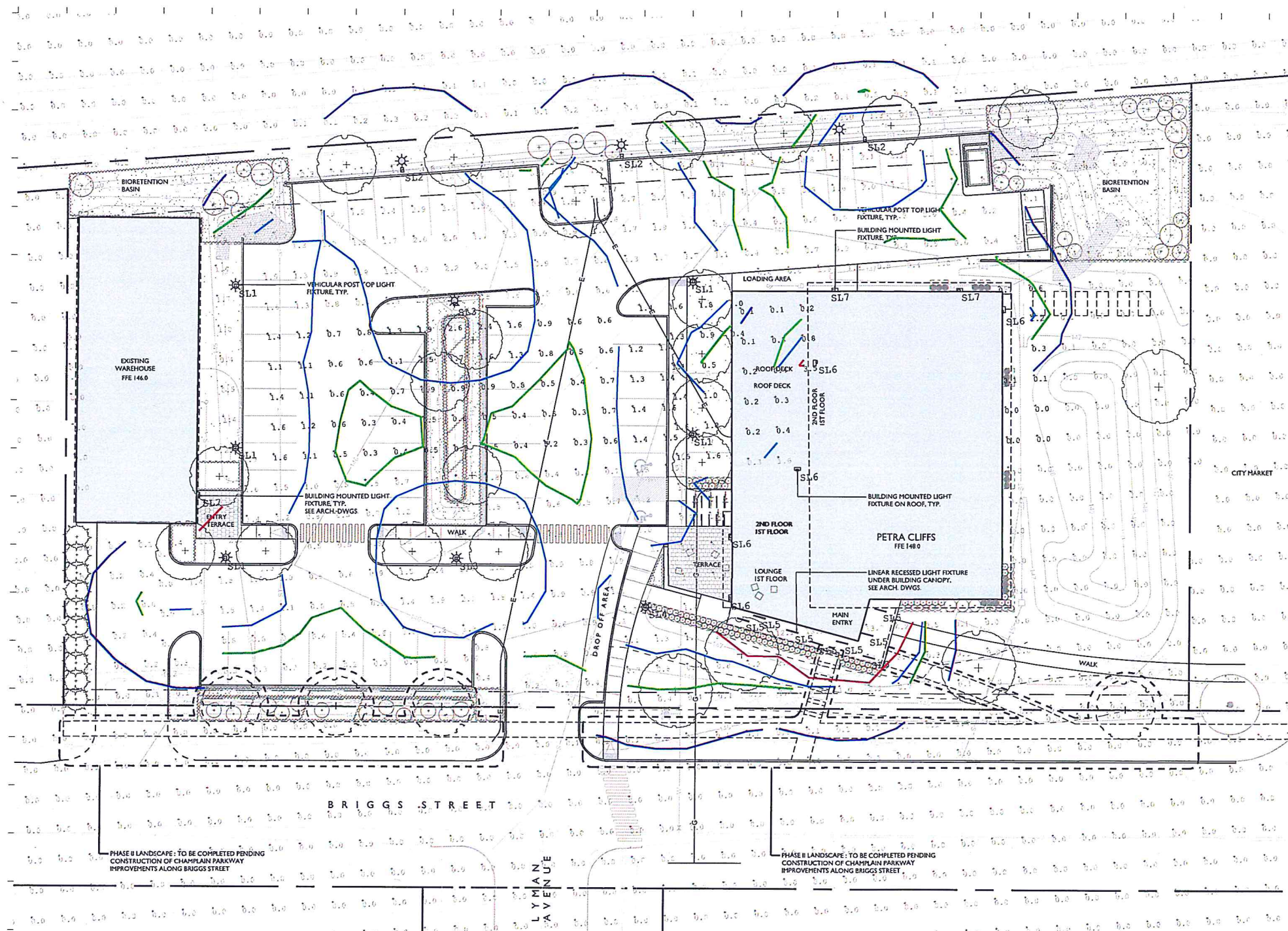
PETRA CLIFFS
75 BRIGGS STREET,
BURLINGTON, VERMONT

PHOTOMETRIC PLAN

JOB NO. 807
SCALE 1/16"=1'-0"
DRAWN BY: AH
DATE 06.20.2018

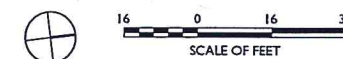
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Calculation Summary						
Label	Grid Height (ft)	Avg	Max	Min	Avg/Min	Max/Min
AREA BEYOND PROPERTY BOUNDARY	0	0.00	0.5	0.0	N.A.	N.A.
PARKING AREA	0	1.04	2.9	0.2	5.20	14.50
PROPERTY LESS PARKING AREA	0	0.75	15.8	0.0	N.A.	N.A.
ROOF PATIO	0	0.50	3.5	0.1	5.00	35.00

Luminaire Schedule						
Qty	Label	Arrangement	Lum. Lumens	Lum. Watts	LLF	BUG Rating
5	SL1	SINGLE	3622	38.75	0.850	B1-U1-G1
5	SL2	SINGLE	3622	38.75	0.850	B1-U1-G1
2	SL3	BACK-BACK	3678	38.75	0.850	B2-U1-G1
1	SL4	SINGLE	3678	38.75	0.850	B2-U1-G1
8	SL5	SINGLE	2052	20.51	0.850	B1-U0-G0
3	SL7	SINGLE	1813	26	0.850	B1-U2-G1
5	SL6	SINGLE	1225	20	0.850	B1-U1-G1
Description						
SELUX U4-R3-X-56700-30-XX-UNV, TYPE 3, MOUNTED @ 16' AFG						
SELUX U4-R2-X-56700-30-XX-UNV, TYPE 2, MOUNTED @ 16' AFG						
SELUX U4-R3R-X-56700-30-XX-UNV, TWIN TYPE 3R, MOUNTED @ 16' AFG						
SELUX U4-R55-X-56700-30-XX-UNV, TYPE 55, MOUNTED @ 16' AFG						
SELUX L125-1B20-40-MI-X-04-XX-UNV, MOUNTED IN CANOPY						
FC LIGHTING FCC1020, 3P, WFL OPTIC, 1800 LUMENS, MOUNTED @ 7' AFG						
FC LIGHTING FCC1020, 3P, WFL OPTIC, 1200 LUMENS, MOUNTED @ 7' AFG						



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NO.	DESCRIPTION	DATE
1	SHADE STUDY REVISION	07.02.2018
2	SHADE STUDY REVISION	07.20.2018

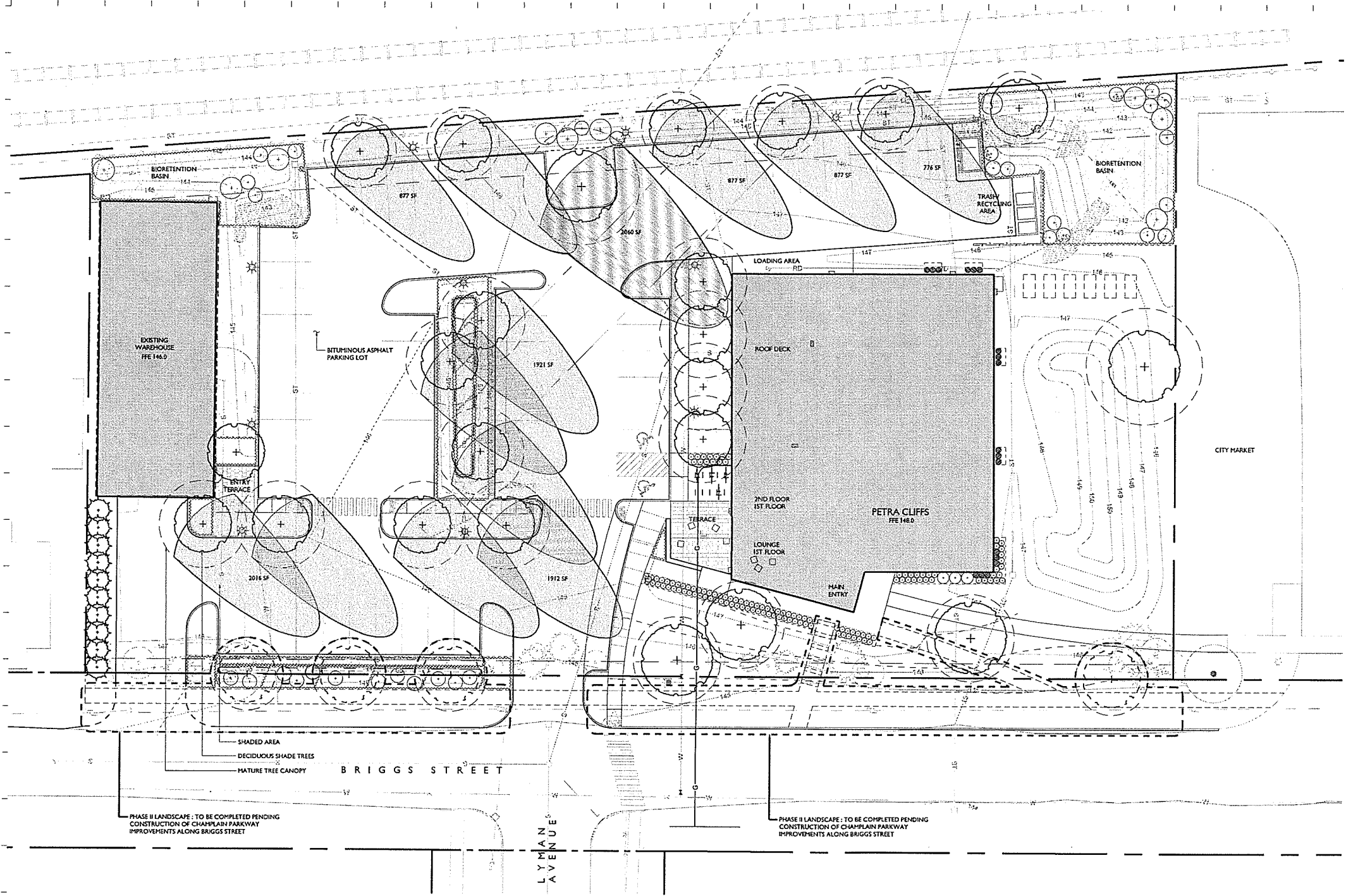
PETRA CLIFFS
ADDRESS

SHADE STUDY
3PM FALL EQUINOX

JOB NO. 807
SCALE 1"=16'
DRAWN BY: AH
DATE 08.20.2018

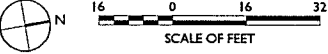
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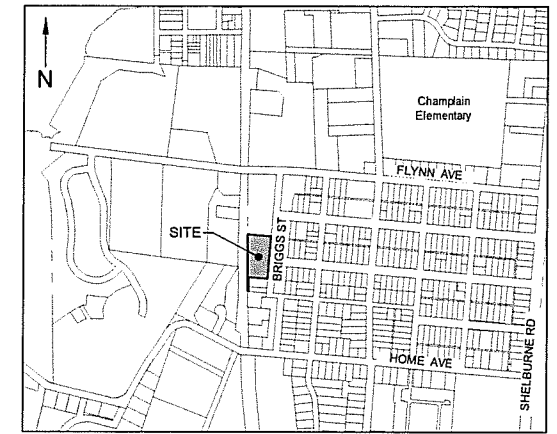
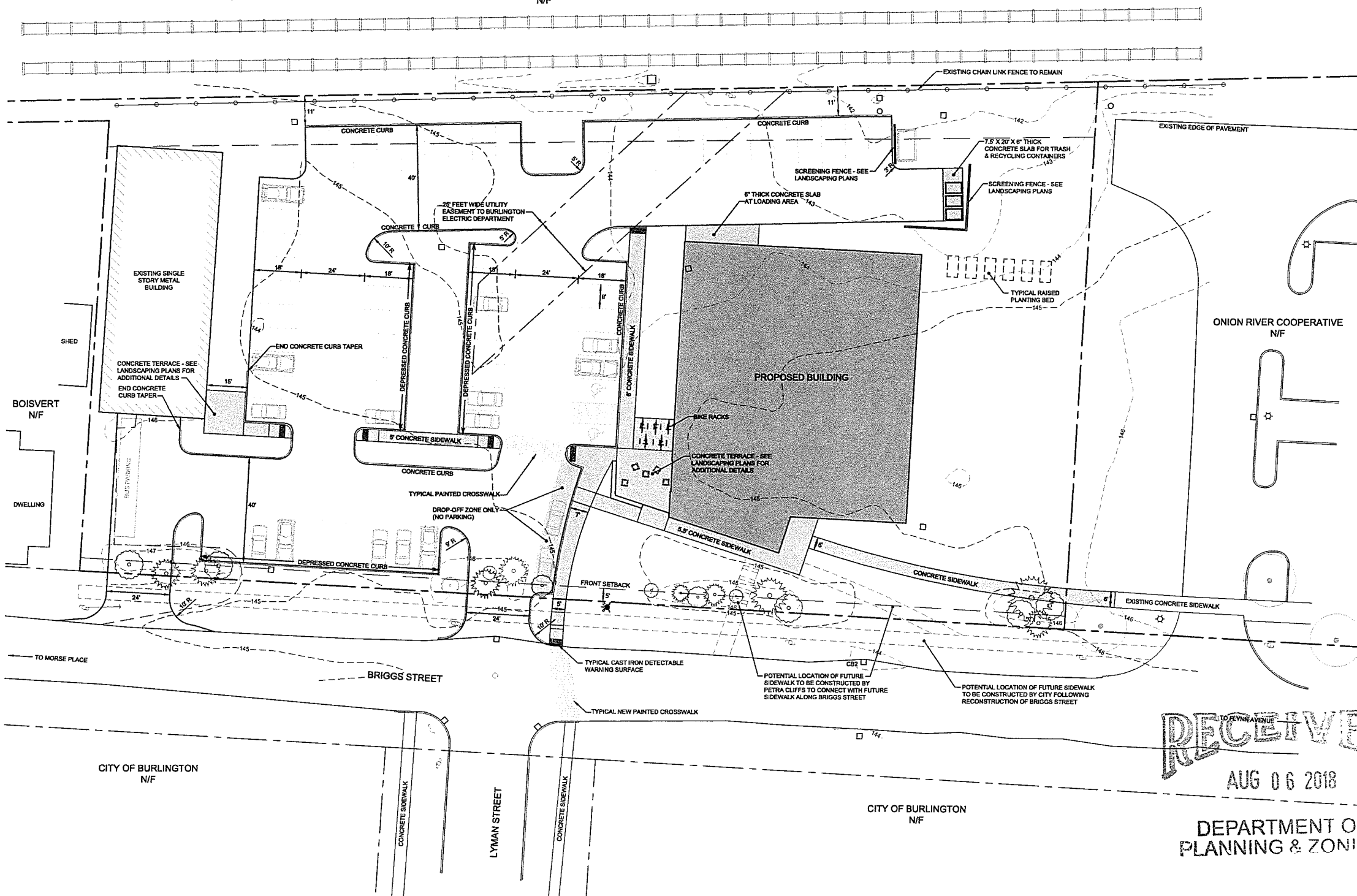
PARKING LOT AREA - 27,150 SF

SHADED AREA WITHIN PARKING
LOT FROM MATURE TREE CANOPY -
13,316 SF (41.7%)





STATE OF VERMONT LANDOWNER
VERMONT RAILWAY LESSEE
N/F



LOCATION MAP
N.T.S.

LEGEND

- EXISTING PROJECT BOUNDARY
- ABUTTING PROPERTY LINE
- BUILDING SETBACK
- EXISTING WATER LINE
- EXISTING STORM & CATCHBASIN
- EXISTING COMBINED SEWER & MANHOLE
- EXISTING UTILITY POLE AND OVERHEAD WIRE
- EXISTING TREES

PROJECT STATISTICS:

ZONING DISTRICT: ENTERPRISE-LIGHT MANUFACTURING (E-LM)
ZONING OVERLAY: DESIGN REVIEW OVERLAY DISTRICT
SHARED USE PARKING DISTRICT

DIMENSIONAL STANDARDS:

MAXIMUM INTENSITY = 2.0 FLOOR AREA RATIO
MAXIMUM BUILDING HEIGHT = 45 FEET
MAXIMUM LOT COVERAGE = 80%

MINIMUM BUILDING SETBACKS:

FRONT = 5 FEET
SIDE = 0 FEET (NON-RESIDENTIAL DISTRICT ABUTTING)
REAR = VARIES (10% OF LOT DEPTH)

PER SECTION 5.2.5(b)(4):

PARKING AREAS AND DRIVEWAYS MAY PROJECT INTO
REQUIRED SIDE AND REAR YARD SETBACKS PROVIDED
THEY ARE NO LESS THAN 5 FEET FROM THE SIDE OR
REAR PROPERTY LINE.

OFF-STREET PARKING STANDARDS:

MINIMUM OFF-STREET PARKING REQUIREMENTS:
HEALTH CLUB USE:
3 SPACES / 1000 SF GFA (NEIGHBORHOOD DISTRICT)
2 SPACES / 1000 SF GFA (SHARED USE DISTRICTS)

THE MAXIMUM NUMBER OF PARKING SPACES IN ALL PARKING DISTRICTS
SHALL NOT BE MORE THAN 125% OF THE MINIMUM NUMBER OF SPACES
REQUIRED FOR THE NEIGHBORHOOD PARKING DISTRICT FOR AN GIVEN USE

MAXIMUM PARKING ALLOWED = 64 SPACES
(3 SPACES/1000 SF GFA X (13,000 SF + 4,000 SF) X 125%)

PROPOSED PARKING = 64 SPACES

BICYCLE PARKING STANDARDS:

SHORT TERM BICYCLE SPACES REQUIRED = 6% OF OCCUPANCY
LONG TERM BICYCLE SPACES REQUIRED = 1 SPACE
(1 SPACE PER 10 EMPLOYEES)

LOT COVERAGE	
BUILDING	TOTAL
EXISTING 4,048 SF 5.5%	68,491 SF 93.4%
PROPOSED 13,650 SF 18.6%	43,233 SF 58.9%
TOTAL LOT AREA = 73,348 SF (1.68 ACRE)	

07-13-18	ADD TRANSFORMER, ELIM PARKING SPACE	ABR
Date	Revision	By

These plans shall only be used for the purpose shown below:

- ☐ Sketch/Concept
- ☐ Preliminary
- ☒ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

PETRA CLIFFS

75 BRIGGS STREET BURLINGTON, VT 05401

SITE PLAN

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450
www.LDengineering.com

Project No.
17023
Survey
L&D
Design
ABR
Drawn
L&D
Checked
DJG
Date
06-21-18
Scale
AS NOTED
Sheet number

C1

SHEET INDEX

- SHEET C1 SITE PLAN
- SHEET C2 UTILITY & GRADING PLAN
- SHEET C3 EROSION PREVENTION & SEDIMENT CONTROL PLAN
- SHEET C4 EXISTING CONDITIONS & DEMOLITION PLAN
- SHEET C5 SITEWORK & WATER DETAILS & SPECIFICATIONS
- SHEET C6 WATER DETAILS & SPECIFICATIONS
- SHEET C7 STORM, SEWER, & EPSC DETAILS & SPECIFICATIONS
- SHEET C8 STORMWATER DETAILS & SPECIFICATIONS

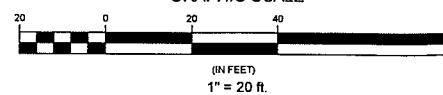
APPLICANT

PETRA CLIFFS
CHAREST ALPINISM, LLC
105 BRIGGS STREET
BURLINGTON, VT 05401

LANDOWNER

ONION RIVER COOPERATIVE, INC.
82 SOUTH WINDOOSKI AVENUE
BURLINGTON, VT 05401

GRAPHIC SCALE





STATE OF VERMONT LANDOWNER
VERMONT RAILWAY LESSEE
N/F

THE CONTRACTOR SHALL
NOTIFY DIG SAFE® AT 811
PRIOR TO ANY EXCAVATION.

LEGEND

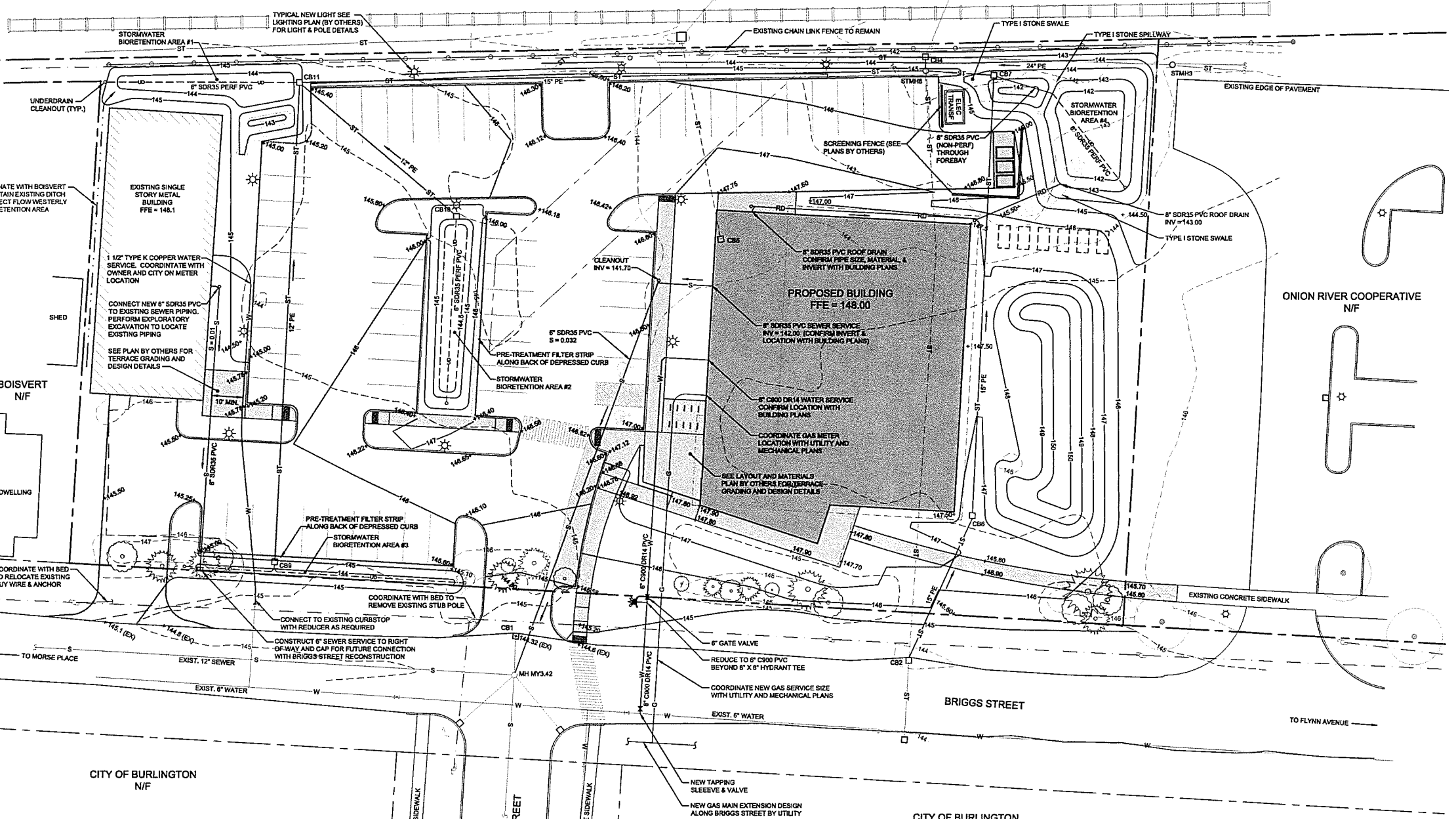
- EXISTING PROJECT BOUNDARY
- ABUTTING PROPERTY LINE
- BUILDING SETBACK
- EXISTING WATER LINE
- EXISTING STORM & CATCHBASIN
- EXISTING COMBINED SEWER & MANHOLE
- EXISTING UTILITY POLE AND OVERHEAD WIRE
- PROPOSED FINISH GRADE CONTOUR
- PROPOSED WATER LINE, GATE VALVE & HYDRANT
- PROPOSED STORM PIPE AND CATCHBASIN
- PROPOSED SEWER PIPE AND CLEANOUT
- PROPOSED UNDERDRAIN AND CLEANOUT
- PROPOSED ELECTRIC CONDUIT(S)
- PROPOSED POLE MOUNTED LIGHT
- EXISTING TREES

NOTES:

- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS AND THE LOCATION AND ELEVATION OF ALL ENTRANCES AND UTILITY SERVICES WITH THE ARCHITECTURAL & MECHANICAL PLANS.
- SEE ARCHITECTURAL PLANS FOR BUILDING CONSTRUCTION DETAILS, INCLUDING WALKWAY AND PAVEMENT FROST HEAVE PREVENTION MEASURES AT BUILDING ENTRANCES.
- SEE OTHER SHEETS OF THESE PLANS FOR ADDITIONAL SITE IMPROVEMENTS, DETAILS AND SPECIFICATIONS. SEE PLANS BY OTHERS FOR RAILING, STEPS, RETAINING WALL, LIGHTING, AND CONCRETE PATIOWALK DETAILS.
- ALL WORK WITHIN THE CITY RIGHT OF WAY AND WORK ON THE EXISTING WATER AND SEWER SERVICES SHALL BE COORDINATED WITH THE CITY PUBLIC WORKS DEPARTMENT.
- AT THE END OF ALL NEW SIDEWALKS AND RAMPS, CAST IRON DETECTABLE WARNING PLATES SHALL BE INSTALLED THE FULL WIDTH OF THE SIDEWALK.
- SEE LIGHTING PLAN (BY OTHERS) FOR LIGHT FIXTURE AND POLE DESIGN DETAILS. SEE ELECTRICAL DESIGN PLAN (BY OTHERS) FOR ELECTRICAL DISTRIBUTION AND CONDUIT REQUIREMENTS FOR NEW LIGHTING.
- PIPE SLOPES ARE IN FEET PER FOOT UNLESS OTHERWISE NOTED.

CONSTRUCTION NOTES:

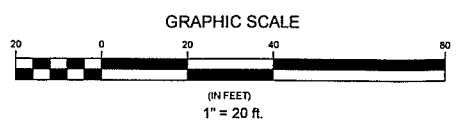
- UNLESS OTHERWISE NOTED, A MINIMUM 5 FT BY 5 FT LANDING AREA SHALL BE PROVIDED AT EACH BUILDING ENTRY WITH A MAXIMUM SLOPE OF 1:50.
- A MINIMUM 5 FT BY 5 FT LANDING AREA SHALL BE PROVIDED AT EACH TURN AND AT THE BOTTOM OF EACH SIDEWALK RAMP. THE CROSS SLOPE OF THE LANDING AREA SHALL HAVE A MAXIMUM SLOPE OF 1:50.
- THE PREFERRED MAXIMUM SLOPE OF ALL NEW WALKS IS 5% (1:20). THE MAXIMUM CROSS SLOPE OF NEW WALKS SHALL BE 1:50. THE MAXIMUM SLOPE OF ANY NEW WALK OR RAMP SHALL BE 1:12 (8%). EXCEPT FOR CURB RAMPS, WHERE RAMPS EXCEED 5% WITH A RISE GREATER THAN 6", A COMPLAINT HANDRAIL IS REQUIRED ALONG THE RAMP.
- ALL TRANSITIONS BETWEEN EXISTING PAVEMENT OR CONCRETE AND NEW WALKS SHALL BE SMOOTH. IN NO CASE SHALL THERE BE A TRANSITION WITH A VERTICAL EDGE GREATER THAN 1/4".
- ALL GRASS AND LANDSCAPED AREAS ADJACENT TO THE NEW WALKS AND BUILDINGS SHALL BE GRADED TO MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING OR WALK. LOW AREAS SHALL BE FILLED WITH TOPSOIL, SEEDED AND MULCHED AS REQUIRED.
- SEE OTHER SHEETS OF THESE PLANS FOR ADDITIONAL SITE IMPROVEMENTS, DETAILS AND SPECIFICATIONS.



COMBINED SEWER DATA	
EXIST. MH MY3.42	RM = 144.66
NEW 6" IN = 138.9	12" CLAY OUT = 136.6

STORM DATA	
EXIST. CB 1	RM = 144.32
10" PVC OUT = 141.23	RESET EXIST. FRAME & GRATE
EXIST. CB 2	RM = 143.76
15" IN = 141.4	
EXIST. STMH 3	RM = 143.87
24" OUT = 135.87	
EXIST. CB 4	EXIST RM = 140.43
NEW RM = 143.00	24" IN = 134.67 (N)
15" CAP (N) = 129.7 (S)	TO BE REMOVED
15" IN = 138.0 (E)	TO BE REMOVED
NEW 18" IN = 138.0	OUT = 129.9
EXIST. CB 5	RM = 143.16
8" OUT = 141.6	STRUCTURE TO BE REMOVED

NEW CB6	RM = 146.30
15" IN = 141.13	15" OUT = 141.08
NEW CB7	RM = 143.25
6" LD IN = 139.17	15" IN = 140.30
15" OUT = 139.10	
NEW STMH 6	RM = 145.50
15" IN = 138.95 (N)	15" IN = 139.10 (S)
18" OUT = 138.30	
NEW CB8	RM = 144.5
8" LD IN = 141.17	12" OUT = 141.10
NEW CB10	RM = 145.5
6" LD IN = 141.67	12" OUT = 141.60
NEW CB11	RM = 144.75
5" LD IN = 141.17	12" IN = 140.25
12" IN = 140.25	15" OUT = 140.20



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07-13-18	ADD ELEC TRANSFORMER, ELIM PARKING SPACE, ADJUST CB7	ABR
07-12-18	ADD 6" GATE VALVE ON WATER SERVICE	ABR
Date	Revision	By
These plans shall only be used for the purpose shown below:		
☐ Sketch/Concept	☐ Act 250 Review	
☐ Preliminary	☐ Construction	
☒ Final Local Review	☐ Record Drawing	
PETRA CLIFFS		Project No. 17023
75 BRIGGS STREET BURLINGTON, VT 05401		Survey L&D
UTILITY & GRADING PLAN		Design ABR
		Drawn L&D
		Checked DJG
		Date 08-21-18
Lamoureux & Dickinson Consulting Engineers, Inc.		Scale AS NOTED
14 Morse Drive, Essex, VT 05452		Sheet number
802-878-4450		C2
www.LDEngineering.com		

STANDARD EPSC PLAN REQUIREMENTS

THIS SECTION CONTAINS THE MINIMUM REQUIREMENTS FOR THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN. THESE ELEMENTS ARE IN ADDITION TO THE SITE SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL PRACTICES SHOWN ON THE PLANS.

EROSION PREVENTION

1. THROUGHOUT CONSTRUCTION, THE AREA OF SOIL DISTURBANCE SHALL BE LIMITED TO THOSE AREAS THAT CAN BE ACTIVELY WORKED AND MANAGED WITH THE FORCES AVAILABLE. AREAS THAT ARE NOT ACTIVELY BEING WORKED FOR A PERIOD OF 5 DAYS OR MORE, SHALL BE TEMPORARILY STABILIZED.
2. THE MAXIMUM AREA OF SOIL DISTURBANCE AT ANY ONE TIME ON THE ENTIRE PROJECT PARCEL SHALL BE 1.0 ACRE.
3. SEDIMENT BASINS, SEDIMENT TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
4. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.
5. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
6. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND THE RECEIVING CHANNEL.
7. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - A. NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPSLOPE SIDE OF TRENCHES.
 - C. ALL SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES AS A PART OF MAINTENANCE SHALL BE DISPOSED OF IN AN AREA THAT IS LESS THAN 5% IN SLOPE.
 - D. AT LEAST 100 FT. FROM ANY DOWNSLOPE WATER BODY OR CONVEYANCE TO A WATER BODY (INCLUDING STORM DRAIN INLET OR DITCH).
 - E. VEGETATED PERMANENT STABILIZATION OF SEDIMENT SHALL BE IMMEDIATELY IMPLEMENTED FOLLOWING DISPOSAL.
8. FOR ANY AREA TO BE STABILIZED FOR WINTER BY VEGETATIVE COVER, SEEDING MUST BE COMPLETED NO LATER THAN SEPTEMBER 15.
9. ANY AREA TO BE STABILIZED FOR WINTER THAT DOES NOT HAVE ESTABLISHED VEGETATION BY OCTOBER 15 MUST BE STABILIZED BY ANCHORED MULCH AT THE WINTER APPLICATION RATE OF 4 TONS PER ACRE OR OTHER APPROVED STABILIZATION MEASURES (E.G. ROLLED EROSION CONTROL PRODUCT). DORMANT SEEDING (E.G. WITH WINTER RYE) IS RECOMMENDED.
10. DISTURBED AREAS BORDERING AND DRAINING TO THE STREET MUST HAVE AN APPROPRIATE SEDIMENT BARRIER SPANNING THE EDGE OF THE DISTURBANCE TO PREVENT WASHING OF SEDIMENT ONTO SIDEWALKS OR STREETS AND GUTTERS.
11. HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 2 TONS PER ACRE. HAY MULCH APPLICATION DURING WINTER CONSTRUCTION SHALL BE AT A RATE OF 4 TONS PER ACRE. MULCH SHALL BE SECURED IN PLACE BY TACKLING WITH EQUIPMENT WITH TRACKS RUNNING PARALLEL TO SLOPE, A TACKLER NETTING, OR COVERED/REPLACED WITH PROPERLY ANCHORED EROSION MATTING.
12. PLACEMENT OF SEED AND MULCH SHALL OCCUR WITHIN 48 HOURS OF PLACEMENT OF TOPSOIL AND COMPLETION OF FINAL GRADING (NOT WITHSTANDING STABILIZATION REQUIREMENTS ELSEWHERE IN THIS PLAN).
13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED.

STABILIZATION

15. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR PERMANENT STABILIZATION WITHIN 14 CALENDAR DAYS. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY.

THE FOLLOWING EXCEPTIONS APPLY:

- A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
- B. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (E.G. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. BUILDING FOUNDATION EXCAVATION, UTILITY TRENCHES).
- C. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. EXCEPT AS NOTED BELOW, ALL SITES SHALL BE SEED AND STABILIZED WITH EROSION CONTROL MATERIALS, SUCH AS MULCH OR ROLLED EROSION CONTROL PRODUCTS, INCLUDING AREAS WHERE CONSTRUCTION HAS BEEN SUSPENDED OR SECTIONS COMPLETED.
 - A. ON THE CUT SIDE OF STREETS/DROVES, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK R/R RAP OR OTHER NON-ERODIBLE LINERS (E.G. RECP), OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS SOO.
 - B. FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, STREET IMPROVEMENTS AND AREAS WITHIN 50 FT. OF A BUILDING UNDER CONSTRUCTION, A DOWNSLOPE PERIMETER SEDIMENT CONTROL SYSTEM (CONSISTING, FOR EXAMPLE, OF SILT FENCE, SHALL BE INSTALLED AND MAINTAINED TO CONTAIN SOIL. EXPOSED DISTURBED AREAS ADJACENT TO A CONVEYANCE THAT PROVIDES RAPID OFFSITE DISCHARGE OF SEDIMENT, SUCH AS A CUT SLOPE AT AN ENTRANCE, SHALL BE COVERED WITH PLASTIC OR GEOTEXTILE TO PREVENT SOIL LOSS UNTIL IT CAN BE STABILIZED. STABILIZED CONSTRUCTION ENTRANCES WILL BE MAINTAINED TO CONTROL VEHICLE TRACKING MATERIAL OFF SITE.
 - C. TEMPORARY SEDIMENT TRAPPING DEVICES SHALL NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTING DRAINAGE AREAS. SIMILARLY, STABILIZATION SHALL BE ESTABLISHED PRIOR TO CONVERTING SEDIMENT TRAP BASINS INTO PERMANENT (POST-CONSTRUCTION) STORMWATER MANAGEMENT PRACTICES.
 - D. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
 - E. ALL SLOPES STEEPER THAN 3:1 (H:V) OR 33:1, AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS SHALL, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES (RECP). AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL NOT BE DISTURBED.

WINTER CONSTRUCTION REQUIREMENTS

THE FOLLOWING REQUIREMENTS APPLY DURING THE WINTER CONSTRUCTION PERIOD, WHICH IS FROM OCTOBER 15 TO APRIL 15.

17. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR PERMANENT STABILIZATION AT THE END OF EACH WORK DAY.

THE FOLLOWING EXCEPTIONS APPLY:

- A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
- B. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (E.G. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. BUILDING FOUNDATION EXCAVATION, UTILITY TRENCHES).
- C. STABILIZED ACCESS POINTS SHALL BE ENLARGED TO PROVIDE FOR SNOW STOCKPILING WHILE STILL MAINTAINING EFFECTIVE SEDIMENT CONTROL. PACKED SNOW AND ICE MAY NEED TO BE REMOVED AND ADDITIONAL STONE PLACED TO MAINTAIN THE LOOSE STONE SURFACE AT STABILIZED CONSTRUCTION EXITS.
- D. THE LIMITS OF DISTURBANCE MAY NEED TO BE REPLACED OR DRAWN IN TO REFLECT THE BOUNDARY OF WINTER WORK. THE LIMITS OF DISTURBANCE SHALL BE DRAWN IN TO EXCLUDE ALL AREAS TEMPORARILY STABILIZED FOR THE WINTER, AND AREAS WHERE DISTURBANCE DURING THE WINTER IS NOT PLANNED.
- E. BASED UPON THE WINTER ACTIVITIES PROPOSED, THE ON-SITE PLAN COORDINATOR SHALL DEVELOP A SNOW MANAGEMENT PLAN THAT SHALL INCLUDE AT A MINIMUM:
 - A. ADEQUATE SIZE FOR SNOW STORAGE AREAS.
 - B. SNOW STORAGE AREAS LOCATED DOWN GRADIENT OF AREAS OF PLANNED DISTURBANCE.
 - C. CONTROL OF SNOWMELT RUNOFF.
 - D. PROHIBITING STORAGE OF SNOW IN STORMWATER TREATMENT STRUCTURES.
 - E. A MINIMUM 25 FOOT BUFFER BETWEEN PERIMETER CONTROLS (SUCH AS SILT FENCE) TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
- F. SILT FENCE SHALL BE REINFORCED OR REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
- G. THE ON-SITE PLAN COORDINATOR INSPECTIONS SHALL INCLUDE MAINTENANCE OF DRAINAGE STRUCTURES TO INSURE THAT THEY ARE OPEN AND FREE OF SNOW AND ICE DAMS.
- H. SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE SHALL BE INSTALLED AHEAD OF GROUND FREEZING. IF PRACTICES MUST BE INSTALLED OR MAINTAINED AFTER GROUND FREEZING, NO FROZEN MATERIAL SHALL BE USED IN THE CONSTRUCTION OF BERM OR DIKE, OR INSTALLATION OF SILT FENCE.

INSPECTION & MONITORING

24. THE ON-SITE COORDINATOR IS TO BE DETERMINED.
25. THE PERIMETER OF THE SITE AND ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT THE END OF EACH WORKDAY. IF SEDIMENT HAS TRAVELLED BEYOND THE SITE BOUNDARY, IT SHALL BE SWEEPED UP OR OTHERWISE REMOVED AND DEPOSITED ON-SITE IN AN UPGRADE AREA AT THE END OF EACH WORK DAY.

THE ON-SITE COORDINATOR SHALL INSPECT, AND DOCUMENT IN WRITING, THE STATUS OF CONSTRUCTION ON THE PROJECT SITE AND EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES AT THE END OF EACH WORK DAY. INSPECTIONS SHALL ALSO BE CONDUCTED PRIOR TO PREDICTED STORM EVENTS, AND AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.

26. THE OWNER, THE SITE CONTRACTOR / PRINCIPAL OPERATOR, AND THEIR REPRESENTATIVES SHALL ADOBE BY THE BEST MANAGEMENT PRACTICES PRESENTED ON THESE PLANS, REQUIRED BY THE PERMIT CONDITIONS, AND PRESENTED IN THE VT DEC LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.
27. DURING EACH INSPECTION, THE ON-SITE COORDINATOR SHALL VISUALLY MONITOR AND RECORD THE TURBIDITY OF ALL STORMWATER RUNOFF FROM THE CONSTRUCTION SITE IN ACCORDANCE WITH THE SAMPLING & TESTING REQUIREMENTS AND PROTOCOL OF THE VERMONT GENERAL PERMIT.

28. INSPECTION FREQUENCY MAY BE REDUCED TO NOT LESS THAN ONE PER WEEK IF THE ENTIRE SITE IS TEMPORARILY STABILIZED AND ALL CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED. INSPECTIONS SHALL RESUME PRIOR TO RESUMING CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE REQUIREMENTS LISTED ABOVE.
29. IN ADVANCE OF A PREDICTED RAINFALL OR SNOWMELT EVENT, ALL MANAGEMENT PRACTICES APPROPRIATE TO CURRENT AREAS OF DISTURBANCE MUST BE CHECKED AND REPAIRED AS NECESSARY TO ENSURE PROPER OPERATING CONDITION. IF NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE, THIS WILL INCLUDE THE TEMPORARY STABILIZATION OF ALL DISTURBED SOILS ON THE SITE IN ADVANCE OF THE ANTICIPATED RUNOFF PERIOD.

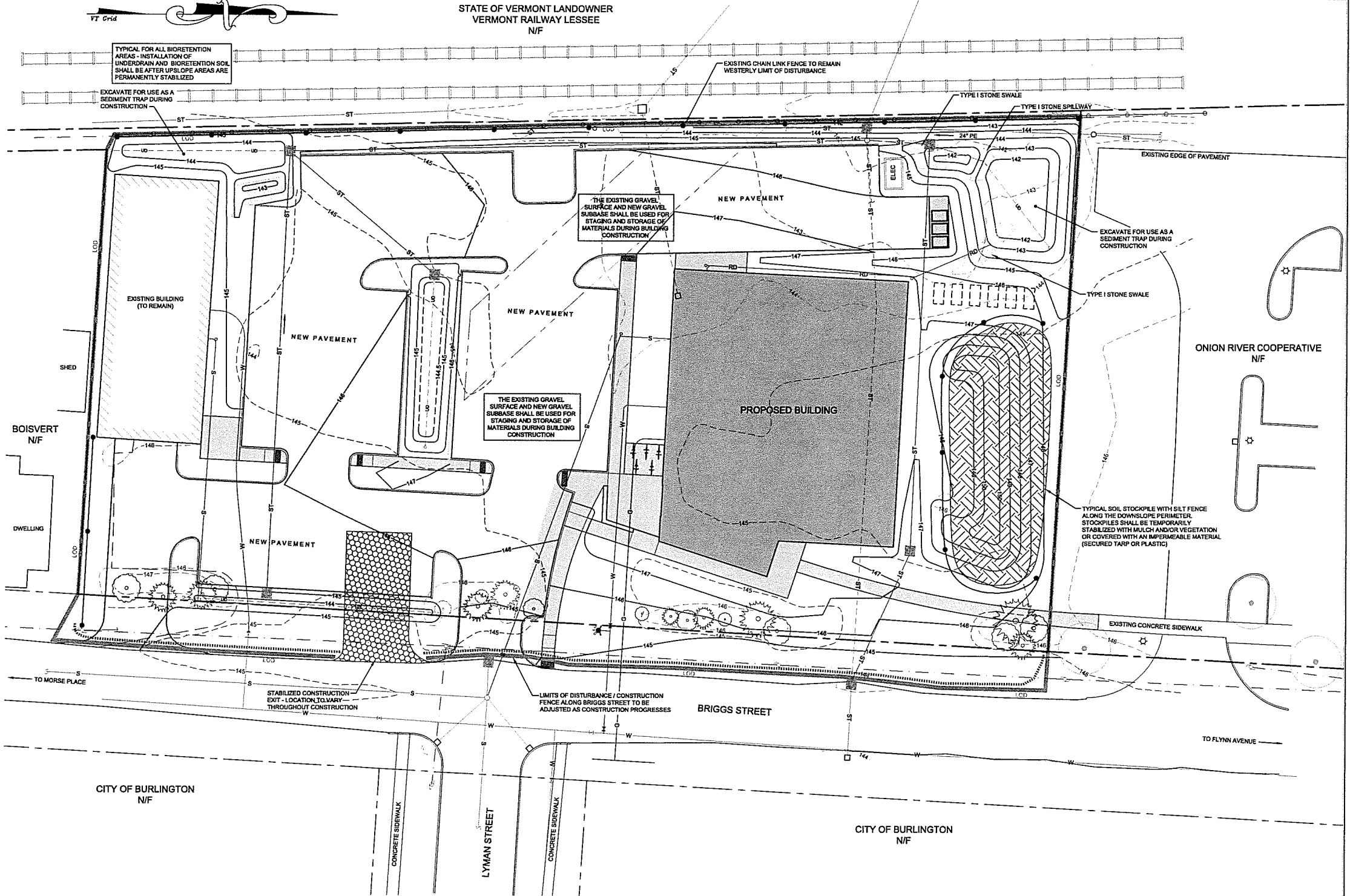
PUBLIC NOTICE AND DPW COORDINATION

30. A COPY OF THE CITY EPSC PLAN APPROVAL, THE STATE DISCHARGE PERMIT AND THE AUTHORIZATION TO DISCHARGE, A BRIEF DESCRIPTION OF THE PROJECT, AND THE LOCATION WHERE THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN IS AVAILABLE SHALL BE POSTED AT A LOCATION ON THE PROJECT SITE THAT IS VISIBLE TO THE PUBLIC.

31. THE LANDOWNER OR SITE CONTRACTOR SHALL CONTACT THE CITY STORMWATER ADMINISTRATOR AT 540-2748 OR GLOUVER@BURLINGTONVT.GOV AT LEAST 24 HOURS PRIOR TO ANY EARTH DISTURBANCE, AND SHALL PROVIDE THE NAME AND CONTACT INFORMATION FOR THE ON-SITE PLAN COORDINATOR.

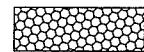
32. THE ON-SITE PLAN COORDINATOR SHALL NOTIFY THE CITY STORMWATER ADMINISTRATOR PRIOR TO OCTOBER 15 IF THE SITE WILL NOT BE STABILIZED BY NOVEMBER 1 OR ADDITIONAL WORK IS PROPOSED DURING THE WINTER CONSTRUCTION PERIOD.

33. THE LANDOWNER OR ON-SITE PLAN COORDINATOR SHALL CONTACT THE CITY STORMWATER ADMINISTRATOR TO SCHEDULE A STABILIZATION INSPECTION WHEN SITE WORK IS FINISHED AND STABILIZATION MEASURES HAVE BEEN INSTALLED.



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LEGEND



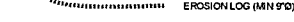
STABILIZED CONSTRUCTION EXIT



CONSTRUCTION FENCE / LIMIT OF DISTURBANCE



TEMPORARY SILT FENCE

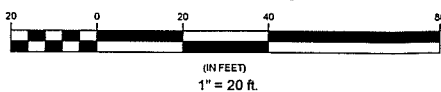


EROSION LOG (MN 97D)



INLET PROTECTION

GRAPHIC SCALE



07-13-18	REVISE PARKING & C&T	ABR
Date	Revision	By
These plans shall only be used for the purpose shown below:		
☐ Sketch/Concept	☐ Act 250 Review	
☐ Preliminary	☐ Construction	
☒ Final Local Review	☐ Record Drawing	
Project No. 17023		Survey L&D
Design ABR		Drawn L&D
Checked DJG		Date 06-21-18
Scale AS NOTED		Sheet number
C3		

PETRA CLIFFS
75 BRIGGS STREET BURLINGTON, VT 05401

EROSION PREVENTION & SEDIMENT CONTROL PLAN

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450
www.LDEngineering.com



STATE OF VERMONT LANDOWNER
VERMONT RAILWAY LESSEE
N/F



THE CONTRACTOR SHALL
NOTIFY DIG SAFE® AT 811
PRIOR TO ANY EXCAVATION.

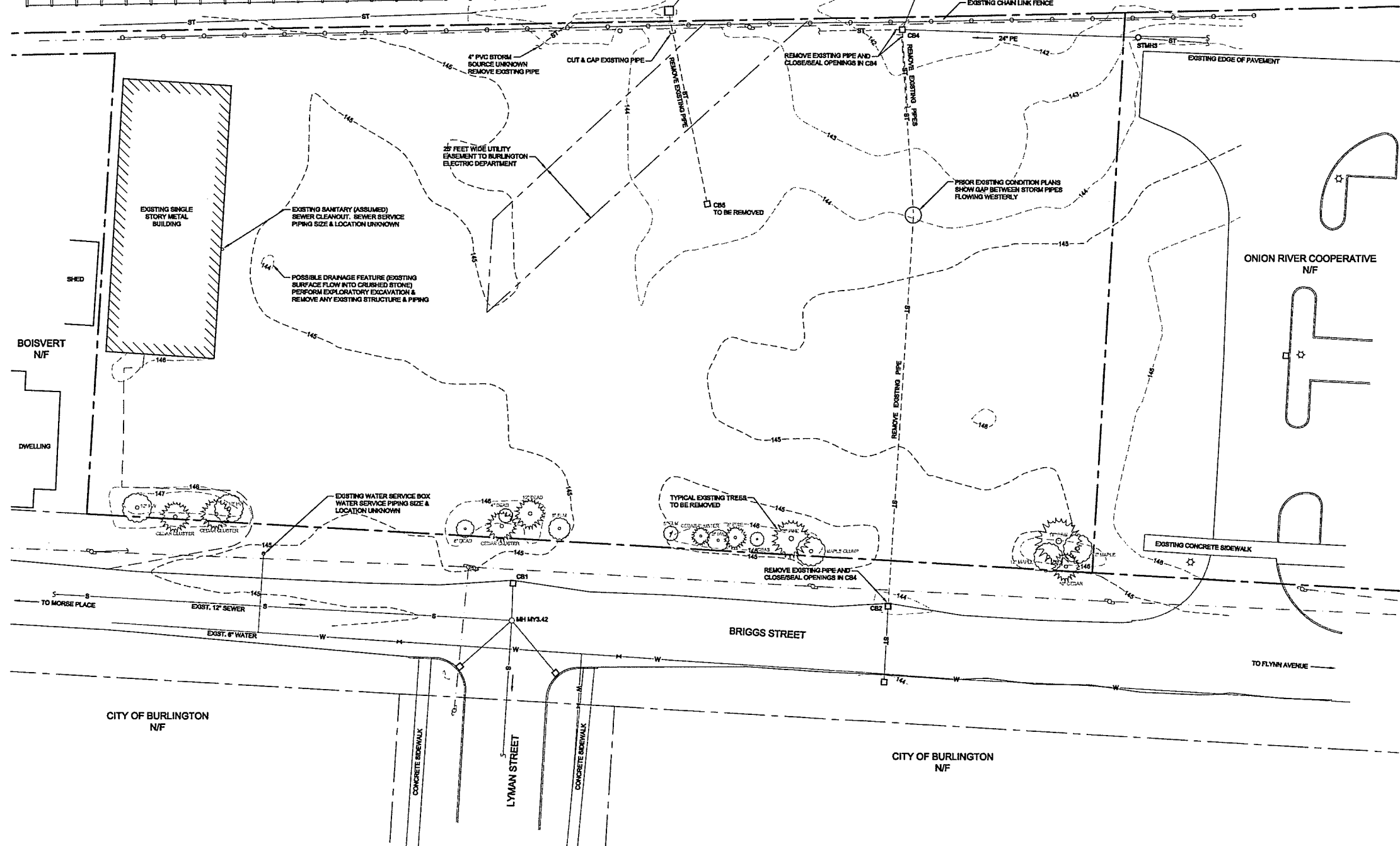
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JUN 26 2018

DEPARTMENT OF
PLANNING & CONSTRUCTION

- DEMOLITION NOTES:**
1. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF THE EXISTING SURFACES, STRUCTURES, AND UTILITIES WITH THE OWNER, UTILITY COMPANIES, AND THE CITY OF BURLINGTON.
 2. THE RELOCATION AND/OR TERMINATION OF EXISTING UTILITIES SHALL BE COMPLETED IN COORDINATION WITH THE UTILITY COMPANY AND OWNER, WITH WORK IN ACCORDANCE WITH THE UTILITY COMPANY'S SPECIFICATIONS FOR CONSTRUCTION.
 3. EXISTING FOUNDATIONS AND STRUCTURES, NOT SHOWN ON THIS PLAN, MAY EXIST BELOW GRADE ON THE SITE. IF ENCOUNTERED, THEY SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND STRUCTURAL ENGINEER. AT A MINIMUM, EXISTING FOUNDATIONS AND STRUCTURES SHALL BE REMOVED TO A DEPTH OF AT LEAST 2 FEET BELOW THE BOTTOM OF THE SUBGRADE OR ANY TRENCH BEDDING.
 3. WHERE REQUIRED, EXISTING UTILITY SERVICE AND ACCESS SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND PROVISION OF TEMPORARY UTILITY SERVICES AND ACCESS AS REQUIRED. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
 4. EXISTING STRUCTURES, PAVEMENT, SURFACES, AND UTILITIES SHALL BE REMOVED WHERE INDICATED ON THE PLANS, AND AS NECESSARY TO CONSTRUCT AND COMPLETE THE IMPROVEMENTS SHOWN ON THE PLANS. THE EXCAVATION, REMOVAL, AND DISPOSAL OF MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE LAWS, RULES, REGULATIONS, AND PROTOCOLS. THE WORK SHALL INCLUDE THE EXCAVATION, DISPOSAL, BORROW, AND PLACEMENT OF SUITABLE MATERIAL IN CONFORMANCE WITH THE LINES, GRADES, AND TYPICALS SHOWN ON THE PLANS.
- UTILITY CONSTRUCTION NOTES:**
1. THE LOCATIONS AND PIPE MATERIAL OF THE WATER AND SEWER SERVICES AND MAINS ARE BASED UPON RECORD INFORMATION PROVIDED BY THE PUBLIC WORKS DEPARTMENT AND FIELD OBSERVATIONS. THE ACTUAL LOCATION OF THE EXISTING MAINS AND SERVICES MAY VARY FROM THAT SHOWN ON THIS PLAN.
 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS TO VERIFY THE HORIZONTAL LOCATION AND ELEVATION OF THE WATER AND SEWER SERVICES TO THE EXISTING BUILDING. TIES FOR, AND THE ELEVATION OF, EACH SERVICE SHALL BE REPORTED TO THE ENGINEER.
 3. ALL UTILITY WORK SHALL BE PERFORMED IN A MANNER THAT MINIMIZES INTERRUPTIONS IN SERVICE TO OTHER ADJACENT USERS.
 4. WHERE TEMPORARY INTERRUPTIONS IN UTILITY SERVICES ARE REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS AND SHALL PROVIDE WRITTEN NOTICE TO AFFECTED USERS IN ACCORDANCE WITH THE DEPARTMENT REQUIREMENTS.
- CITY RIGHT OF WAY REQUIREMENTS:**
1. AUTHORIZATION FROM THE DEPARTMENT OF PUBLIC WORKS SHALL BE OBTAINED PRIOR TO PERFORMING ANY WORK WITHIN THE CITY'S RIGHT OF WAY.
 2. THE SITE CONTRACTOR SHALL IMPLEMENT TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF PUBLIC WORKS AND THE MUTCD. WORK SHALL CONFORM WITH THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE "STANDARDS" OF THE VTRANS CONSTRUCTION STANDARDS.
 3. ALL WORK AND DISTURBANCE WITHIN THE CITY RIGHT OF WAY SHALL BE LIMITED TO THAT SPECIFIC AREA APPROVED. WORK SHALL NOT EXTEND BEYOND THE APPROVED LIMITS OF DISTURBANCE.
 4. NO VEHICLE PARKING OR STORAGE OF MATERIALS SHALL BE ALLOWED WITHIN THE CITY RIGHT OF WAY, INCLUDING GREEN STRIPS, EXCEPT WHERE APPROVED BY THE CITY.

CORRECTIVE ACTION PLAN
SEE THE CORRECTIVE ACTION PLAN BY KAS CONSULTING FOR SOIL MANAGEMENT REQUIREMENTS PRIOR TO, AND THROUGHOUT CONSTRUCTION.

Date	Revision	By
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☐ Preliminary	☐ Construction	
☒ Final Local Review	☐ Record Drawing	
PETRA CLIFFS		Project No. 17023
75 BRIGGS STREET BURLINGTON, VT 05401		Survey L&D
EXISTING CONDITIONS & DEMOLITION PLAN		Design ABR
		Drawn L&D
		Checked D.J.G
		Date 06-21-18
		Scale AS NOTED
		Sheet number C4
Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDEngineering.com		

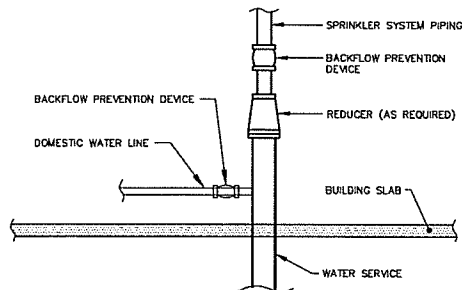


COMBINED SEWER DATA	STORM DATA
EXIST. MH MY3.42 RIM = 144.85 12" CLAY OUT = 136.6	EXIST. CB 1 RIM = 144.32 10" PVC OUT = 141.23
	EXIST. CB 2 RIM = 143.78 15" OUT = 141.4
	EXIST. STMH 3 RIM = 143.87 24" OUT = 135.87
	EXIST. CB 4 RIM = 140.43 24" IN = 134.87 (N) 15" CMP IN = 129.7 (S) 15" IN = 138.0 (G) OUT = 129.9
	EXIST. CB 5 RIM = 143.16 8" OUT = 141.6 STRUCTURE TO BE REMOVED

LEGEND

- EXISTING PROJECT BOUNDARY
- ABUTTING PROPERTY LINE
- BUILDING SETBACK
- EXISTING WATER LINE
- EXISTING STORM & CATCHBASIN
- EXISTING COMBINED SEWER & MANHOLE
- EXISTING UTILITY POLE AND OVERHEAD WIRE
- EXISTING TREES

GRAPHIC SCALE
20 0 20 40 80
(IN FEET)
1" = 20 ft.

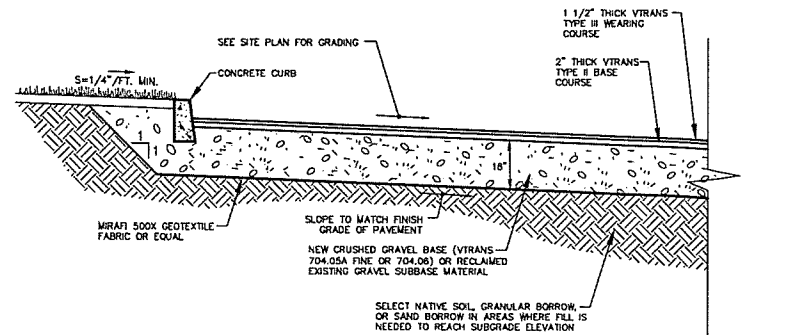


NOTE:
ALL DOMESTIC SERVICES AND FIRE SPRINKLER SYSTEMS THAT ARE CONNECTED TO THE PUBLIC WATER SYSTEM SHALL BE PROTECTED WITH A BACKFLOW PREVENTION ASSEMBLY, AND AN APPROPRIATE THERMAL EXPANSION SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF THE BURLINGTON WATER DEPARTMENT.

WATER SERVICE BACKFLOW PREVENTION DETAIL

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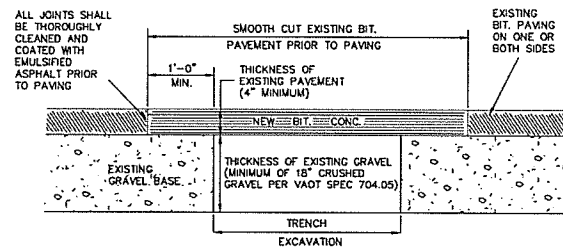
SEE SHEET D6 AND THE CITY OF BURLINGTON WATER DEPARTMENT STANDARDS FOR ADDITIONAL DETAILS AND SPECIFICATIONS



- NOTES:
- AREAS OF EXISTING PAVEMENT AND GRAVEL SUBBASE MAY BE RECLAIMED AND STOCKPILED FOR RE-USE. EXISTING PAVEMENT SHALL BE RECLAIMED SUCH THAT THE BITUMINOUS CONCRETE IS PULVERIZED TO A MAXIMUM PARTICLE SIZE OF 3 INCHES AND MIXED WITH THE UNDERLYING GRAVEL SUBBASE. PRIOR TO PAVING, THE RECLAIMED MATERIAL SHALL BE FINE GRADED WITH A MINIMUM OF 2" ADDITIONAL CRUSHED GRAVEL (VITRANS 704.05A FINE) PLACED AS NEEDED TO ACHIEVE THE PROPOSED GRADES SHOWN ON THE PLANS.
 - IN AREAS WHERE THERE IS NO EXISTING PAVEMENT, NEW CRUSHED GRAVEL SUBBASE MATERIAL, OVER GEOTEXTILE FABRIC SHALL BE PLACED PRIOR TO PAVING.
 - IN ALL AREAS WHERE UNSTABLE/UNSATURABLE SUBGRADE SOILS ARE PRESENT, THE SUBGRADE SHALL BE OVER-EXCAVATED TO REMOVE THE UNSUITABLE MATERIAL AND BACKFILLED WITH SAND BORROW OR SELECT NATIVE MATERIAL.
 - SUBGRADE SOIL, NEW CRUSHED GRAVEL, AND RECLAIMED MATERIAL SHALL BE ADEQUATELY COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D698).

TYPICAL NEW DRIVE & PARKING CROSS SECTION

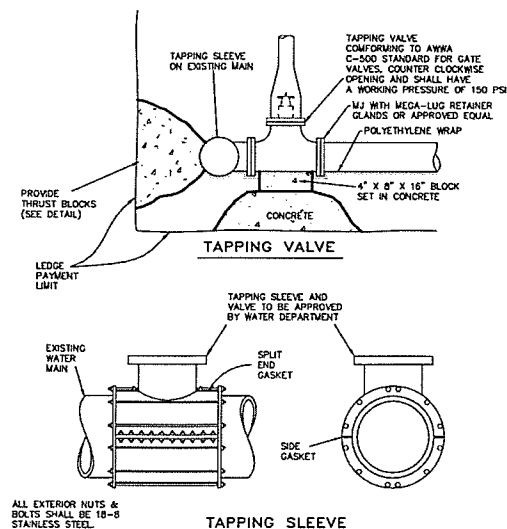
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- SET UP AND MAINTAIN SIGNS AND OTHER SAFETY CONTROL DEVICES.
- RESHAPE HOLE AND PATCH AREA BY CUTTING WITH A CONCRETE SAW INTO SQUARE OR RECTANGULAR SHAPE AND CUT SIDE FACES VERTICALLY. RESHAPE DOWNWARD TO SOLID MATERIAL AND AROUND HOLE TO SOUND PAVEMENT.
- BACKFILL TRENCH IN 6" LIFTS AND COMPACT EACH LIFT TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
- REMOVE ALL LOOSE MATERIAL AND THOROUGHLY SWEEP THE HOLE AREA CLEAN OF MUD AND STANDING WATER.
- APPLY LIQUID ASPHALT TACK TO VERTICAL FACES IN A UNIFORM MANNER. DO NOT PUDDLE TACK COAT ON BOTTOM OF HOLE.
- FILL TOP OF HOLE WITH TYPE III BITUMINOUS CONCRETE. PLACE AND COMPACT IN LIFTS NO MORE THAN 2" THICK. FINAL TYPE III LIFT PRIOR TO COMPACTING SHOULD BE 1/2" TO 3/4" ABOVE ADJOINING PAVEMENT SO THAT AFTER COMPACTING THE PATCH IS LEVEL WITH THE ORIGINAL PAVEMENT. EACH LIFT SHOULD BE THOROUGHLY COMPACTED WITH A VIBRATORY PLATE COMPACTOR OR A PORTABLE ROLLER. HAND TAMP SHOULD ONLY BE USED FOR SMALL AREAS (LESS THAN 1 S.F.).
- CLEAN UP AREA. DO NOT LEAVE EXCESS FILL OR EXCAVATED MATERIAL ON THE PAVEMENT. REMOVE SAFETY SIGNS.

REPLACEMENT of EXISTING BITUMINOUS PAVEMENT

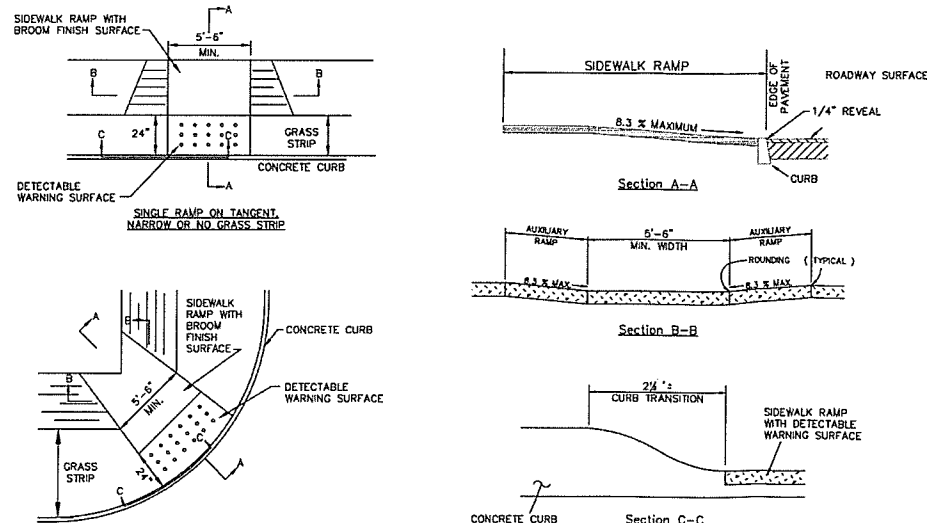
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- NOTES:
- SLEEVES SHALL HAVE WORKING PRESSURE OF 150 PSI.
 - ALL EXTERIOR EXPOSED SURFACES SHALL BE FUSION BONDED, EPOXY-COATED TO A MIN. 10 MIL. THICKNESS.
 - ALL NUTS AND BOLTS SHALL BE 18-8 STAINLESS STEEL.
 - UPON FINAL TIGHTENING AND TESTING ALL BOLTS SHALL BE BRUSH COATED WITH BITUMASTIC COLD APPLIED MATERIAL TO ALL EXPOSED NUTS & BOLTS.

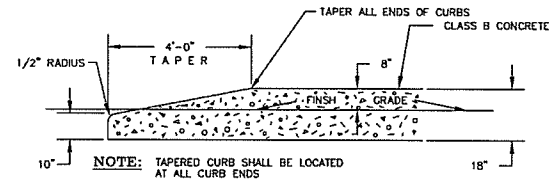
TAPPING VALVE and SLEEVE DETAIL

NTS



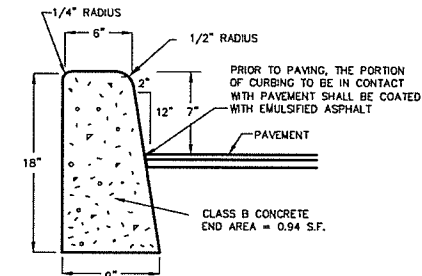
SIDEWALK RAMPS

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TYPICAL TAPERED CURB

N.T.S.

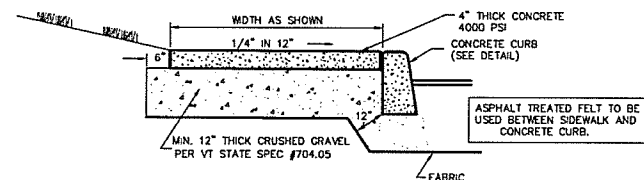


NOTES:

- CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
- CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO AASHTO DESIGNATION M-153 (1/2" SPONGE RUBBER OR CORK.)
- ALL CONCRETE SHALL BE AIR ENTRAINMENT NOT LESS THAN 5% AND NOT MORE THAN 7%.

CONCRETE CURB

N.T.S.

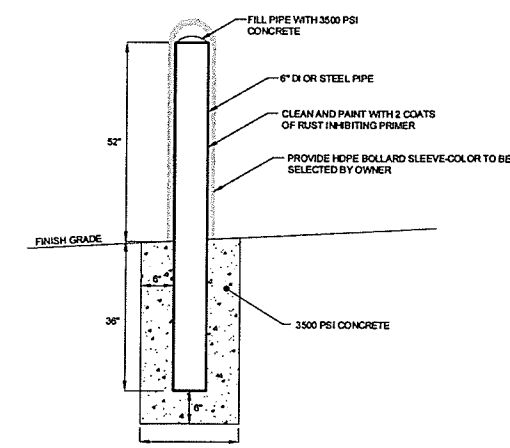


NOTES:

- CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4,000 PSI AT 28 DAYS, AIR ENTRAINMENT WITH AN ADJUTURE PRODUCING AN AIR CONTENT OF BETWEEN 5% AND 7% BY VOLUME.
- HALF INCH (1/2") TRANSVERSE EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT EXCEEDING TWENTY FEET (20'). SIDEWALKS SHALL BE SCORED TO A DEPTH OF ONE INCH (1") EVERY FIVE (5') FEET. CURB AND SIDEWALK SECTIONS SHALL BE SEPARATED BY ASPHALT TREATED FELT.
- AFTER THE INITIAL CURING PERIOD IS OVER (APPROXIMATELY 28 DAYS), ALL EXPOSED SURFACES SHALL RECEIVE TWO COATS OF ANTI-SPALLING COMPOUND.
- SEE ARCHITECTURAL PLANS AND DETAILS AT BUILDING ENTRANCE LOCATIONS FOR ADDITIONAL SIDEWALK FOUNDATION AND SUPPORT DETAILS.

CONCRETE SIDEWALK DETAIL

N.T.S.



THE ABOVE DETAIL SHALL BE USED FOR BOLLARDS AT THE LOADING AREA ENTRY

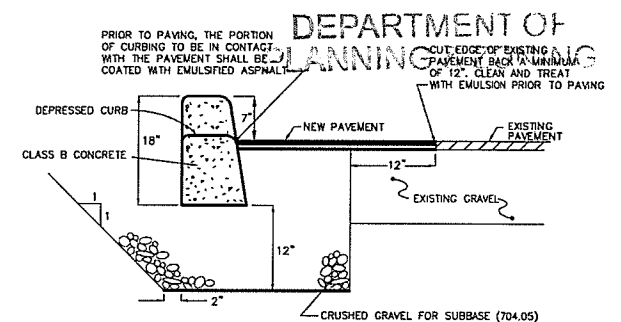
TYPICAL BOLLARD

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GENERAL CONSTRUCTION SPECIFICATIONS

- ALL WORK AND MATERIALS SHALL BE APPROVED BY THE OWNER OR ENGINEER AND IN ACCORDANCE WITH THE LATEST VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CITY OF BURLINGTON PUBLIC WORKS REQUIREMENTS, AND THESE PLANS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DISSAFE" AT 1-888-DISSAFE PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING VEGETATION, PAVEMENT AND STRUCTURES NECESSARY TO CONSTRUCT THIS PROJECT UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR SHALL REMOVE ALL EXCESS OR UNSTABLE MATERIAL, DEBRIS AND TRASH FROM THE SITE UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OR HER OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER, APPLY CALCIUM CHLORIDE OR SWEEP ASPHALT ROADS WITH A POWER BROOM AS DUST CONTROL.
- ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THE CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
- THE WORK SHOWN ON THESE PLANS SHALL BE INSPECTED BY LAMOUREUX & DICKINSON CONSULTING ENGINEERS, INC., ESSEX JUNCTION, VERMONT, TO ENSURE COMPLIANCE WITH THE PLANS AND REQUIREMENTS. LAMOUREUX & DICKINSON WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT MAY ARISE FROM THE FAILURE OF THE CONTRACTOR TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED TO INSPECT THE WORKS AND TESTS IN PROGRESS.
- FOR ANY WORK WITHIN A HIGHWAY OR STREET RIGHT-OF-WAY, A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC WILL BE REQUIRED AT NIGHT, DURING PEAK HOURS, AND WHENEVER POSSIBLE DURING ACTUAL CONSTRUCTION ACTIVITIES. UNIFORMED TRAFFIC CONTROL OFFICERS SHALL DIRECT TRAFFIC DURING PEAK HOURS WHEN THERE IS ONE-WAY TRAFFIC OR WHEN DEEMED NECESSARY BY THE CITY.
- TEMPORARY CONSTRUCTION SIGNS AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, VITRANS E-STANDARDS AND CITY REQUIREMENTS.
- TO ASSURE COMPLIANCE WITH THE PLAN(S), THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS IN ADVANCE OF STARTING ANY WORK, CUTTING THE PAVEMENT, BEGINNING THE INSTALLATION OF ANY UTILITIES, TESTING THE UTILITIES, BRINGING IN ANY NEW GRAVEL FOR THE NEW BASE, PAVING, AND FINAL INSPECTION. PRIOR TO BEGINNING CONSTRUCTION ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER.
- AT COMPLETION OF GRADING, SLOPES, DITCHES, AND ALL DISTURBED AREAS SHALL BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL VERIFY NEW TAP LOCATIONS AND SHALL CONNECT ALL UTILITIES TO NEAREST SOURCE THROUGH COORDINATION WITH THE UTILITY COMPANY AND OWNER.
- SEE OTHER DETAIL SHEETS OF THESE PLANS FOR ADDITIONAL DETAILS, REQUIREMENTS AND SPECIFICATIONS.

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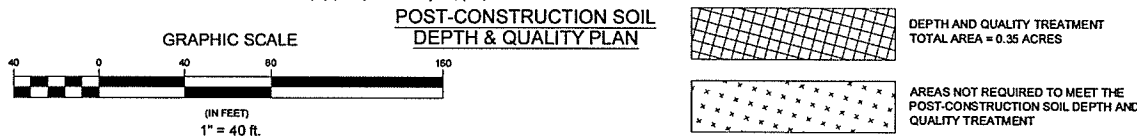
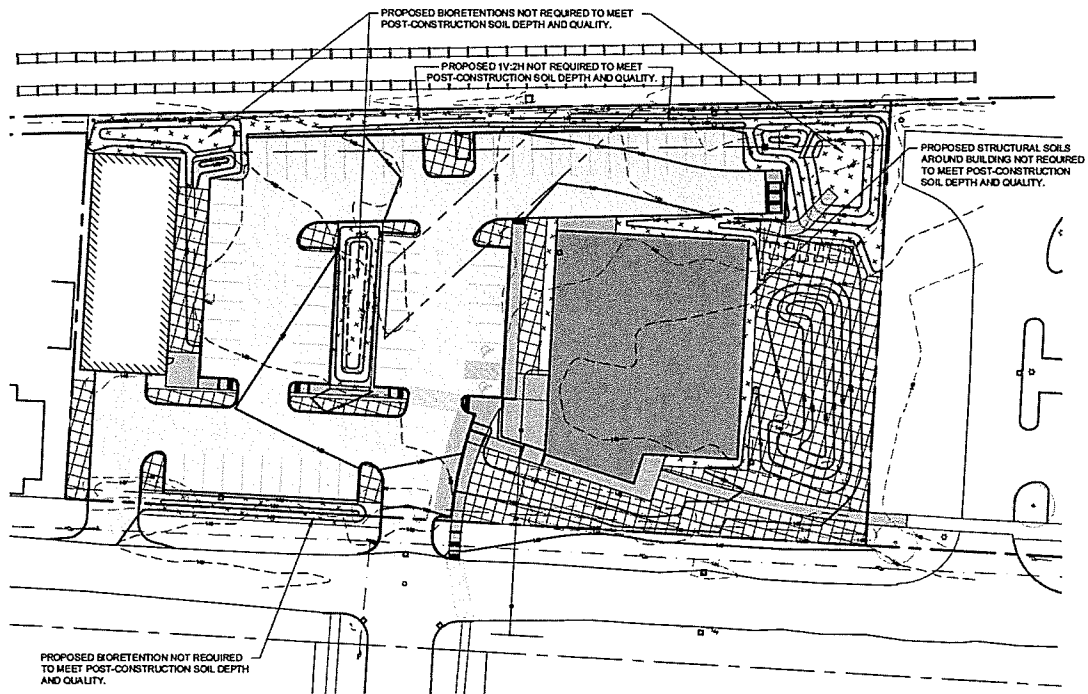


NOTES:
THE NEW PAVEMENT DEPTH SHALL MATCH THE EXISTING PAVEMENT DEPTH. AT A MINIMUM, 4" OF TYPE III PAVEMENT SHALL BE PLACED IN 2 LIFTS.

CONCRETE CURB AND PAVEMENT REPLACEMENT

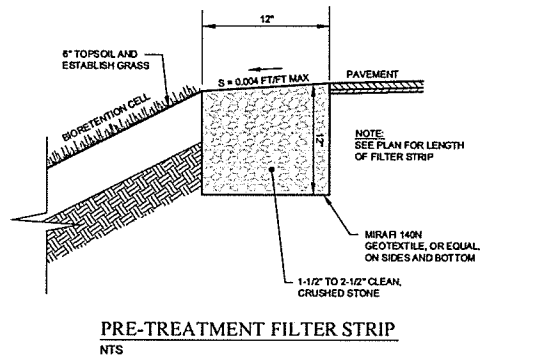
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Date	Revision	By
These plans shall only be used for the purpose shown below:		
☐ Sketch/Concept	☐ Act 250 Review	
☐ Preliminary	☐ Construction	
☒ Final Local Review	☐ Record Drawing	
Project No. 17023		Survey L&D
75 BRIGGS STREET BURLINGTON, VT 05401		Design ABR
SITWORK & WATER DETAILS & SPECIFICATIONS		Drawn L&D
		Checked DJG
		Date 06-21-18
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		Sheet number C5

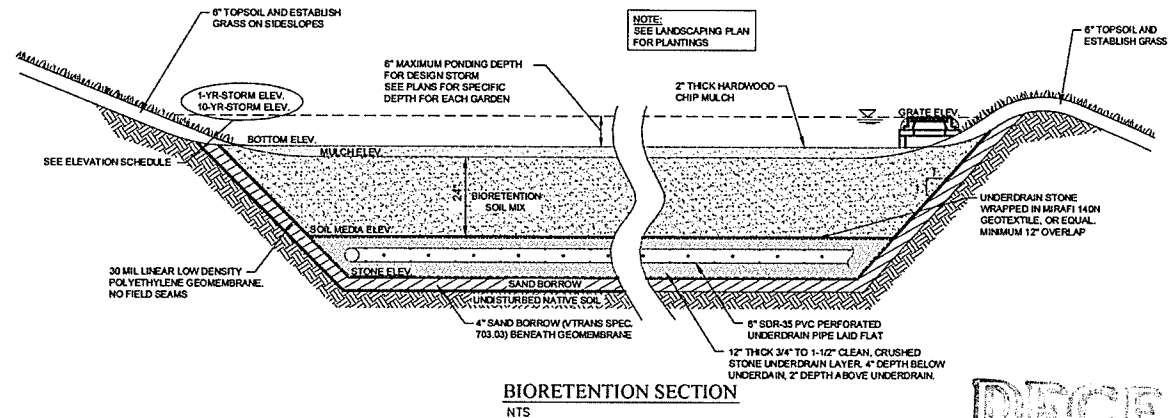


POST-CONSTRUCTION SOIL DEPTH & QUALITY TREATMENT NOTES

- POST-CONSTRUCTION SOIL DEPTH AND QUALITY TREATMENT SHALL CONFORM TO SECTION 3 OF THE 2017 VERMONT STORMWATER MANAGEMENT MANUAL RULE AND DESIGN GUIDANCE. AT A MINIMUM, ALL AREAS IDENTIFIED ON THIS PLAN ARE SUBJECT TO THESE RULES AND THE OUTLINED TREATMENT AS INDICATED BELOW. ANY ADDITIONAL AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING THE COMPACTION OF SOIL DUE TO THE TRACKING OF HEAVY EQUIPMENT, ARE ALSO SUBJECT TO THE STANDARDS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 4% DRY WEIGHT ORGANIC MATTER, AND SHALL BE PLACED A MINIMUM OF 4" OF DEPTH AS INDICATED ON THE PLANS.
- THE COMPOST USED TO MEET ORGANIC REQUIREMENTS SHALL CONSIST OF THE FOLLOWING:
 - A CARBON TO NITROGEN RATIO BELOW 25:1.
 - COMPOST SHALL MEET THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR THE CONTAINMENT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(g)(8-7), §6-1105(a)(8-9), AND §6-1108(a)(9-4).
 - A MAXIMUM OF 35% OF THE TOTAL SOIL VOLUME MAY CONTAIN EXCEPTIONAL QUALITY BIOSOLIDS AMENDMENTS, AND SHALL BE WELL MIXED.
- THE SOIL QUALITY REQUIREMENTS SHALL BE MET BY USING THE FOLLOWING METHOD:
 - IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.
 - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
 - PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA.
 - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER AND WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 95% OF MAXIMUM DRY DENSITY.
- SOIL DEPTH SHALL BE ESTABLISHED AT THE END OF CONSTRUCTION AND ALL AREAS IDENTIFIED SHALL BE PROTECTED FROM COMPACTION.
- TEST HOLES SHALL BE PERFORMED BY THE CONTRACTOR BY USING A SHOVEL DRIVEN SOLELY BY THE CONTRACTOR'S WEIGHT. THE TEST HOLES SHALL BE 8" IN DEPTH AND USED BY THE CONTRACTOR FOR SELF VERIFICATION THAT ALL REQUIREMENTS OF THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY PLAN HAVE BEEN MET.
- TEST HOLES SHALL BE PERFORMED IN LOCATIONS NOTED ON THIS PLAN OR AS SELECTED BY THE CONTRACTOR. TEST HOLES SHALL BE SPACED AT A MINIMUM OF 50' APART. THE CONTRACTOR SHALL PROVIDE NINE (9) TEST HOLES PER ACRE OF IDENTIFIED AREA SUBJECT TO THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY TREATMENT.
- A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER ALL TURF AREAS. SEE LANDSCAPING PLAN FOR ADDITIONAL NOTES, PLANTING SCHEDULE AND SEEDING SPECIFICATIONS.



PRE-TREATMENT FILTER STRIP
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BIORETENTION SECTION
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BIORETENTION MONITORING AND MANAGEMENT

WHAT TO LOOK FOR	PROBLEMS	YES/NO	POSSIBLE CAUSES	ACTIONS
AESTHETICS	ARE WEEDS PRESENT?	YES	YOUNG PLANTS HAVE NOT YET COVERED THE GROUND. THERE ARE NEARBY SOURCES OF WEED SEEDS.	REMOVE WEEDS. IRRIGATE IF NECESSARY TO INCREASE VIGOR OF DESIRED SPECIES. REPLACE ANY PLANTS THAT ARE MISSING BECAUSE OF MORTALITY. APPLY A THIN LAYER OF WOOD CHIP MULCH OVER ANY BARE SOIL.
		NO		CHECK AGAIN NEXT TIME.
	IS THE PLANTING ATTRACTIVE?	YES		CHECK AGAIN NEXT TIME.
		NO	THE MIX OF SPECIES HAS DEVIATED FROM ORIGINAL DESIGN.	CONTACT DESIGNER TO DEVELOP ENHANCEMENT PLAN. INSTALL RECOMMENDED PLANTINGS.
LOSS OF SPECIES DIVERSITY	IS LITTER PRESENT?	YES		REMOVE LITTER. INVESTIGATE POSSIBLE SOURCES AND REMOVE, OR IMPROVE LITTER COLLECTION PRACTICES.
		NO		CHECK AGAIN NEXT TIME.
HEALTH OF PLANTS	HAS MORTALITY CAUSED THE DISAPPEARANCE OF SPECIES?	YES	THE ADAPTATIONS OF THE PLANT SPECIES DO NOT MATCH THE HYDROLOGY.	CONTACT DESIGNER TO ASSESS HYDROLOGY AND SUITABILITY OF SPECIES. INSTALL RECOMMENDED SPECIES TO FILL GAPS.
		NO		CHECK AGAIN NEXT TIME.
	DO PLANTS EXHIBIT LOW VIGOR?	YES	THE SOIL HAS INADEQUATE NUTRIENTS. SOIL pH IS OUT OF THE ACCEPTABLE RANGE. PLANTS ARE NOT ADAPTED TO THE HYDROLOGY OF THE RAIN GARDEN. SUBSTANCES TOXIC TO PLANTS HAVE ENTERED THE RAIN GARDEN.	COLLECT AND SUBMIT SOIL SAMPLES FOR ANALYSIS. CORRECT NUTRIENT DEFICIENCIES OR IMBALANCES. BECAUSE RAIN GARDEN PLANTS DO NOT HAVE HIGH NUTRIENT REQUIREMENTS, BE CONSERVATIVE WITH FERTILIZER APPLICATION. COLLECT AND SUBMIT SOIL SAMPLES FOR ANALYSIS. CORRECT pH LEVEL USING SULFUR OR GROUND LIMESTONE, AS PRESCRIBED. CONTACT DESIGNER TO ASSESS HYDROLOGY AND MAKE RECOMMENDATIONS FOR MORE SUITABLE SPECIES. INSTALL RECOMMENDED SPECIES.
		NO		CHECK AGAIN NEXT TIME.
	ARE PLANTS OVERLY VIGOROUS OR FALLING OVER?	YES	THE SOIL HAS EXCESSIVE NUTRIENTS.	FERTILIZER SHOULD NEVER BE APPLIED TO A RAIN GARDEN UNLESS THE NEED IS DEMONSTRATED. CHECK THE CONTRIBUTING WATERSHED FOR SOURCES OF EXCESS NUTRIENTS AND REMOVE IF POSSIBLE. ASSESS SPECIES SUITABILITY IN LIGHT OF HIGH NUTRIENT LEVELS.
		NO		CHECK AGAIN NEXT TIME.
BIORETENTION FUNCTION	ARE ONE OR MORE SPECIES ENCROACHING ON OTHERS?	YES	CONDITIONS ARE IDEAL FOR THE OVERLY VIGOROUS SPECIES. SPECIES THAT ARE BEING CROWDED OUT ARE NOT WELL SUITED TO THE SOIL OR HYDROLOGY.	IN EARLY SUMMER, CUT STEMS OF THE OVERLY VIGOROUS PLANTS TO THE GROUND WHERE THEY ENCRONCH ON NEARBY SPECIES. CONTINUED ISSUES MAY REQUIRE THAT THE EXCESS PLANT CROWNS BE DUG OUT. CONTACT THE DESIGNER TO ASSESS THE SUITABILITY OF THE LOW-VIGOR SPECIES AND MAKE RECOMMENDATIONS.
		NO		CHECK AGAIN NEXT TIME.
	IS STANDING WATER ABSORBED WITHIN 48 HOURS AFTER A RAIN EVENT?	YES		CHECK AGAIN NEXT TIME.
		NO	OUTLET DRAIN IS BLOCKED. SOIL IS NOT PERMEABLE ENOUGH. EXCESSIVE WATER IS BEING DIRECTED INTO RAIN GARDEN.	CLEAR OR UNBLOCK DRAIN. CONTACT DESIGNER TO ASSESS INFILTRATION RATE AND DEVELOP STRATEGY TO IMPROVE IT.
	IS BIORETENTION RARELY INUNDATED OR INUNDATED FOR ONLY SHORT PERIODS OF TIME?	YES	INLET IS BLOCKED. ADEQUATE WATER IS NOT FLOWING TOWARDS INLET. OUTLET STRUCTURE IS LEAKING BELOW THE RIM.	CLEAN DEBRIS FROM INLET. MODIFY THE INLET OR FLOW PATHS OVER CONTRIBUTING IMPERVIOUS SURFACES. REPAIR THE OUTLET STRUCTURE.
		NO		CHECK AGAIN NEXT TIME.
ACCUMULATION OF PLANT DEBRIS	IS EROSION, SEDIMENTATION, OR BARE SOIL PRESENT?	YES	GAPS BETWEEN PLANTS ARE NOT STABILIZED BY ROOTS. OTHER INFLOWS OF WATER BESIDES THE PLANNED ONE EXPOSES SOIL TO EROSION. SEDIMENT IS BEING CARRIED WITH RUN-OFF INTO THE RAIN GARDEN.	CONTACT DESIGNER TO EVALUATE WHETHER MORE OR ALTERNATIVE SPECIES ARE NECESSARY TO STABILIZE SOIL. INSTALL ADDITIONAL PLANTINGS. BLOCK THE EXTRA INFLOW OR ARMOR THE ROUTE OF INFLOW WITH STONES TO KEEP SOIL IN PLACE. STABILIZE OR REMOVE SEDIMENT SOURCE. DETERMINE THE CAUSE AND PREVENT IT FROM HAPPENING. REPLACE ANY MISSING PLANTS AS SOON AS POSSIBLE. MULCH WITH A THIN LAYER OF WOOD CHIPS.
		NO		CHECK AGAIN NEXT TIME.
	DOES BIORETENTION VEGETATION ATTRACT BIRDS AND POLLINATORS?	YES		CHECK AGAIN NEXT TIME.
		NO	NOT ENOUGH OF THE RIGHT KINDS OF PLANTS ARE PRESENT. FLOWERS ARE NOT BLOOMING AT THE PROPER TIME TO BENEFIT DESIRED SPECIES. THE END OF THE GROWING SEASON RESULTS IN DEAD HERBACEOUS STEMS. SHRUB STEMS LOSE VIGOR WITH AGE.	LEAVE STEMS STANDING OVER THE WINTER TO PROVIDE SEEDS AND COVER FOR BIRDS, PROTECTION FOR SOIL. CUT DEAD STEMS TO 6-12" ABOVE THE SOIL IN LATE APRIL. REMOVE STEMS FROM RAIN GARDEN. AFTER SHRUBS HAVE REACHED MATURITY, REAPPRPRIATE BY PERIODICALLY PRUNING AWAY LESS VIGOROUS STEMS, CLEARLY CUTTING AT GROUND LEVEL. RETAIN ADEQUATE TOP GROWTH TO SUPPORT ROOTS.

BIORETENTION - EROSION PREVENTION AND SEDIMENT CONTROL SEQUENCING

- INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM ENTERING THE BIORETENTION DURING CONSTRUCTION.
- RUNOFF SHALL NOT BE DIRECTED INTO THE BIORETENTION FACILITY UNTIL:
 - ALL UPGRADIENT CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED.
 - THE BIORETENTION FACILITY IS COMPLETE AND ALL AREAS SUBJECT TO RUNOFF HAVE BEEN PERMANENTLY STABILIZED.
- REMOVE TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL DEVICES AFTER THE BIORETENTION IS PLACED ONLINE AND IS RECEIVING RUNOFF.
- IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BIORETENTION, THE SEDIMENT AND ALL CONTAMINATED MATERIAL (SUCH AS MULCH OR SOIL MIX) SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

BIORETENTION - GENERAL CONSTRUCTION SPECIFICATIONS

- THE BIORETENTION SHALL BE EXCAVATED TO THE DIMENSIONS, SIDE SLOPES, AND ELEVATIONS SHOWN ON THE DRAWINGS. THE METHOD OF EXCAVATION SHALL MINIMIZE THE COMPACTION OF THE SUBGRADE SOIL WITHIN THE FOOTPRINT OF THE BIORETENTION AREA.
- THE BIORETENTION SOIL MIXTURE SHALL BE PLACED AND GRADED USING LOW GROUND CONTACT PRESSURE EQUIPMENT. TO THE EXTENT POSSIBLE, WORK SHALL BE PERFORMED BY EQUIPMENT OPERATING ON THE ADJACENT SLOPES.
- ALL WORK RELATED TO PLACEMENT OF MULCH AND PLANT INSTALLATION SHALL BE ACCOMPISHED WITH METHODS AND EQUIPMENT THAT DO NOT RESULT IN FURTHER COMPACTION OF THE BIORETENTION SOIL MIX.

BIORETENTION - MATERIAL SPECIFICATIONS:

HARDWOOD CHIP MULCH
MULCH SHALL CONSIST OF RAW WOOD MATERIAL FROM ONLY HARDWOOD TIMBER AND SHALL BE A PRODUCT OF A MECHANICAL CHIPPER, HAMMERMILL, OR TUB GRINDER. MULCH CONSISTING OF SOFTWOOD TIMBER, MANUFACTURED BOARDS, AND/OR CHEMICALLY TREATED WOOD IS UNACCEPTABLE. THE MATERIAL SHALL BE UNIFORM IN COLOR AND SUBSTANTIALLY FREE OF MOLD, DIRT, SAWDUST, WEEDS, SEED AND FOREIGN MATERIAL. THE MATERIAL SHALL BE AGED A MINIMUM OF 12 MONTHS, BUT SHALL NOT BE IN AN ADVANCED STATE OF DECOMPOSITION.

THE MULCH MATERIAL, WHEN DRIED, SHALL ALL PASS A FOUR (4) INCH SCREEN AND NOT MORE THAN 20 PERCENT BY MASS SHALL PASS A ONE TENTH (0.1) INCH SCREEN. GRASS CLIPPINGS ARE UNSUITABLE FOR MULCH.

BIORETENTION SOIL MIX
THE BIORETENTION SOIL SHALL CONSIST OF USDA SAND TO LOAMY SAND CLASSIFICATION, OR A WELL BLENDED, HOMOGENEOUS MIXTURE OF THE FOLLOWING COMPONENTS:

SAND	85-98%
SILT	0-12%
CLAY	0-3%
ORGANICS	3-5%

ORGANICS SHOULD CONSIST OF COMPOST THAT MEETS THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR THE CONTAINMENT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(g)(8-7), §6-1105(a)(8-9), AND §6-1108(a)(9-4).

THE BIORETENTION SOIL MIX SHALL BE FREE OF STONES, STUMPS, OR ROOTS LARGER THAN TWO (2) INCHES IN ANY DIMENSION. THE SOIL MIX SHALL BE FREE OF NOXIOUS WEEDS.

EACH BIORETENTION SOIL MIX MATERIAL COMPONENT SHALL HAVE THE FOLLOWING PROPERTIES:

TOPSOIL: SANDY LOAM OR LOAMY SAND TEXTURE PER USDA TEXTURAL TRIANGLE, HAVING LESS THAN 5% CLAY CONTENT.

COMPOST: SHALL BE FREE OF WEED SEEDS AND COMPLY WITH EPA REQUIREMENTS FOR COMPOST. THE COMPOST SHALL HAVE A LOOSE AND GRANULAR TEXTURE. THE COMPOST SHALL POSSESS NO OBJECTIONABLE ODORS AND SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED.

RECEIVED
JUN 26 2018
DEPARTMENT OF
PLANNING & ZONING

BIORETENTION - RECOMMENDED MAINTENANCE SCHEDULE

ACTIVITY	SCHEDULE
PRUNE OR WEED TO MAINTAIN APPEARANCE	AS NEEDED
REPLACE MULCH DUE TO EROSION	AS NEEDED
REMOVE TRASH AND DEBRIS	AS NEEDED
INSPECT VEGETATED SWALE/FOREBAY/PRETREATMENT FOR EROSION	SEMI-ANNUALLY
INSPECT SHRUBS AND PERENNIALS, REMOVE DEAD OR DISEASED PLANTS	SEMI-ANNUALLY
INSPECT AND REMOVE SEDIMENT AND DEBRIS IN PRETREATMENT AREAS	ANNUALLY
INSPECT INFLOW POINTS AND RAIN GARDEN SURFACES FOR BUILD-UP OF SEDIMENT. REMOVE AND REPAIR AS NECESSARY	ANNUALLY
REPLACE MULCH OVER BIORETENTION SURFACE	2-3 YEARS
REPLACE CLEAN PRETREATMENT STONE	3-5 YEARS

Date	Revision	By
These plans shall only be used for the purpose shown below:		
☐ Sketch/Concept	☐ Act 250 Review	
☐ Preliminary	☐ Construction	
☒ Final Local Review	☐ Record Drawing	
PETRA CLIFFS		Project No. 17023
75 BRIGGS STREET BURLINGTON, VT 05401		Survey L&D
		Design ABR
		Drawn L&D
STORMWATER DETAILS		Checked DJG
		Date 06-21-18
Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com		Scale AS NOTED Sheet number C8

Petra Cliffs Climbing Center & Mountaineering School
(802) 657-3872 / andrea@petracliffs.com

Today's Date: March 15, 2024

Future facility at 75 Briggs Street, Burlington VT, planned opening Fall 2025

TRANSPORTATION DEMAND MANAGEMENT PLAN

Outreach and Education

Petra Cliffs has initiated a conversation with CATMA. A Business Membership is anticipated to begin in Fall 2024 to begin assessing the project, surveying employees, determining organizational transportation needs, designing an effective commuter program, and creating a timeline for strategy implementation.

The designated Transportation Coordinator will be the staff team at CATMA.

TDM Strategies

The Petra Cliffs project complies with bike parking standards.

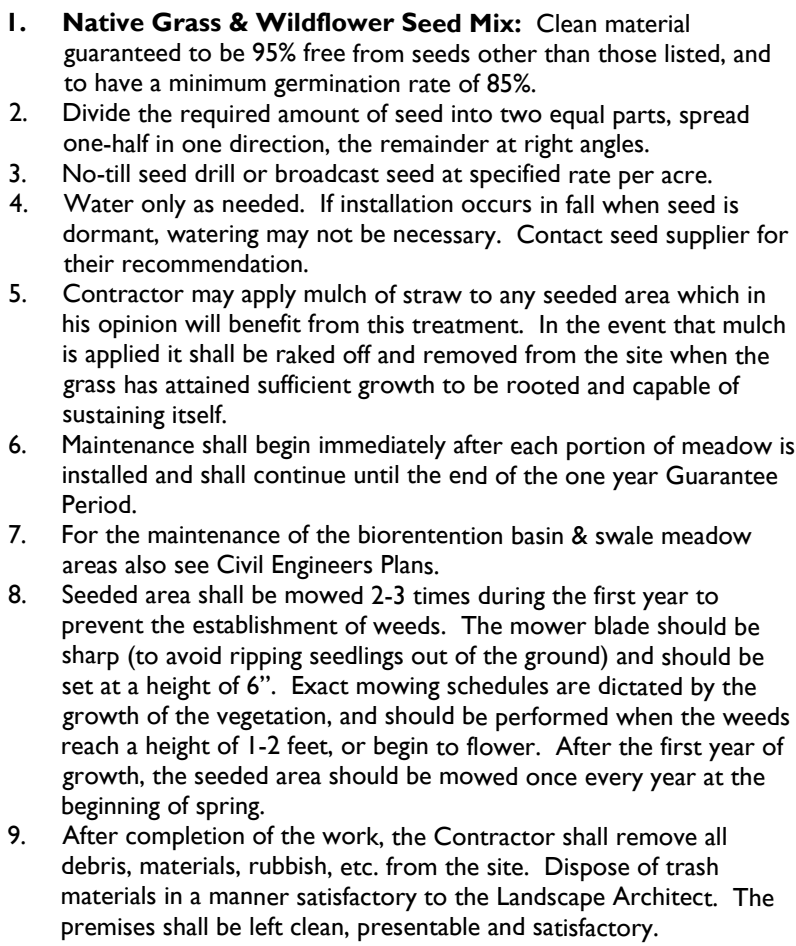
In addition to bike parking standards, the following strategies have been selected for implementation:

- Petra Cliffs will maintain an ongoing and active Business Membership with CATMA for program development, a suite of TDM services, discounted GMT passes, an annual survey, tracking and reporting.
- Petra Cliffs plans to provide Green Mountain Transit passes to employees upon request, at a minimum discount of 50%. We understand that GMT will be reinstating fares in April 2024 and is not currently working with CATMA to provide discounted passes; however, it is anticipated that the project timeline will be favorable to this relationship being restored and the TDM will be updated accordingly.

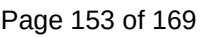
Parking Management

Petra Cliffs will work with CATMA to provide an annual study of parking utilization, which is intended to show actual parking demand and how the TDM plan affects that demand over time.

Priority parking spaces will be provided for bikes, including covered bike parking and indoor employee bike parking. Two ADA accessible spaces will be provided.



24" DEPTH MIN.
24" DEPTH MIN.
24" DEPTH MIN.
18" DEPTH
12" DEPTH
6" DEPTH (OVER 6" OF CLEAN FILL/ PLANTING SOIL)



Department of Permitting & Inspections

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

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



TO: Development Review Board
FROM: Scott Gustin
DATE: March 19, 2024
RE: ZP-24-31; 750 Pine Street

=====

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

Zone: ELM Ward: 5S

Owner/Representative: James Edward Company, LLC / Susan Nostrand

Request: Master sign plan

Applicable Regulations:

Article 6 (Development Criteria & Guidelines), Article 7 (Signs)

Background Information:

The applicant is seeking approval for a master sign plan for the commercial building at 750 Pine Street. As there are three separate tenants within this building, a master sign plan approval may be sought.

Exterior signs are already in place at the subject property and have been permitted without need of a master sign plan. New signage included in this master sign plan is limited to a new freestanding sign. This second freestanding sign, placed along Pine Street, is predicated on approval of a master sign plan. Existing signs will be incorporated into this master sign plan by reference.

Master sign plans offer flexibility but are required to be compatible with the site and buildings and character of the surrounding area pursuant to the provisions of Article 6. While individual signs in the plan may vary from the standards in Article 7, Part 2: *District Regulations*, as to the type and placement of signs on a structure or lot, no individual sign may exceed the size limitations.

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

I. Findings

Article 6: Development Review Standards

Part 1, Land Division Design Standards

Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

Not applicable.

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(a) Make advertising features complimentary to the site

The proposed freestanding sign is dimensionally compliant. In fact, it is smaller than could be allowed. It is set along the building's Pine Street frontage near the center entrance and logically reflects tenants accessible at this entrance. The top circular portion of the sign will be backlit as allowed. **(Affirmative finding)**

Article 7: Signs

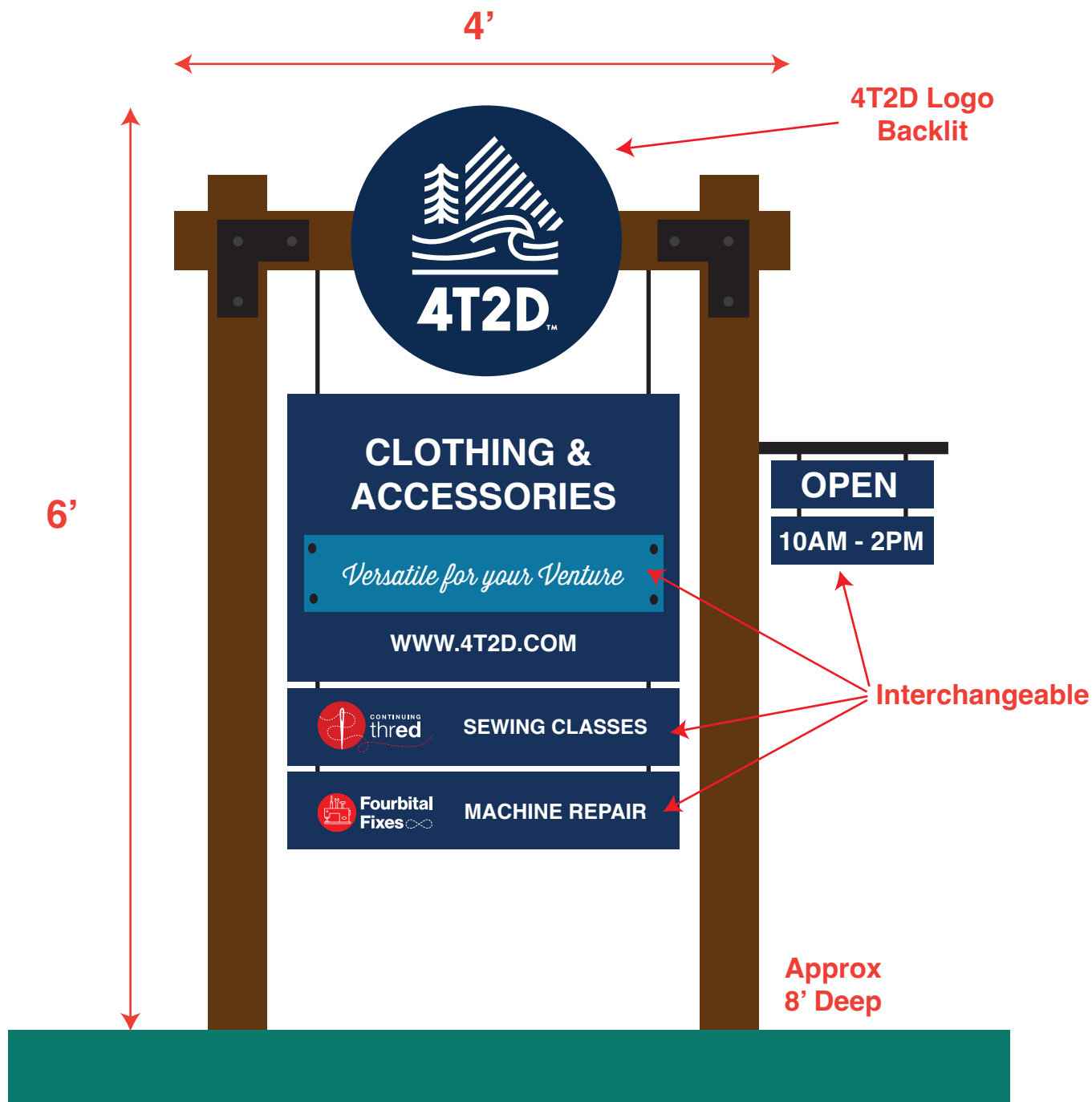
Sec. 7.3.4, Flexibility from Existing Standards

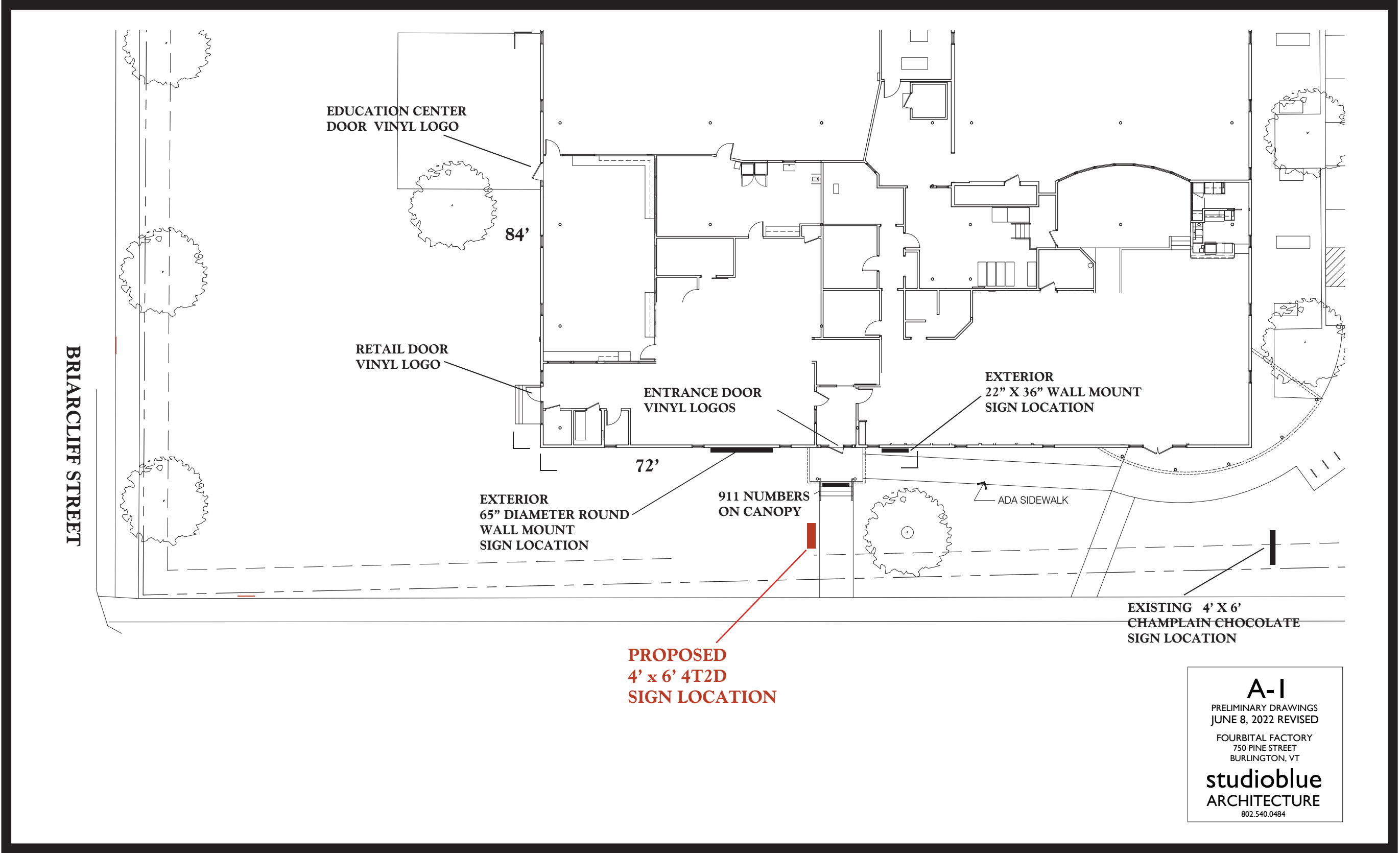
This criterion enables flexibility as to the locational standards for signs that otherwise apply in Article 7. Typically, freestanding signs are limited to 1 per primary street frontage. The subject property is a corner lot and has two primary street frontages. Up to two freestanding signs, one along each street frontage, may be permissible. The flexibility sought in this application is the placement of the second freestanding sign along Pine Street. The end result would be two freestanding signs along Pine Street – the other sign being for Champlain Chocolates.

(Affirmative finding)

II. Conditions of Approval

1. Installation of the proposed freestanding sign is included in this approval.
2. Standard conditions 1-15.





notes

#

FOURBITAL FACTORY
EXTERIOR BUILDING
SITE PLAN
FOR
4T2D
SIGN LOCATION

client
FOURBITAL

scale
NTS

file name
FOURBITAL FACTORY
SITE PLAN 2024

date
03/08/24

drawing
JAL/JCM

SPARKY POTTER
DESIGN GROUP

WOOD & WOOD
DESIGN • SIGN SYSTEMS
INTERIORS • DECORATIVE ARTS
98 CARROLL ROAD
WAITSFIELD, VERMONT 05673



802-496-3000
802-496-7916 FAX
woodwood@madriver.com



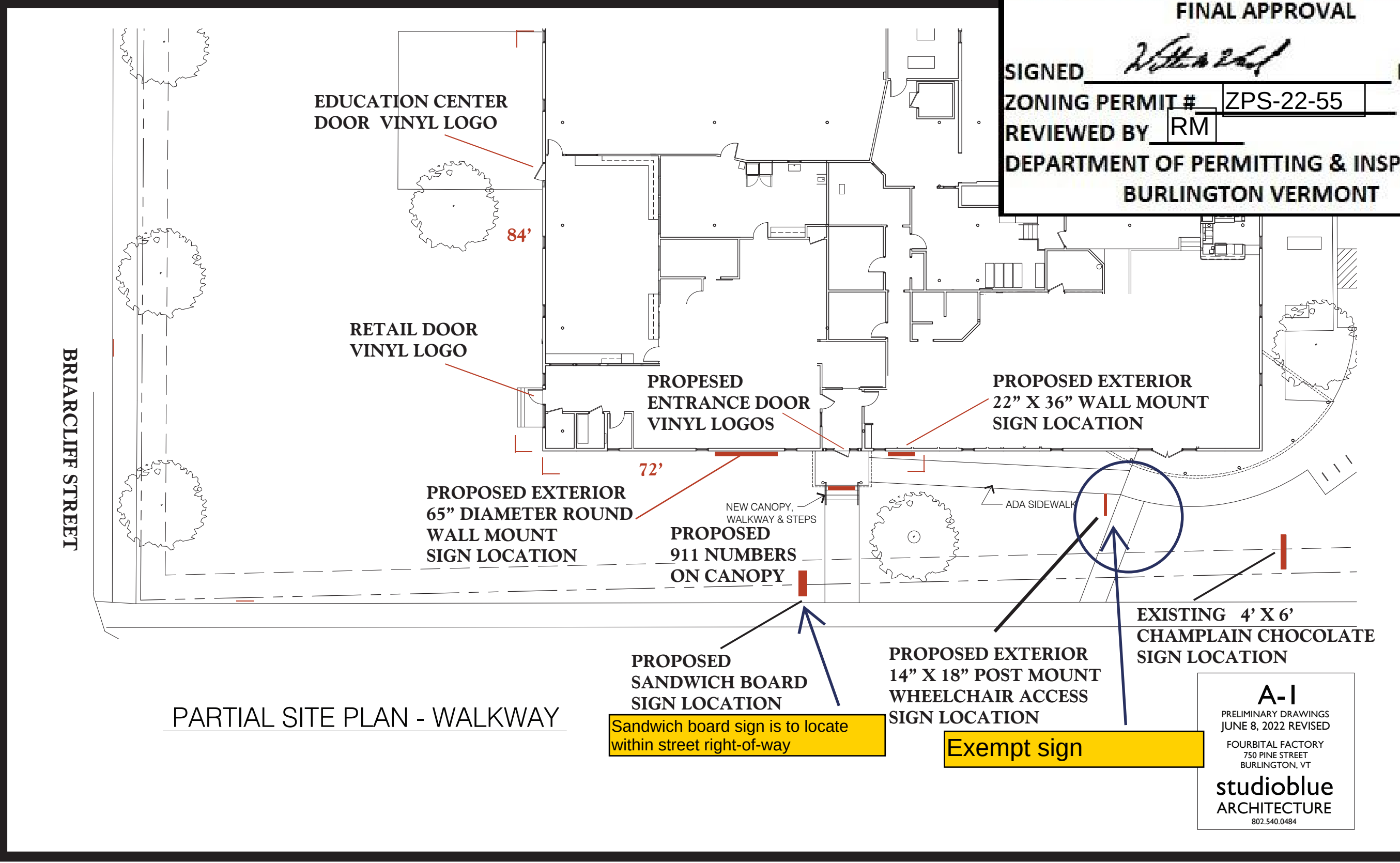




-NOTE-
ANY MODIFICATION OR DEVIATIONS FROM THESE PLANS
REQUIRE ZONING APPROVAL PRIOR TO CONSTRUCTION.
ALL ERRORS IN DIMENSIONS, PLANS, OR DETAILING ARE
FULLY THE RESPONSIBILITY OF THE APPLICANT/OWNER.

FINAL APPROVAL

SIGNED *[Signature]* DATE 9/30/22
ZONING PERMIT # ZPS-22-55
REVIEWED BY RM
DEPARTMENT OF PERMITTING & INSPECTIONS
BURLINGTON VERMONT



PARTIAL SITE PLAN - WALKWAY

client	FOURBITAL
scale	3/4" = 12'
file name	FOURBITAL FACTORY SITE PLAN R1
date	09/26/22
drawing	JAL

SPARKY POTTER
DESIGN GROUP

WOOD & WOOD
DESIGN • SIGN SYSTEMS
INTERIORS • DECORATIVE ARTS
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WAITSFIELD, VERMONT 05673


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802-496-7916 FAX
woodwood@madriver.com
Page 161 of 169

A-I
PRELIMINARY DRAWINGS
JUNE 8, 2022 REVISED
FOURBITAL FACTORY
750 PINE STREET
BURLINGTON, VT

studioblue
ARCHITECTURE
802.540.0484

Sandwich board sign is to locate
within street right-of-way

Exempt sign

1

notes

4904

FOURBITAL FACTORY
EXTERIOR BUILDING
CANOPY NUMBERS

QTY = ONE SET

client

FOURBITAL

scale

3" = 1'

file name

FOURBITAL FACTORY
CANOPY NUMBERS R2

date

09/26/22

drawing

JAL

SPARKY POTTER
DESIGN GROUP

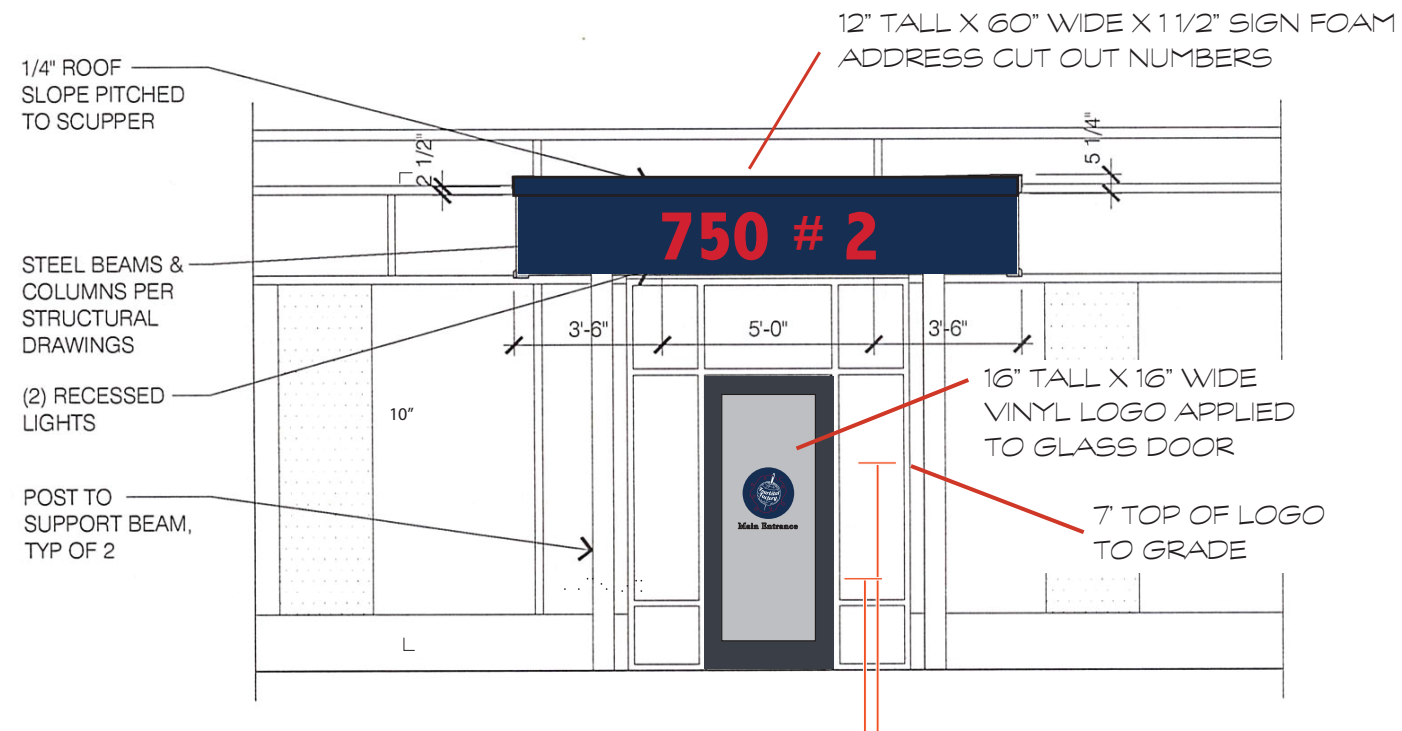
WOOD & WOOD
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WAITSFIELD, VERMONT 05673



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802-496-7916 FAX
woodwood@madriver.com



2 PARTIAL PROPOSED WEST ELEVATION
SCALE: 1/8" = 1'-0" UPDATE TO A2.1 REV.2 DATED 5.2.22



6 CANOPY CROSS-SECTION
SCALE: 1/4" = 1'-0" UPDATE TO A2.3 DATED 5.2.22

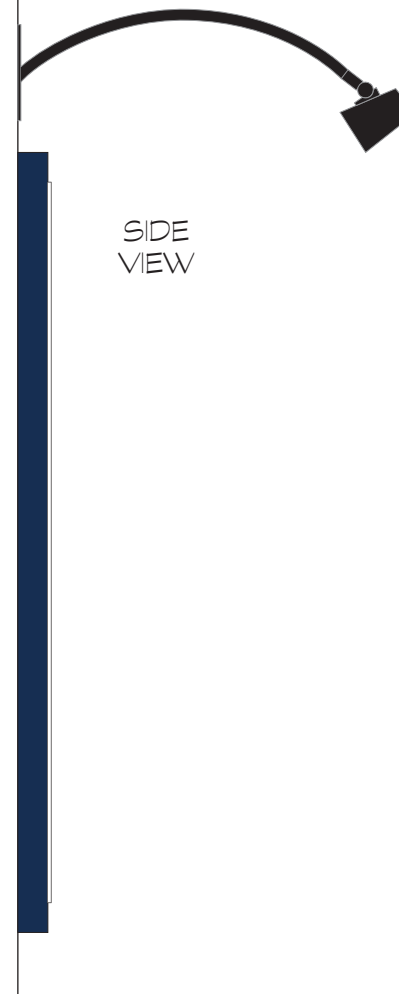
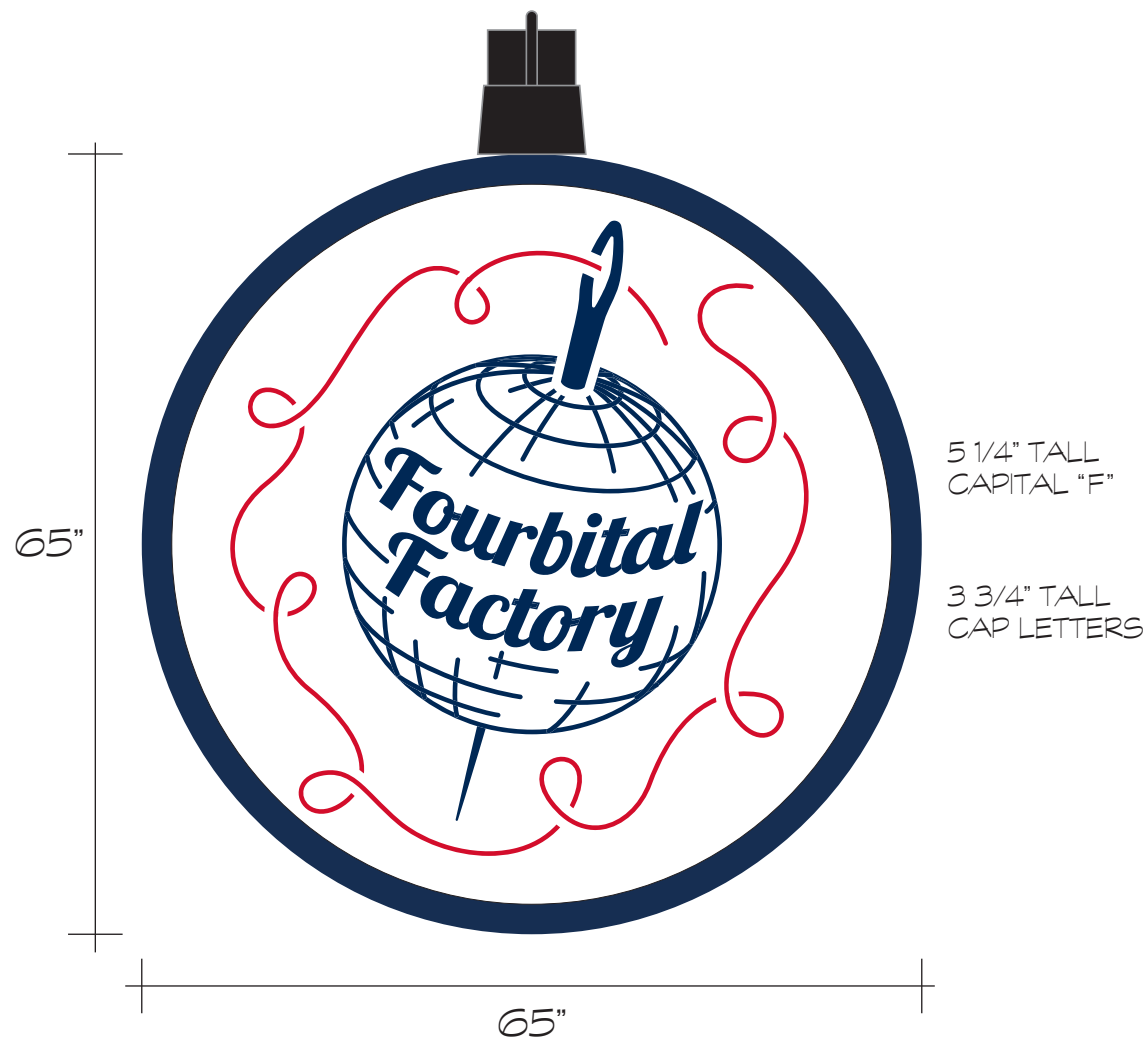
QTY = ONE SET

12 " X 60" X 1 1/2" THICK
CUT OUT SIGN FOAM NUMBERS
PAINTED FLAT RECTORY RED
FARROW & BALLS 100217
MOUNTED TO DOOR CANOPY
WITH PINS AND GLUE

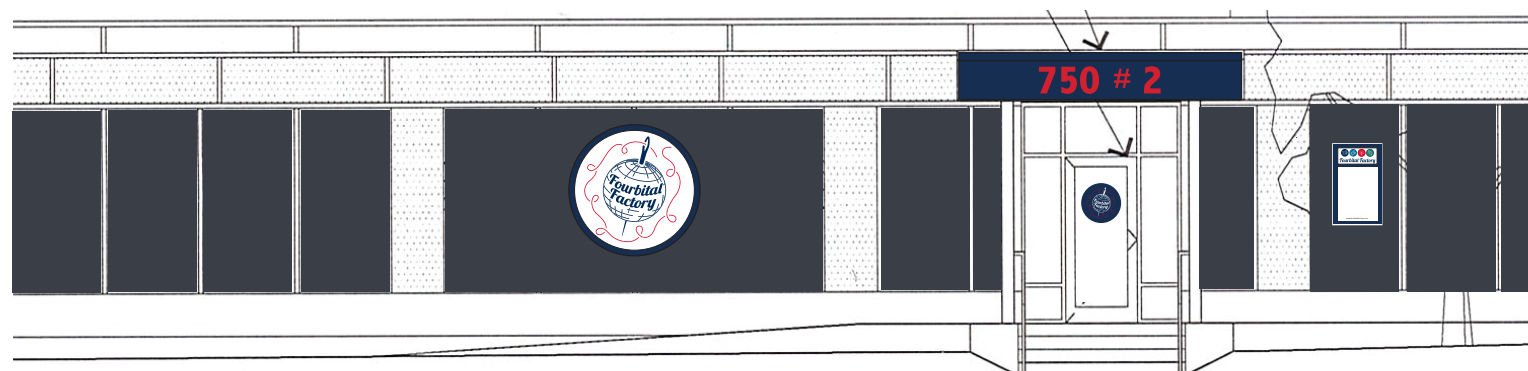
12" 750 # 2 60"

APPROVED _____
DATE _____

8



60 " DIAMTER CIRCLE X 1/8" THICK WHITE MAX METAL ALUMINUM BACKGROUND
3/4" THICK BY 2 1/2" WIDE HDU SIGN FOAM FRAME PAINTED FLAT BM GENTLEMANS GREY 2062-20
THREAD ELEMENT
1/4" - 1/2" THICK HDU SIGN FOAM WITH ROUNDED EDGES PAINTED RED FOR STRING
FLAT RECTORY RED 100217 FARROW & BALLS
3/8" THICK CUTOUT ACRYLIC LOGO PAINTED FLAT BM GENTLEMANS GREY 2062-20
8 3/4" WIDE BLACK RAB LIGHT REFLECTOR WITH CUSTOM BLACK GOOSENECK METAL FIXTURE
WALL MOUNTED TO BUILDING WITH THRU-FASTENERS



WEST ELEVATION SCALE: 1/8" = 1' - 0"



APPROVED _____
DATE _____

notes

4904

FOURBITAL FACTORY
EXTERIOR BUILDING
MOUNTED SIGNS

QTY = ONE
ONE SIDED

65" X 65"
30 TOTAL SQ FT.

client

FOURBITAL

scale

3/4" = 1'

file name

FOURBITAL FACTORY
BUILDING SIGN R5

date

09 /26/22

drawing

JAL / JMHD

SPARKY POTTER
DESIGN GROUP

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98 CARROLL ROAD
WAITSFIELD, VERMONT 05673



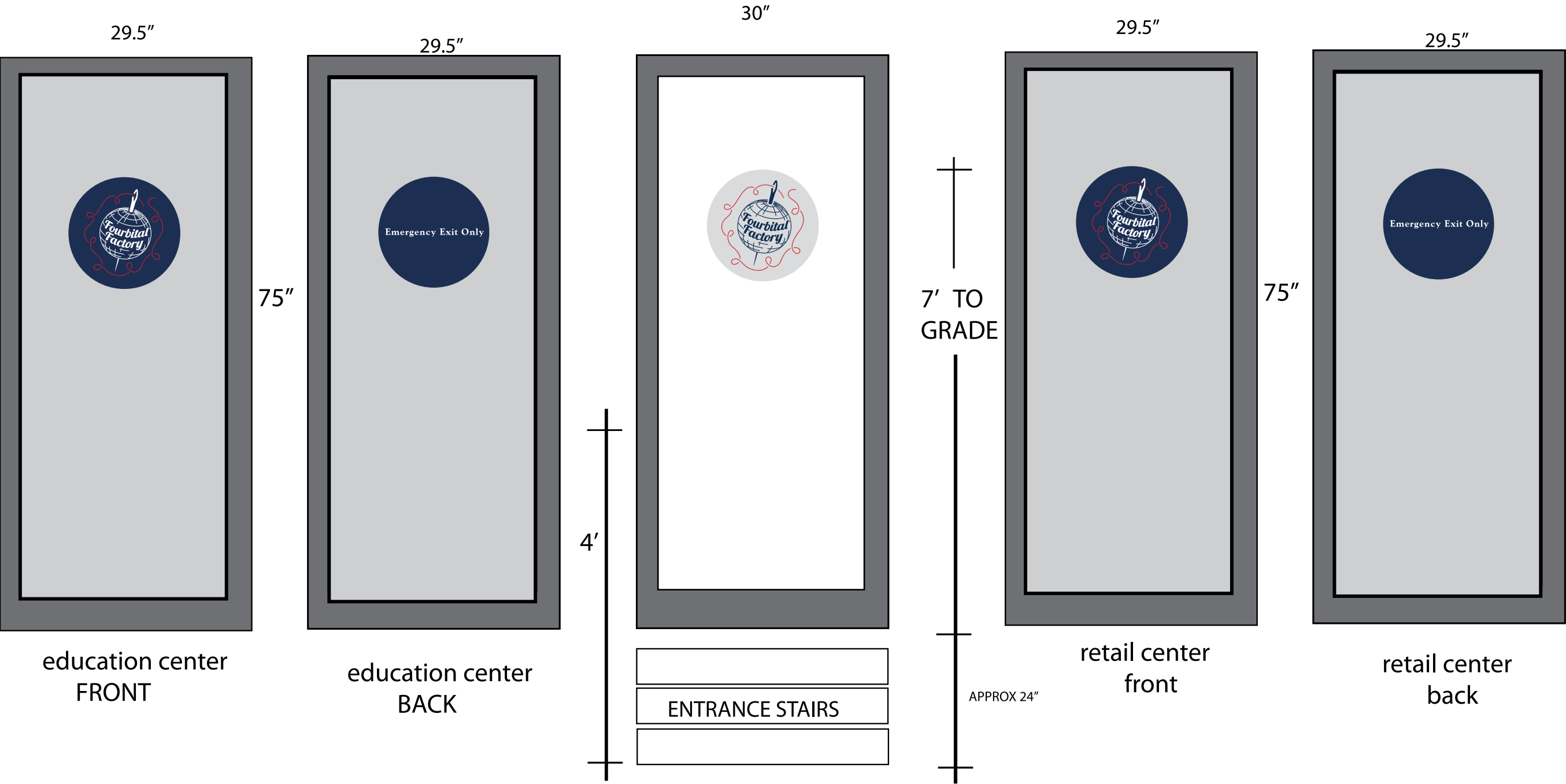
802-496-3000
802-496-7916 FAX
woodwood@madriver.com

9

QTY = THREE GLASS DOOR VINYL LOGO APLICATIONS
30" X 36" = 7.5 SQ FT. (ALLOWABLE GLASS AREA IN THE 4' - 7' HEIGHT FROM GRADE)
16" LOGO CIRCLE 16" X 16" = 1.38 SQ FT.

GRAPHICS TO TAKE UP LESS THN 20% OF TOTAL GLASS SQ FOOTAGE
BETWEEN 4' AND 7' HEIGHT

16" diameter VINYL LOGOS = 1.38 SQ FT



education center
FRONT

education center
BACK

ENTRANCE STAIRS

MAIN DOOR LOGO GRAPHIC
ICE VINYL BACKGROUND

retail center
front

retail center
back

APPROVED _____
DATE _____

notes

4904

FOURBITAL FACTORY
EXTERIOR BUILDING
DOORWAY VINYL
GRAPHICS

QTY = ONE EACH

client

FOURBITAL

scale

3/4" = 1'

file name

FOURBITAL FACTORY
VINYL PERMIT R3

date

09/29 /22

drawing

JAL

SPARKY POTTER
DESIGN GROUP

WOOD & WOOD
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INTERIORS • DECORATIVE ARTS
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WAITSFIELD, VERMONT 05673



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woodwood@madriver.com

2

3a Pine St



QTY = ONE

22 " X 36" X 1" SIGNFOAM PANEL PAINTED
BM GENTLEMANS GREY 2062-20

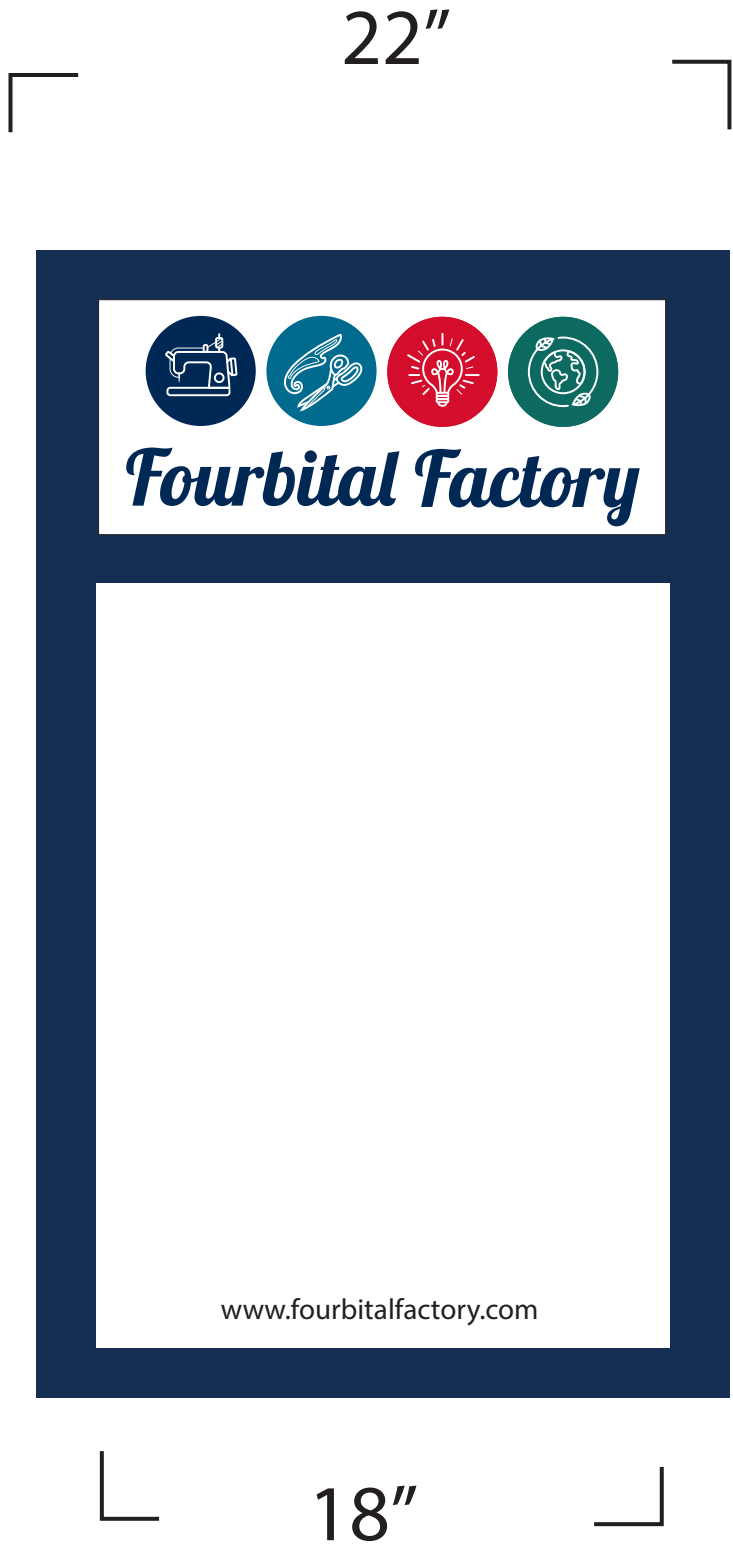
8" X 18" X 1/8 WHITE DIBOND PANEL WITH DIRECT DIGITAL PRINTED
COPY AND LOGO GRAPHIC

18" X 24" X 1/8" DIBOND MOTHERBOARD PANEL WITH EMAIL COPY

TBD CHANEL SYSTEM FOR INTERCHANGABLE LOWER SIGN PANEL

18" X 24" X 1/8 DIBOND PANEL WITH DIRECT PRINT DIGITAL GRAPHICS

WALL MOUNT TO BUILDING WITH THRU FASTENERS



notes

4904

FOURBITAL FACTORY
EXTERIOR BUILDING
WALL MOUNTED
SIGN

QTY = ONE
ONE SIDED

22" X 36"
6 TOTAL SQ FT.

client

FOURBITAL

scale

2" = 1'

file name

FOURBITAL FACTORY
BUILDING SIGN R4

date

09 /26/22

drawing

JAL

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DESIGN GROUP

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WAITSFIELD, VERMONT 05673



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802-496-7916 FAX
woodwood@madriver.com

750 Pine Street on February 15, 2006



750 Pine Street on February 15, 2006



750 Pine Street on February 15, 2006



Department of Permitting and Inspections

Zoning Division

645 Pine Street

Burlington, VT 05401

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

Telephone: (802) 865-7188

(802) 865-7195 (FAX)

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



MEMORANDUM

To: Development Review Board

From: Mary O'Neil, AICP, Principal Planner

Date: March 19, 2024

RE: 44 Wright Avenue; ZP-24-59

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

File: ZP-24-59

Location: 44 Wright Avenue

Zone: RM **Ward:** 5

Parking District: Neighborhood

Date application accepted: February 21, 2024

Applicant/ Owner: Arthur Chukhman, Duncan Wisniewski / Andrew McNealus, 44 Wright LLC

Request: Proposed reconfiguration of existing 3-unit building into a 4-unit building. Proposal includes a secondary 3-unit structure and changing the driveway from gravel to pervious pavers. Review of this application is under the newly warned **ZA-24-02 Neighborhood Code**.

The **Design Advisory Board** reviewed the application at their March 12, 2024 meeting and voted to **Table the application** pending design revision of the Secondary building.

Recommended motion: Defer DRB review pending re-review by the Design Advisory Board.

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