



November 27, 2023

Sarah McShane  
Planning & Zoning Director  
Town of Stowe - Akeley Memorial Building  
67 Main Street  
PO Box 730  
Stowe, VT 05672

Re: Stowe Parking Lot Improvements – Parking Lot A1, A2, A3 Expansion  
Site Plan Revisions

Dear Sarah,

On behalf of VR US Holdings II, LLC, please find enclosed a revised set of the Stowe Mountain Parking Lot Improvements – A Lots Plans. As a follow-up to the 11/7/2023 DRB hearing, the plans have been revised to address feedback received both from Staff and the Board. These revisions include:

- 1) Updated PUD Boundary – Per your correspondence with Matt Lillis on 11/8/2023, it is our understanding that the SKI-PUD boundary follows the existing VR US Holdings II, LLC / State of Vermont Dept of Forests, Parks, and Recreation property line. As such, a portion of the proposed parking expansion falls outside of the SKI-PUD Boundary and within the Forest Reserve (FR) Zoning District.

In reviewing the zoning regulations, commercial ski infrastructure is a conditional use within the FR Zoning District. A portion of the existing parking lot is currently located with the FR Zoning District and the proposed expansion will not have an undue adverse effect on the character of this district as the parking expansion is continuous to the existing parking lot, has been designed to avoid wildlife habitat, natural and scenic resources, and will help provide infrastructure to support outdoor recreation at the ski resort. The SKI-PUD boundary has been labeled on Sheet C2.00.

- 2) Updated Drive Aisle and Parking Lot Striping – The attached plans have been revised to provide a minimum two-way drive aisle width of 24' per Table 15.1 of the Zoning Regulations. Please see Sheet C2.00 for updated parking stall and drive aisle dimensions / layout.

40 IDX Drive, Building 100  
Suite 200  
South Burlington, Vermont 05403  
P 802.497.6100  
F 802.495.5130

Engineers | Scientists | Planners | Designers



- 3) Landscape Plan and Details – The attached plans have been updated to include a Landscape Plan and Planting Detail Specifications. Per Section 15.4 of the Town of Stowe Zoning Regulations:

*Large parking lots of (20 or more spaces) shall be broken down into sections as appropriate for the type and size of the development. Landscaped Island or peninsulas should be incorporated in the parking lot design.*

As depicted on Sheet LA1.00 of the revised plan set, (13) Sienna Glen Maple Trees are now proposed in and around the proposed parking expansion. The proposed trees have been sited along the main drive aisle leading to Lots A1, A2 and A3 to provide partial perimeter screening from the surrounding area, sited adjacent to the Gondola and Mansfield Base Lodge entrances and within landscape peninsulas in all three parking lots. In addition, one (1) proposed Sienna Glen Maple is proposed adjacent to each entrance / exit of the covered pedestrian walkways to complement and help define these features.

Given this parking area will be heavily utilized during the winter months, surrounded by steep topography and snow storage areas between lots, and routinely subject to snow removal, the proposal is appropriate for the type and size of the existing / proposed use.

- 4) Revised Parking Affidavit and Parking Counts – Enclosed please find the revised parking affidavit.

In addition to the parking affidavit, the revised plan set depicts updated parking counts for the Control Lot, A1, A2, A3 on Sheet C2.00. The parking counts have been updated to reflect the revised parking lot striping and inclusion of landscape peninsulas. The existing lots have a total of 337 parking spaces. The proposal will add 77 spaces, increasing the total number of parking spaces to 414. Please see Sheet C2.00 for additional information.

- 5) Revised Covered Stairway / Boardwalk Plans – The covered stairways and boardwalks have been revised to include recessed, ceiling mounted lighting as depicted on Sheet A-100 and A-500. In addition, exterior gooseneck lighting is proposed at each entrance / exit. Please refer to attached Parking Lot Stair Plan and light fixture cut sheets for additional information.

Stowe Mountain Parking Lot Improvements – A Lots  
Ref: 58971.00  
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Included in this submission, please find the following:

- 1) Digital copy of revised Site Plan
- 2) Updated Parking Affidavit
- 3) Updated Parking Lot Stairs Plan
- 4) Light Fixture Cut Sheets

Please feel free to contact me with any questions regarding the proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel Heil".

Daniel Heil, PE  
Site / Civil Project Manager

Cc: VR US Holdings II, LLC



**Stowe Mountain Resort  
Parking Affidavit**

December 2023

	<b>Current State 12/2023</b>	<b>Gondola Base/"A" Lots Parking Improvements Proposed 12/2023</b>
Base Area & Spruce Parking	1977	2054
Satellite Parking	661	661
<b>Total</b>	<b>2638</b>	<b>2715</b>
Comfortable Carrying Capacity (CCC)		8960
On-Site Lodging Guests		1000
Mountain Road Shuttle Guests		700
Guests Arriving in Personal Vehicles		7260
Average Vehicle Occupancy, AVO		2.7
Guest Parking Requirement		2689
Employee Parking Requirement		350
CCC Parking Requirement		3039
Surplus Parking Requirement *		258
<b>Total Parking Requirement</b>		<b>3297</b>

\* Surplus Parking spaces account for employee and guest parking on peak visitation

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Current State and Proposed Plan Notes:

AVO (2.7) based on observations during the 2022/23 season and accounts for guest carpools

Mountain Road Shuttle data based on peak day ridership 2023

Employee Parking Requirement based on employee parking data 2022-2023

General Notes:

On-Site Lodging Guests based on Spruce lodging capacity, peak occupancy %, and ski/ride %

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## DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type	
Project		A	
Comments		Date	
Prepared by	D&K		

## SPECIFICATION FEATURES

### Construction

**TOP:** Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). **MIDSECTION:** Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. **SHADES:** Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. **DOORFRAME:** Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

### Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application

requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

### Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

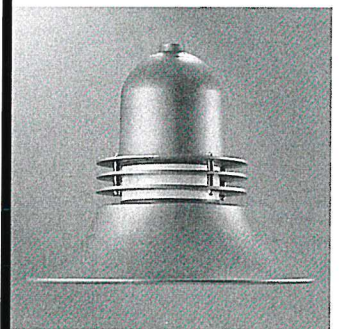
### Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against

fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection. Options to meet Buy American Act requirements

### Warranty

Five-year warranty.



## ECM/EMM EPIC MEDIUM LED

1 - 4 LightBARs  
Solid State LED

DECORATIVE AREA LUMINAIRE



**CERTIFICATION DATA**  
UL/cUL Listed  
DesignLights Consortium® Qualified\*  
IP66 LightBARs  
LM79 / LM80 Compliant  
2G Vibration Tested  
ISO 9001

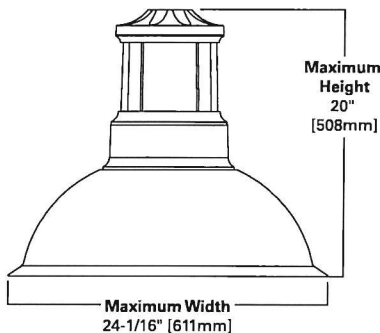
**ENERGY DATA**  
Electronic LED Driver  
>0.9 Power Factor  
<20% Total Harmonic Distortion  
120-277V 50/60Hz, 347V/60Hz,  
480V/60Hz  
-40°C Minimum Temperature  
40°C Ambient Temperature Rating

**EPA**  
Effective Projected Area: (Sq. Ft.) 0.94

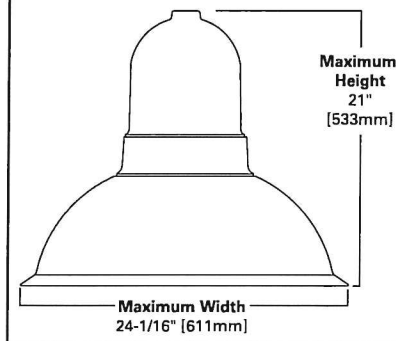
**SHIPPING DATA**  
Approximate Net Weight:  
45 lbs. [20 kgs.]

## DIMENSIONS

### ECM Classical

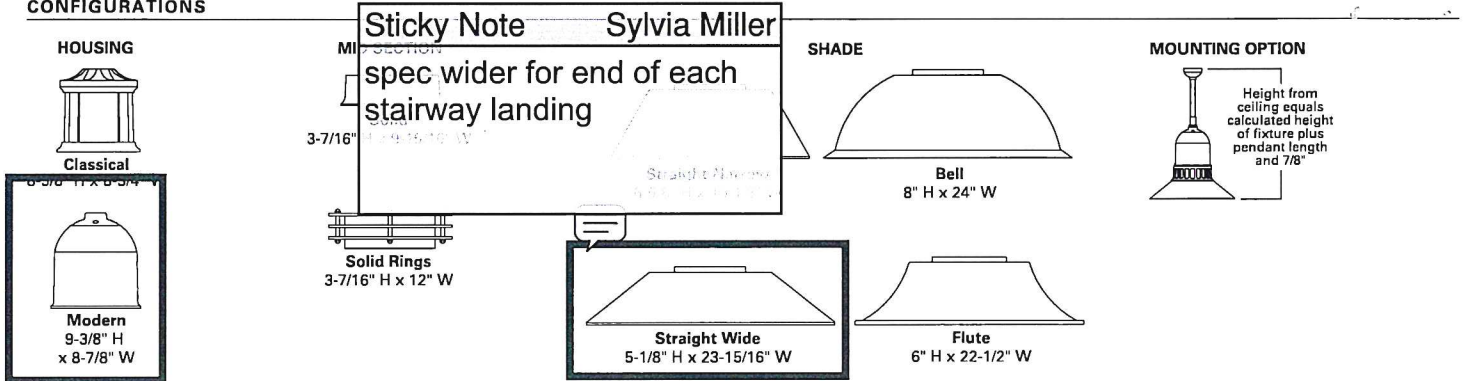


### EMM Modem



See configurations for more detailed information.

CONFIGURATIONS



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

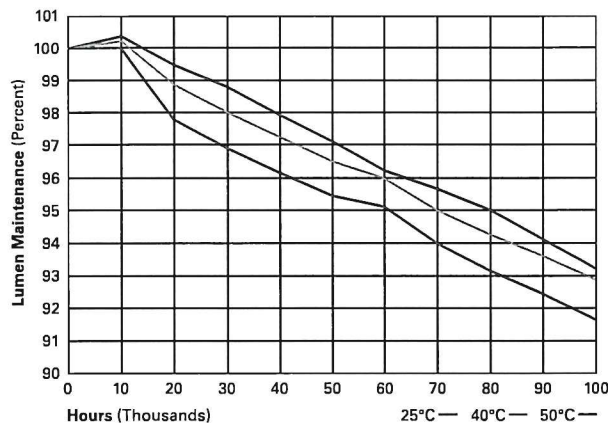
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25 C	> 99%	> 97%	> 96%	> 93%	> 450,000
40 C	> 98%	> 97%	> 96%	> 92%	> 425,000
50 C	> 97%	> 96%	> 95%	> 91%	> 400,000

\* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10 C	1.02
15 C	1.01
25 C	1.00
40 C	0.99
50 C	0.96



**CONTROL, OPTIONS**

**0-10V (DIM)**

The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

**Photocontrol (PC, PER and PER7)**

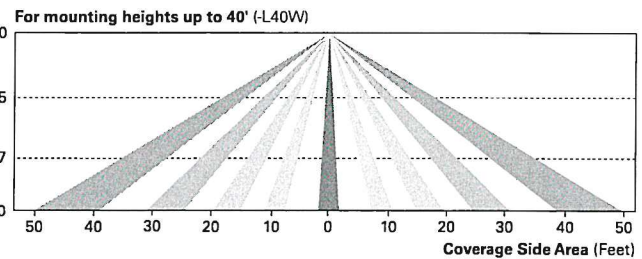
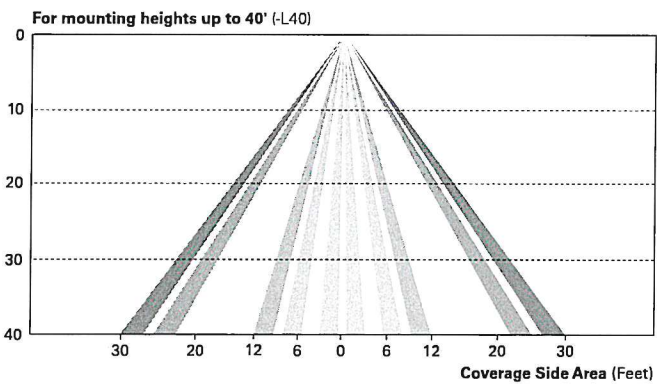
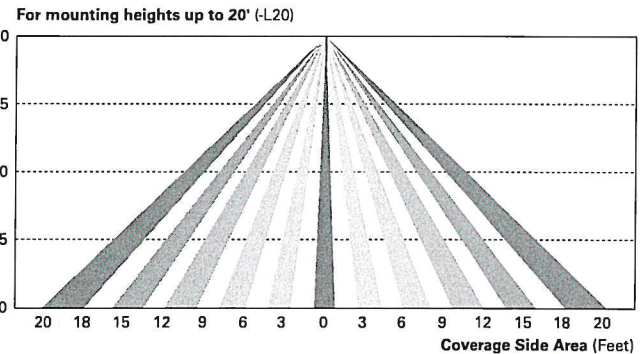
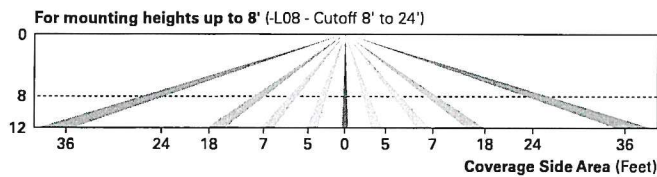
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

**Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)**

These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

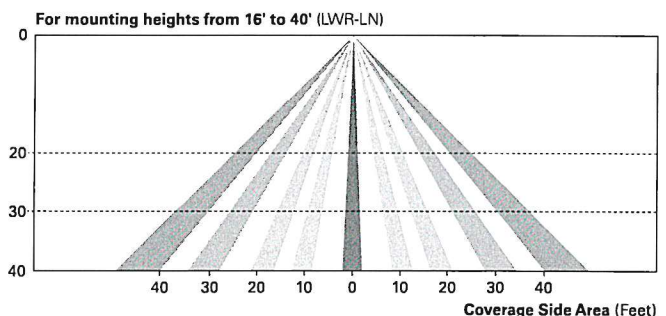
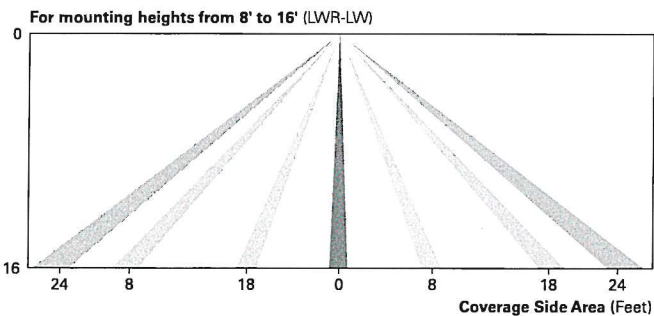
A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.



**LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)**

The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.



**ORDERING INFORMATION**

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family <sup>1</sup>	Number of LightBARs <sup>2,3</sup>	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color <sup>5</sup>
ECM=Epic Classical Medium EMM=Epic Modern Medium BAA-ECM=Epic Classical Medium Buy American Act Compliant <sup>19</sup> BAA-EMM=Epic Modern Medium Buy American Act Compliant <sup>19</sup>	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs E03=(3) 21 LED LightBARs E04=(4) 21 LED LightBARs F01=(1) 7 LED LightBAR F02=(2) 7 LED LightBARs F03=(3) 7 LED LightBARs F04=(4) 7 LED LightBARs	LED=Solid State Light Emitting Diodes	E1=Electronic (120-277V) 347=347V 480=480V <sup>4</sup>	T2=Type II T3=Type III T4=Type IV SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide RW=Rectangular Wide SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	SO=Solid SR=Solid Rings	SN=Straight Narrow SW=Straight Wide BL=Bell FL=Flute	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White

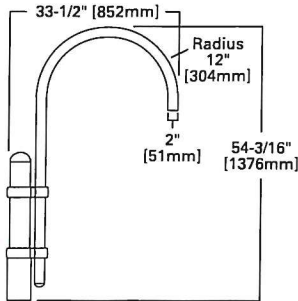
Options (Add as Suffix)	Accessories (Order Separately) <sup>20</sup>	Accessory Options <sup>16</sup>
2L=Two Circuits <sup>6</sup> 7030=70 CRI / 3000K CCT <sup>7</sup> 7050=70 CRI / 5000K CCT <sup>7</sup> 8030=80 CRI / 3000K CCT <sup>7</sup> LCF=LightBAR Cover Plate Matches Housing Finish MS-LXX=Motion Sensor for ON/OFF Operation <sup>8</sup> MS/X-LXX=Motion Sensor for Bi-Level Switching <sup>9</sup> PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) <sup>10</sup> HSS=Factory Installed House Side Shield <sup>11</sup> DIM=0-10V Dimming Driver <sup>12</sup>	<b>OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap</b> <b>OA/RA1027=NEMA Twistlock Photocontrol - 480V</b> <b>OA/RA1201=NEMA Twistlock Photocontrol - 347V</b> <b>OA/RA1013=Photocontrol Shorting Cap</b> <b>LB/HSS-21=Field Installed House Side Shield for "E" LightBARs <sup>11,15</sup></b> <b>LB/HSS-07=Field Installed House Side Shield for "F" LightBARs <sup>11,15</sup></b>  <b>Mounting Accessories (Order Separately)</b> Classical <b>VA6150-XX=Bishop Wall Mount Arm</b> <b>VA6151-XX=Bishop Wall Mount Arm with Cross Rod</b> <b>VA6152-XX=Traditional Wall Mount Arm</b> <b>VA6153-XX=Traditional Wall Mount Arm with 45° Strap</b> <b>VA6154-XX=Bishop Single Pole Mount Arm</b> <b>VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod</b> <b>VA6156-XX=Bishop Twin Pole Mount Arm</b> <b>VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods</b> <b>VA6158-XX=Traditional Single Pole Mount Arm</b> <b>VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar</b> <b>VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar <sup>14</sup></b> <b>VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar</b> <b>VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar <sup>14</sup></b> <b>VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap</b> <b>VA6165-XX=Traditional Twin Pole Mount Arm</b> <b>VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars</b> <b>VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars <sup>14</sup></b> <b>VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars</b> <b>VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars <sup>14</sup></b> <b>VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps</b> <b>VA6171-XX=Mast Arm Adapter</b> Modern <b>VA6101-XX=Bishop Wall Mount Arm</b> <b>VA6102-XX=Bishop Wall Mount Arm with Cross Rod</b> <b>VA6103-XX=Traditional Wall Mount Arm</b> <b>VA6104-XX=Traditional Wall Mount Arm with 45° Strap</b> <b>VA6105-XX=Bishop Single Pole Mount Arm</b> <b>VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod</b> <b>VA6107-XX=Bishop Twin Pole Mount Arm</b> <b>VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods</b> <b>VA6109-XX=Traditional Single Pole Mount Arm</b> <b>VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar</b> <b>VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar <sup>14</sup></b> <b>VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar</b> <b>VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar <sup>14</sup></b> <b>VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap</b> <b>VA6116-XX=Traditional Twin Pole Mount Arm</b> <b>VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars</b> <b>VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars <sup>14</sup></b> <b>VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars</b> <b>VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars <sup>14</sup></b> <b>VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps</b> <b>VA6122-XX=Mast Arm Adapter</b>	<b>V=Victorian Fial <sup>17</sup></b> <b>M=Modern Fial <sup>17</sup></b> <b>A=Architectural Fial <sup>17</sup></b> <b>N=Nostalgic Fial <sup>17</sup></b> <b>R=NEMA Twistlock Photocontrol Receptacle <sup>18</sup></b>

- NOTES:**
- Arm not included. Order separately. See accessories.
  - Standard 4000K CCT and greater than 70 RI.
  - 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
  - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
  - Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
  - Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
  - Consult customer service for lead times and multiplier.
  - Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
  - Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
  - Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
  - Only for use with SL2, SL3 and SL4 distributions.
  - Dimming leads provide for external 0-10V control system (by others).
  - Replace XX with color suffix.
  - Only available with traditional arms.
  - One required for each LightBAR.
  - Add as suffix to mounting accessory. Example: VA6106-BK-R.
  - Not available with finials, pendant mount "PM48" or bishop wall mounts.
  - Requires use of 4" O.D. round straight pole.
  - Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
  - Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

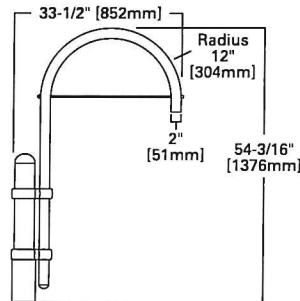


**MOUNTING ACCESSORIES**

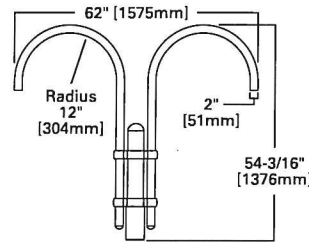
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms compliment pole mount luminaires and attractively transition fixture scale in lower mounting height pedestrian environments. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



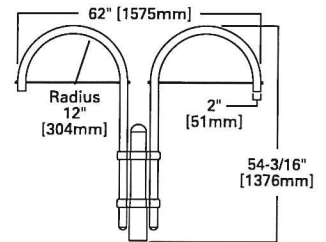
**BISHOP SINGLE POLE MOUNT ARM**  
 VA6105 (Modern), VA6154 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 24 lbs. E.P.A.: 0.92



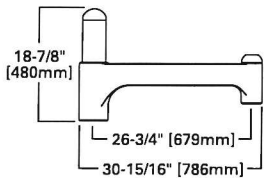
**BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD**  
 VA6106 (Modern), VA6155 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 25 lbs. E.P.A.: 0.98



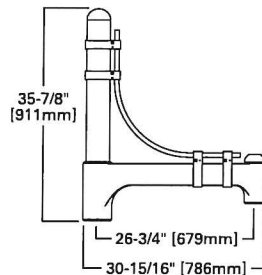
**BISHOPTWIN POLE MOUNT ARM**  
 VA6107 (Modern), VA6156 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 37 lbs. E.P.A.: 1.43



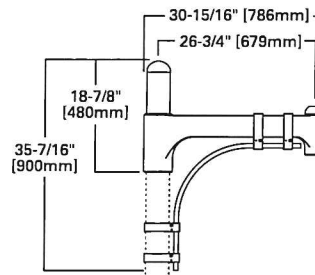
**BISHOPTWIN POLE MOUNT ARM WITH CROSS RODS**  
 VA6108 (Modern), VA6157 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 39 lbs. E.P.A.: 1.55



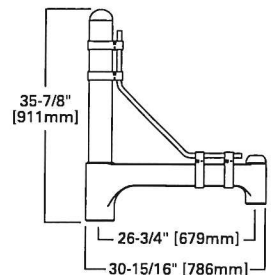
**TRADITIONAL SINGLE POLE MOUNT ARM**  
 VA6109 (Modern), VA6158 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 20 lbs. E.P.A.: 0.86



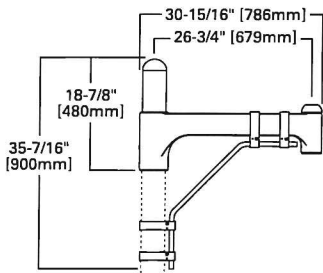
**TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR**  
 VA6110 (Modern), VA6159 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 28 lbs. E.P.A.: 1.4



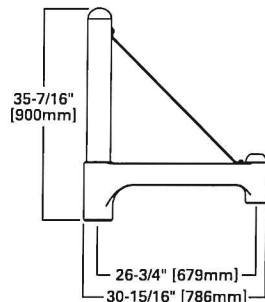
**TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR**  
 VA6111 (Modern), VA6160 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 25 lbs. E.P.A.: 1.16



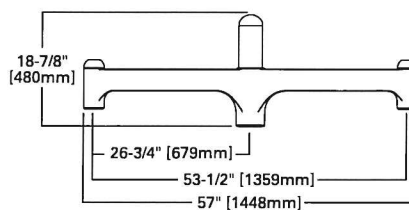
**TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR**  
 VA6112 (Modern), VA6161 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 28 lbs. E.P.A.: 1.38



**TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR**  
 VA6113 (Modern), VA6162 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 24 lbs. E.P.A.: 1.17

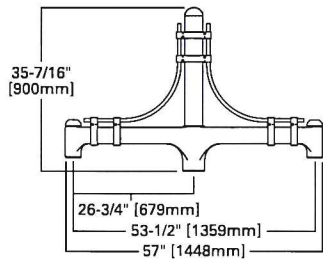


**TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP**  
 VA6114 (Modern), VA6163 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 24 lbs. E.P.A.: 1.17

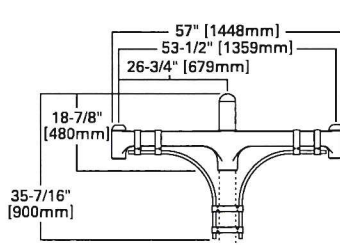


**TRADITIONAL TWIN POLE MOUNT ARM**  
 VA6116 (Modern), VA6165 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 30 lbs. E.P.A.: 1.44

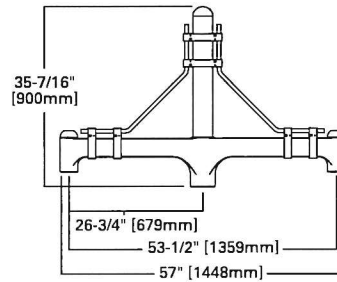
**MOUNTING ACCESSORIES**



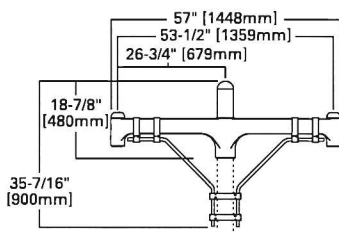
**TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS**  
 VA6117 (Modern), VA6166 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 43 lbs. E.P.A: 2.28



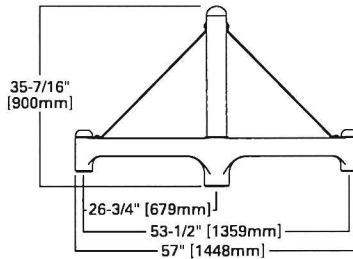
**TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS**  
 VA6118 (Modern), VA6167 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 40 lbs. E.P.A: 2.04



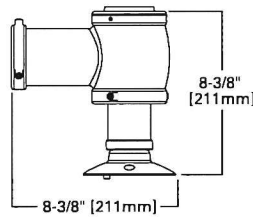
**TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS**  
 VA6119 (Modern), VA6168 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 43 lbs. E.P.A: 2.24



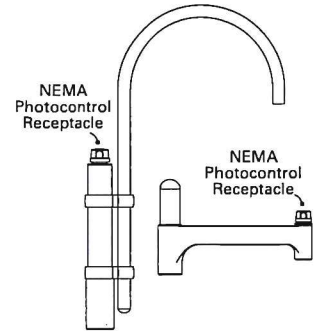
**TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS**  
 VA6120 (Modern), VA6169 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 40 lbs. E.P.A: 2.0



**TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS**  
 VA6121 (Modern), VA6170 (Classical)  
 Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.  
 Weight: 37 lbs. E.P.A: 1.81



**MAST ARM ADAPTER**  
 VA6122 (Modern), VA6171 (Classical)  
 Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)  
 Weight: 4 lbs.

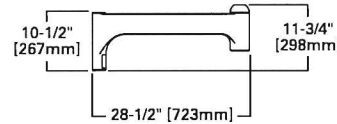


**NEMA TWISTLOCK PHOTOCONTROL (R)**  
 Order separately (Not compatible with finials or wall mount bishop arms)

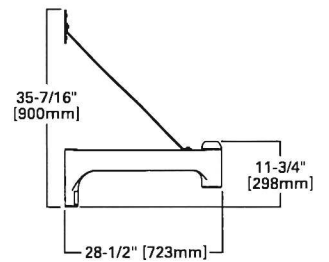
**Wall Mount Accessories**

**BISHOP WALL MOUNT ARM**  
 VA6101 (Modern), VA6150 (Classical)  
 Mounts to wall with four stainless steel lag bolts (provided by other).  
 Weight: 16 lbs.

**BISHOP WALL MOUNT ARM WITH CROSS ROD**  
 VA6102 (Modern), VA6151 (Classical)  
 Mounts to wall with four stainless steel lag bolts (provided by other).  
 Weight: 17 lbs.



**TRADITIONAL WALL MOUNT ARM**  
 VA6103 (Modern), VA6152 (Classical)  
 Mounts to wall with four stainless steel lag bolts (provided by other).  
 Weight: 17 lbs.



**TRADITIONAL WALL MOUNT ARM WITH 45° STRAP**  
 VA6104 (Modern), VA6153 (Classical)  
 Mounts to wall with four stainless steel lag bolts (provided by other).  
 Weight: 18 lbs.

# alphabet

JOB NAME	STOWE BRIDGES	TYPE	C (at sloped ceiling above stairs)
ORDERING CODE	SEE BELOW		

## NU4

4" Round **Adjustable** Standard White



AT  
airtight

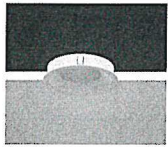
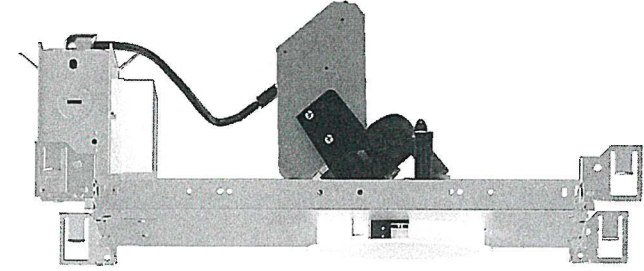
DF  
dead-front



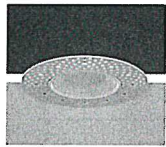
plenum rated



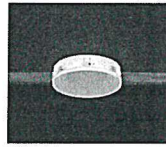
wet rated



Trim



Trimless



Trimless Millwork

20° - 55° BEAM (Note: Specifications are subject to change without notice)		
9mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	880LM @30K/80CRI	9W
15LM	1280LM @30K/80CRI	13W
20LM	1670LM @30K/80CRI	17W
25LM	2020LM @30K/80CRI	22W
30LM	2410LM @30K/80CRI	27W
35LM	2840LM @30K/80CRI	34W
40LM	3180LM @30K/80CRI	40W
10LM	740LM @30K/90CRI	9W
15LM	1080LM @30K/90CRI	13W
20LM	1410LM @30K/90CRI	17W
25LM	1710LM @30K/90CRI	22W
30LM	2030LM @30K/90CRI	27W
35LM	2410LM @30K/90CRI	34W
40LM	2710LM @30K/90CRI	40W
Notes	Delivered lumens based on 35D optic with no lens, (see page 2)	

15° BEAM (Note: Specifications are subject to change without notice)		
6mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	870LM @30K/80CRI	11W
15LM	1220LM @30K/80CRI	19W
20LM	1550LM @30K/80CRI	31W
10LM	730LM @30K/90CRI	11W
15LM	1025LM @30K/90CRI	19W
20LM	1310LM @30K/90CRI	31W
Notes	Delivered lumens based on 15D optic with no lens, (see page 2)	

9.5° BEAM (Note: Specifications are subject to change without notice)		
4.5mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	705LM @30K/80CRI	17.5W
10LM	595LM @30K/90CRI	17.5W
Notes	Delivered lumens based on 9D optic with SBL lens, (see page 2)	

eldoLED



CASAMBI

### FEATURES

- True 40° Tilt with <5% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Concentric Tilt Tracking ensures minimal light loss
- 1/16" micro flange
- 9° - 55° optical beam control
- UGR <5
- Multiple mounting, glare control options, trims, and finishes available

### ED

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs

### DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- DMX dim to zero
- Lutron Hi-lumen 2-Wire (Triac and Eco System) dimming to 0.1% and 1%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi bluetooth dimming to 0.1%
- NLight control interface dimming to 0%

### LISTING

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- Made in the USA - meets the requirements of the Buy American provision within the ARRA
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

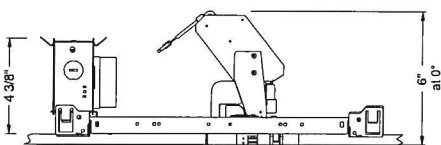
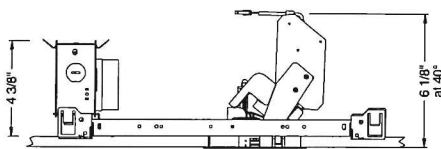
### CONSTRUCTION

- Shatter proof acrylic bezel lens
- Lexan™ (PC) Optimal connectivity for wireless control signal
- Impact and chemical resistant at the highest level
- Withstands temperatures up to 240°F
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 0.4" to 2.0"
- Fixture is pre-set and shipped at 20deg tilt

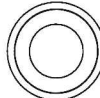
### ELECTRICAL

- 120V-277V, 120 only Triac / ELV
- Power factory ≥ 0.9
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

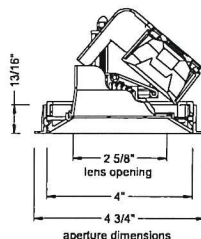
### FIXTURE HEIGHT



### TRIMMED

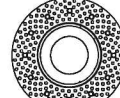


ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.4" to 2.0"

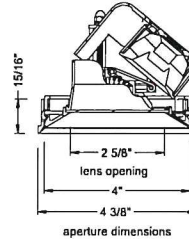


aperture dimensions

### TRIMLESS



ceiling cutout  
4-1/2" diameter  
ceiling thickness  
0.4" to 2.0"

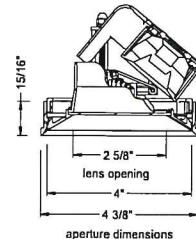


aperture dimensions

### MILLWORK



ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.5" to 2.0"



aperture dimensions

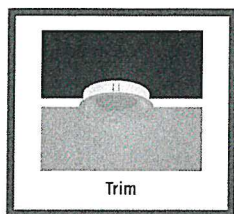
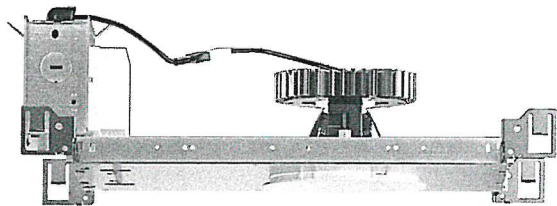


# alphabet

JOB NAME	STOWE MTN EXT STAIRS	TYPE	B (flat ceiling)
ORDERING CODE			

## NU4

### 4" Round Downlight Standard White



20° - 65° BEAM (Note: Specifications are subject to change without notice)		
14mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	990LM @30K/80CRI	9W
15LM	1485LM @30K/80CRI	12W
20LM	2095LM @30K/80CRI	17W
25LM	2540LM @30K/80CRI	21W
30LM	3090LM @30K/80CRI	26W
35LM	3580LM @30K/80CRI	31W
40LM	4180LM @30K/80CRI	37W
10LM	840LM @30K/90/CRI	9W
15LM	1260LM @30K/90/CRI	12W
20LM	1780LM @30K/90/CRI	17W
25LM	2160LM @30K/90/CRI	21W
30LM	2620LM @30K/90/CRI	26W
35LM	3040LM @30K/90/CRI	31W
40LM	3550LM @30K/90/CRI	37W
Notes	Delivered lumens based on 25D optic with no lens, (see page 2)	

8°-12° BEAM (Note: Specifications are subject to change without notice)		
6mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	990LM @30K/80CRI	10W
15LM	1460LM @30K/80CRI	15W
20LM	1970LM @30K/80CRI	23W
10LM	840LM @30K/90CRI	10W
20LM	1670LM @30K/90CRI	23W
Notes	Delivered lumens based on 8D optic no lens, (see page 2)	



#### FEATURES

- 3/4" bezel regresses with 1/16" micro flange
- 8° - 65° optical beam control
- UGR < 19
- 110 LPW average
- Glare control, specialty optics, trim options, and custom finishes available
- Microban antimicrobial finish available on all exposed painted surfaces

#### ED

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs

#### DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- DMX dim to zero
- Lutron Hi-lumen 2-Wire (Eco System) dimming to 0.1% and 1%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi bluetooth dimming to 1%
- nLight control interface dimming to 0%

#### LISTING

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

#### CONSTRUCTION

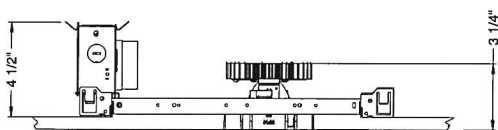
- Lexan™ (PC) highly resistant to impact and heat (240°F)
- Optimal material for wireless BLE signal connectivity
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

#### ELECTRICAL

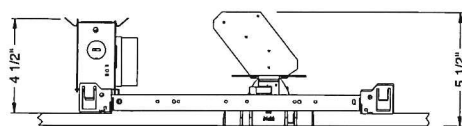
- 120V-277V, 120 only Triac / ELV
- Power factory ≥ 0.9
- 2kV driver input surge protection
- Remote and Integral (ITS) emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

#### FIXTURE HEIGHT

10LM - 30LM LOW LUMENS



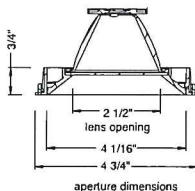
35LM - 40LM HIGH LUMENS



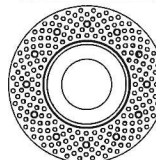
#### TRIMMED



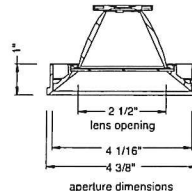
ceiling cutout  
4-1/2" diameter  
ceiling thickness  
1/8" to 1 5/8"



#### TRIMLESS



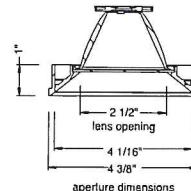
ceiling cutout  
4-1/2" diameter  
ceiling thickness  
3/8" to 1 3/4"



#### MILLWORK



ceiling cutout  
4-3/8" diameter  
ceiling thickness  
1/2" to 1 3/4"





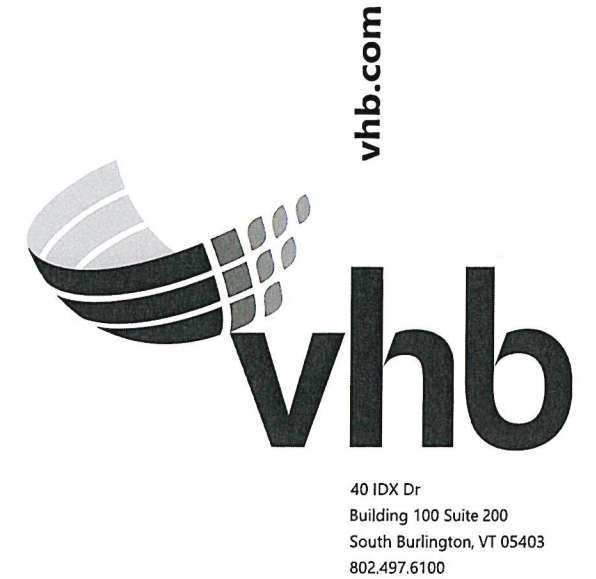
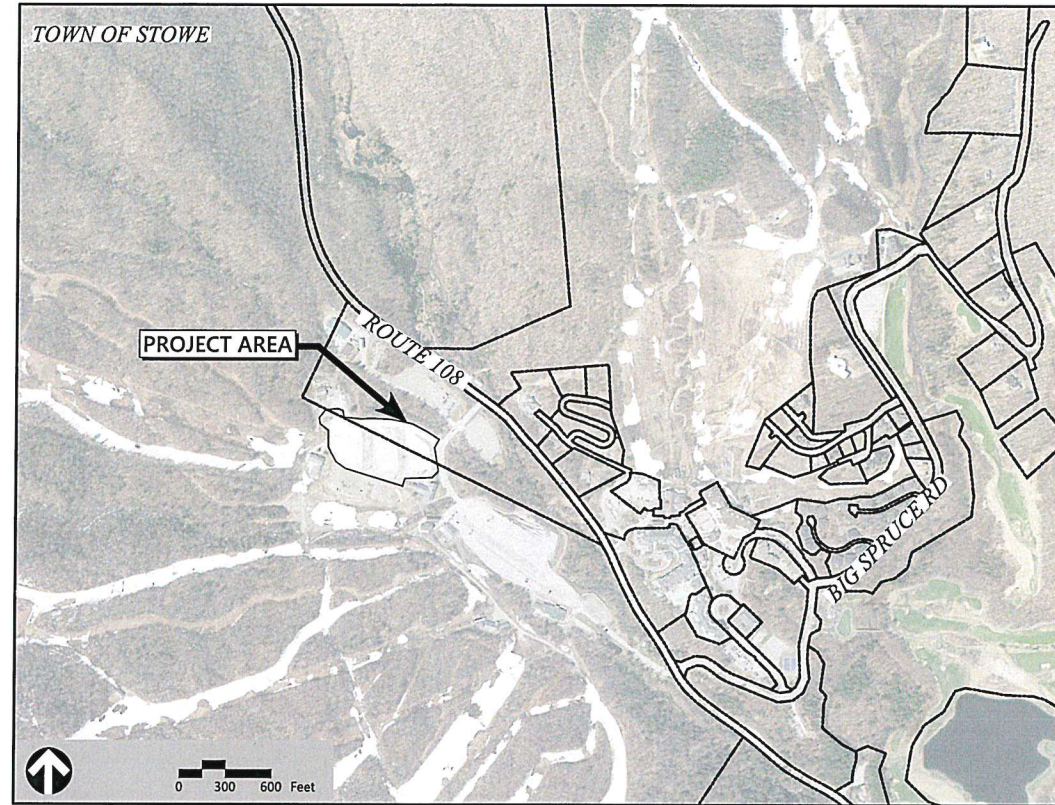


# Site Plans

Issued for	Permitting
Date Issued	7/25/23
Latest Issue	11/27/23

## Stowe Mountain Parking Lot Improvements - A Lots

5781 Mountain Road  
Stowe VT, 05672



### Owner / Applicant:

VR US Holdings II, LLC  
5781 Mountain Road  
Stowe, VT 05672

### Owner:

State of Vermont  
Department of Forests, Parks & Recreation  
1 National Life Drive, Davis 2  
Montpelier, VT 05620-3801

### Sheet Index

No.	Drawing Title	Latest Issue
C1.00	Legend And General Notes	7/25/23
EX1.00	Existing Conditions Plan	7/25/23
C2.00	Overall Site Plan	11/27/23
C2.01	Grading Plan (1 Of 2)	11/27/23
C2.02	Grading Plan (2 Of 2)	11/27/23
C4.00	EPSC Notes & Narrative	7/25/23
C4.01	Erosion And Sediment Control Plan	11/27/23
C6.00	Erosion Prevention & Sediment Control Details	7/25/23
C6.01	Stormwater Details (1 Of 2)	7/25/23
C6.02	Stormwater Details (2 Of 2)	11/27/23
LA1.00	Planting Plan	11/27/23
LA5.01	Landscaping Details	11/27/23



40 IDX Dr  
Building 100 Suite 200  
South Burlington, VT 05403  
802.497.6100

Legend

Legend table with columns: Exist., Prop., Exist., Prop. and descriptions for various site features like PROPERTY LINE, CONSTRUCTION LAYOUT, UNDERDRAIN, etc.

Abbreviations

Abbreviations table with columns: General and Utility, listing codes like ABAN, ACR, ADJ, etc. and their corresponding terms.

Notes

- Notes section containing 10 numbered items detailing construction requirements, safety protocols, and utility handling instructions.

Demolition

- Demolition section containing 5 numbered items regarding the removal of existing structures and materials.

Erosion Control

- Erosion Control section containing 5 numbered items detailing measures to prevent soil erosion during construction.

Existing Conditions Information

- Existing Conditions Information section containing 2 numbered items regarding site survey data and wetland delineation.

Document Use

- Document Use section containing 3 numbered items regarding the use of electronic and printed versions of the drawing.

Stowe Mountain Parking Improvements - A Lots

Revision table with columns: No., Revision, Date, Apprd.

Designed by SSM/VMA, Checked by DJH, Issued for Permitting, Date July 25, 2023

Not for Construction, Legend and General Notes, Drawing Title

C1.00



**Stowe Mountain  
 Parking Improvements -  
 A Lots**  
 5781 Mountain Road  
 Stowe VT, 05672

No.	Revision	Date	App'd

Designed by: SSM/VMA  
 Checked by: DJH  
 Issued for: Permitting  
 Date: July 25, 2023

Not for Construction  
 Drawing Title: **Existing Conditions Plan**

Drawing Number: **EX1.00**

Sheet 2 of 12

Project Number: 58971.00



### Zoning Summary Chart

Parcel ID(S):	26000 & 00001-001
Zoning District(S):	RR-5 And FR
LOT AREA - PARCEL ID 26000	±1749 ACRES
LOT AREA - PARCEL ID 00001-001	±6618 ACRES
<b>EXISTING PARKING</b>	
A1 LOT	114
A2 LOT	100
A3 LOT	73
CONTROL LOT	50
<b>TOTAL EXISTING (A LOTS)</b>	<b>337</b>
<b>PROPOSED PARKING</b>	
A1 LOT	154
A2 LOT	123
A3 LOT	87
CONTROL LOT	50
<b>TOTAL PROPOSED (A LOTS)</b>	<b>414</b>



## Stowe Mountain Parking Improvements - A Lots

5781 Mountain Road  
Stowe VT, 05672

No.	Revision	Date	Appr.
1.	Layout and Landscaping Revisions	11/27/2023	DJH

Designed by	SSM/VMA	Checked by	DJH
Issued for	Permitting	Date	July 25, 2023

Not for Construction

Drawing Title

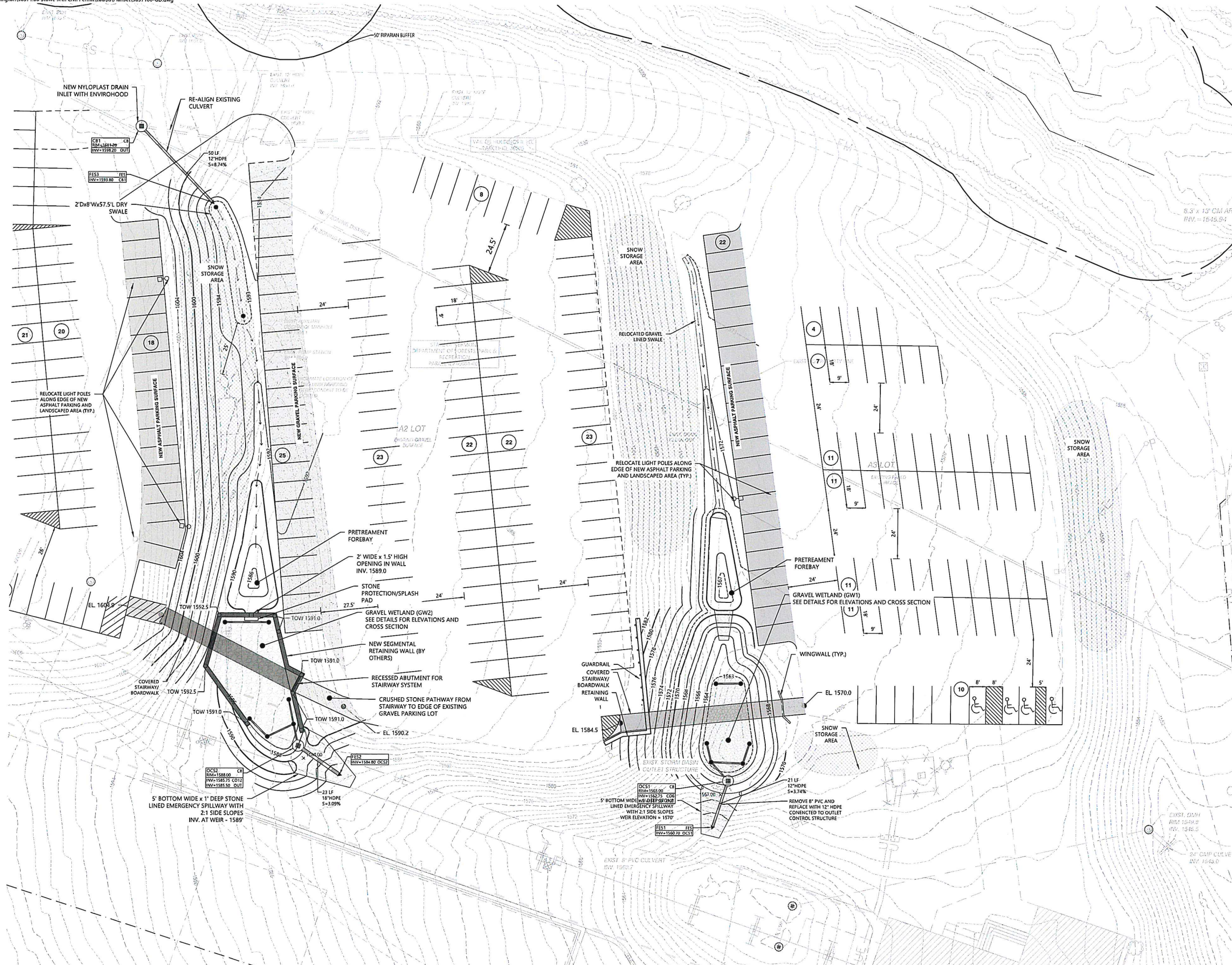
# Overall Site Plan

Drawing Number

# C2.00



40 IDX Dr  
Building 100 Suite 200  
South Burlington, VT 05403  
802.497.6100



### Stowe Mountain Parking Improvements - A Lots

5781 Mountain Road  
Stowe VT, 05672

No.	Revision	Date	Appr.
1.	Layout and Landscaping Revisions	11/27/2023	DJH

Designed by	SSM/VMA	Checked by	DJH
Issued for	Permitting	Date	July 25, 2023

Not for Construction

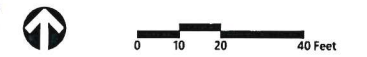
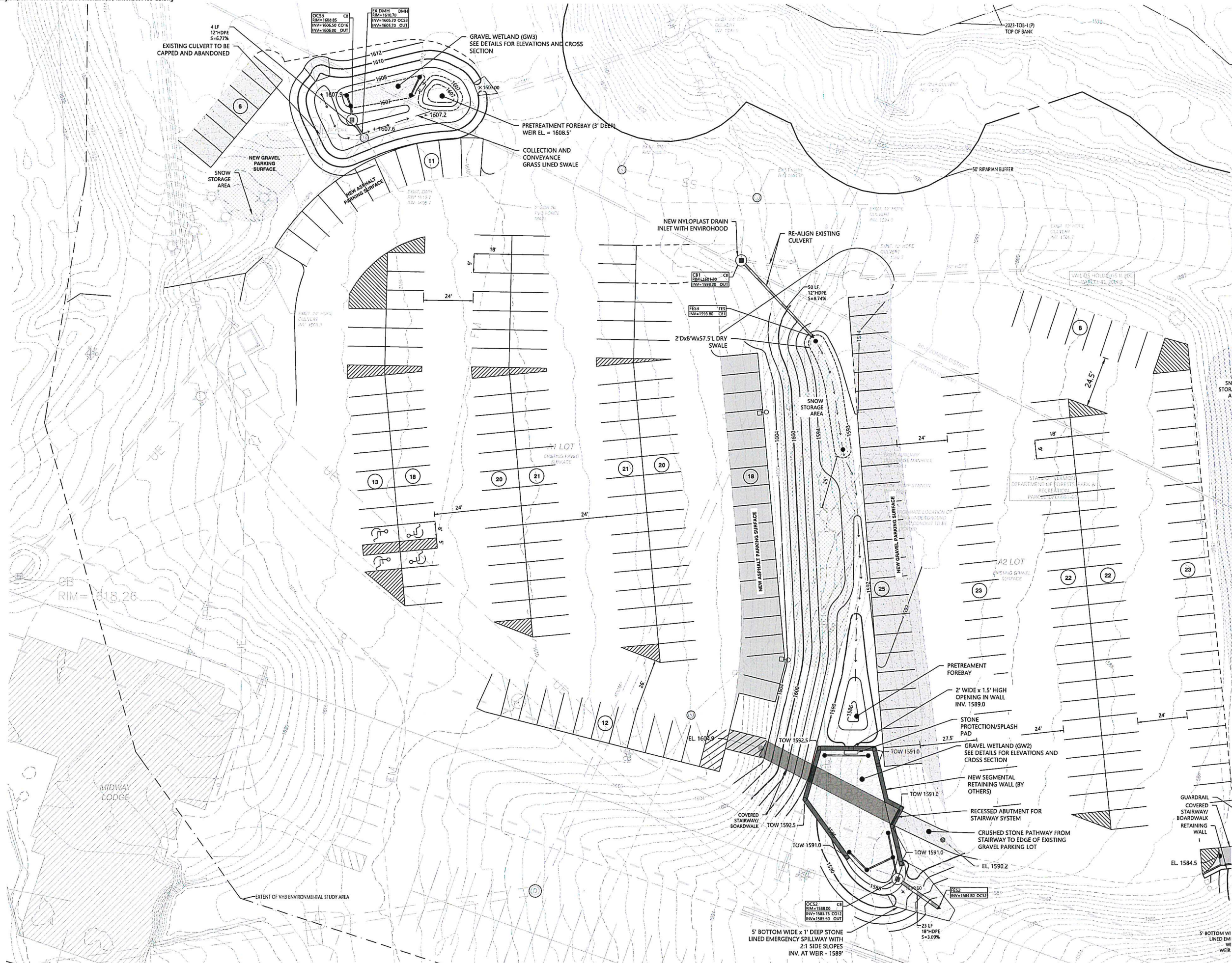
Grading and Drainage  
Plan (1 of 2)

Drawing Title

Project Number  
58971.00

# C2.01

Sheet 4 of 12



**Stowe Mountain  
Parking Improvements -  
A Lots**  
5781 Mountain Road  
Stowe VT, 05672

No.	Revision	Date	App'd.
1.	Layout and Landscaping Revisions	11/27/2023	DJH

Designed by: **SSM/VMA**      Checked by: **DJH**  
 Issued for: **Permitting**      Date: **July 25, 2023**

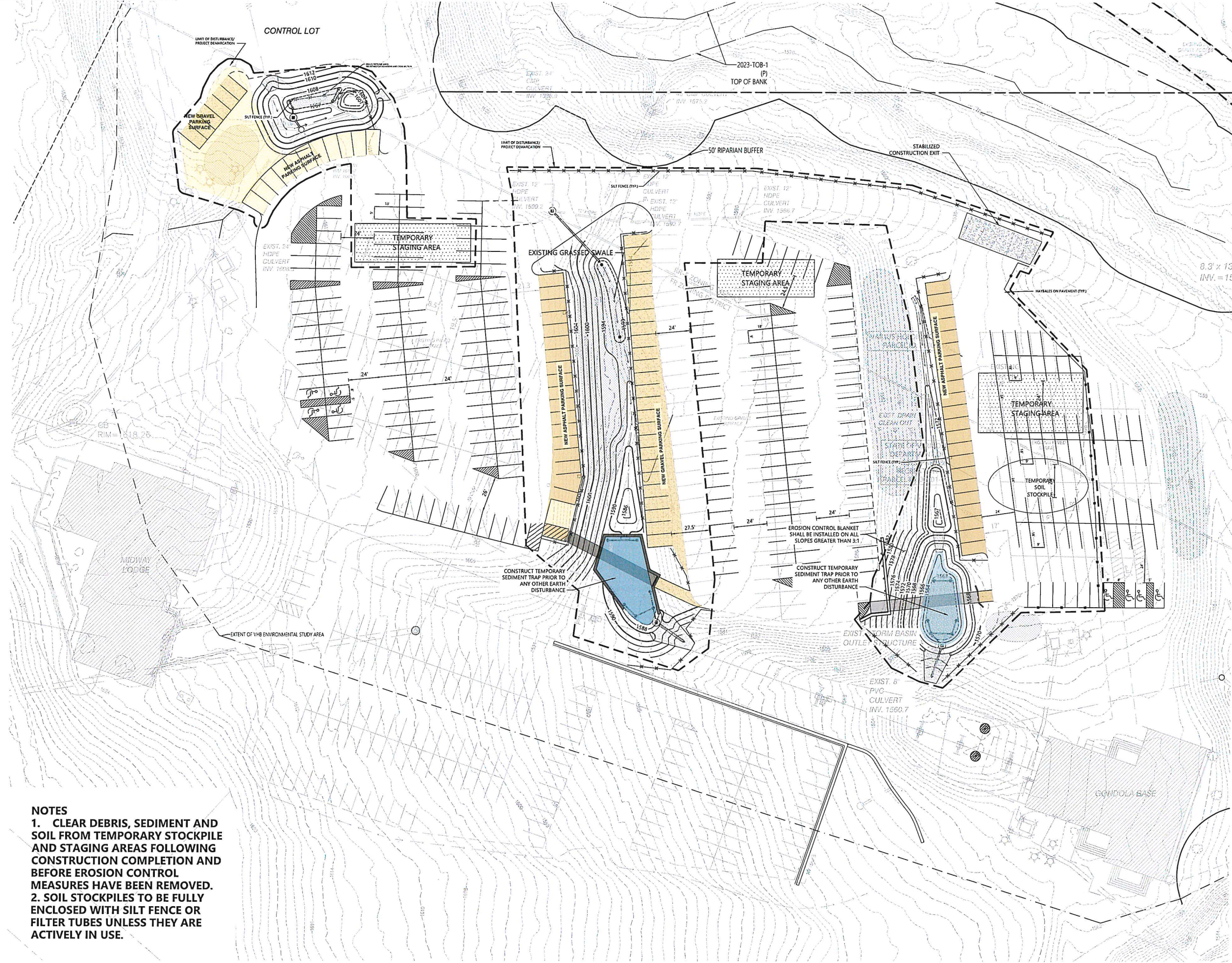
**Not for Construction**  
 Drawing Title: **Grading and Drainage  
Plan (2 of 2)**

Drawing Number: **C2.02**







Sheet: **5** of **12**

Project Number: **58971.00**





### EPSC LEGEND

-  LIMIT OF DISTURBANCE/PROJECT DEMARCATION
-  LAYDOWN/STAGING AREA
-  STABILIZED CONSTRUCTION EXIT
-  NEW IMPERVIOUS SURFACE
-  STORMWATER PRACTICE WITH ROLLED EROSION CONTROL PRODUCT
-  INLET PROTECTION



**Stowe Mountain  
 Parking Improvements -  
 A Lots**  
 5781 Mountain Road  
 Stowe VT, 05672

No.	Revision	Date	Appr.
1.	Layout and Landscaping Revisions	11/27/2023	DJH

Designed by **SSM/VMA** Checked by **DJH**  
 Issued for **Permitting** Date **July 25, 2023**

**Not for Construction**  
 Drawing Title  
**Erosion and Sediment  
 Control Plan**

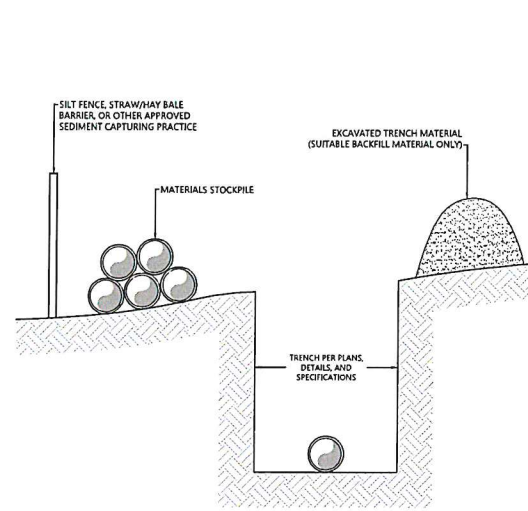
# C4.01

Sheet 7 of 12

Project Number  
58971.00

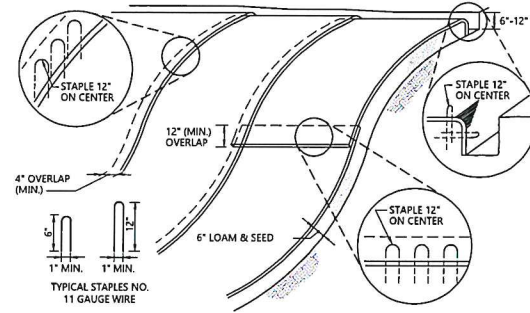
**NOTES**  
 1. CLEAR DEBRIS, SEDIMENT AND SOIL FROM TEMPORARY STOCKPILE AND STAGING AREAS FOLLOWING CONSTRUCTION COMPLETION AND BEFORE EROSION CONTROL MEASURES HAVE BEEN REMOVED.  
 2. SOIL STOCKPILES TO BE FULLY ENCLOSED WITH SILT FENCE OR FILTER TUBES UNLESS THEY ARE ACTIVELY IN USE.





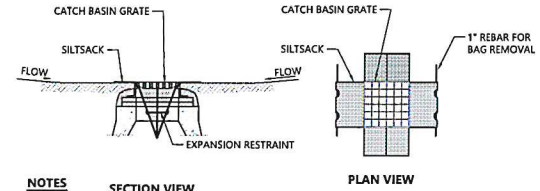
- NOTES**
1. STOCKPILE SUITABLE BACKFILL MATERIAL ON THE UPHILL SIDE OF ALL TRENCHING TO DIRECT ANY EROSION BACK INTO THE TRENCH AREA. TRANSFER ANY UNSUITABLE BACKFILL MATERIAL TO APPROPRIATE SOIL STOCKPILE LOCATIONS.
  2. STOCKPILE ALL CLEAN MATERIALS ON THE DOWNHILL SIDE OF ALL TRENCHING.
  3. FOLLOW ALL OSHA TRENCHING AND EXCAVATION SAFETY DIRECTIVES AND INSTRUCTIONS.

**Typical Trench Detail** 12/21  
N.T.S. Source: VHB REV LD\_VT



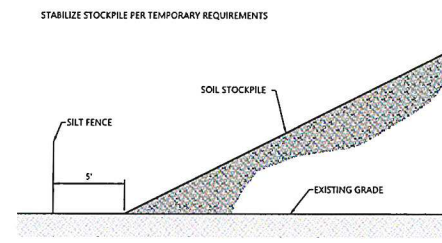
- NOTES**
1. APPLY TO SLOPES 3H:1V OR GREATER AND WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
  2. INSTALL EROSION CONTROL BLANKET THAT MEETS VTRANS CONST SPECIFICATIONS FOR SLOPE AND LENGTH.
  3. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
  4. APPLY TOP SOIL, FERTILIZER, LIME AND SEED PRIOR TO PLACING MATTING.
  5. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 40 STAPLES ARE REQUIRED PER 4'x50' ROLL OF MATERIAL.
  6. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION PREVENTION AND SEDIMENT CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH AND ENSURE CLOSE CONTACT WITH THE GROUND SURFACE.
  7. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.
  8. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" TO 12" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
  9. ROLL THE BLANKET DOWN IN THE DIRECTION OF THE WATER FLOW.
  10. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4" OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
  11. WHEN BLANKETS MUST BE SPICED, PLACE UPPER BLANKET END OVER LOWER END WITH 12" (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.

**Erosion Control Blanket Slope Installation** 08/16  
N.T.S. Source: VHB REV LD\_703-VT

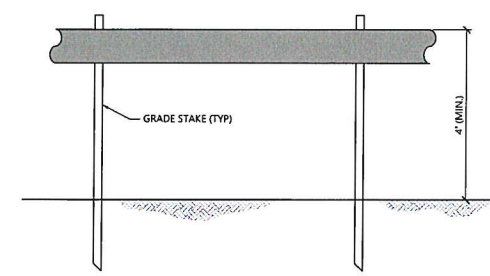


- NOTES**
1. INSTALL SILTSACK IN ADDITION TO ANY OTHER INLET PROTECTION ON ALL CATCH BASINS.
  2. GRATE TO BE PLACED OVER SILTSACK.
  3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

**Silt Sack Sediment Trap** 1/16  
N.T.S. Source: VHB REV LD\_674

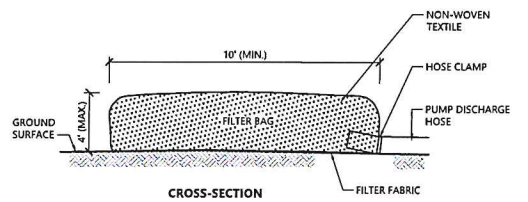
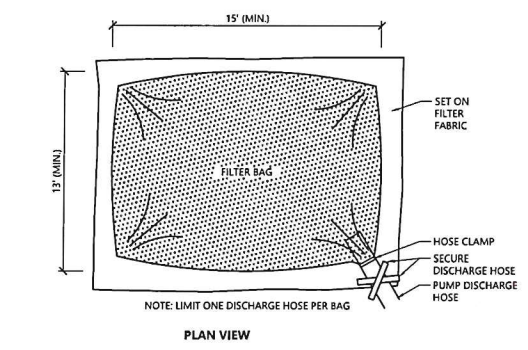


**Soil Stockpile and Covering Detail** 11/15  
N.T.S. Source: VHB REV LD\_



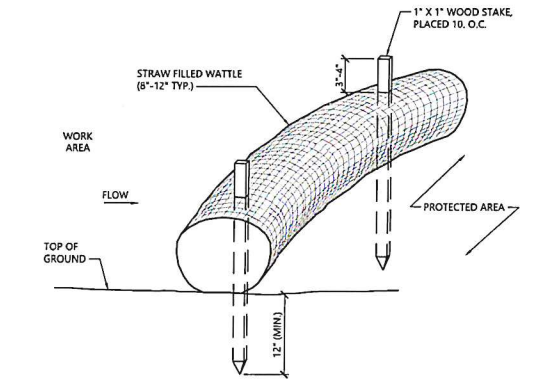
- NOTES**
1. BARRIER MESH TAPE OR ROPE SHALL BE INSTALLED ALONG THE PERIMETER OF THE PROJECT AREA TO DEMARCATATE THE LIMIT OF DISTURBANCE. NO EARTHWORK OR STORAGE OF MATERIALS SHALL BE CONDUCTED BEYOND THIS LIMIT WITHOUT PRIOR APPROVAL FROM THE OSPC.
  2. USE 3" ORANGE BARRIER MESH TAPE OR 1/2" YELLOW POLYPROPYLENE ROPE.
  3. WITHIN 50' OF WATER RESOURCE AREAS, USE 2-3 ROWS OF TAPE OR ROPE. BEYOND 50' OF WATER RESOURCE AREAS USE 1 ROW OF TAPE OR ROPE.
  4. TAPE OR ROPE MAY BE FASTENED TO STAKES, TREES, OR OTHER APPROPRIATE FIXED OBJECTS.
  5. PROJECT DEMARCATATION SHALL NOT CROSS ACTIVE ACCESS ROUTES (E.G. ROADS). PROJECT DEMARCATATION MAY CROSS RESOURCE AREAS WITH EXCEPTION OF LARGER WATER BODIES WHERE IT IS NOT FEASIBLE OR ADVISABLE.
  6. PROJECT DEMARCATATION SHALL REMAIN IN PLACE AND BE MAINTAINED/REPLACED AS NEEDED UNTIL FINAL STABILIZATION IN THE AREA HAS BEEN ACHIEVED.

**Barrier Mesh Tape or Rope** 08/16  
N.T.S. Source: VHB REV LD\_VT



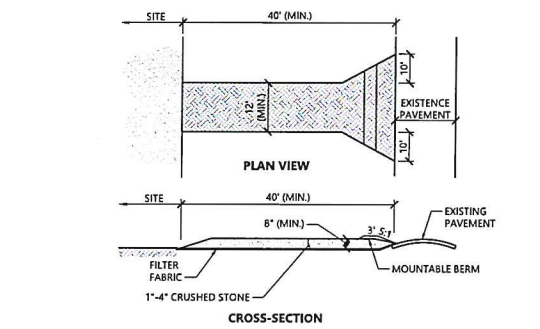
- NOTES**
1. BAG TO BE USED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

**Dewatering Filter Bag** 1/16  
N.T.S. Source: VHB REV LD\_691



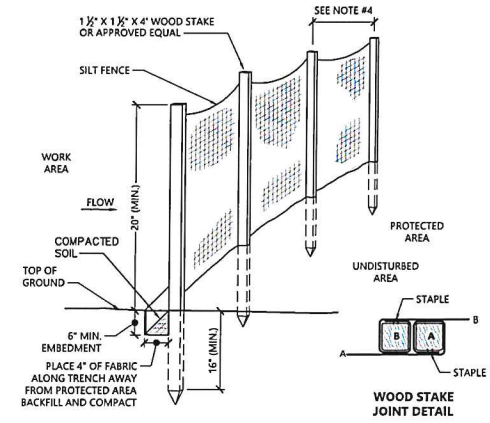
- NOTES**
1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
  2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
  3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
  4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
  5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

**Straw Wattle - Erosion Control Barrier** 1/20  
N.T.S. Source: VHB REV LD\_659



- NOTES**
1. AGGREGATE SIZE: USE A MATRIX OF 1 TO 4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  2. LENGTH: NOT LESS THAN 40 FEET (OR LENGTH OF DRIVEWAY FOR RESIDENTIAL PROJECTS, IF SHORTER)
  3. THICKNESS: NOT LESS THAN EIGHT (8) INCHES
  4. WIDTH: TWELVE (12) FOOT MINIMUM, FLARED AT ROAD FOR VEHICLE TURNING
  5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE
  6. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION EXITS SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
  7. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  8. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

**Stabilized Construction Exit** 11/20  
N.T.S. Source: VHB REV LD\_682-VT



- NOTES**
1. WOVEN WIRE FENCE REINFORCEMENT IS REQUIRED WITHIN 50 FT UPSLOPE OF RECEIVING WATERS.
  2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MESH OPENING SHALL BE USED.
  3. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
  4. POST SPACING FOR WIRE BACKED FENCE SHALL BE 10 FT. MAX. FOR FILTER CLOTH FENCE WHEN ELONGATION IS > 50%, POST SPACING SHALL NOT EXCEED 4 FT. FOR FILTER CLOTH FENCE WHEN ELONGATION IS < 50%, POST SPACING SHALL NOT EXCEED 6 FT.
  5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6 INCHES AND FOLDED.
  6. PREFABRICATED UNITS SHALL BE GEODAF, ENVIROFENCE OR APPROVED EQUIVALENT.
  7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.
  8. SILT FENCE SHALL NOT BE USED TO DEMARCATATE LIMITS OF DISTURBANCE.

**Silt Fence/ Reinforced Silt Fence Barrier** 08/16  
N.T.S. Source: VHB REV LD\_650-VT

**Stowe Mountain Parking Improvements - A Lots**  
5781 Mountain Road  
Stowe VT, 05672

No.	Revision	Date	App'd

Designed by: SSM/VMA Checked by: DJH  
Issued for: Permitting Date: July 25, 2023

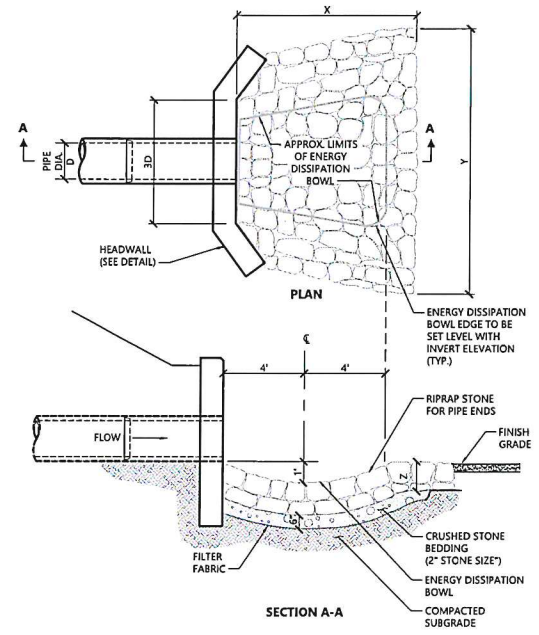
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Drawing Number

C6.00

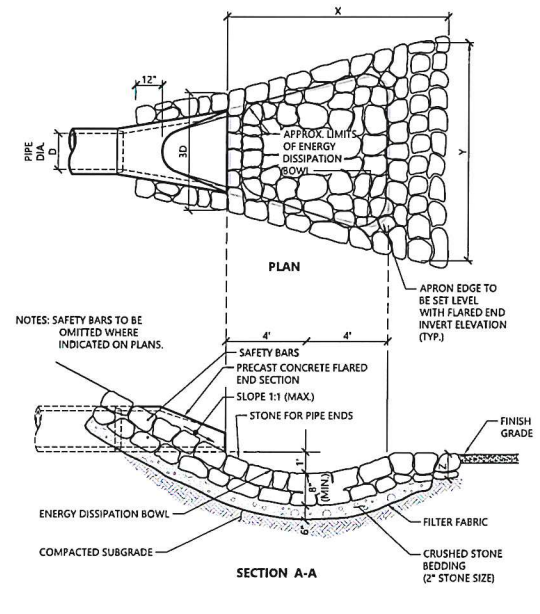
**Gravel Wetland Species Specifications:**

- TEMPORARY & PERMANENT SEEDING IN UPLAND AREA:**
- SEE SPECIFICATIONS ABOVE FOR TEMPORARY AND PERMANENT SEEDING IN UPLAND AREA.
- GRAVEL WETLAND BASIN SEEDING**
- AREA TO BE SEEDED MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE.
  - SEEDING METHOD TO RESULT IN GOOD SOIL TO SEED CONTACT.
  - AFTER SEEDING, MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/AC (APPROX 90 LBS/1,000 SF OR 2 BALES/1,000 SF); SEE MULCH DETAIL AND SPECIFICATIONS.
  - MULCH ANCHORING MAY BE NEEDED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE POSSIBLE.
  - AREA TO BE SEEDED MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE; CHISELING OR DISKING MAY BE NEEDED IF SOIL IS COMPACTED.
  - PERMANENT SEEDING TO OCCUR PRIOR TO SEPTEMBER 15TH UNLESS WEATHER PERMITS SEEDING BEYOND SEPTEMBER 15TH.
  - IRRIGATION MAY BE NEEDED TO FACILITATE GROWTH AND ESTABLISH ADEQUATE GRASS COVER.
  - WETLAND SEED MIXTURE SPECIES COMPOSITION: AMERICAN BUR-REED (SPARGANUM AMERICANUM), BROAD-FRUITED BUR-REED (SPARGANUM), PICKERELWEED (POHODONIA CORDATA), WILD RICE (ZIZANIA SP.), BROADLEAF ARROWHEAD (SAGITTARIA LATIFOLIA), RICE CUTGRASS (LEERSIA CRYZOIDES), NORTHERN WATER PLANTAIN (ALISMA SUBCORDATUM), SWEETFLAG (ACORUS AMERICANUS), LONG-HAIR SEDGE (CAREX COMOSAL), NODDING SEDGE (CAREX CRINITA), SHALLOW SEDGE (CAREX LURIDA), BATTLESHAKE MANNAGRASS (GLYCERIA CANADENSIS), FOWL MANNAGRASS (GLYCERIA STRIATA), SOFTSTEM BULRUSH (SCHOENOPLECTUS TABERNAEMONTANI).
  - APPLY 18 LBS PER ACRE OF WETLAND SEED MIXTURE.
  - COVER WETLAND SEED MIXTURE ON BOTTOM OF GRAVEL WETLAND BASIN EROSION CONTROL BLANKET AND ANCHOR IN PLACE.

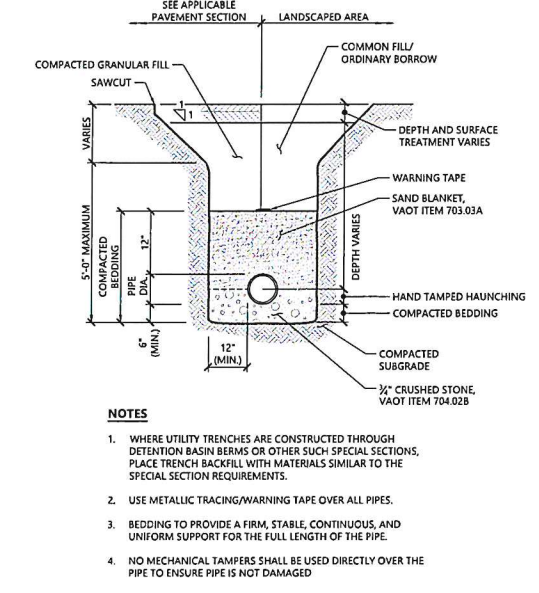
- GRAVEL WETLANDS:**
- GRAVEL WETLAND DESIGN SHALL BE INCLUSIVE OF A SURFACE GRAVEL WETLAND SOIL LAYER (MUCK), A TRANSITION LAYER BETWEEN THE WETLAND SOIL AND THE GRAVEL CELLS, AND THE SUBSURFACE GRAVEL LAYER. THE GRAVEL WETLAND SHALL BE DESIGNED SO THAT THE WQ STORM EVENT DOES NOT BYPASS TREATMENT AND SHALL IN ITS ENTIRETY BE TREATED VIA THE SUBSURFACE GRAVEL FILTER, DRAINING DOWN OVER A 24-HOUR PERIOD. THE GRAVEL WETLAND LAYERS SHOULD MEET THE GUIDELINES AS FOLLOWS:
- THE GRAVEL WETLAND SOIL LAYER (MUCK) ENSURES THAT RUNOFF DOES NOT INFILTRATE THROUGH THE SOIL TO THE SUBSURFACE GRAVEL WETLAND TREATMENT MEDIA. RUNOFF SHOULD PREDOMINANTLY ENTER THE GRAVEL WETLAND TREATMENT MEDIA THROUGH THE PERFORATED RISER PIPE(S) AND SECONDARY INLET. THE SOIL LAYER SHALL HAVE A MINIMUM THICKNESS OF 8 INCHES AND SHALL BE LEVEL CONSTRUCTED WITH A SURFACE SLOPE OF ZERO.
    - THE MUCK LAYER SHALL HAVE LOW TEXTURED HYDRAULIC ACTIVITY (Ksat) MEASURED BETWEEN 0.1-0.01 FT/DAY OR WITH A SOIL TEXTURE CONFORMING TO HYDROLOGIC SOIL GROUP D.
    - SOIL PH SHOULD BE BETWEEN 6.0-7.0.
    - UTILIZATION OF ONSITE MATERIAL TO MANUFACTURE THE SOIL LAYER IS ENCOURAGED PROVIDED THE SOIL WILL MEET SPECIFICATIONS, EITHER AS A STANDALONE PRODUCT OR BY AMENDMENT WITH OUTSIDE MATERIAL.
    - IN ALL CASES, THE GRAVEL WETLAND SOIL SHALL BE TESTED IN ACCORDANCE WITH THE P-TESTING PROCEDURE.



**Stone Protection at Headwall/Splash Pad**  
N.T.S. Source: VHB



**Flared End Section (FES) with Stone Protection**  
N.T.S. Source: VHB REV LD\_134



**Storm Drain and Foundation Drain**  
N.T.S. Source: VHB LD\_

- WETLAND SOIL NOTES:**
- WETLAND SOIL SHALL MEET THE FOLLOWING CRITERIA:
- THE SOIL MEDIA SHALL HAVE LOW HYDRAULICALLY CONDUCTIVITY (Ksat = 0.1-0.01 FT/DAY = 3.5410^-4 CM/SEC TO 3.5410^-6 CM/SEC).
  - SOIL PH SHOULD BE BETWEEN 6.0 AND 7.0.
  - UTILIZATION OF ON SITE MATERIALS TO MANUFACTURE SOIL LAYER IS ENCOURAGED PROVIDED THAT THE SOIL WILL MEET SPECIFICATIONS, EITHER AS A STANDALONE PRODUCT OR BY AMENDMENT WITH OUTSIDE MATERIAL.
  - SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION IF NECESSARY.
  - THE WETLAND SOILS SHALL BE TESTED IN ACCORDANCE WITH THE P-TESTING PROCEDURE DESCRIBED BELOW AND SHALL HAVE A PHOSPHORUS SATURATION RATION (PSR) LESS THAN OR EQUAL TO 0.10.
    - PSR IS DETERMINED USING THE FOLLOWING PROTOCOL:
      - Samples are to be air dried and sieved through 2 mm prior to testing
      - Air dried, sieved soil samples are to then be extracted with the Mehlich-3 solution (0.2 M CH3COOH + 0.25 M NH4NO3 + 0.015 M NH4F + 0.013 M HNO3 + 0.001 M EDTA) by shaking a soil solution suspension for 5 minutes at a 1:10 ratio (soil mass in grams: solution volume in mL), followed by filtering to remove particles (pore size of 2 µm is recommended, max pore size = 8 µm).
      - Extracts from the Mehlich-3 procedure are to be analyzed for P, Fe, and Al by ICP-OES.
      - The Phosphorus Saturation Ratio (PSR) is then calculated as follows:

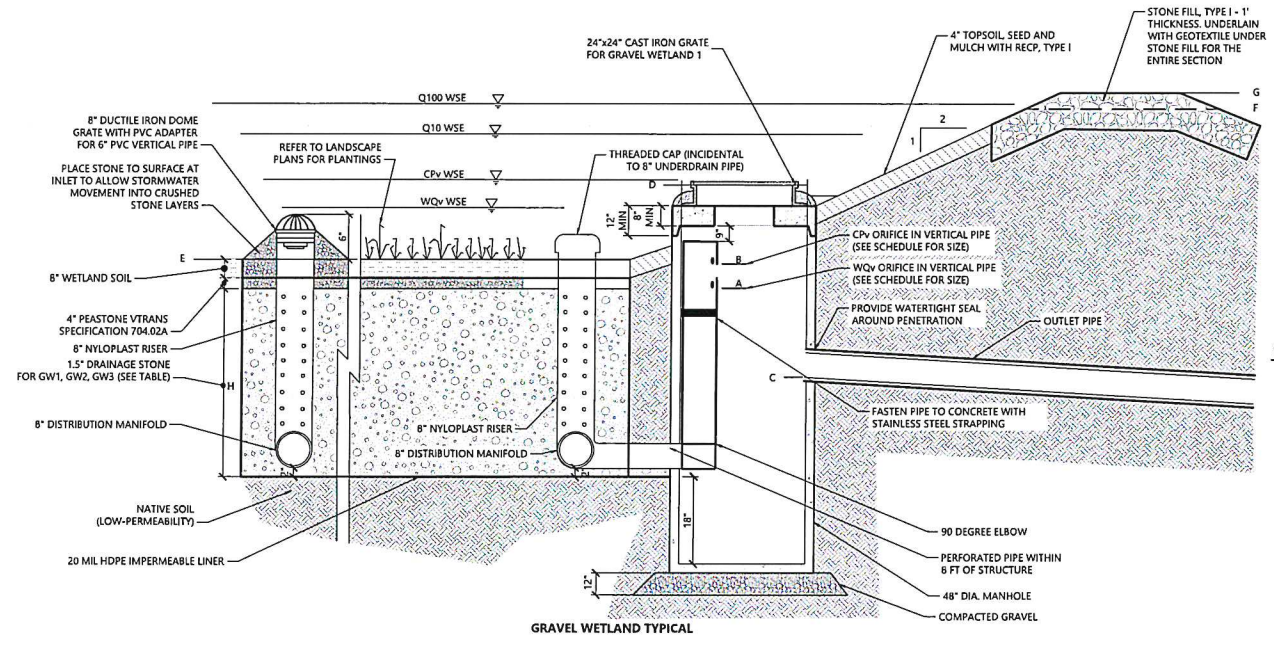
$$PSR = \frac{\left(\frac{P_{M3}}{56}\right)}{\left(\frac{Fe_{M3}}{56}\right) + \left(\frac{Al_{M3}}{27}\right)}$$

- where,
- P<sub>M3</sub> = Mehlich-3 P in mg P per kg dry soil
  - Fe<sub>M3</sub> = Mehlich-3 Fe in mg Fe per kg dry soil
  - Al<sub>M3</sub> = Mehlich-3 Al in mg Al per kg dry soil

THE TRANSITION LAYER MAY BE COMPOSED OF EITHER PEA GRAVEL OR A COMBINATION OF SAND AND PEA GRAVEL.

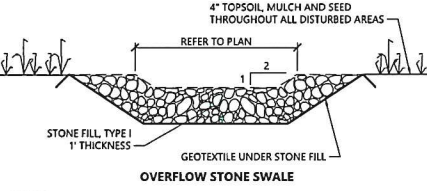
THE SUBSURFACE GRAVEL LAYER SHALL BE MINIMUM OF 24 INCHES IN DEPTH AND CONSIST OF 1/2 INCH CRUSHED STONE.

\*\*DESIGNERS MUST DOCUMENT THROUGH ONSITE SOIL CHARACTERIZATION THAT NATIVE SUBSOILS ARE SUFFICIENTLY IMPERMEABLE TO SUPPORT SEASONAL HIGH-WATER TABLE (SHWT) WITHIN THE GRAVEL LAYER. A LAYER BELOW THE SUBSURFACE GRAVEL LAYER IS REQUIRED IN CASES WHERE NATIVE SUBSOILS CANNOT SUPPORT THIS SHWT.



**Gravel Wetland (Single Bay)**  
N.T.S. Source: VHB 04/21 LD\_VT

Location	GRAVEL WETLAND		
	GW1	GW2	GW3
A - WQ ORIFICE ELEVATION (GSD)	1562.75 (1' 0")	1585.75 (1' 0")	1606.50 (1' 0")
B - CPV ORIFICE ELEVATION (GSD)	1587.00 (1' 0")	1587.00 (1' 0")	-
C - OUTLET PIPE ELEVATION (GSD)	1561.50 (1' 0")	1585.50 (1' 0")	1606.00 (1' 0")
D - CR ORIFICE/GRATE ELEVATION (GSD)	1565.00 (1' 0")	1588.00 (1' 0")	1608.85 (1' 0")
E - BASIN BOTTOM FINISHED ELEVATION	1563.00	1586.00	1607.00
F - OVERFLOW SPILLWAY ELEVATION	1567.00	1589.00	1609.00
G - TOP OF EMBANKMENT	1568.00	1590.00	1610.00
H - STONE DEPTH	48"	48"	48"
WQ- WATER SURFACE ELEVATION (WSD)	1565.01	1587.31	1607.53
CPV WSE	1565.35	1587.88	1608.19
Q10 WSE	1565.69	1588.90	1608.90
Q100 WSE	1566.98	1589.41	1609.18



- NOTES**
- GRASSED SIDE SLOPES WITHIN TREATMENT WETLANDS SHALL HAVE 2:1 SIDE SLOPES MAXIMUM.
  - GRAVEL WETLAND MEDIA (CRUSHED STONE, 1-3/4") SHALL EXTEND LATERALLY TO THE LIMITS OF ELEVATION 300.00' WITHIN THE BAYS.
  - CLAY SOIL LINER SHALL BE INSTALLED ON SIDE WALLS BETWEEN CRUSHED STONE AND NATIVE SOIL TO TOP OF CRUSHED STONE LAYER. CLAY LAYER MAY BE OMITTED IF SUITABLE IMPERMEABLE NATURAL MATERIAL EXISTS.
  - 6" UNDERDRAIN CARRIER PIPE SHALL NOT BE BACKFILLED WITH STONE BEDDING OR OTHER PERMEABLE MATERIAL. BACKFILL CARRIER PIPES WITH CLAY OR PROVIDE ANTI-SLEEP COLLARS (INCIDENTAL TO COST OF CARRIER PIPE).

**Stowe Mountain  
Parking Improvements -  
A Lots**  
5781 Mountain Road  
Stowe VT, 05672

No.	Revision	Date	App'd

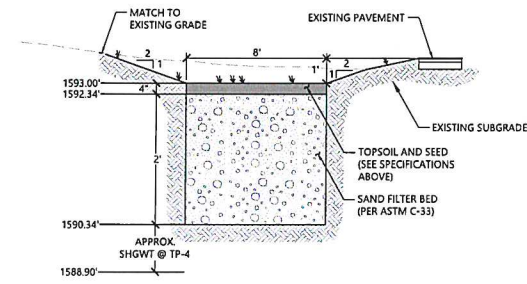
Designed by SSM/VMA Checked by DJH  
Issued on Date July 25, 2023  
Permitting

**Not for Construction**  
Drawing Title  
**Stormwater Details (1 of 2)**

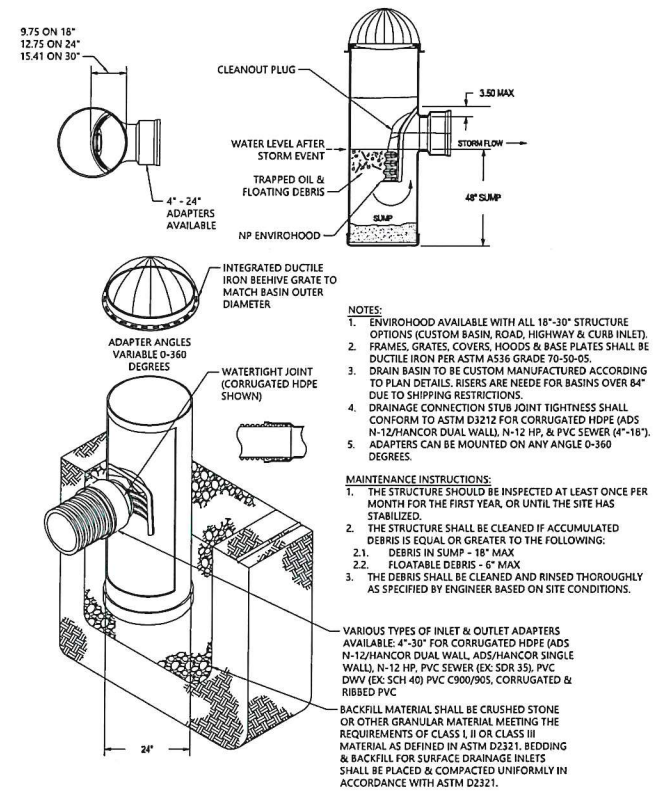
**C6.01**

**Dry Swale Specifications:**

- VEGETATION AND LANDSCAPING:
1. THE ENTIRE CONTRIBUTING AREA SHALL BE STABILIZED BEFORE RUNOFF MAY BE DIRECTED INTO THE PRACTICE. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PREVIOUS DRAINAGE AREAS, AND IMPERVIOUS AREA CONSTRUCTION MUST BE COMPLETED.
  2. A THINK VEGETATIVE COVER SHALL BE PROVIDED FOR PROPER FUNCTION.
  3. A LANDSCAPING PLAN THAT PROVIDES SOIL STABILIZATION AND NUTRIENT UPTAKE SHALL BE PROVIDED FOR BOTH WET AND DRY SWALES. FOR DRY SWALES THAT ARE INTENDED TO BE MOWED, A SEED SPECIFICATION AND SEEDING RATE MAY TAKE THE PLACE OF THE LANDSCAPING PLAN.
    - 3.1. NATIVE PLANT SPECIES SHOULD BE SPECIFIED OVER NON-NATIVE SPECIES, THOUGH NON-INVASIVE CULTIVARS ARE ALSO ACCEPTABLE AND CAN PROVIDE THE FUNCTIONS NEEDED.
    - 3.2. THE LANDSCAPING PLAN SHOULD SPECIFY PROPER GRASS SPECIES AND EMERGENT PLANTS BASED ON SPECIFIC SITE, SOILS, AND HYDRIC CONDITIONS PRESENT ALONG THE PROPOSED SWALE.



**Dry Swale (Area A)** 05/17  
 N.T.S. Source: VHB LD



- NOTES:
1. ENVIROHOOD AVAILABLE WITH ALL 18"-30" STRUCTURE OPTIONS (CUSTOM BASIN, ROAD, HIGHWAY & CURB INLET).
  2. FRAMES, GRATES, COVERS, HOODS & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
  3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS.
  4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL N-12 HP, & PVC SEWER (4"-18").
  5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0-360 DEGREES.

- MAINTENANCE INSTRUCTIONS:
1. THE STRUCTURE SHOULD BE INSPECTED AT LEAST ONCE PER MONTH FOR THE FIRST YEAR, OR UNTIL THE SITE HAS STABILIZED.
  2. THE STRUCTURE SHALL BE CLEANED IF ACCUMULATED DEBRIS IS EQUAL OR GREATER TO THE FOLLOWING:
    - 2.1. DEBRIS IN SUMP - 18" MAX
    - 2.2. FLOATABLE DEBRIS - 6" MAX
  3. THE DEBRIS SHALL BE CLEANED AND RINSED THOROUGHLY AS SPECIFIED BY ENGINEER BASED ON SITE CONDITIONS.

VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE: 4"-30" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, ADS/HANCOR SINGLE WALL, N-12 HP, PVC SEWER (EX: SCH 35), PVC DWV (EX: SCH 40) PVC C900/905, CORRUGATED & RIBBED PVC

BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

**Nyloplast Drain Basin with Envirohood**  
 N.T.S.

**Stowe Mountain  
 Parking Improvements -  
 A Lots**  
 5781 Mountain Road  
 Stowe VT, 05672

No.	Revision	Date	Appr.
1.	Layout and Landscaping Revisions	11/27/2023	DJH

Designed by	SSM/VMA	Checked by	DJH
Issued for	Permitting	Date	July 25, 2023

Not for Construction

**Stormwater Details (2 of 2)**

Drawing Number

**C6.02**

Sheet 10 of 12

Project Number 58971.00

**OWNER**

**Stowe Mountain Resort**  
 5781 Mountain Road  
 Stowe, VT 05672  
 802.253.3629

**ARCHITECT**

**Freeman French Freeman, Inc.**  
 81 Maple Street  
 Burlington, VT 05401  
 802.864.6844

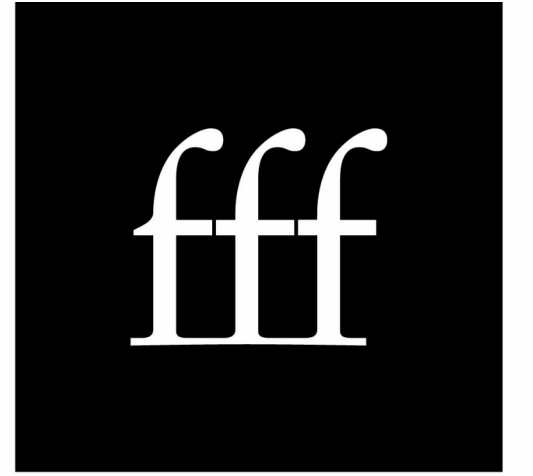
**STRUCTURAL ENGINEER**

**DeWolfe Engineering Associates P.C.**  
 317 River St., P.O. Box 1576  
 Montpelier, VT 05601  
 802.223.4727

**ABBREVIATIONS**

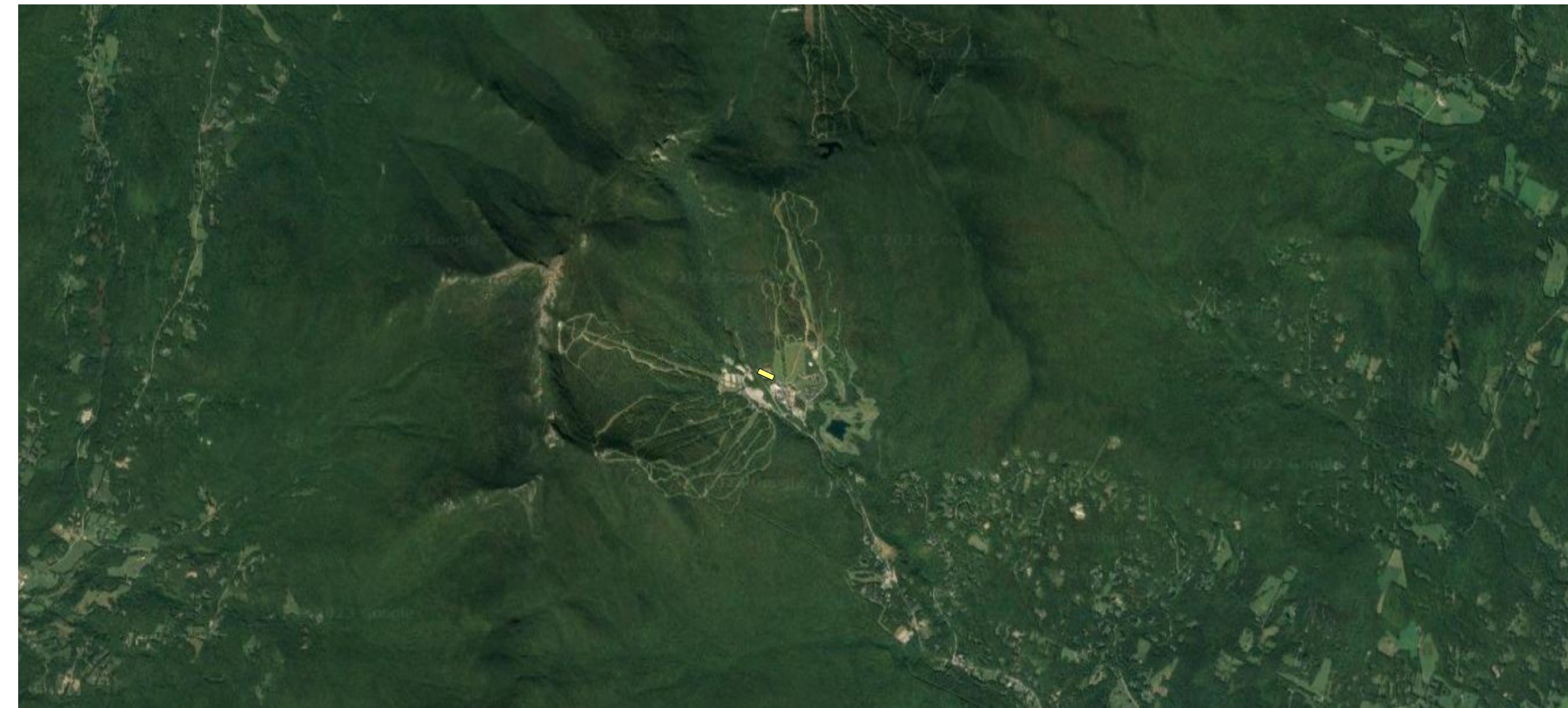
ACM	ALUMINUM COMPOSITE PANEL	LAV	LAVATORY
ACT	ACOUSTICAL CEILING TILE	MATL	MATERIAL
ADA	AMERICANS WITH DISABILITIES ACT	MAX	MAXIMUM
AFF	ABOVE FINISH FLOOR	MECH	MECHANICAL
ALUM	ALUMINUM	MFR	MANUFACTURER
APPROX	APPROXIMATELY	MIN	MINIMUM
		MISC	MISCELLANEOUS
		MO	MASONRY OPENING
BD	BOARD	MS	MANUAL SHADE
BLDG	BUILDING	MTD	MOUNTED
BS	BLACKOUT SHADE	MTL	METAL
		NIC	NOT IN CONTRACT
CG	CORNER GUARD	NTS	NOT TO SCALE
CJ	CONTROL JOINT		
CL	CENTER LINE		
CLG	CEILING	OC	ON CENTER
CLR	CLEAR	OD	OVERFLOW ROOF DRAIN
CMP	COMPOSITE METAL PANEL	OFF	OFFICE
CMU	CONCRETE MASONRY UNIT	OH	OPPOSITE HAND OR OVERHEAD
COL	COLUMN	OPP	OPPOSITE
CONC	CONCRETE	OFOI	OWNER FURNISHED
CONT	CONTINUOUS	OFCI	OWNER INSTALLED
CORR	CORRIDOR		OWNER FURNISHED
CPT	CARPET		CONTRACTOR INSTALLED
CT	CERAMIC TILE		
CFCI	CONTRACTOR FURNISHED		
	CONTRACTOR INSTALLED	PJ	PANEL JOINT
CFOI	CONTRACTOR FURNISHED	PL	PLATE
	OWNER INSTALLED	PLAM/P-LAM	PLASTIC LAMINATE PLYWOOD
		PREFAB	PREFABRICATED
DF	DRINKING FOUNTAIN	PT	PRESSURE TREATED
DIA	DIAMETER	PTD	PAINTED
DIM	DIMENSION		
DN	DOWN	QT	QUARRY TILE
DTL	DETAIL		
DWG	DRAWING	RCP	REFLECTED CEILING PLAN
		RD	ROOF DRAIN
EJ	EXPANSION JOINT	REF	REFERENCE/REFRIGERATOR
EL/ELEV	ELEVATION	REQD	REQUIRED
ELEC	ELECTRIC	RESIL	RESILIENT
EMER	EMERGENCY	REV	REVISION
ENGR	ENGINEER	RM	ROOM
EQ	EQUAL	RO	ROUGH OPENING
EQUIP	EQUIPMENT		
EWC	ELECTRIC WATER COOLER		
EX/EXIST	EXISTING	SCHED	SCHEDULE
		SECT	SECTION
EXT	EXTERIOR	SHT	SHEET
ETR	EXISTING TO REMAIN	SIM	SIMILAR
FCBP	FIBER CEMENT BOARD PANEL	SPEC	SPECIFICATION
FD	FLOOR DRAIN	STD	STANDARD
FEC	FIRE EXTINGUISHER CABINET	STL	STEEL
FIN FLR	FINISH FLOOR	SS, ST, STL	STAINLESS STEEL
FIN	FINISH	STOR	STORAGE
FLR	FLOOR	STRUC	STRUCTURAL
FRM	FIRE RESISTIVE MATERIAL	SSG	STRUCTURAL SILICONE GLAZING
FT	FOOT OR FEET		
		TOC	TOP OF CONCRETE
GALV	GALVANIZED	TOS	TOP OF STEEL
GWB	GYPSPUM WALL BOARD	TOW	TOP OF WALL
GYP	GYPSPUM	TYP	TYPICAL
		UNO	UNLESS NOTED OTHERWISE
		UC	UNDER CONTROL
HC	HANDICAP		
HDW	HARDWARE		
HM	HOLLOW METAL	VB	VINYL BASE
HORIZ	HORIZONTAL	VCT	VINYL COMPOSITION TILE
HR	HANDRAIL	VERT	VERTICAL
HT	HEIGHT	VEST	VESTIBULE
INSUL	INSULATION	W/	WITH
INT	INTERIOR	WD	WOOD
IN	INCHES	W/O	WITHOUT

# STOWE MOUNTAIN RESORT PARKING LOT STAIRS

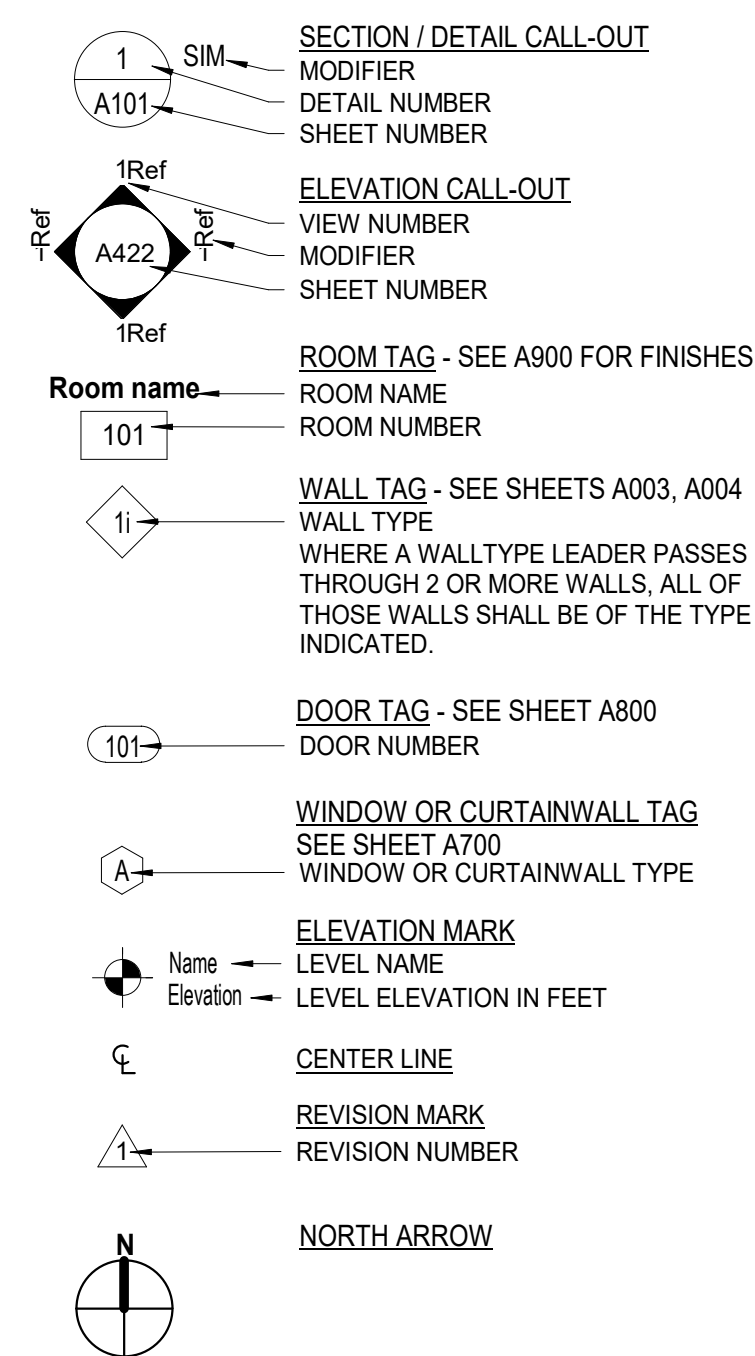


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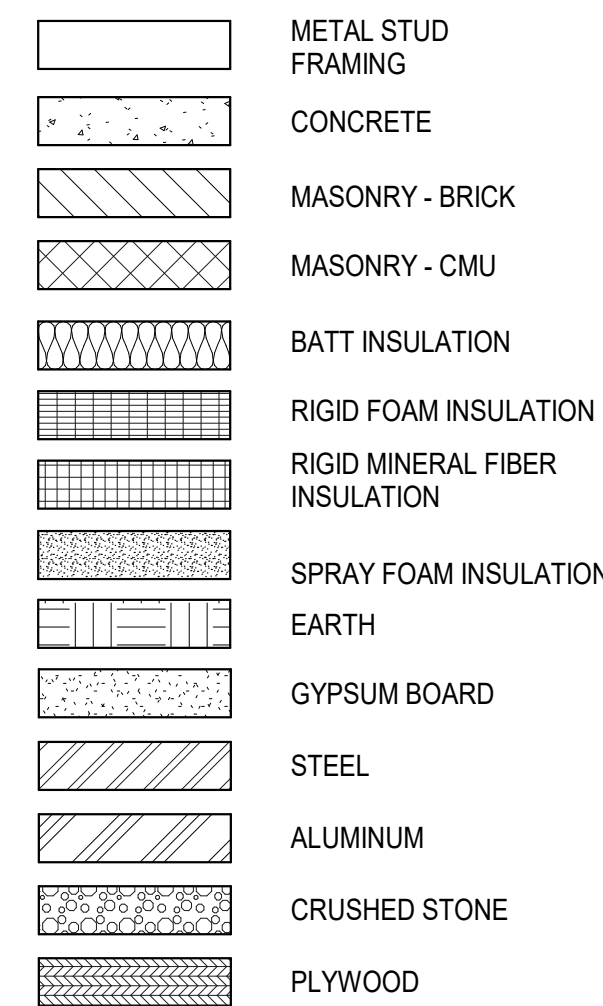
**LOCATION MAP**



**MATERIALS LEGEND**



**SYMBOLS LEGEND**



**GENERAL NOTES**

- ALL WORK TO BE DONE IN ACCORDANCE WITH STATE AND LOCAL CODES AND ORDINANCES.
- ALL WORK PERFORMED TO BE OF ACCEPTED INDUSTRY STANDARDS AND PRACTICES GOVERNING THE HIGHEST DEFINED QUALITY OF WORKMANSHIP.
- CONTRACTOR TO COORDINATE KEYING REQUIREMENTS WITH THE OWNER AND THOSE SCHEDULED WITHIN THESE DOCUMENTS.
- FIRE PROTECTION DEVICES, FIRE ALARM DEVICES, EXIT SIGNS AND EMERGENCY LIGHTING ARE TO BE LOCATED AS DIRECTED AND REQUIRED BY CODE AND / OR AUTHORITIES HAVING JURISDICTION.
- ALL EXTERIOR WOOD BLOCKING AND ALL WOOD IN CONTACT WITH CONCRETESLABS AND / OR MASONRY TO BE PRESSURE TREATED.
- CONTRACTOR TO VERIFY LAYOUT AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND TO CONSULT WITH THE ARCHITECT REGARDING ANY DISCREPANCIES THAT EXIST WITHIN THESE CONSTRUCTION DOCUMENTS.
- CONTRACTOR TO COORDINATE WITH THE OWNER FOR ANY ITEMS TO BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR PERMITS, FEES, ETC. ASSOCIATED WITH THE EXECUTION AND COMPLETION OF THE WORK AS DEFINED IN THE CONTRACT.
- PROVIDE FIRE TREATED WOOD BLOCKING IN PARTITIONS AS REQUIRED FOR MOUNTING OF CABINETS, SHELVING, GRAB BARS, TACK BOARDS, ETC.
- ALL WOOD FRAMING/ BLOCKING AND UNIT MASONRY SIZES ARE NOMINAL, UNO.
- ALL EXPOSED INTERIOR STEEL TO BE PAINTED, EXPOSED EXTERIOR STEEL TO BE GALVANIZED, UNO.
- ALL INTERIOR PLAN DIMENSIONS ARE FROM FINISHED FACE OF WALLS, UNO.
- WHERE WALLS OR PARTITIONS ON EITHER SIDE OF A DOOR ARE SHOWN AS SOUND, SMOKE, OR FIRE RATED, THE WALL OR PARTITION OVER THE DOOR SHALL BE RATED TO THE HIGHEST RATING OF THE ADJACENT WALLS AND PARTITIONS, UNLESS OTHERWISE NOTED.
- THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER AS DEFINED IN THE A201 GENERAL CONDITIONS. BRING CONFLICTING INFORMATION TO THE ATTENTION OF THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONFLICTING REQUIREMENTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE ARCHITECT WILL RENDER A DECISION ON HOW TO RESOLVE THE CONFLICT AT A LATER DATE. THE CONTRACTOR IS RESPONSIBLE FOR THE HIGHER COST OF THE CONFLICTING REQUIREMENTS UNLESS CLARIFIED IN WRITING WITHIN OR PRIOR TO SUBMITTING THE BID OR PROPOSAL.

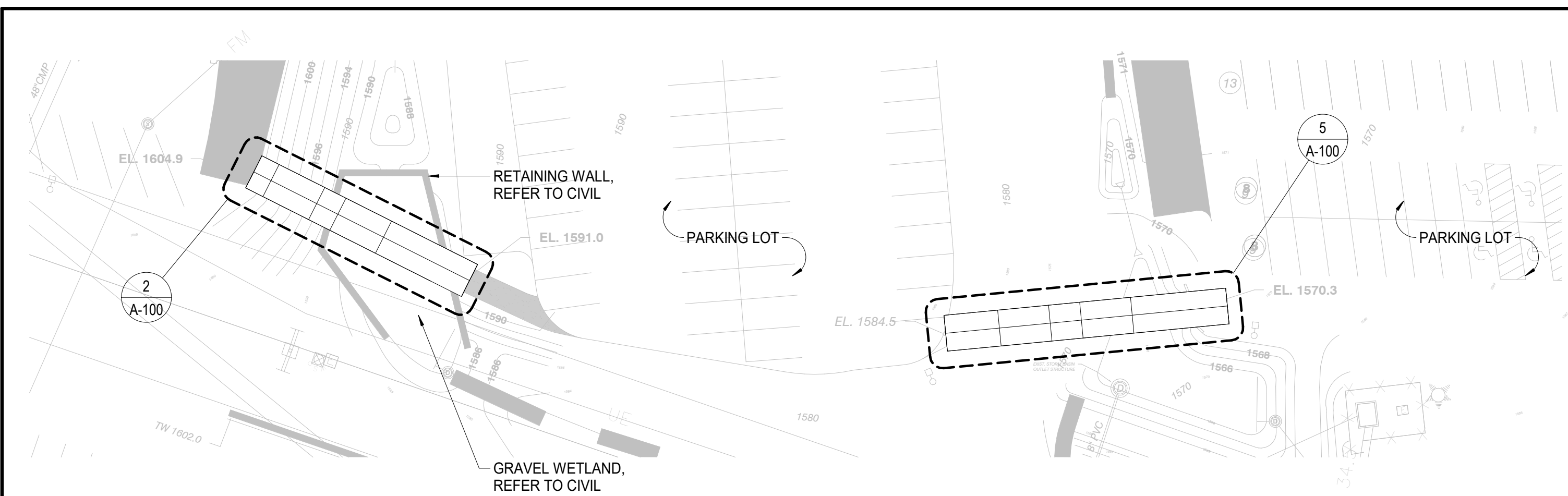
**SCHEDULE OF DRAWINGS**

<b>ARCHITECTURAL</b>	
A-100	PLANS & ELEVATIONS
A-500	DETAILS
<b>STRUCTURAL</b>	
S1.0	GENERAL NOTES & DETAILS
S1.1	STAIR / BRIDGE FLOOR AND ROOF PLANS

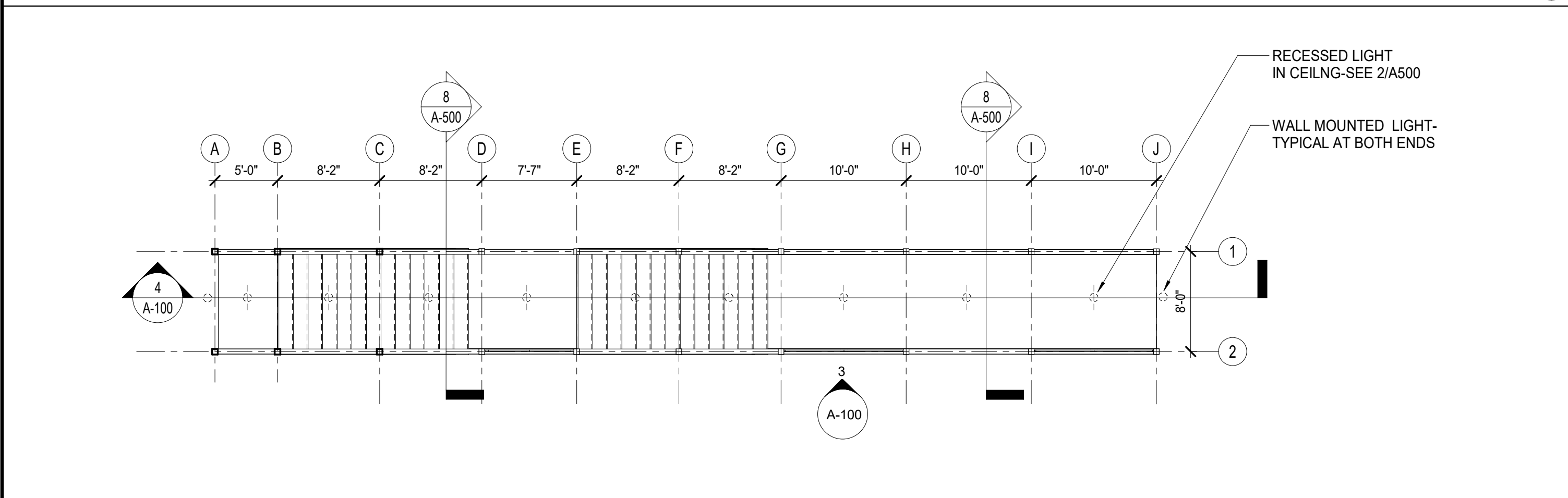
**ISSUE FOR PERMIT**  
**04/12/23**



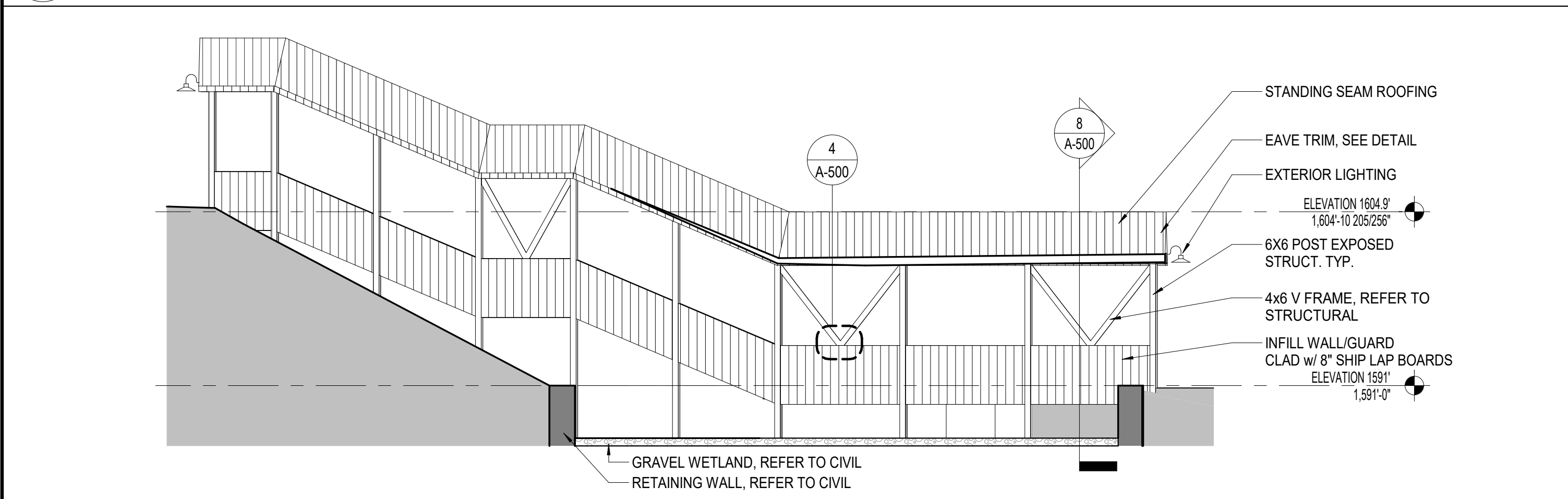
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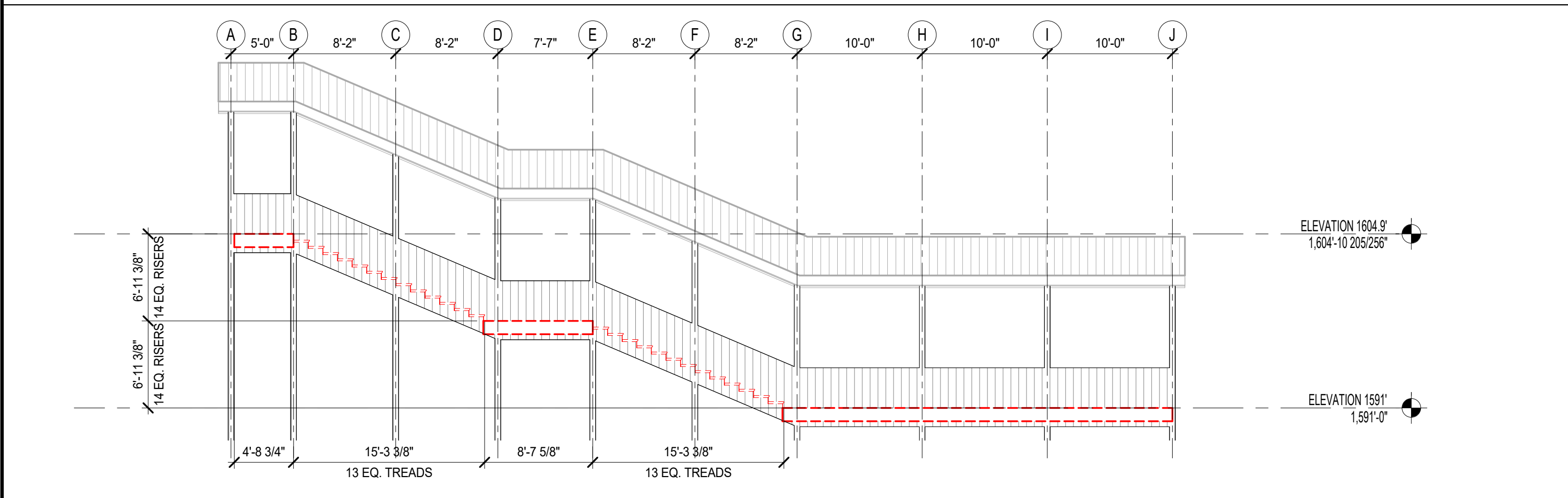
**1 STAIR BRIDGE - SITE PLAN**  
 A-100 SCALE: 1/32" = 1'-0"



**2 STAIR / BRIDGE 1 - PLAN**  
 A-100 SCALE: 1/8" = 1'-0"



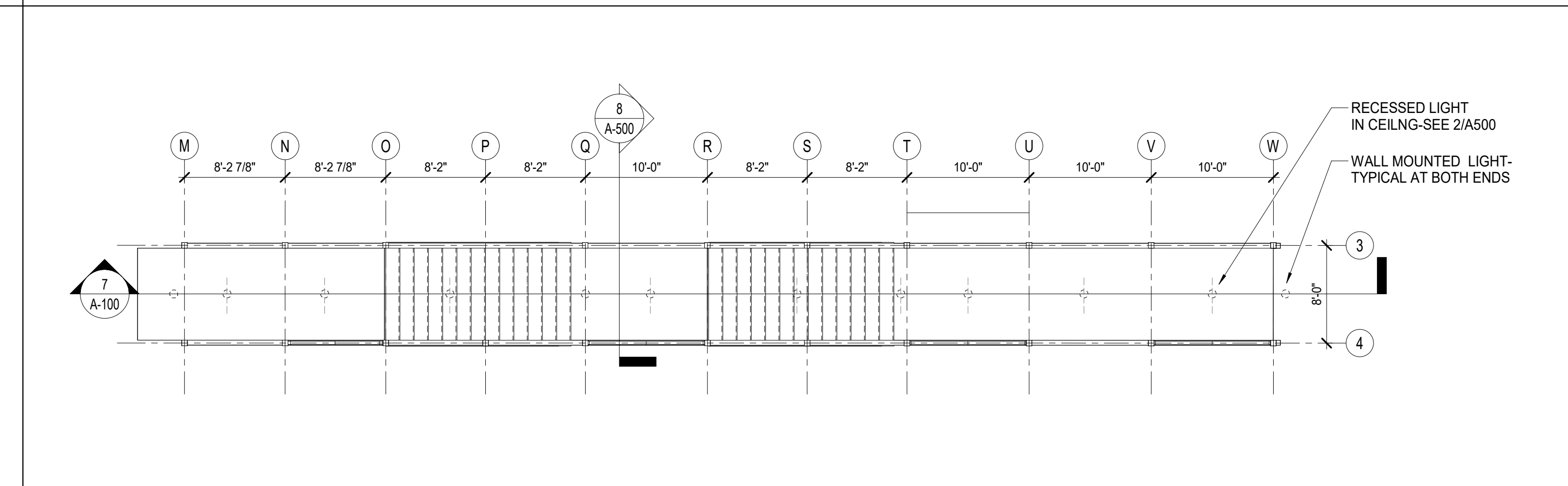
**3 STAIR / BRIDGE 1 - ELEVATION**  
 A-100 SCALE: 1/8" = 1'-0"



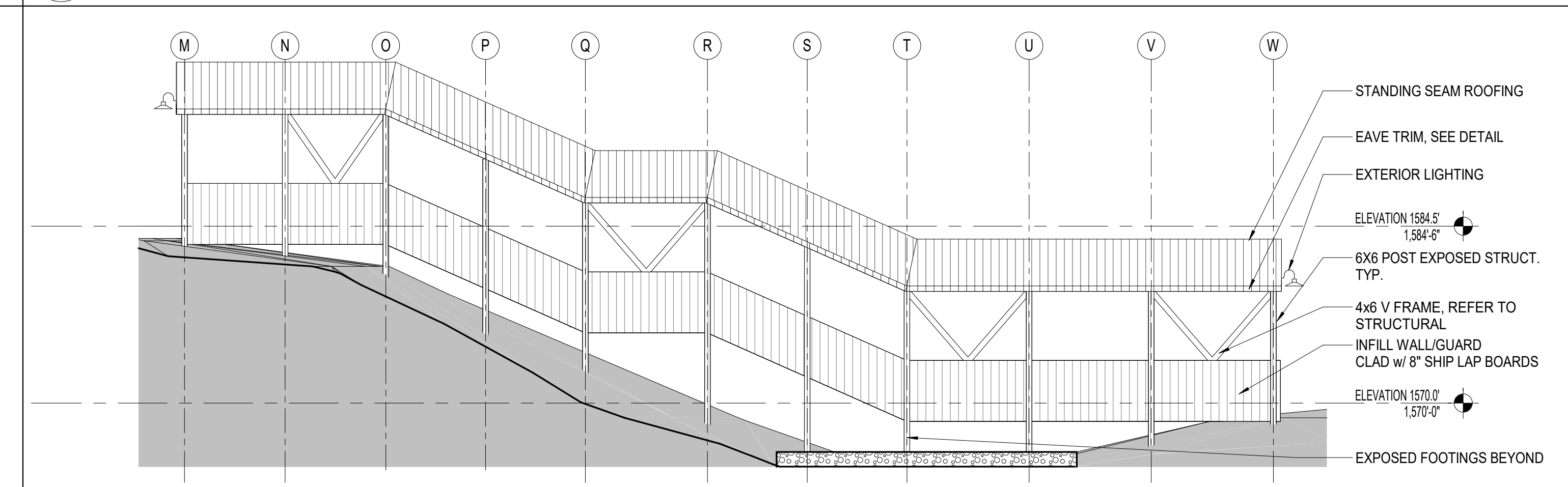
**4 STAIR / BRIDGE 1 - STAIR PROFILE**  
 A-100 SCALE: 1/8" = 1'-0"



**5 STAIR / BRIDGE 2 - PLAN**  
 A-100 SCALE: 1/8" = 1'-0"



**6 STAIR / BRIDGE 2 - ELEVATION**  
 A-100 SCALE: 1/8" = 1'-0"



**7 STAIR / BRIDGE 2 - STAIR PROFILE**  
 A-100 SCALE: 1/8" = 1'-0"

**STOWE STAIR**  
  
**STOWE MOUNTAIN SKI AREA**  
**STOWE, VERMONT**

FFF PROJECT NO: **2292**

ORIGINATION DATE: <b>12/17/22</b>	SCALE: <b>As indicated</b>
DRAWN BY: <b>JW</b>	CHECKED BY: <b>SB</b>
ISSUE LOG:	
IFP	04/12/23
IFP	11/30/23

SHEET CONTENTS:

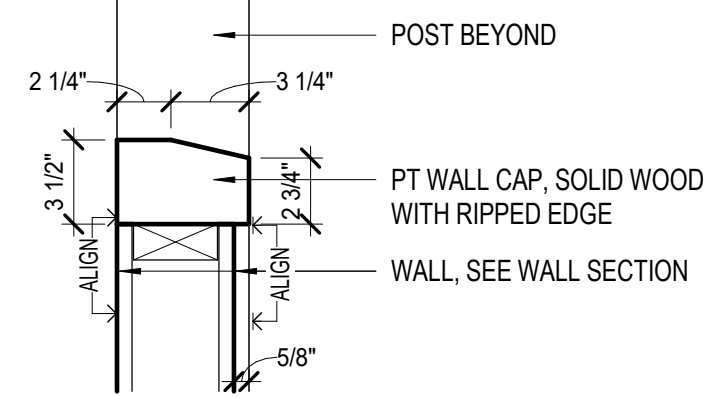
**PLANS & ELEVATIONS**

SHEET NO: **A-100**

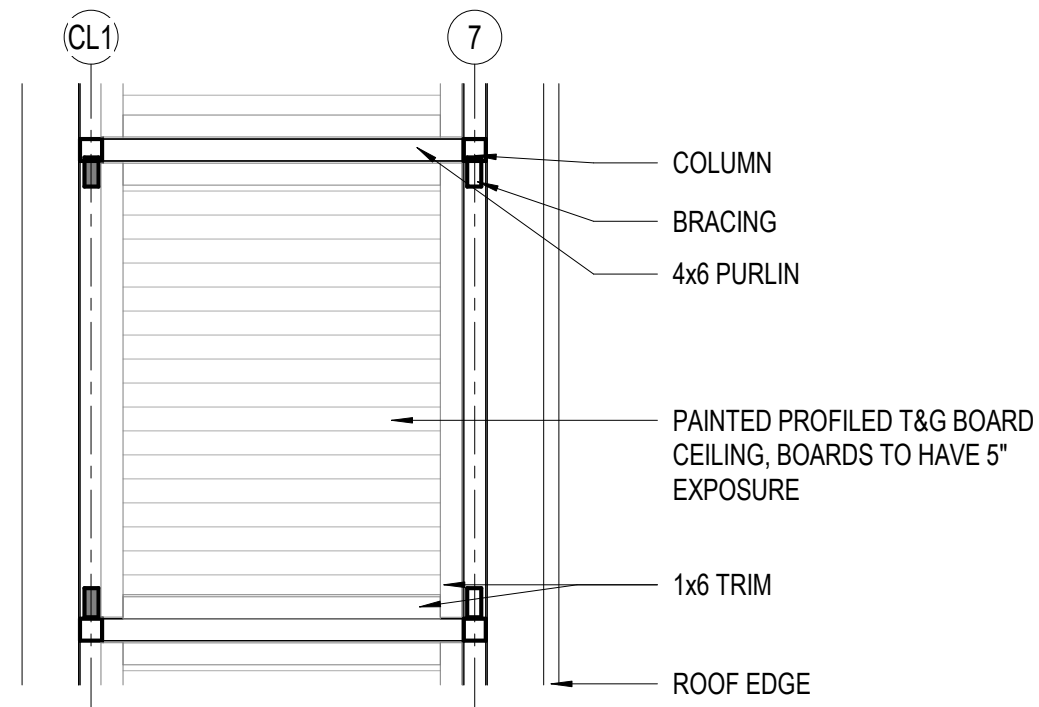
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**GENERAL SPEC INFORMATION**

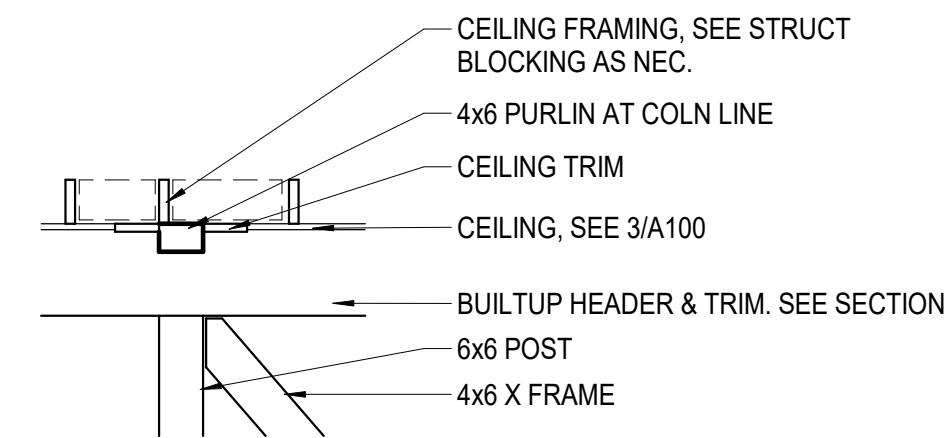
- DIV. 03 - SEE STRUCTURAL
- DIV. 05 - SEE STRUCTURAL
- DIV. 06 - ALL TRIM & SIDING TO BE ROUGH SAWN HEMLOCK  
- SEE STRUCTURAL FOR ROUGH FRAMING; INCLUDING COLUMN & "V" BRACING
- DIV. 07 - STANDING SEAM IS TO MATCH EXISTING GONDOLA ROOF BARN IN COLOR AND TYPE  
- STANDING SEAM UNDERLAYMENT - PER STANDING SEAM MFR RECOMMENDATIONS
- DIV. 09 - OPAQUE STAIN TO BE SELECTED BY OWNER/ARCH
- DIV. 26 - ELEC. BY OTHERS.
- DIV. 31 - SEE CIVIL



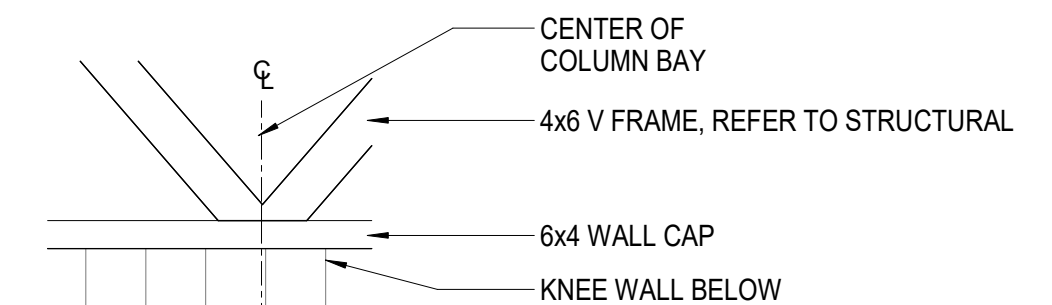
**1 HANDRAIL DETAIL**  
A-500 SCALE: 1 1/2" = 1'-0"



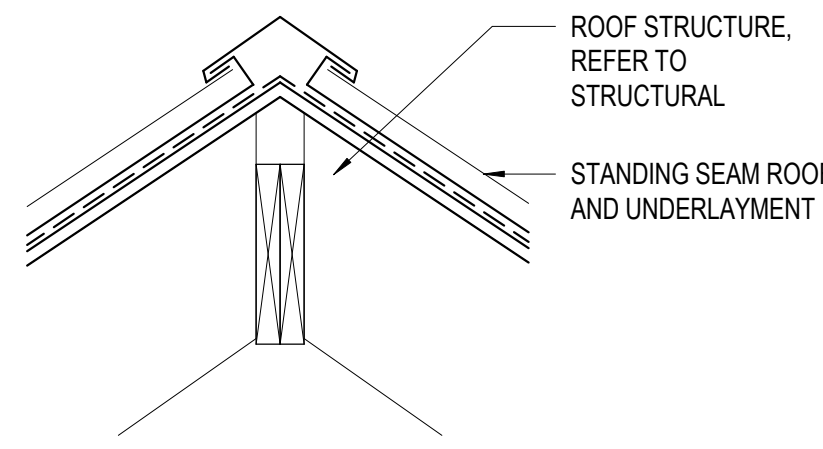
**2 TYPICAL CEILING BAY**  
A-500 SCALE: 1/4" = 1'-0"



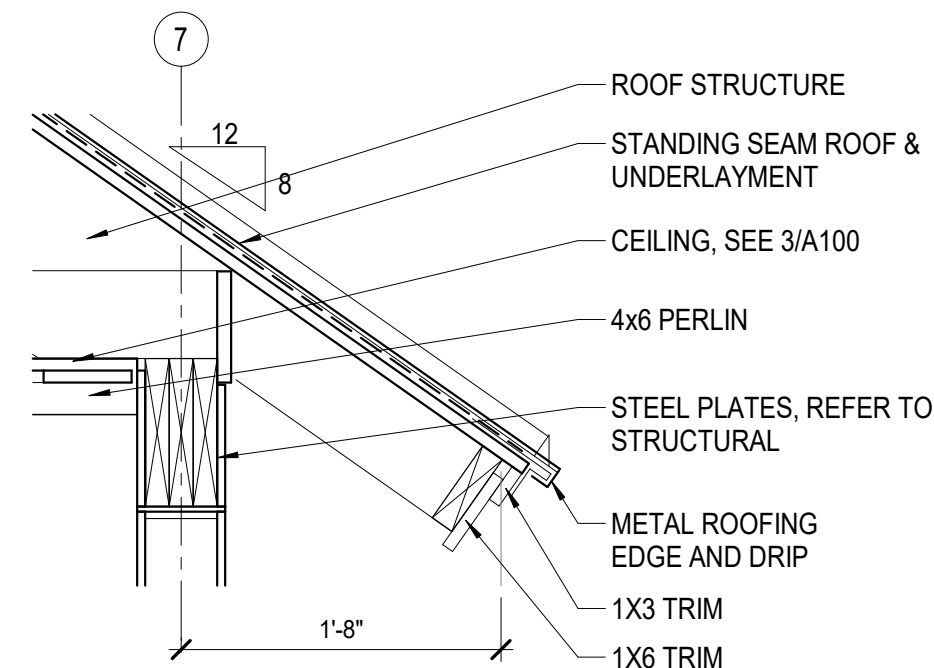
**3 INT. ELEV. OF TOP OF COLUMN**  
A-500 SCALE: 1/2" = 1'-0"



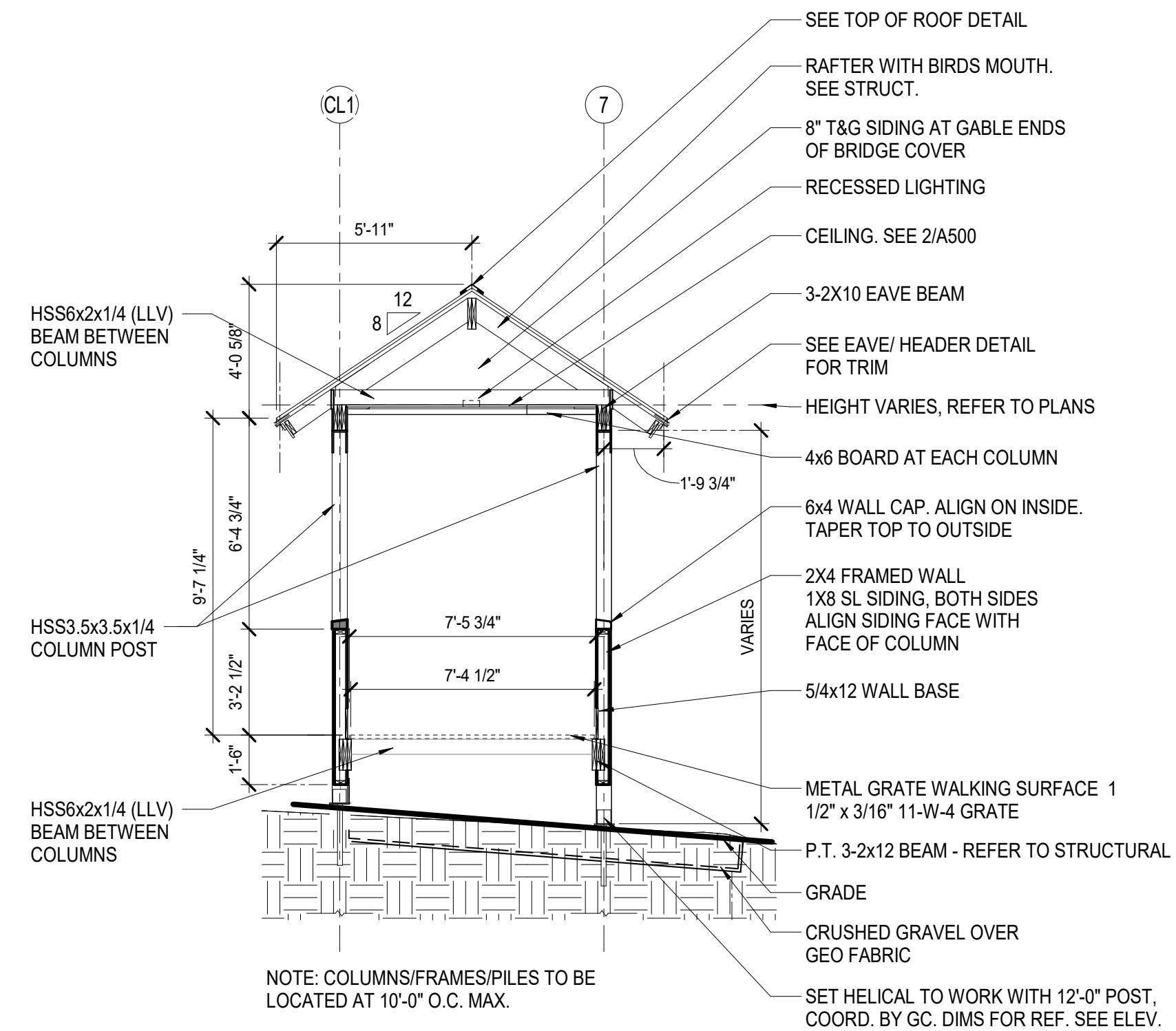
**4 INT. ELEV. BOTTOM OF V FRAME**  
A-500 SCALE: 1/2" = 1'-0"



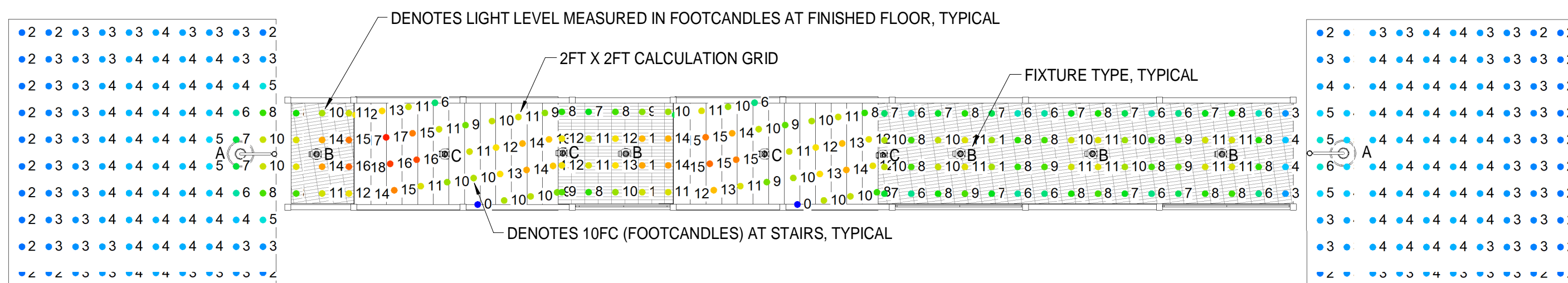
**5 TYPICAL RIDGE DETAIL**  
A-500 SCALE: 1" = 1'-0"



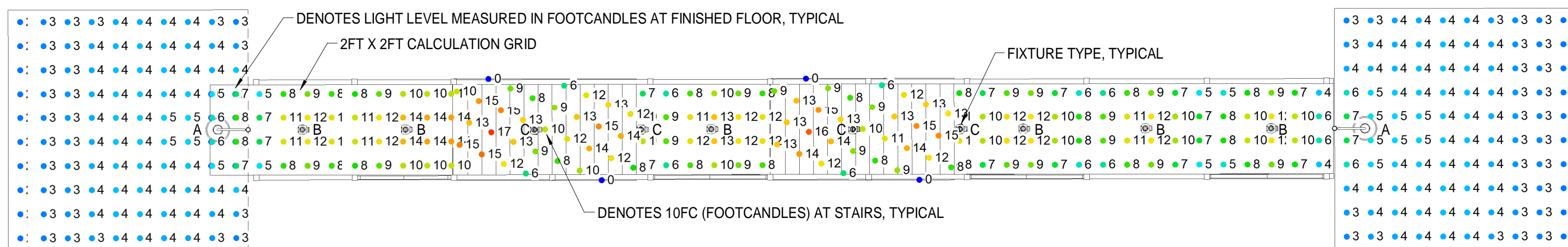
**6 TYPICAL EAVE DETAIL**  
A-500 SCALE: 1" = 1'-0"



**8 TYPICAL SECTION**  
A-500 SCALE: 1/4" = 1'-0"



**7 STAIR/BRIDGE 1 - PHOTOMETRICS**  
A-500 SCALE:

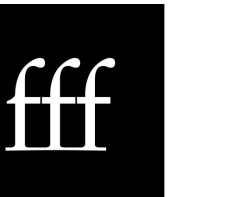


**9 STAIR/BRIDGE 2 - PHOTOMETRICS**  
A-500 SCALE:

MARK	MANUFACTURER	DESCRIPTION	MOUNTING	CATALOG NUMBER	TYPE	CT	FINISH	VOLTAGE	LUMEN OUTPUT	CCT	REMARKS	TOTAL WATTS
A	COOPER INVUE	GOOSENECK	WALL MTD @ +/- 12FT AFG	EMM-E02-LED-E1-T4-SO-SW-BZ-8030 + VA6101 (MODERN MNT ARM)	LED	4000K	BRONZE	UNV	3500L	4000K	PROVIDE PC AUTO CONTROL (DUSK/DAWN)	52
B	ALPHABET	RECESSED DOWNLIGHT	UNDERSIDE OF ROOF STRUCTURE	NU4-RD-SW-10LM-40K-80-50D-CL-BZ-BZ-NC-UNV-DIM10-EM7	LED	4000K	BRONZE	UNV	990L	4000K	w/ EM BACKUP	9
C	ALPHABET	RECESSED DOWNLIGHT	UNDERSIDE OF ROOF STRUCTURE	NU4-RA-SW-15LM-40K-80-55D-NA-CL-BZ-BZ-NC-UNV-DIM10-EM12	LED	4000K	BRONZE	UNV	1280L	4000K	w/ SLOPED CLG ADAPTOR & EM BACKUP	13

LIGHTING FIXTURE NOTES:  
1. FIXTURE TYPES LISTED INDICATE LED TYPE, COLOR TEMPERATURE, WATTAGE, MINIMUM LUMENS, QUALITY, MOUNTING STYLE, AND DOES NOT LIMIT SELECTION TO THE LISTED MANUFACTURERS. EQUIVALENT FIXTURES MAY BE SUBMITTED FOR APPROVAL.

Global Illuminance Results		
Calculation Points Name	Average	Maximum
Stair; Stair	11 fc	18 fc
Generic - 12.75"	12 fc	16 fc
Generic - 12.75"	11 fc	14 fc
Generic - 12.75"	8 fc	11 fc
Generic - 12"	9 fc	14 fc
Generic - 12"	10 fc	13 fc
Generic - 12"	9 fc	12 fc
Stair; Stair	10 fc	17 fc
Generic - 12"	0 fc	0 fc
Generic - 12"	0 fc	0 fc
Generic - 12"	0 fc	0 fc
Generic - 12"	0 fc	0 fc
Generic - 12"	4 fc	10 fc
Generic - 12"	3 fc	6 fc
Generic - 12"	4 fc	8 fc
Generic - 12"	4 fc	7 fc



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STOWE STAIR

STOWE MOUNTAIN SKI AREA  
STOWE, VERMONT

PROJECT NO: 2292

ORIGINATOR DATE: 12/17/22 SCALE: As indicated

DRAWN BY: JW CHECKED BY: SB

ISSUE LOG:  
IFP 04/12/23  
IFP 11/30/23

SHEET CONTENTS:

DETAILS

SHEET NO:

A-500

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**GENERAL NOTES**

**1 GENERAL:**

- ALL WORK SHALL BE PERFORMED IN A FIRST CLASS MANNER, AND IN STRICT ACCORDANCE WITH THE VERMONT FIRE & BUILDING SAFETY CODE - 2015 (WHICH INCORPORATES IBC 2015 WITH LATEST SUPPLEMENTS), AND LOCAL CODES AND ORDINANCES.
- BEFORE ORDERING MATERIALS, CONTRACTOR SHALL REVIEW ALL CONSTRUCTION DOCUMENTS, INCLUDING ARCHITECTURAL, STRUCTURAL, MEP, CIVIL, LANDSCAPE, SUBCONTRACTORS SHOP DRAWINGS, AND OTHER RELATED DOCUMENTS, TO VERIFY AND COORDINATE DIMENSIONS, LOCATIONS, PLACEMENT, AND APPLICABILITY OF BUILDING COMPONENTS. THE CONTRACTOR SHALL MAKE FIELD CHECKS TO VERIFY THE ACCURACY OF DIMENSIONS, TOPOGRAPHY, AND OTHER EXISTING CONDITIONS. IF THERE IS ANY DISCREPANCY IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND THE ENGINEER AS SOON AS POSSIBLE.
- DEPRESS SLABS FOR FLOOR FINISHES PER ARCHITECTURAL DRAWINGS. MAINTAIN FULL SLAB THICKNESS.
- SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES, AND UTILITY LINES FROM ALL DAMAGE.
- CONTRACTOR IS RESPONSIBLE FOR ADEQUATE BRACING OF STRUCTURAL MEMBERS, WALLS, AND NON-STRUCTURAL ITEMS DURING CONSTRUCTION.
- BUILDING IS DESIGNED FOR THE FOLLOWING LIVE LOADS:  
FLOOR LIVE LOADS:  
STAIRS & WALKWAYS 100 PSF  
ROOF LIVE LOADS:  
SNOW LOAD GOVERNS  
ROOF SNOW LOADS:  
GROUND SNOW LOAD, P<sub>g</sub> 70 PSF  
FLAT ROOF SNOW LOAD, P<sub>f</sub> 58.8 PSF  
SNOW EXPOSURE FACTOR, C<sub>e</sub> 1  
SNOW LOAD IMPORTANCE FACTOR, I<sub>s</sub> 1  
THERMAL FACTOR, C<sub>t</sub> 1.2  
WIND DESIGN DATA:  
ULTIMATE DESIGN WIND SPEED, V<sub>ult</sub> (3 SECOND GUST) 115 MPH  
NOMINAL DESIGN WIND SPEED, V<sub>nom</sub> 90 MPH  
RISK CATEGORY II  
WIND EXPOSURE C  
INTERNAL PRESSURE COEFFICIENT 18.4  
COMPONENTS AND CLADDING 17.7 PSF

- THE MINIMUM CLEAR DISTANCE FROM REINFC. STEEL TO ADJACENT SURFACE SHALL BE 3" FROM BOT. OF FOOTINGS AND GRADE BEAMS; 1 1/2" (2" FOR #6 OR LARGER) FROM FACE OF WALLS AND GRADE BEAMS EXPOSED TO EARTH OR WEATHER; 3/4" FROM INSIDE FACE; AND 2" FOR SLAB ON GRADE.
- LAP ALL BARS AS SHOWN IN THE LAP SCHEDULE. TOP BARS TO BE LAPPED AT MIDSPAN, AND BOTTOM BARS AT SUPPORTS.
- REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS USING APPROVED TIES, CHAIRS, AND SPACERS AS REQUIRED. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD WITHOUT THE APPROVAL OF THE ENGINEER. USE PLASTIC TIPPED ACCESSORIES IN CONCRETE EXPOSED TO WEATHER, WATER, OR VIEW.
- WHERE CONTINUOUS BARS ARE CALLED FOR, INDICATED OR OTHERWISE REQUIRED THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS, DOWELED INTO INTERSECTION WALLS AND LAPPED AT NECESSARY SPLICES WITH SPLICES STAGGERED WHEREVER POSSIBLE.

- 5 CONCRETE ACCESSORIES**
- CAST-IN-PLACE ANCHOR RODS SHALL BE MADE FROM ASTM F1554, GRADE 36 MATERIAL UNLESS OTHERWISE NOTED. ANCHOR ROD DIAMETERS, MINIMUM EMBEDMENT LENGTHS AND PROJECTION LENGTHS SHALL BE AS SPECIFIED ON THE DRAWINGS.
  - POST-INSTALLED ANCHOR RODS (ALLOWED ONLY WHERE NOTED ON THE DRAWINGS) SHALL BE MADE FROM ASTM A36 MATERIAL UNLESS OTHERWISE NOTED. ANCHOR ROD DIAMETERS, MINIMUM EMBEDMENT LENGTHS AND PROJECTION LENGTHS SHALL BE AS SPECIFIED ON THE DRAWINGS. RODS SHALL BE ATTACHED TO THE CONCRETE WITH HILTI HIT-RE 500-V3 EPOXY ADHESIVE. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - ALL WELDING WHETHER FIELD OR SHOP SHALL BE PREQUALIFIED WELDS WITH E-70 ELECTRODES BY AWS PREVIOUSLY CERTIFIED WELDERS.
  - CONNECTIONS MAY BE DESIGNED FOR THE REACTIONS SHOWN ON THE DRAWINGS. IF THE REACTIONS ARE NOT SHOWN THEY WILL BE PROVIDED AT THE REQUEST OF THE FABRICATOR.
  - STEEL LINTELS AND STEEL EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION. ANY GALVANIZED SURFACE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH ZRC PAINT.

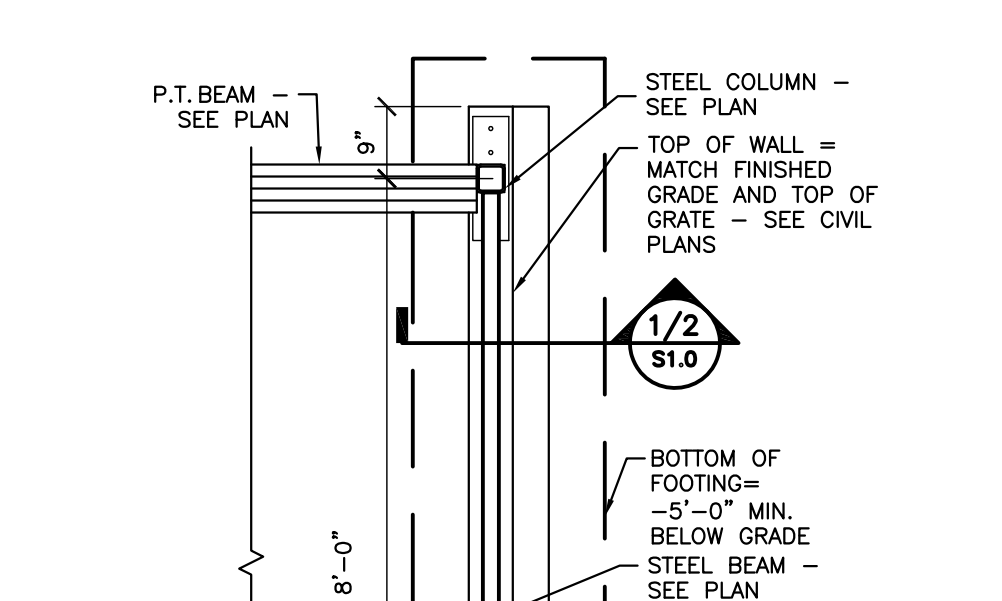
- 7 WOOD FRAMING:**
- WOOD FRAMING WORK SHALL BE IN ACCORDANCE WITH STATE CODE WHICH INCORPORATES NDS-2015, NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION PRODUCED BY THE AMERICAN WOOD COUNCIL. ALL LUMBER SHALL BE AGENCY GRADE STAMPED OF THE SPECIES AND GRADE INDICATED IN THE PROJECT SPECIFICATIONS OR HEREIN.
  - FRAMING SAWN LUMBER SHALL BE SPRUCE-PINE-FIR NO. 1 /NO.2 AND/OR SOUTHERN PINE NO. 1. NO MIXTURE OF LOWER GRADES WITHIN THE SPECIES WILL BE ALLOWED. SAWN LUMBER SHALL BE KILN DRIED TO 19% MOISTURE CONTENT.
  - NAIL 2-MEMBER BEAMS WITH 1 ROW OF 16d AT 12" O.C. FOR EVERY 3" OF MEMBER DEPTH, AND 3-MEMBER BEAMS WITH 1 ROWS OF 16d @ 12" ON EACH SIDE FOR EVERY 3" OF MEMBER DEPTH.
  - UNLESS OTHERWISE SHOWN ON THE DRAWINGS, CONNECTIONS SHALL BE COMPLETED BY THE FABRICATOR FOR THE REACTIONS INDICATED THUS ON THE DRAWINGS THAT THIS WILL BE ATTAINED AT A MINIMUM DEPTH OF 5'-0" BELOW FINISHED EXTERIOR GRADE OR AT THE ELEVATION NOTED ON THE PLANS - LOWER AS NECESSARY. NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS ENCOUNTERED.
  - CONNECTION MATERIAL, BOLTS, NUTS, AND WASHERS EXPOSED TO WEATHER OR IN CONTACT WITH PRESSURE-TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED. EXTERIOR SIMPSON PRODUCTS IN CONTACT WITH PRESSURE TREATED MATERIALS SHALL BE Z MAX COATED. ALL OTHER CONNECTIONS SHALL BE PRIME PAINTED.

- 2 SOILS/GEOTECHNICAL:**
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL HAVING A MINIMUM BEARING CAPACITY OF 3,000 PSF, OR ON WELL COMPACTED STRUCTURAL FILL PLACED IN A CONTROLLED MANNER AS SPECIFIED, OR ON SOUND LEVEL ROCK. IT IS ASSUMED THAT THIS WILL BE ATTAINED AT A MINIMUM DEPTH OF 5'-0" BELOW FINISHED EXTERIOR GRADE OR AT THE ELEVATION NOTED ON THE PLANS - LOWER AS NECESSARY. NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS ENCOUNTERED.
  - THE NATIVE SOIL BELOW ALL FOOTINGS SHALL BE PROOF-ROLLED.
  - ALL FILL MATERIAL PLACED WITHIN THE STRUCTURE FOOTPRINT AND EXTENDING OUT 5'-0" MINIMUM BEYOND THE STRUCTURE PERIMETER SHALL BE WELL COMPACTED, FREE DRAINING, STRUCTURAL FILL.
  - STRUCTURAL FILL SHALL BE CLEAN, NON-FROST SUSCEPTIBLE SAND AND GRAVEL FREE OF ORGANICS AND OTHER DELETERIOUS MATERIALS MEETING THE FOLLOWING GRADATION:  
SIEVE SIZE      PERCENT FINER BY WEIGHT  
No. 4              100  
No. 100          45 TO 75  
No. 200          0 TO 12  
                       0 TO 6
  - ALL STRUCTURAL FILL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8" IN THICKNESS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D -1557.
  - CRUSHED STONE SHALL BE CRUSHED, WASHED, HARD, DURABLE ROCK MEETING THE GRADATION REQUIREMENTS FOR ASTM D-448, NO. 67 STONE.

- 3 CONCRETE:**
- ALL CONCRETE AND REINFORCING WORK SHALL BE IN STRICT ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14). EXTERIOR CONCRETE AND FOUNDATION WALLS SHALL BE AIR-ENTRAINED WITH AIR CONTENT OF 5% ± 1.5%. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. SUBMIT CONCRETE MIX DESIGN FOLLOWING PROCEDURES OUTLINED IN THE FLOW CHART IN CHAPTER 5 OF ACI 318 FOR REVIEW OF ENGINEER. CONTRACTOR SHALL TAKE 4 TEST CYLINDERS OF CONCRETE FOR EACH 50 CUBIC YARDS OF CONCRETE OR FOR EACH DAY'S POUR IF LESS THAN 50 C.Y. TESTING WILL BE AT OWNER'S EXPENSE.
  - MAXIMUM W/C RATIOS AS FOLLOWS:  
3000 psi CONCRETE: 0.55
  - CONCRETE SHALL BE PROTECTED FROM FREEZING. CONTRACTOR SHALL FOLLOW THE RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 306R-16, LATEST EDITION).
  - ALL CONCRETE SHALL BE PLACED IN THE DRY - PUMP AS NECESSARY.
  - CONCRETE SHALL BE SO PROPORTIONED SO AS TO HAVE A MAXIMUM SLUMP OF 4" EXCEPT CONCRETE SPECIFIED TO HAVE A PLASTICIZER SHALL HAVE A SLUMP OF 2" +OR- 1".
  - THE CONCRETE CONTRACTOR SHALL INSTALL (OR GIVE OTHER TRADES AMPLIFIED OPPORTUNITY TO INSTALL) ALL ANCHOR BOLTS, ANCHORS, PLATES, NAILERS, SLOTS, CHASES, PIPE SLEEVES, DUCT OPENINGS, ETC., AS REQUIRED BY OTHER TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREDS AND FORMS. FORM RELEASE OIL SHALL BE AN APPROVED NON-TOXIC LIQUID.
  - CHAMFER EDGES OF EXPOSED BEAMS AND COLUMNS.
  - CURING: HORIZONTAL SURFACES SHALL BE KEPT CONTINUOUSLY MOIST OVER ENTIRE SURFACE FOR SEVEN DAYS WHEN WATER CURING IS USED. VERTICAL SURFACES SHALL RECEIVE 2 COATS (ONE AT TIME OF STRIPPING AND ANOTHER 3 DAY LATER) OF AN APPROVED NON-TOXIC LIQUID CURING COMPOUND.
  - ALL WALLS SHALL BE ADEQUATELY BRACED TO WITHSTAND BACKFILLING AND CONSTRUCTION LOAD PRESSURES. WALLS MUST BE AT LEAST SEVEN DAYS OLD BEFORE BACKFILLING.
  - DURING PLACEMENT OF CONCRETE, USE TREMIE OR OTHER MEANS TO LIMIT FREE-FALL OF CONCRETE TO 5 FEET.
  - CONCRETE SHALL BE CONSOLIDATED BY VIBRATION, SPADING, OR RODDING SO THE CONCRETE IS THOROUGHLY WORKED AROUND THE REINFORCEMENT, EMBEDDED ITEMS, AND INTO CORNERS OF FORMS, ELIMINATING ALL AIR OR STONE POCKETS WHICH MAY CAUSE HONEYCOMBING. (CARE SHALL BE TAKEN NOT TO OVER VIBRATE AND CAUSE SEGREGATION).

- 4 REINFORCING STEEL:**
- REINFORCING STEEL SHALL BE NEW BILLET STEEL, ASTM A615, F<sub>y</sub>=60 KSI. SNOW SHOP DRAWINGS FOR REVIEW OF ENGINEER.
  - MINIMUM INSTALLATION TORQUE REQUIRED: AS NECESSARY TO ACHIEVE DESIGN LOAD OF 7,500LBS. MINIMUM EMBEDMENT DEPTH INTO SAND: HIGHEST HELIX 5'-0" OR MORE BELOW GRADE
  - INSTALLATION REQUIREMENTS FOR SLOPED GRADE ANCHORS: MINIMUM INSTALLATION TORQUE REQUIRED: AS NECESSARY TO ACHIEVE DESIGN LOAD OF 7,500LBS. MINIMUM EMBEDMENT DEPTH INTO SAND: HIGHEST HELIX 5'-0" OR MORE BELOW GRADE
- 6 STRUCTURAL STEEL:**
- TUBE COLUMNS SHALL BE ASTM A500, GRADE B, F<sub>y</sub>=46 KSI. ALL REMAINING STRUCTURAL STEEL SHALL BE ASTM A36, UNLESS OTHERWISE NOTED, ALL BOLTING SHALL BE 3/4" DIA. A325 SLIP-CRITICAL (WHERE SPECIFIED) SNUG TIGHT HIGH STRENGTH BOLTS. SHOP CONNECTIONS SHALL BE PRE-QUALIFIED WELDS USING E-70 ELECTRODES BY AWS CERTIFIED WELDERS, OR BOLTED. FIELD CONNECTIONS SHALL BE BOLTED, U.O.N. ALL STRUCTURAL STEEL WORK SHALL BE IN STRICT ACCORDANCE WITH THE A.I.S.C. MANUAL OF STEEL CONSTRUCTION LATEST EDITION. ALL STEEL SHALL RECEIVE ONE COAT OF RUST INHIBITIVE PRIMER. SUBMIT SHOP DRAWINGS FOR REVIEW OF ENGINEER.

9.10 INSTALLATION REQUIREMENTS FOR VERTICAL ANCHORS:  
MINIMUM INSTALLATION TORQUE REQUIRED: AS NECESSARY TO ACHIEVE DESIGN LOAD OF 7,500LBS. MINIMUM EMBEDMENT DEPTH INTO SAND: HIGHEST HELIX 5'-0" OR MORE BELOW GRADE

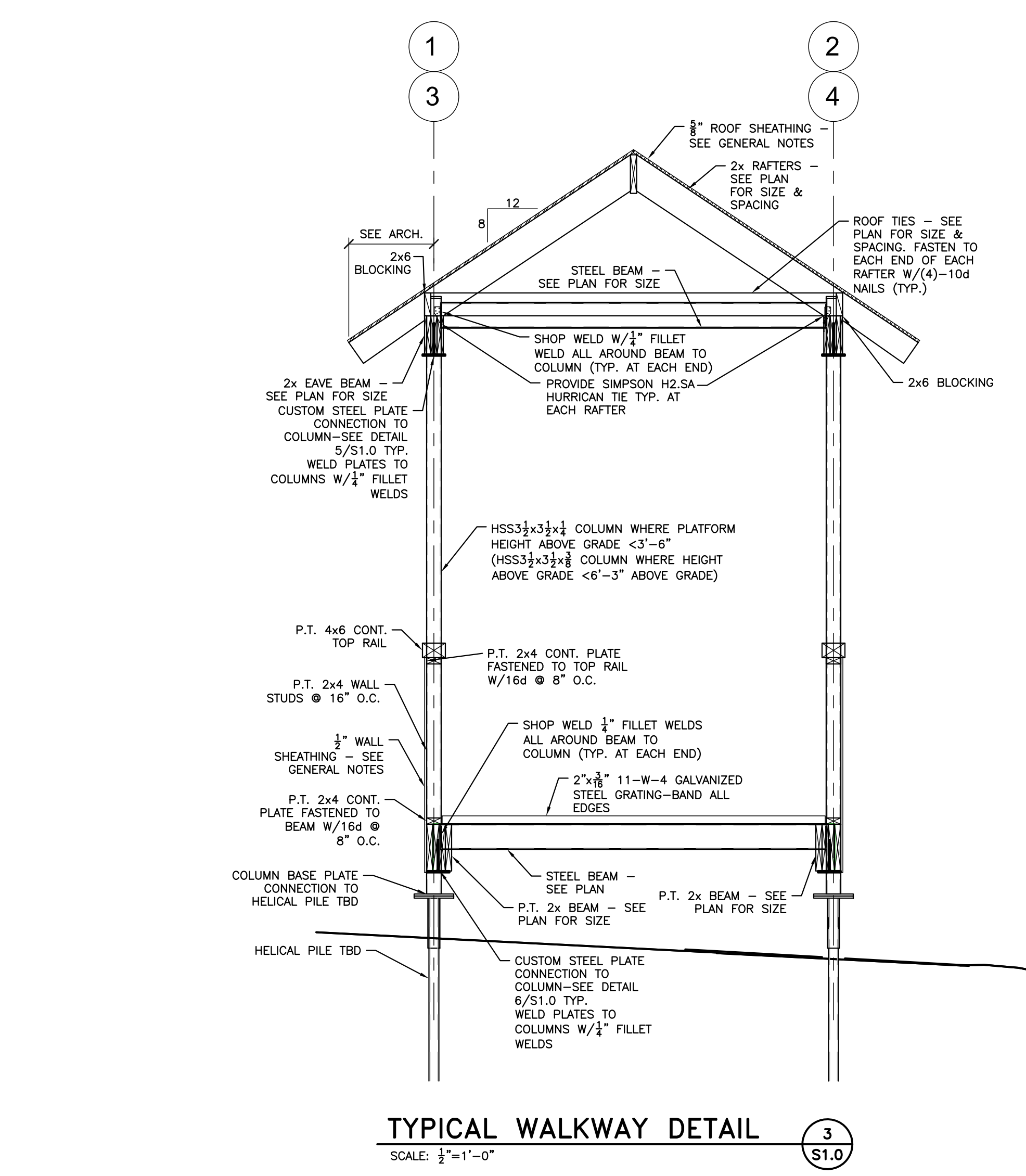


TYPICAL ABUTMENT PLAN SCALE: 1/2"=1'-0" S1.0

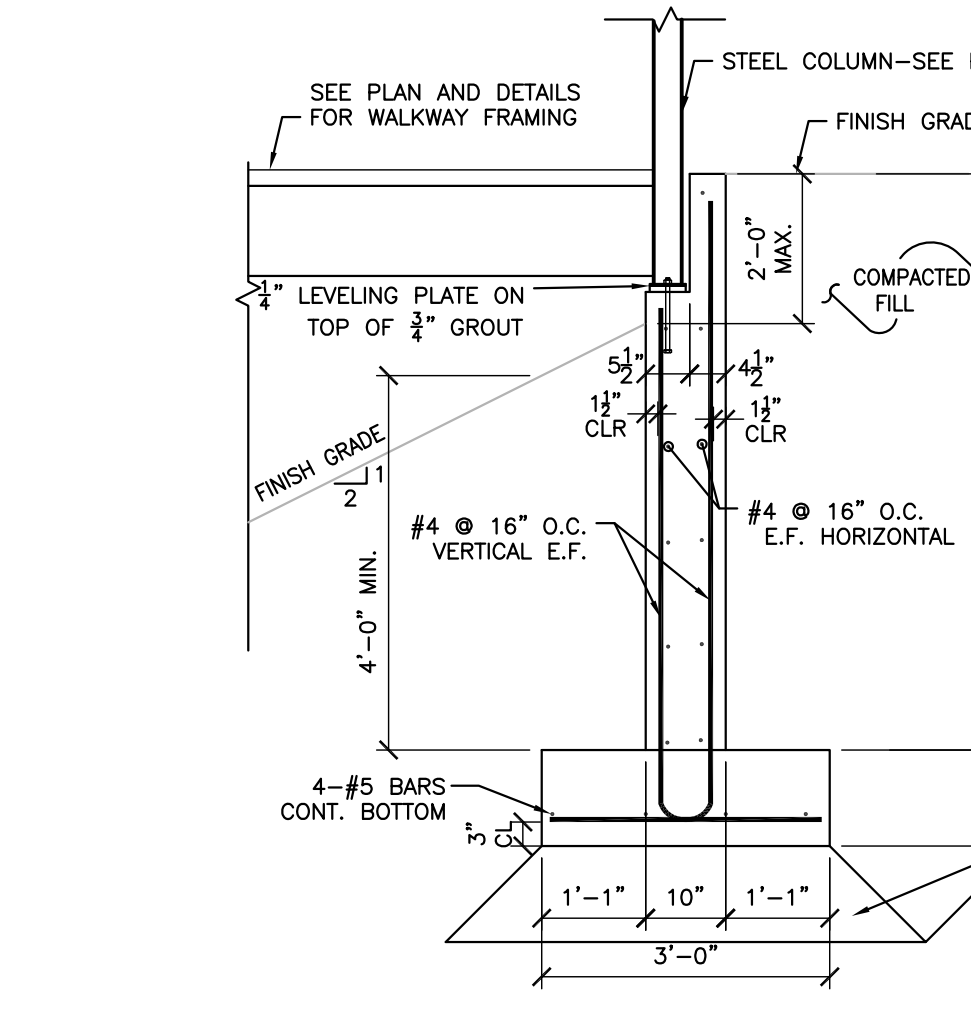
**REINFORCING SPLICE LENGTHS**

BAR	F <sub>y</sub> =60 KSI		F <sub>c</sub> =3 KSI		F <sub>c</sub> =4 KSI	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
3	17"	13"	15"	12"		
4	23"	18"	20"	15"		
5	28"	22"	25"	19"		
6	34"	26"	29"	23"		
7	49"	38"	43"	33"		
8	56"	43"	49"	37"		
9	63"	48"	55"	42"		

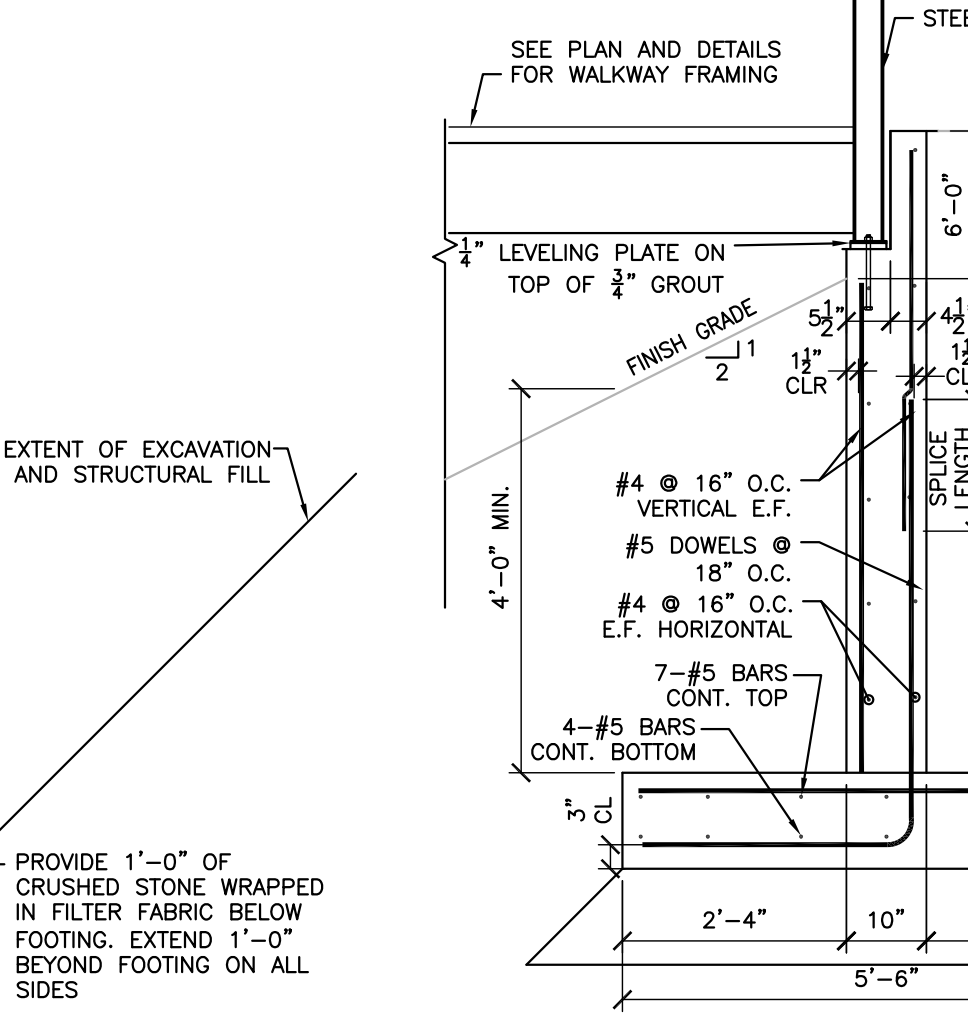
CHART BASED ON THE FOLLOWING:  
BAR SPACING 5" MINIMUM  
CLEAR COVER 2 BAR DIAMETERS MINIMUM  
REFER TO ACI 318-14 FOR OTHER CONDITIONS  
TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW THE BAR.



TYPICAL WALKWAY DETAIL SCALE: 1/2"=1'-0" S1.0



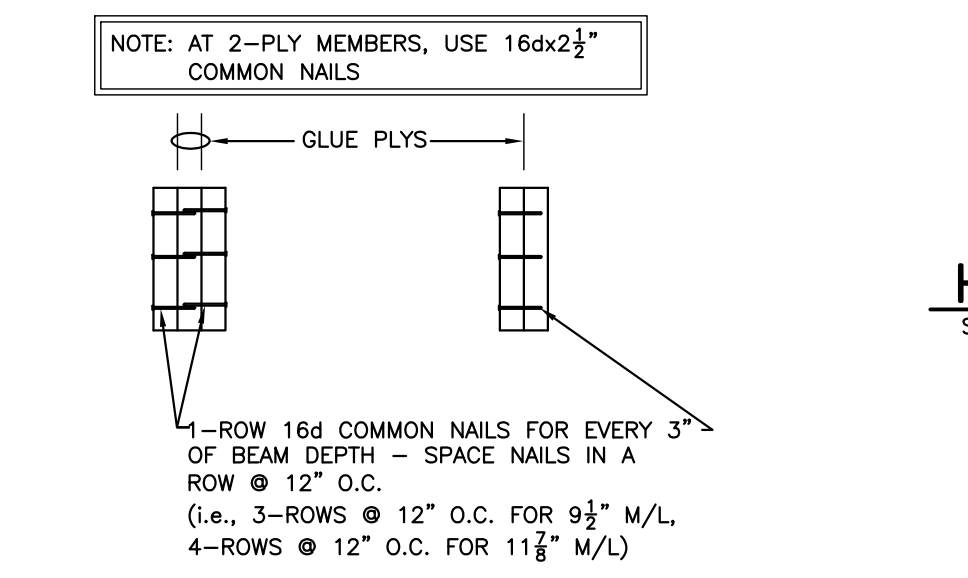
TYPICAL ABUTMENT SECTION SCALE: 1/2"=1'-0" S1.0



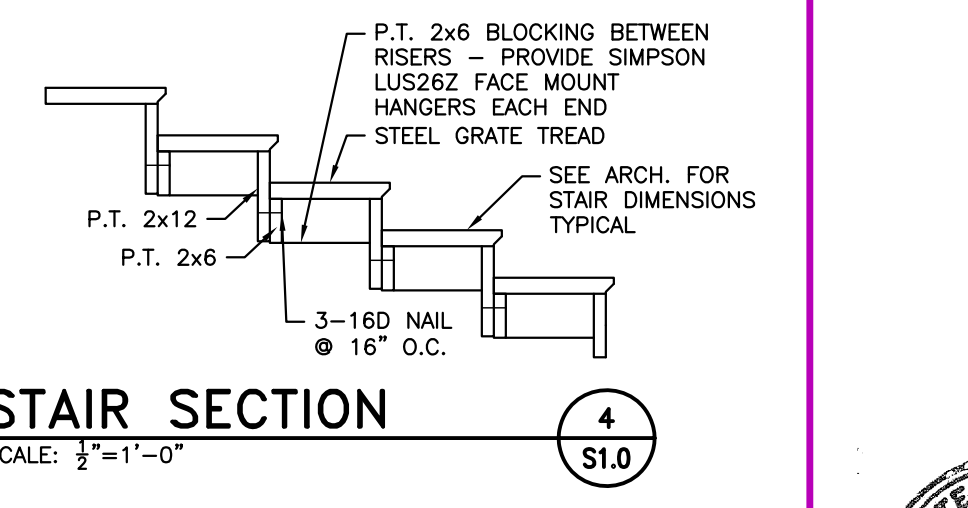
BRIDGE 1 ABUTMENT SECTION SCALE: 1/2"=1'-0" S1.0

**ABBREVIATIONS**

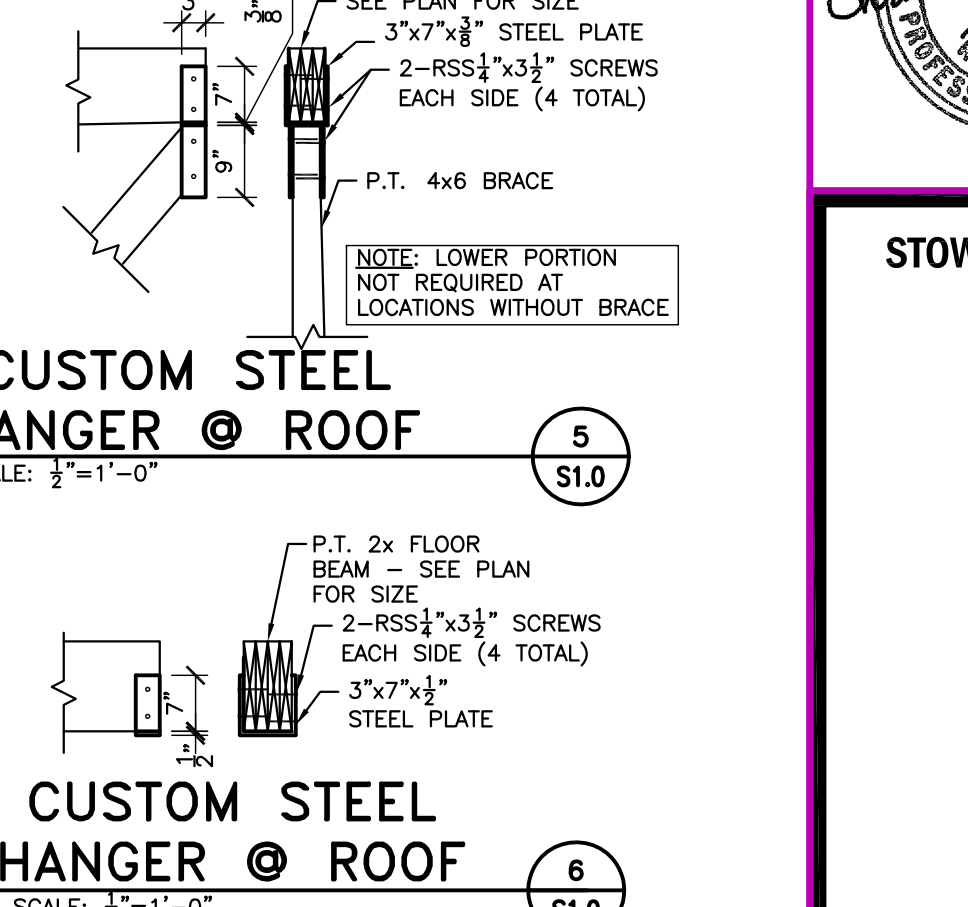
T.O.S.	TOP OF SLAB	CONT.	CONTINUOUS
EL.	ELEVATION	NTS.	NOT TO SCALE
DIM.	DIMENSION	TYP.	TYPICAL
T.O.W.	TOP OF WALL	F.D.	FLOOR DRAIN
T.O.S.H.	TOP OF SHELF	CL.	CENTERLINE
F.O.C.	FACE OF CONCRETE	DIA.	DIAMETER
E.O.D.	EDGE OF DECK	DWL.	DOWEL
E.O.S.	EDGE OF SLAB	CL.	CLEAR
T.C.X.	TOP CHORD EXTENSION	LLV.	LONG LEG VERTICAL
E.F.	EACH FACE	LLH.	LONG LEG HORIZONTAL
E.W.	EACH WAY	DWS.	DRAWINGS
U.O.N.	UNLESS OTHERWISE NOTED	LG.	LIGHT GAUGE
C.J.	SLAB CONTROL JOINT	F.V.	FIELD VERIFY



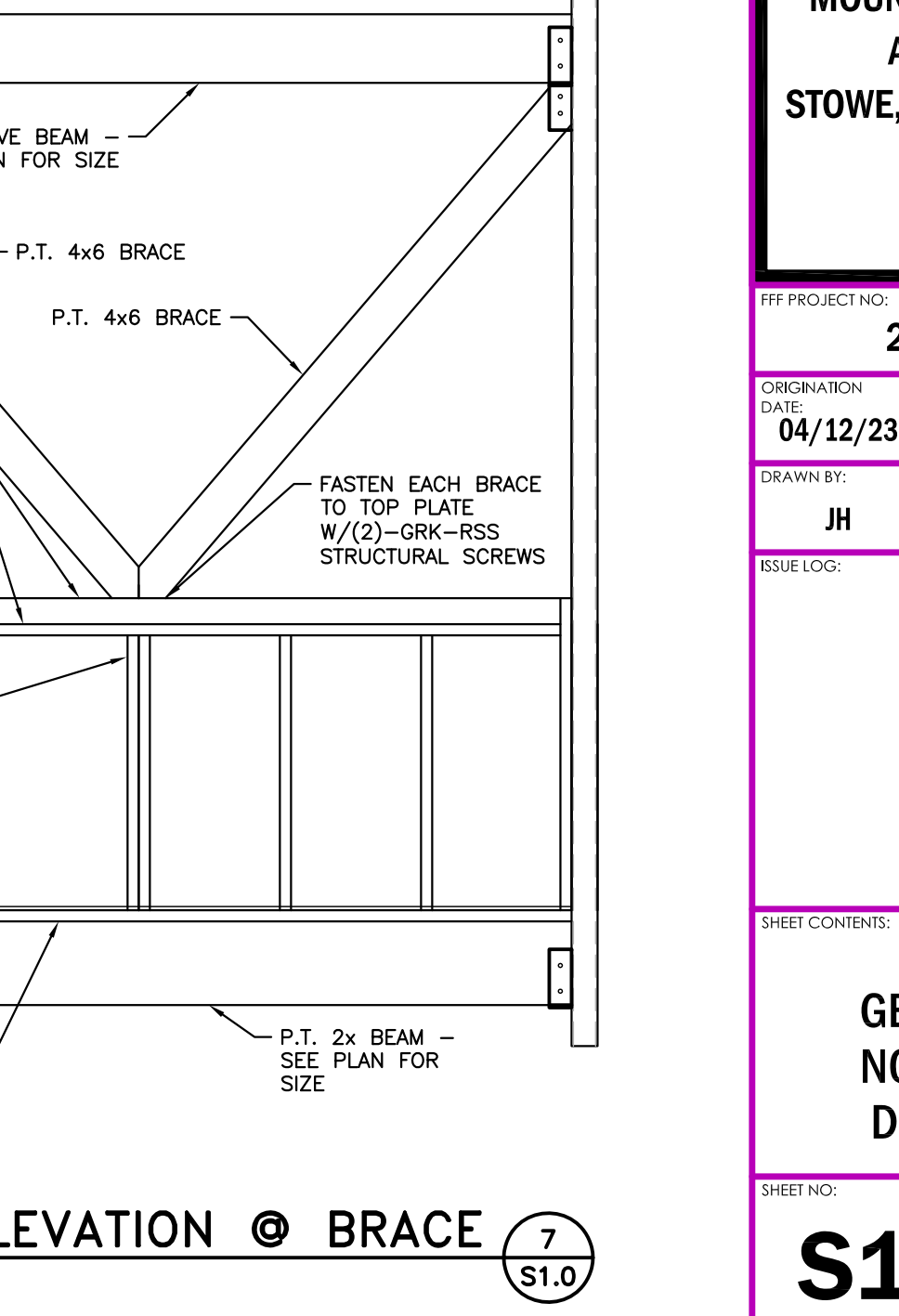
TYPICAL MULTI-PLY MEMBER NAILING NOT TO SCALE



STAIR SECTION SCALE: 3/8"=1'-0" S1.0



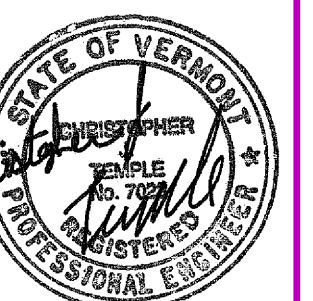
CUSTOM STEEL HANGER @ ROOF SCALE: 1/2"=1'-0" S1.0



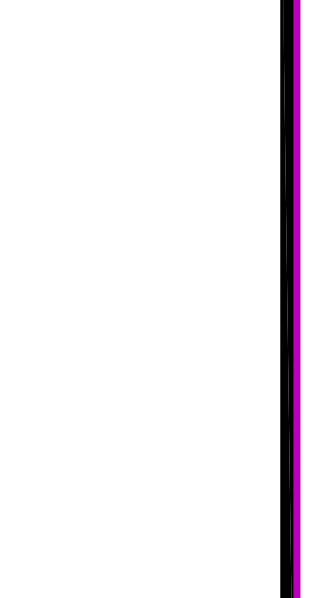
TYPICAL WALKWAY ELEVATION @ BRACE SCALE: 1/2"=1'-0" S1.0



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**STOWE STAIR**



CUSTOM STEEL HANGER @ ROOF SCALE: 1/2"=1'-0" S1.0

STOWE MOUNTAIN SKI AREA  
STOWE, VERMONT

FF PROJECT NO: **2292**

ORIGINATOR DATE: <b>04/12/23</b>	SCALE: <b>As indicated</b>
DRAWN BY: <b>JH</b>	CHECKED BY: <b>NC</b>

ISSUE LOG:

SHEET CONTENTS:

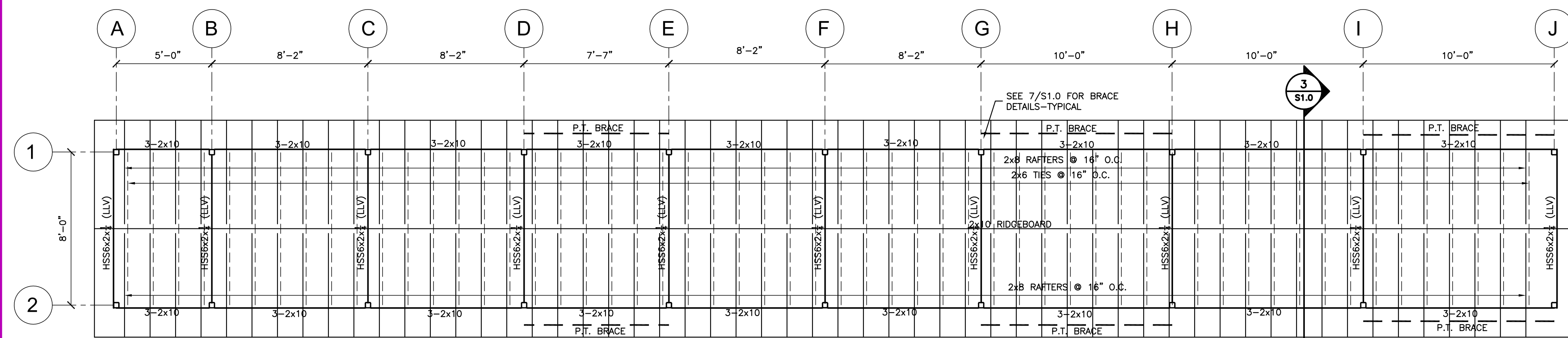
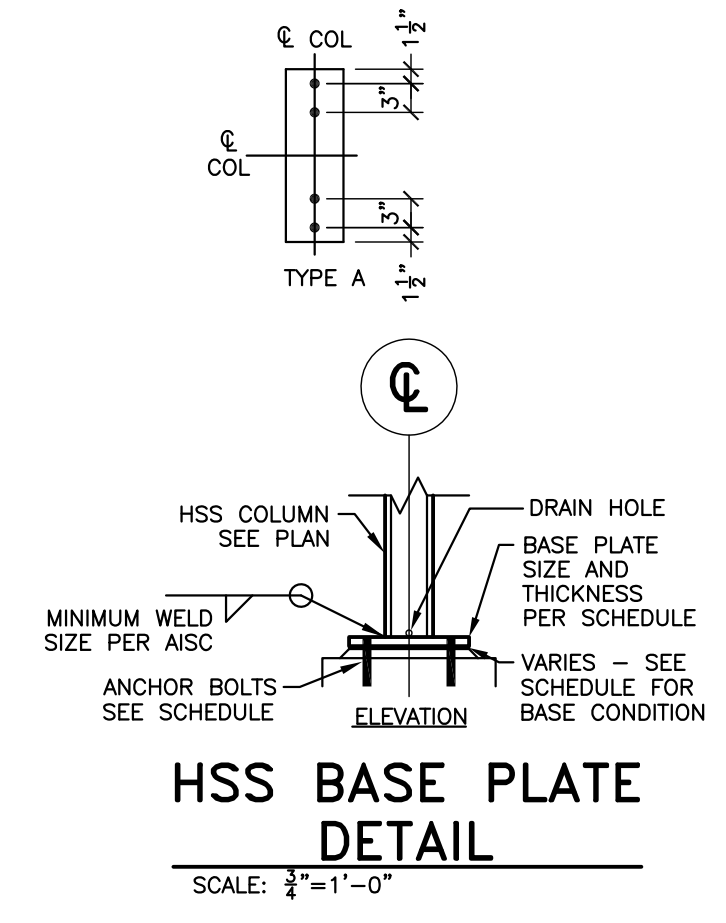
**GENERAL NOTES & DETAILS**

SHEET NO: **S1.0**

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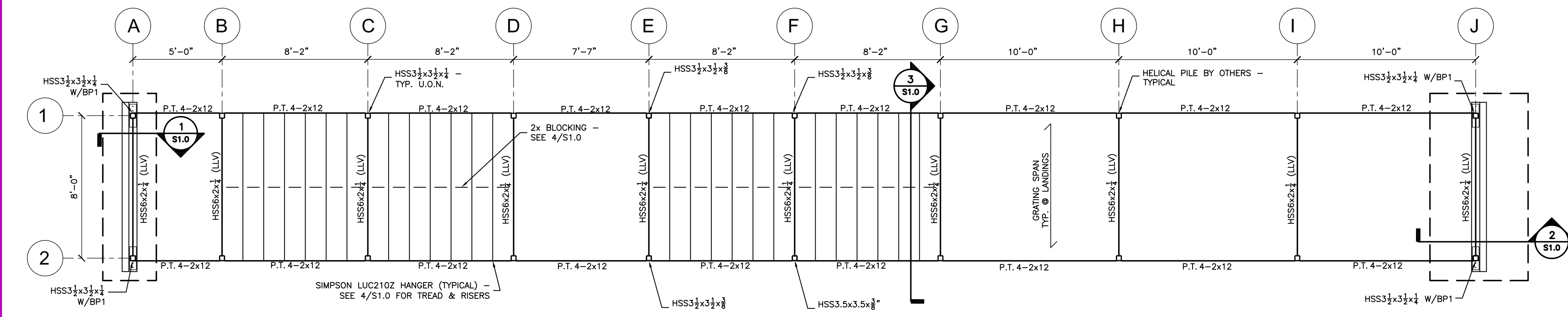
MARK	BASE PLATE SIZE Tp x W x L	TYPE	ANCHOR RODS				
			φ	QUANTITY	EMBEDMENT	PROJECTION	TOTAL LENGTH
BP1	3/4" x 4 1/2" x 1'-3 1/2"	A	1/2"	4	9"	5"	1'-2"

- W=PERPENDICULAR TO WALL, L=PARALLEL TO WALL.
- ANCHOR BOLT PROJECTION SHALL BE 5" UNLESS OTHERWISE NOTED.
- EMBEDDED END OF ANCHOR BOLTS SHALL BE HEADED OR SHALL HAVE A TACK NUT. FULLY THREADED RODS ARE ACCEPTABLE SUBJECT TO MATERIAL COMPLIANCE.
- PROVIDE DOUBLE NUTS AND WASHERS OR LEVELING PLATES TO MATCH BASEPLATE SIZE WITH NUTS AND WASHERS.



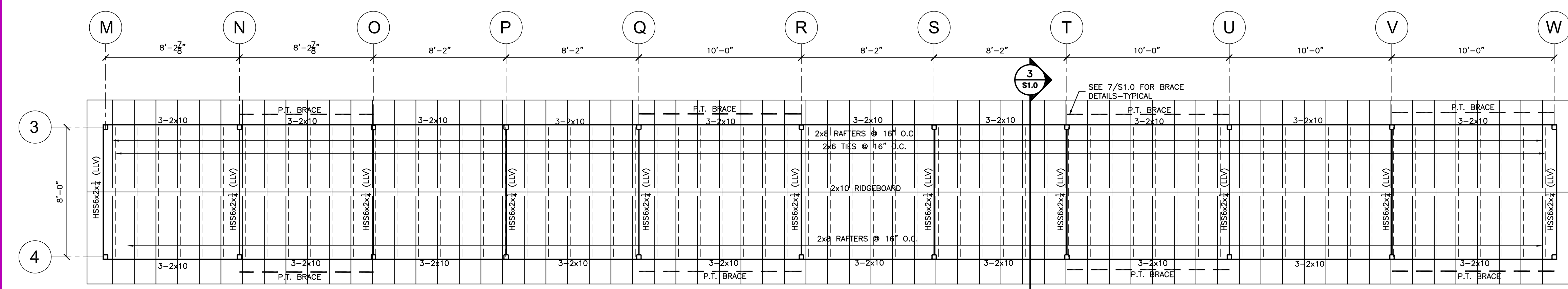
**STAIR/BRIDGE 1 ROOF FRAMING PLAN NOTES** SCALE: 1/4"=1'-0"

- TOP OF PLATE = VARIES - SEE ARCH. TOP OF STEEL EL. = VARIES - SEE ARCH.
- ALL TUBE STEEL SHALL BE ASTM 500 GRADE B.
- HEADERS AND BEAMS SHOWN SUPPORT THE ROOF.
- FOR ROOF SHEATHING & FASTENING - SEE GENERAL NOTES.



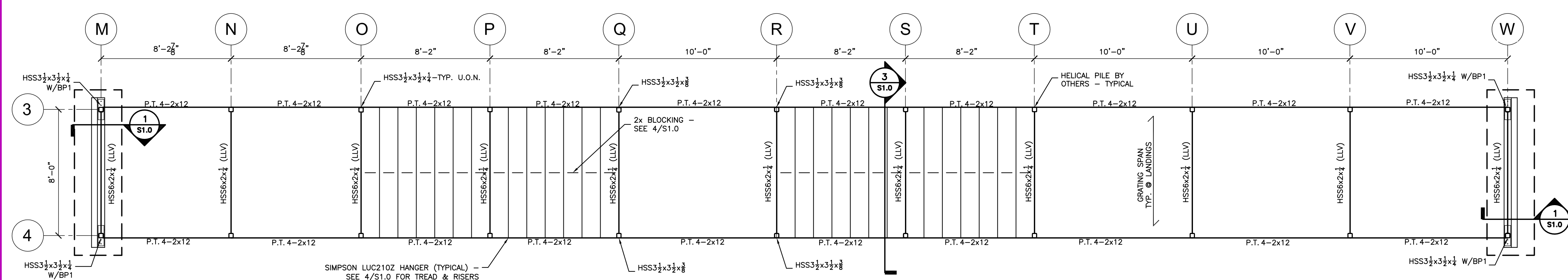
**STAIR/BRIDGE 1 FLOOR FRAMING PLAN NOTES** SCALE: 1/4"=1'-0"

- TOP OF SUBFLOOR = VARIES - SEE ARCH. TOP OF STEEL EL. = VARIES - SEE ARCH.
- ALL TUBE STEEL SHALL BE ASTM 500 GRADE B.
- HEADERS AND BEAMS SHOWN SUPPORT THE FLOOR.
- ALL NEW GRATING SHALL BE GALVANIZED STEEL GRATING, 2" 11-W-4 WITH 3/8" MAIN BEARING BARS AS MANUFACTURED BY MCNICHOLS OR APPROVED EQUIVALENT. BAND ALL EDGES OF STEEL GRATING.
- DESIGN SOIL BEARING PRESSURE 3,000 PSF. NOTIFY ENGINEER IF UNSUITABLE MATERIAL IS ENCOUNTERED.
- ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
- ALL FILL, BACKFILL AND BASE MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF IT'S MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D1557 (MODIFIED PROCTOR).



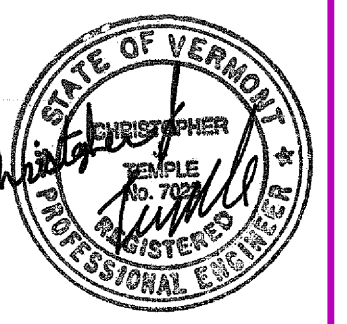
**STAIR/BRIDGE 2 ROOF FRAMING PLAN NOTES** SCALE: 1/4"=1'-0"

- TOP OF PLATE = VARIES - SEE ARCH. TOP OF STEEL EL. = VARIES - SEE ARCH.
- ALL TUBE STEEL SHALL BE ASTM 500 GRADE B.
- HEADERS AND BEAMS SHOWN SUPPORT THE ROOF.
- FOR ROOF SHEATHING & FASTENING - SEE GENERAL NOTES.



**STAIR/BRIDGE 2 FLOOR FRAMING PLAN NOTES** SCALE: 1/4"=1'-0"

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STOWE STAIR

STOWE MOUNTAIN SKI AREA  
 STOWE, VERMONT

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STAIR/BRIDGE FOUNDATION & FRAMING PLANS

**S1.1**