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**ADDENDUM 2 - ATTACHMENT A**

**REVISED SHEET EX-02**

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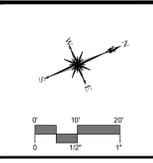
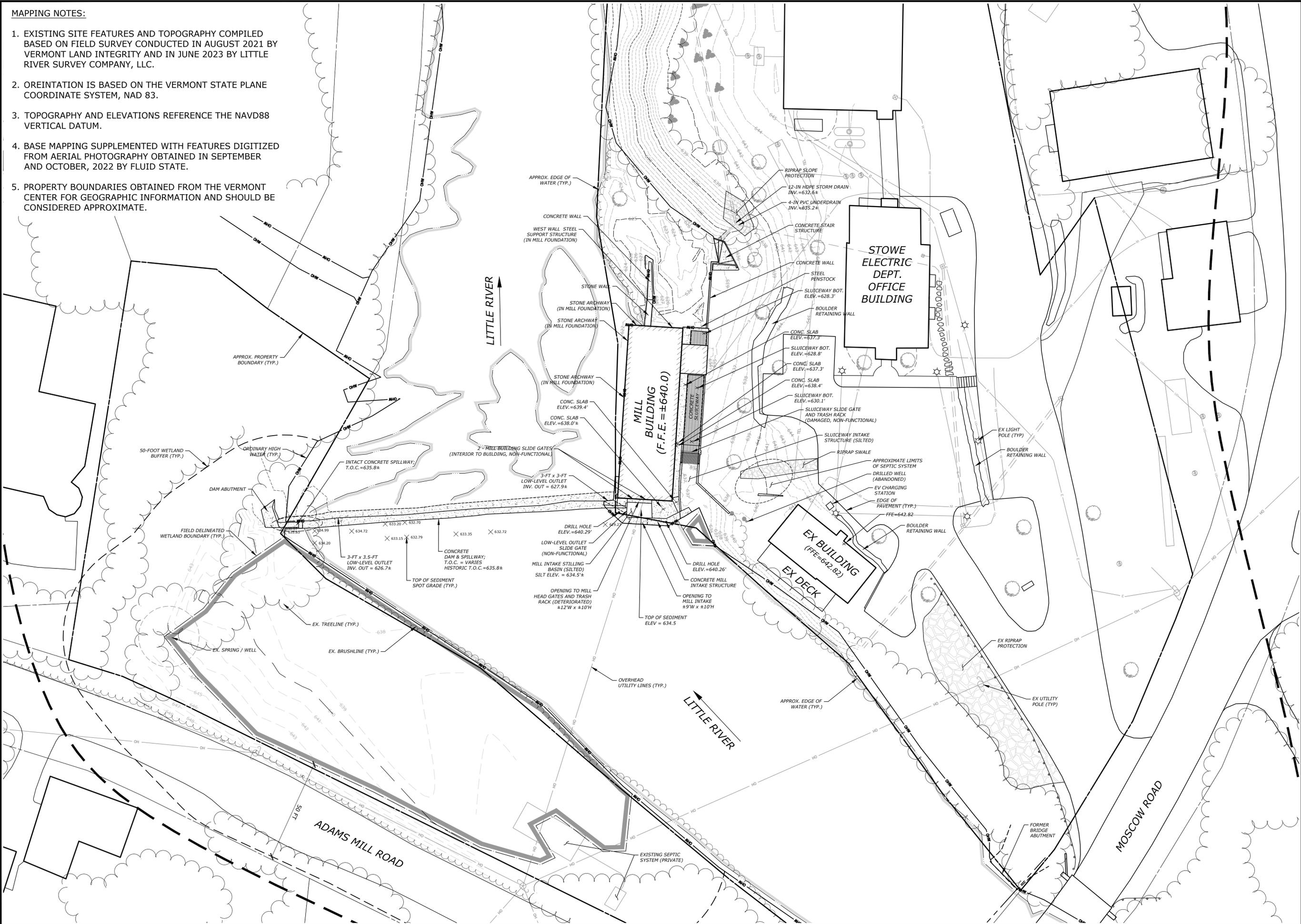
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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



**MAPPING NOTES:**

1. EXISTING SITE FEATURES AND TOPOGRAPHY COMPILED BASED ON FIELD SURVEY CONDUCTED IN AUGUST 2021 BY VERMONT LAND INTEGRITY AND IN JUNE 2023 BY LITTLE RIVER SURVEY COMPANY, LLC.
2. OREINTATION IS BASED ON THE VERMONT STATE PLANE COORDINATE SYSTEM, NAD 83.
3. TOPOGRAPHY AND ELEVATIONS REFERENCE THE NAVD88 VERTICAL DATUM.
4. BASE MAPPING SUPPLEMENTED WITH FEATURES DIGITIZED FROM AERIAL PHOTOGRAPHY OBTAINED IN SEPTEMBER AND OCTOBER, 2022 BY FLUID STATE.
5. PROPERTY BOUNDARIES OBTAINED FROM THE VERMONT CENTER FOR GEOGRAPHIC INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE.



**SLR**  
 1 SOUTH MAIN STREET  
 BURLINGTON, VT 05401  
 802.882.8333  
 SLRCONSULTING.COM

DESCRIPTION	DATE	BY
SEDIMENT POINTS ADDED	01/23/26	LKC

EXISTING CONDITIONS

**SMITHS FALLS HYDROELECTRIC PROJECT**  
**STOWE ELECTRIC DEPARTMENT**  
 435 MOSCOW ROAD  
 STOWE, VERMONT

DESIGNED	MW	CHECKED
SCALE		
1" = 20'		
DATE		
DECEMBER 1, 2025		
PROJECT NO.		
17412.00001		
SHEET NO.		
04 OF 29		

**EX-02**

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**ADDENDUM 2 - ATTACHMENT B**

**CHC PRELIMINARY TRANSPORTATION PLAN**

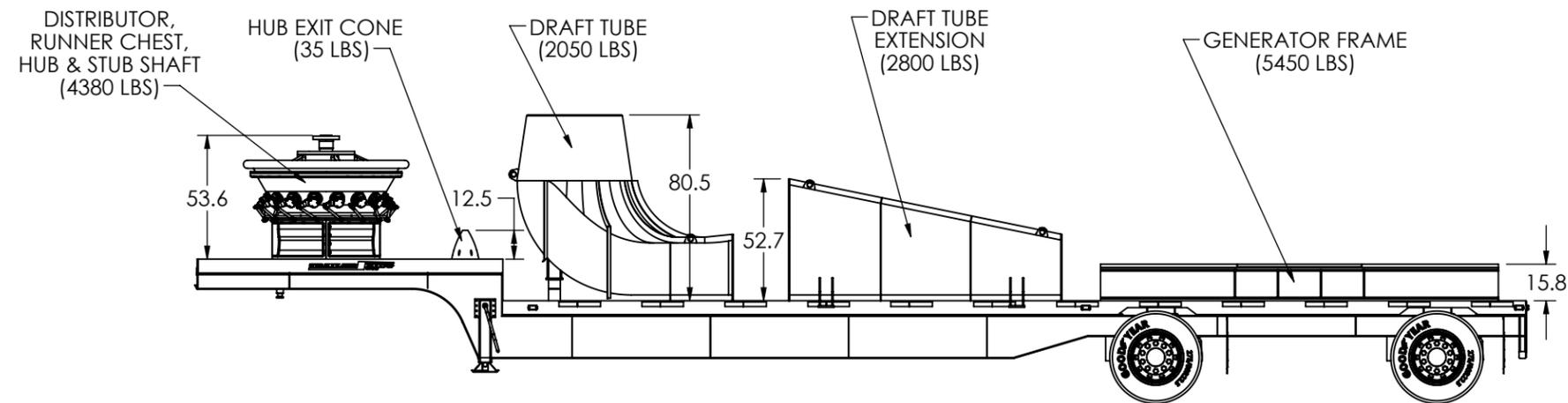
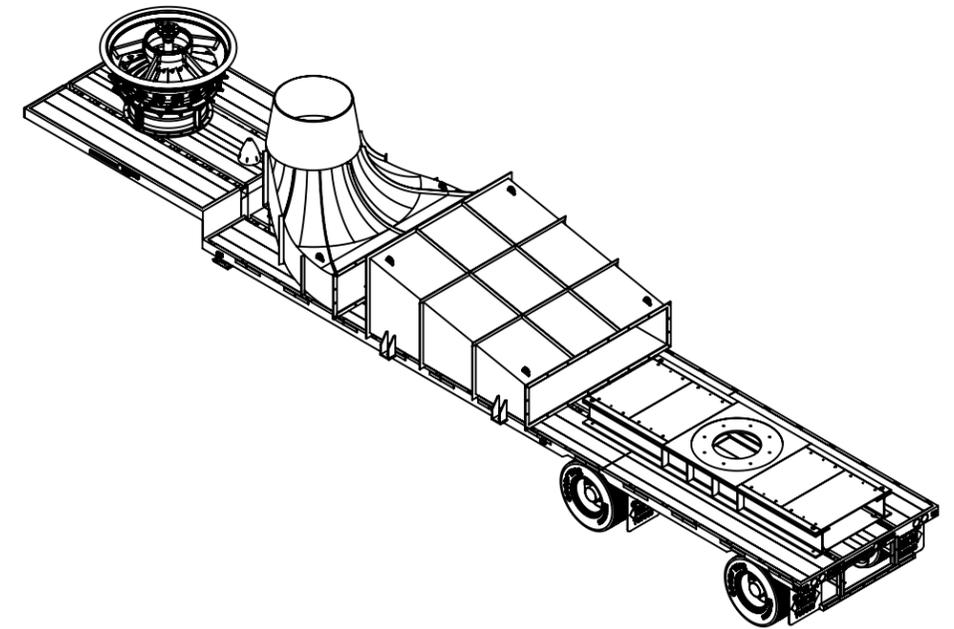
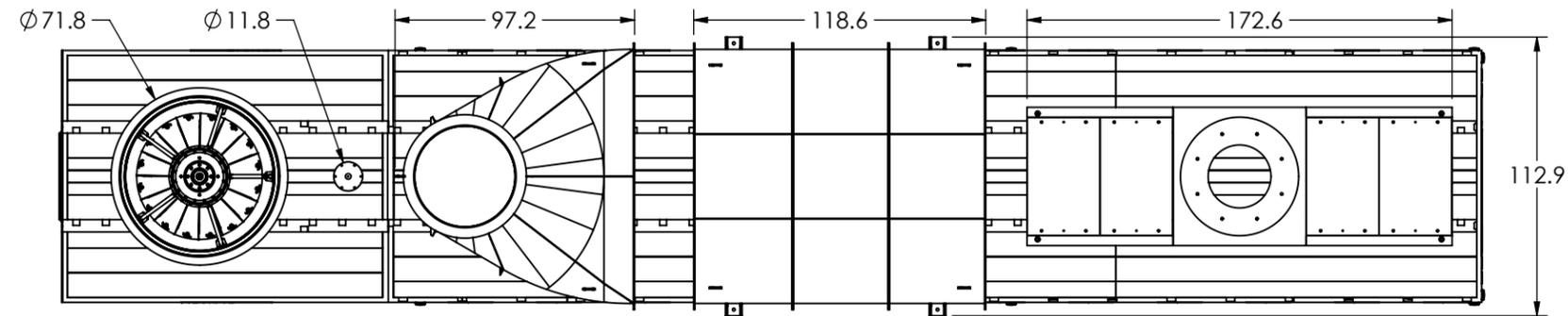
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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



# TRUCK #1

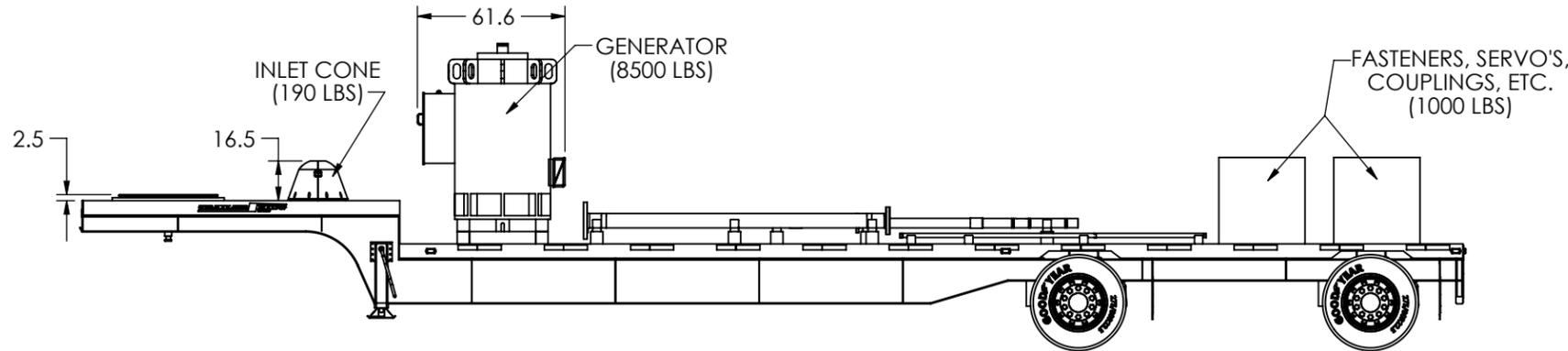
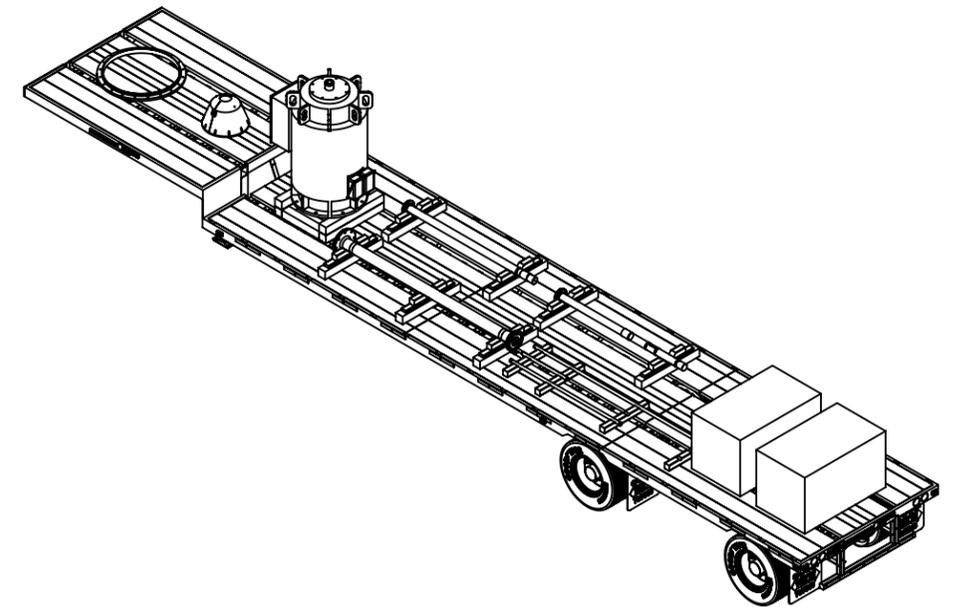
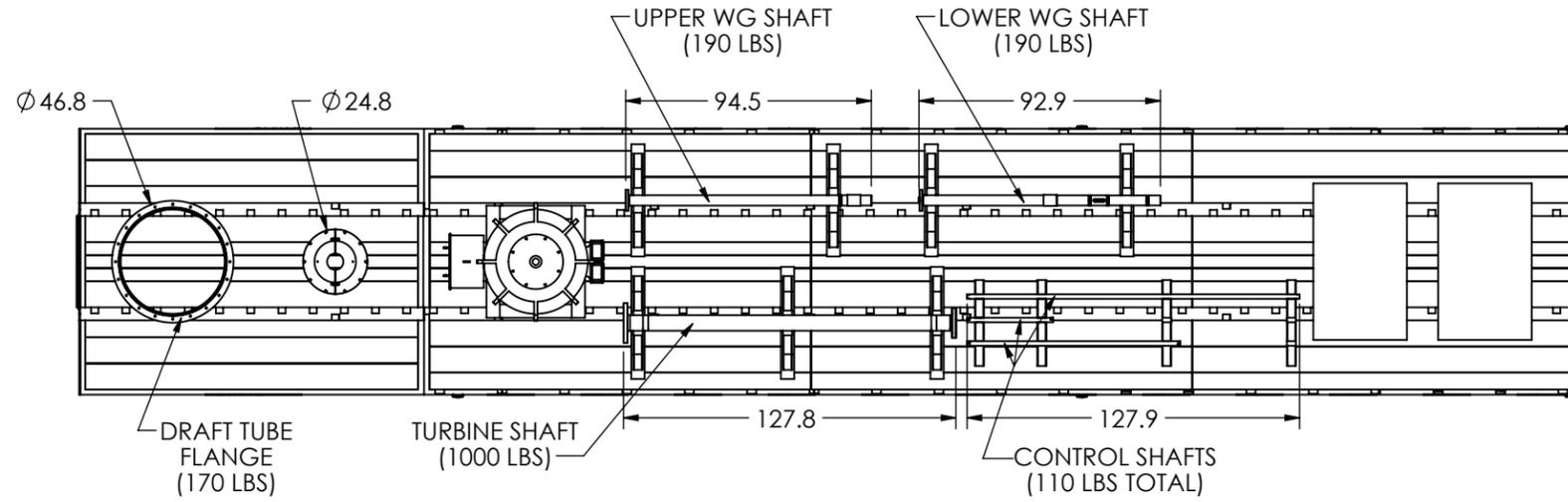


**NOTES:**

1. APPROXIMATE DIMENSIONS AND PLACEMENT ONLY
2. RESTRAIN ALL COMPONENTS IN PLACE
3. TOTAL MASS = 14,700 LBS

MATERIAL:		A INITIAL RELEASE		CB	1/7/26																
GENERAL SURFACE FINISH 125		UNLESS NOTED OTHERWISE, DIMENSIONS ARE IN INCHES, MILLIMETERS ARE IN SQUARE BRACKETS, AND TOLERANCES APPLY AS SHOWN BELOW. REMOVE ALL BURRS & SHARP EDGES. DO NOT SCALE DRAWING.		BY	DATE																
EST. WEIGHT (LBS)	DATE: 1/7/26	<p>16 Main Street West, PO Box 640 Almonte, Ontario, Canada K0A 1A0 Tel: (613) 256-1983 / Fax: (613) 256-4235</p> <p>inquiries@canadianhydro.com www.canadianhydro.com</p>																			
DRAWN BY: CB	DATE:																				
ENG. BY:	DATE:																				
CHECKED BY:	DATE:	<table border="1"> <tr> <th colspan="2">INCHES</th> <th colspan="2">MILLIMETERS</th> </tr> <tr> <th>BASIC DIMENSION</th> <th>DECIMAL PLACES</th> <th>BASIC DIMENSION</th> <th>DECIMAL PLACES</th> </tr> <tr> <td></td> <td>FRACTIONS .XX .XXX</td> <td></td> <td>FRACTIONS .XX .XXX</td> </tr> <tr> <td></td> <td>±1/32 ±.01 ±.005</td> <td></td> <td>±.25 ±.10</td> </tr> </table>		INCHES		MILLIMETERS		BASIC DIMENSION	DECIMAL PLACES	BASIC DIMENSION	DECIMAL PLACES		FRACTIONS .XX .XXX		FRACTIONS .XX .XXX		±1/32 ±.01 ±.005		±.25 ±.10		
INCHES		MILLIMETERS																			
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	±1/32 ±.01 ±.005		±.25 ±.10																		
THIRD ANGLE PROJECTION:	WELDING STANDARD: CSA W59	<table border="1"> <tr> <th colspan="2">ANGULAR DIMENSIONS</th> </tr> <tr> <th>BASIC DIMENSION</th> <th>DECIMAL PLACES</th> </tr> <tr> <td></td> <td>X .XX</td> </tr> <tr> <td>ALL ANGLES</td> <td>±2.0° ±0.5°</td> </tr> </table>		ANGULAR DIMENSIONS		BASIC DIMENSION	DECIMAL PLACES		X .XX	ALL ANGLES	±2.0° ±0.5°	DESC.:									
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BASIC DIMENSION	DECIMAL PLACES																				
	X .XX																				
ALL ANGLES	±2.0° ±0.5°																				
THIS PRINT IS THE EXCLUSIVE PROPERTY OF CANADIAN HYDRO COMPONENTS AND MUST BE RETURNED UPON REQUEST. UNAUTHORIZED USE, MANUFACTURE OR REPRODUCTION IN WHOLE OR IN PART IS PROHIBITED.		TRANSPORTATION DRAWING		REV. A																	
		DWG NO. D-SFH-K1000-7003		PRJ NAME: SMITHS FALLS/STOWE																	
		SIZE: B		SHEET: 1 OF 2																	
				SCALE: 1:96																	

# TRUCK #2



**NOTES:**

1. APPROXIMATE DIMENSIONS AND PLACEMENT ONLY
2. RESTRAIN ALL COMPONENTS IN PLACE
3. TOTAL MASS = 11,350 LBS

MATERIAL:		UNLESS NOTED OTHERWISE, DIMENSIONS ARE IN INCHES, MILLIMETERS ARE IN SQUARE BRACKETS, AND TOLERANCES APPLY AS SHOWN BELOW. REMOVE ALL BURRS & SHARP EDGES. DO NOT SCALE DRAWING.	
GENERAL SURFACE FINISH	EST. WEIGHT (LBS)	INCHES	
125		BASIC DIMENSION	DECIMAL PLACES
		FRACTIONS	.XX .XXX
			±.01 ±.005
		MILLIMETERS	
		BASIC DIMENSION	DECIMAL PLACES
		FRACTIONS	.XX .XXX
			±.25 ±.10
		ANGULAR DIMENSIONS	
		BASIC DIMENSION	DECIMAL PLACES
		FRACTIONS	.XX .XXX
			±2.0° ±0.5°

A INITIAL RELEASE		CB	1/7/26
REV	DESCRIPTION	BY	DATE
 canadianhydro.com		16 Main Street West, PO Box 640 Almonte, Ontario, Canada K0A 1A0 Tel: (613) 256-1983 / Fax: (613) 256-4235	
		inquiries@canadianhydro.com www.canadianhydro.com	
DESC: TRANSPORTATION DRAWING			
DWG NO: D-SFH-K1000-7003		REV: A	
PRJ NAME: SMITHS FALLS/STOWE	SIZE: B	SHEET: 2 OF: 2	SCALE: 1:96

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**ADDENDUM 2 - ATTACHMENT C**  
**CHC COMMISSIONING OVERVIEW PLAN**

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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



# COMMISSIONING OVERVIEW

## DRAFT R2

**Project: Smith’s Fall Hydro – Stowe, Vermont**  
**Owner: Stowe Electric Department**

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## **1 START-UP & COMMISSIONING**

### **1.1 STAGES OF COMMISSIONING**

The main stages of commissioning are:

- (I) Installation of equipment
- (II) Inspection and dry testing of equipment
- (III) Wet start-up and initial operation

Stages II and III relate to commissioning inspection and testing which is the focus of this document. The main steps required at stage II and III by CHC are outlined in this document.

#### **1.1.1 STAGE I – INSTALLATION OF EQUIPMENT**

This stage consists of the installation of each piece of equipment individually, including electrical control and power wiring connected to the equipment, according to approved drawings and specifications. The installation of equipment will be performed by the Installation Contractor. CHC (Canadian Hydro Components) and Piedmont (Piedmont Hydro Technologies) will be available to remotely assist during the installation process.

To signify the completion of stage I, the Installation Contractor is to complete and initial each step in the Installation ITP (Inspection and Test Plan) documents (to be provided later). ITPs for the CHC provided turbine/generator equipment installation will cover requirements for various turbine and generator components, including positions, elevations, levelness, plumbness, orientations, runouts, clearances, and torques. A deficiency report will be filled out for each item in nonconformity. All ITPs must be submitted to CHC and the Owner for review and approval.

Other installation checks may be required at the discretion of Piedmont Hydro Tech regarding provided equipment including the HPU, switchgear, and control systems.

Refer to the Installation Overview and Installation Guide (to be provided later) for a complete procedure of the installation process of CHC's equipment.

## **1.1.2 STAGE II – INSPECTION & DRY TESTING OF INDIVIDUAL EQUIPMENT**

This stage consists of the complete physical inspection, dry testing and trials of each piece of equipment individually, including electrical control and power wiring connected to the equipment and checking and calibration of each instrument loop after installation is complete.

It is the responsibility of the Installation Contractor to prepare the equipment for tests and to organize these tests in an orderly manner.

A number of tests must be carried out by the Installation Contractor, the Owner, CHC and Piedmont to determine whether the installation is satisfactory and whether the turbine equipment and control systems perform as required.

## **1.1.3 STAGE III - START-UP AND INITIAL OPERATION**

This stage may commence only after all individual equipment related to the unit has been dry tested. The individual pieces of equipment and systems are put on line for operation trials, culminating in the initial operation of the unit.

Involvement of the CHC, Piedmont, and the Owner's staff is important at this stage to ensure a smooth turnover of equipment, and to provide the earliest possible opportunity for operator familiarization with equipment.

## **2 STAGE II OF COMMISSIONING: INSPECTION & DRY TESTING OF EQUIPMENT**

### **2.1 HYDRAULIC POWER UNIT**

Piedmont and the Installation Contractor are to perform inspection and dry testing of the HPU and controls during the commissioning phase.

Before connection to HPU, cylinders and manifolds, all hydraulic field piping shall be operational.

Installation of HPU and controls shall be as per the supplier's drawings and instructions.

## 2.2 TURBINE-GENERATOR ASSEMBLY

CHC and the Installation Contractor are to perform inspection and dry testing of the turbine-generator assembly during the commissioning phase.

Verify installation, calibration, adjustment of equipment.

The Installation Contractor shall provide copy of equipment calibration records if requested.

Test hydrostatically components and devices subject to oil pressure at maximum operating pressure for a minimum of 30 minutes.

Operate HPU pumps to verify functioning.

Verify timing of wicket gates by moving them through a minimum of one complete cycle from 0% to 100% (open) and from 100% to 0% (closed). Should be 20-25 seconds.

Open and close wicket gates and ensure gates can "squeeze set ". The wicket gates shall close in unison and the sealing surfaces shall make contact.

Measure and record wicket gate and runner blade position versus servomotor positions at wide open and full closed to establish the relationship between servomotor stroke, gate opening and runner blades.

Inspect all components of the turbine, generator, piping and auxiliary equipment to ensure that all foreign matter or obstructions have been removed.

Check field wiring to verify conformance with shop drawings and schematic wiring diagrams; to ensure proper phasing and polarity of all power conductors; and to confirm that cable shields are grounded only at the points indicated on the drawings.

Check electrical controls by trial operation of control equipment after wiring is completed to ensure that each interlock and control function operates according to the connection diagrams, as well as in accordance with the manufacturer's schematics and operating instructions.

Test functioning of safety devices, including emergency stop. Make sure protection relay is functioning with simulated test.

Check for abnormal noise or vibration and overheating in equipment supplied.

Check electrical drive components for proper operation, phase rotation, and for freedom from chatter, noise, and overheating.

When travel limiters, switches, controls and other devices are adjusted or repaired, retest to ensure correct functioning.

### **3 STAGE III OF COMMISSIONING: WET START-UP AND INITIAL OPERATION**

#### **3.1 GENERAL**

CHC and Piedmont will be onsite with the Owner during the commissioning phase.

The commissioning personnel shall submit all test data and calibration records for review to the Owner and CHC.

The following precautions should be observed shortly before filling the water passages:

Ensure all parties involved in the project have performed and passed necessary tests and inspections.

Inspect all water passages and clear them of any debris or foreign objects.

Flush all piping systems connected to the water passages to ensure they are in working order.

Ensure that piping systems have been tested, cleaned and flushed as per section 4.

Verify the fluid level in the HPU reservoir and energize the HPU.

Check the operation and timing in the “dry” condition of flow control equipment for the wicket gates. Leave them closed until required to be opened in the watering procedure.

Make final check to ensure that the water passages are clear of personnel and unnecessary equipment.

Ensure that no loose bolts, tools or equipment are within the generator.

Verify lubricant levels and place generator and turbine bearing lubrication systems in operation in case of inadvertent turbine-generator rotation.

Locate observers at points of potential water leakage and place appropriate test instruments in operation.

Follow watering procedure to check all listed control points.

Check the operation of all valves in, and attached to, the water passages and ensure they are in the appropriate positions ready for watering.

Position personnel at strategic locations to listen for unusual and / or rubbing noises.

### 3.2 MECHANICAL RUN

Mechanical run is performed to check vibration, bearing temperatures and to run-in the bearings. The Owner will assist CHC with watering up and operating the unit. In some cases, dewatering and inspection of internal turbine parts or water passages may be required. The following items are a guide only and are to be done at the discretion of the Owner and CHC.

With the wicket gates initially closed, water up the flume by opening the head gate:

Position the wicket gates and runner blades to spin the unit up to 25% of rated speed to verify free rotation without the presence of unusual sounds.

Shut the wicket gates and allow the unit to spin down to rest.

Do a visual inspection of accessible equipment.

If needed, correct or adjust the equipment.

Position the wicket gates and runner blades to start spinning the unit up to 25% of rated speed:

Hold the speed constant and run the unit for at least 1 hour after stable bearing temperature is reached to verify that the equipment is functioning properly without the presence of unusual sounds.

Verify settings of thermometers, speed indicator and other indicating devices.

Verify response of water flow control devices (start, stop and emergency shut-down).

Verify operation of signaling, alarm and protection devices (i.e. speed switches).

During the test, record on data sheet, the following:

- Bearing vibration
- Bearing temperatures
- Time for bearing temperatures to stabilize
- Shaft vibration
- RPM
- Time to shut down the unit
- Do a visual inspection of accessible equipment and adjust if needed

Proceed with the same procedure above for unit speeds of 50%, 75% and 100% of rated speed.

During the run at or near 100% rated speed:

Place the unit on automatic speed control to verify unit stability and gate timing.

Verify that excitation equipment with AVR can generate required AC voltage.

After the excitation equipment is operational, record the following:

- Bearing vibration
- Bearing temperatures
- Time for bearing temperatures to stabilize
- Shaft vibration
- Headwater elevation
- Tailwater elevation
- Wicket gate position
- Runner blade position
- RPM

### 3.3 LOAD RUN / LOAD REJECTION TEST

Coordinate testing with the Owner and CHC and proceed as follows:

Obtain approval to connect the unit to the electrical system.

Place the unit at speed-no-load as per previous section.

Close generator breaker when matching of phase, frequency and voltage is attained.

Remain on-line until all equipment adjustments are completed and a stable operating condition is reached.

Position wicket gates and blades to reach 25% of generator rated power.

Allow bearings temperature to stabilize.

Record the following:

- Bearing vibration
- Bearing temperatures
- Time for bearing temperatures to stabilize
- Shaft vibration
- Headwater elevation
- Tailwater elevation
- Wicket gate position
- Runner blade position
- Generator output / voltage / frequency / field current
- RPM
- Generator windings temperature
- Temperature and flow rate of water at discharge of each generator air and bearing cooler

Record the following steady-state data **prior to load rejection:**

- Wicket gate position
- Runner blade position
- Generator output (kW)
- Generator line voltage
- Headwater elevation
- Tailwater elevation

## 3.4 PERFORM A LOAD REJECTION TEST

During and after a load rejection test, CHC to inspect the equipment for any damage and, if required, implement correction or adjustment before the next load rejection test, to ensure that the unit will not exceed the admissible operating and safety limits.

Before proceeding with the next load rejection test, verify:

- Automatic start/stop control sequencing and operation
- Controls of unit, control of unit output and remote controls
- Operation of overspeed protection devices

Record versus time the following transient data during load rejection:

- Wicket gate position and gate timing
- Runner blade position
- Shaft speed
- Generator output (kW)
- Generator voltage

Proceed with the same procedure above for unit load at 50%, 75% and 100% of rated power, and at the unit load obtained with 100 % wicket gates opening under the maximum head.

Start the unit, load to 100% of rated power and run the unit for 8 hours to allow:

- Check of operational parameters shown and recorded on control panel
- Observations of general unit operation
- Adjustments necessary to assure continued successful operation
- Monitor all temperatures for stability.

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## 4 HYDRAULIC FIELD PIPING GENERAL PROCEDURE

### 4.1 GENERAL

The hydraulic field piping shall be operational through the application of the installation and testing procedures provided by Piedmont Hydro Tech to the Installation Contractor. The following general procedure is as a guide only and will be superseded by instructions from Piedmont Hydro Tech where applicable.

### 4.2 PREPARATION

Bypass loops of piping shall be installed in place of cylinders, manifolds, and HPU.

Remove or blank off from lines, the connecting equipment and relief valves.

Set control valves in open position for duration of tests.

Use approved test gauges.

### 4.3 TESTING

Maintain hydrostatic test pressures at not less than 100 percent of the design working pressure and maintained for 4 hours.

All welded, flanged, and threaded connections shall be carefully examined for leakage.

Repair leakages and retest lines to the original testing pressure specified.

Do not paint welds before completion and written acceptance of tests results.

### 4.4 CLEANING AND FLUSHING

After testing, clean and flush the system using low-viscosity flushing oil and successively finer filters in accordance with standard cleanliness requirements for this type of application, and the equipment manufacturer's written instructions.

Hydraulic oil must be circulated through each and every pipe, using a flushing cart until returning oil meets manufacturers requirements.

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The flushing oil shall be compatible with the hydraulic oil.

Installation Contractor shall legally dispose of flushing oil and filters off-site at an approved disposal site.

When flushing is completed, the system shall be drained and then filled with the specified hydraulic oil.

#### **4.5 FILLING AND BLEEDING**

Oil used to fill the system shall be filtered as specified by the manufacturer. The complete hydraulic power system shall be bled to remove all air from the system. Care shall be taken to exclude as much air as possible during initial filling.

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**ADDENDUM 2 - ATTACHMENT D**

**SLIDE GATE SPECIFICATIONS**

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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



# SPECIFICATIONS FOR STAINLESS STEEL SERIES FABRICATED SLIDE GATES

## PART 1 GENERAL

### 1.01 SCOPE OF WORK

- A. The equipment provided under this section shall be fabricated, assembled, erected, and placed in proper operating condition in full conformity with the drawings, specifications, engineering data, instructions, and recommendations of the equipment manufacturer unless exceptions are noted by the engineer.

Gates and operators shall be supplied with all the necessary parts and accessories indicated on the drawings, specified or otherwise required for a complete and properly operating installation, and shall be the latest standard product of a manufacturer regularly engaged in the production of fabricated water control gates.

- B. Unit Responsibility: To ensure compatibility of all components directly related to the slide gates, unit responsibility for the slide gates, actuators and accessories as described in this section shall be the responsibility of the slide gate manufacturer unless specified otherwise.
- C. As shown on the plans there are two gates under these specifications:
1. SS-251-1 Slide Gate
  2. Ss-257-1 Slide Gate

### 1.02 SUBMITTALS

Submittals shall include as a minimum:

1. Shop Drawings
2. Manufacturer's operation and maintenance manuals and information.
3. Manufacturer's installation certificate.
4. Manufacturer's equipment warranty.
5. Design calculations demonstrating lift loads and deflection in conformance to the application requirements. Design calculations shall be approved by a licensed engineer (PE).

### 1.03 QUALITY ASSURANCE

- A. Qualifications
1. All of the equipment specified under this Section shall be furnished by a single manufacturer with a minimum of 10-years of experience designing and manufacturing slide gates. The manufacturer shall have manufactured stainless steel slide gates of the type described herein for a minimum of 10 similar projects.

2. The sealing system shall be certified and tested for operation and performance to leakage specifications compliant with AWWA C-561 for a minimum of 100,000 cycles.
3. The project design is based on the Waterman SS-250 Series Fabricated Slide Gate as manufactured by Waterman Industries of Exeter, California or approved equal. Proposed alternates must be pre-approved, per addendum, at least 14-days prior to close of bid. Requests for alternates must be supplemented with detailed drawings, specifications, and references. Any/all additional costs for structure modifications or other changes associated with utilizing a brand other than Waterman are to be borne by the contractor.
4. To ensure quality and consistency, the slide gates listed in this section shall be manufactured and assembled in a facility owned and operated by the slide gate manufacturer. Third-party manufacturers contracted for fabrication and assembly of the slide gates will not be permitted.

PART 2 EQUIPMENT

2.01 GENERAL

- A. The gates shall be either self-contained with yoke and bench stand operators, or non-self-contained with separate stem guides and operator, in accordance with the requirements of these specifications.
- B. The gates shall be compliant with the latest version of AWWA C561 as described below.
- C. Specific configurations shall be as noted on the gate schedule or as shown on the plans.
- D. Materials:

COMPONENTS	MATERIALS
Frame, Yoke, Cover Slide, Wall Thimbles	<b>Stainless Steel ASTM A240, Type 316</b>
Seat/Seals & Stem Sleeves	<b>Ultra High Molecular Weight Polyethylene (UHMWPE) ASTM D-4020</b>
Cord Seal	<b>Neoprene ASTM D 2000</b>
Flush Bottom Seals	<b>Neoprene ASTM D 2000</b>
Stems	<b>Stainless Steel: ASTM A-276, AISI Type 316</b>
Stem cover	<b>Clear Butyrate With Mylar Strip</b>
Stem Guides	<b>Stainless Steel (ASTM A-240 – Type 316L) UHMW Bushed</b>

Wall Brackets	<b>Stainless Steel: ASTM A-240, AISI Type 316L</b>
Pedestals	<b>Stainless Steel: ASTM A-240/A-312, AISI Type 316</b>
Fasteners and Anchor Bolts	<b>Stainless Steel: ASTM A-593 and 594, Type 316 CW</b>
Finish	<b>Polyamide Epoxy</b>

E. Gate Schedule:

Equipment Number	Gate Size, inch <sup>1</sup>	Gate type <sup>2</sup>	Opening Direction <sup>3</sup>	Bottom Seating <sup>4</sup>	Design Head, feet		Operator Type
					Seating	Unseating	
SS-251-1	3'x4'	F	D	See Graphic	See Graphic	See Graphic	See Graphic
SS-257-1	7'-10"x10'-5"	W	See Graphic	See Graphic	See Graphic	See Graphic	See Graphic

Notes:

1. Clear opening width by height.
2. E = embedded frame, W = wall mounted, Y = self-contained, F = flatback
3. U = upward, D = downward
4. FB = flush bottom

2.02 FRAME AND GUIDE RAILS

- A. The gate frame shall be composed of stainless steel guide rails with UHMW seat/seals upstream and downstream. The seat/seals shall form a tight seal between the frame and the slide (disc). The guides will be of sufficient length to support ½ the height of the slide when in the full open position.
- B. Yoke shall not deflect more than 1/360<sup>th</sup> of the span under full head break load.
- C. Seals shall be replaceable without removing the frame from the wall. In the case of embedded gates, they shall be constructed in a manner that allows replacement of the seals without removal of the gate frame from the embedment.

2.03 STEM AND STEM GUIDE

- A. Material
  1. The stem shall be solid stainless steel of the specified grade.

B. Design

1. Guides shall be adjustable with split stem sleeves. Guides shall be spaced per the manufacturer's recommendations. The stem L/r ratio shall not exceed 200.
2. Stem threads shall be machine-cut 29-degree full Acme or stub Acme type.
3. Nominal diameter of the stem shall not be less than the crest of the threaded portion.

2.04 SEALS

- A. The seals shall be self-adjusting. Seals requiring periodic maintenance and adjustments to maintain specified leakage rates will not be permitted.
- B. The top seal design on upward opening gates consisting of four side seals shall incorporate a self-cleaning wiping function that prevents debris from building-up above the top seal and causing premature wear of the seats, seals, and gate face.
- C. The UHMW seats shall impinge on the slide (disc) by way of a continuous loop cord seal. Seal designs incorporating resilient seals such as "J-bulb" or "P" seals that come in direct contact with the friction surface of the slide will not be considered.
- D. The cord seal shall function as a seal between the frame and the UHMW, and as a spring force to maintain contact between the UHMW and the slide (disc).
- E. The resilient bottom seal shall be set into the invert member of the frame which shall be formed in a manner to protect 3 sides of the seal only exposing the side that will come in contact with the slide. Disc-mounted invert seals exposing additional surface area will not be permitted.
- F. The self-adjusting seal system shall provide an allowable leakage rate of no more than ½ AWWA leakage rate per minute per peripheral foot of perimeter opening for seating and unseating heads.

2.05 SLIDE COVER (DISC)

- A. The slide cover (disc) shall be stainless steel plate reinforced with structural shapes welded to the plate.
  1. The slide cover shall not deflect more than 1/720th of the span, or 1/16" at the seated sealing surface of the gate under maximum specified head.
  2. The stem to gate connection shall be either the clevis type, with structural members welded to the slide and a bolt or bolts to act as a securing method, or a threaded and bolted (or keyed) thrust nut supported in a welded nut pocket.
  3. The clevis, or pocket and yoke, of the gate shall be capable of taking, without damage, at least twice the rated thrust output of the operator at 40 pounds of pull on a hand wheel or hand crank, and at locked-rotor stall of a motor operator.
  4. The slide cover shall be constructed with vertical and horizontal reinforcement ribs.
  5. All welds shall be performed by an AWS-certified welding technician.

## 2.06 ANCHOR BOLTS

- A. Anchor hardware shall be provided by the slide gate manufacturer.
  - 1. The size, quantity, and location of the anchor hardware shall be engineered by the slide gate manufacturer. Upon client request manufacturer shall provide calculations for anchor bolt sizing and quantity.
  - 2. Anchor hardware consisting of studs, nuts and washers shall be provided by the manufacturer.

## PART 3 EXECUTION

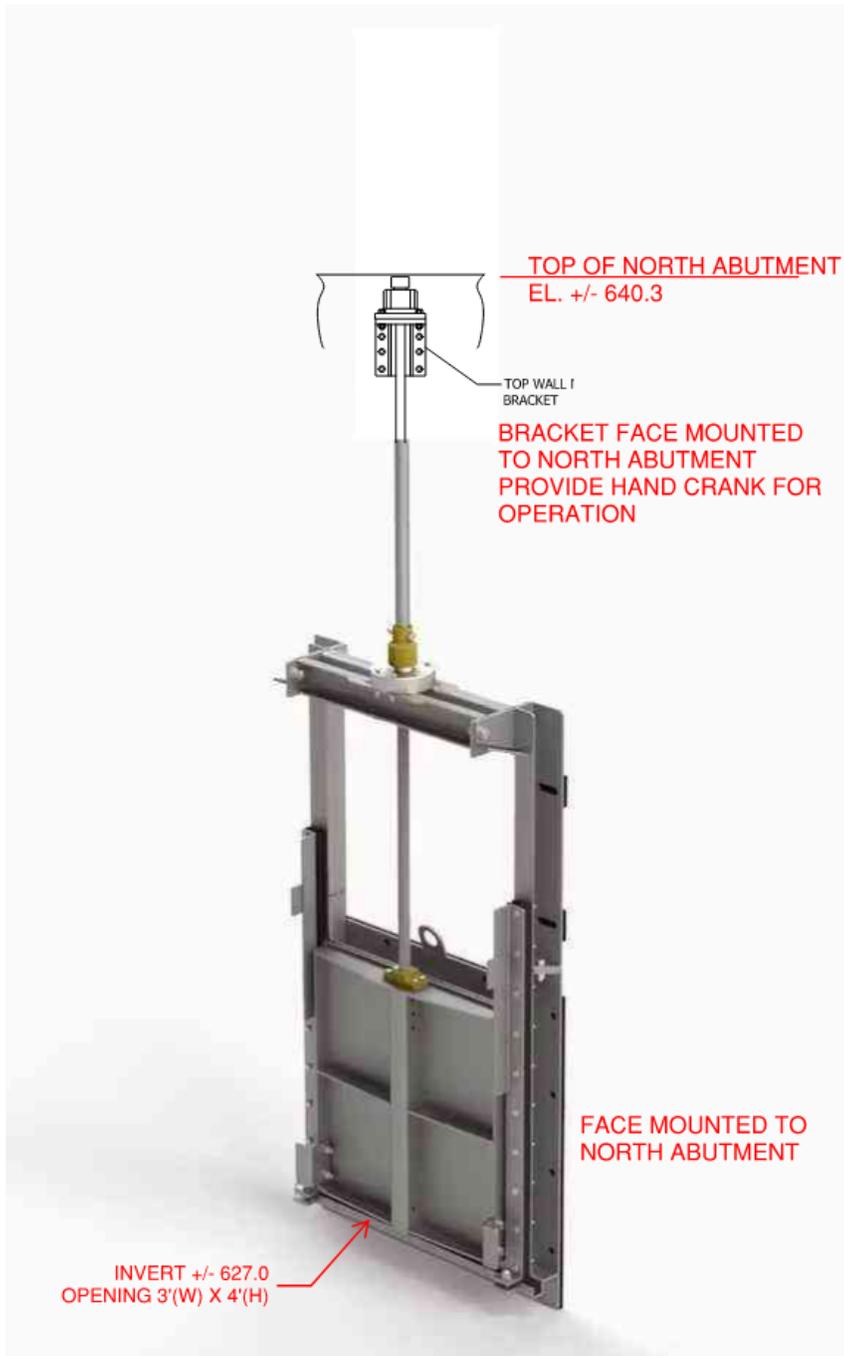
### 3.01 INSTALLATION

- A. Installation of the gates shall be performed in accordance with standard industry practices. It shall be the responsibility of the CONTRACTOR to handle, store, and install the equipment specified in this Section in strict accordance with the Manufacturer's recommendations.
- B. The CONTRACTOR shall review the installation drawings and installation instructions prior to installing the gates.
- C. The gate frames shall be installed in a true vertical plane, square and plumb, with no twist, convergence, or divergence between the vertical legs of the guide frame.
- D. The CONTRACTOR shall fill any void between the guide frames and the structure with non-shrink grout as shown on the installation drawing and in accordance with the grout manufacturer's recommendations.
- E. The frame cross rail shall be adjusted as required to maintain consistent seal compression across the full width of the gate.

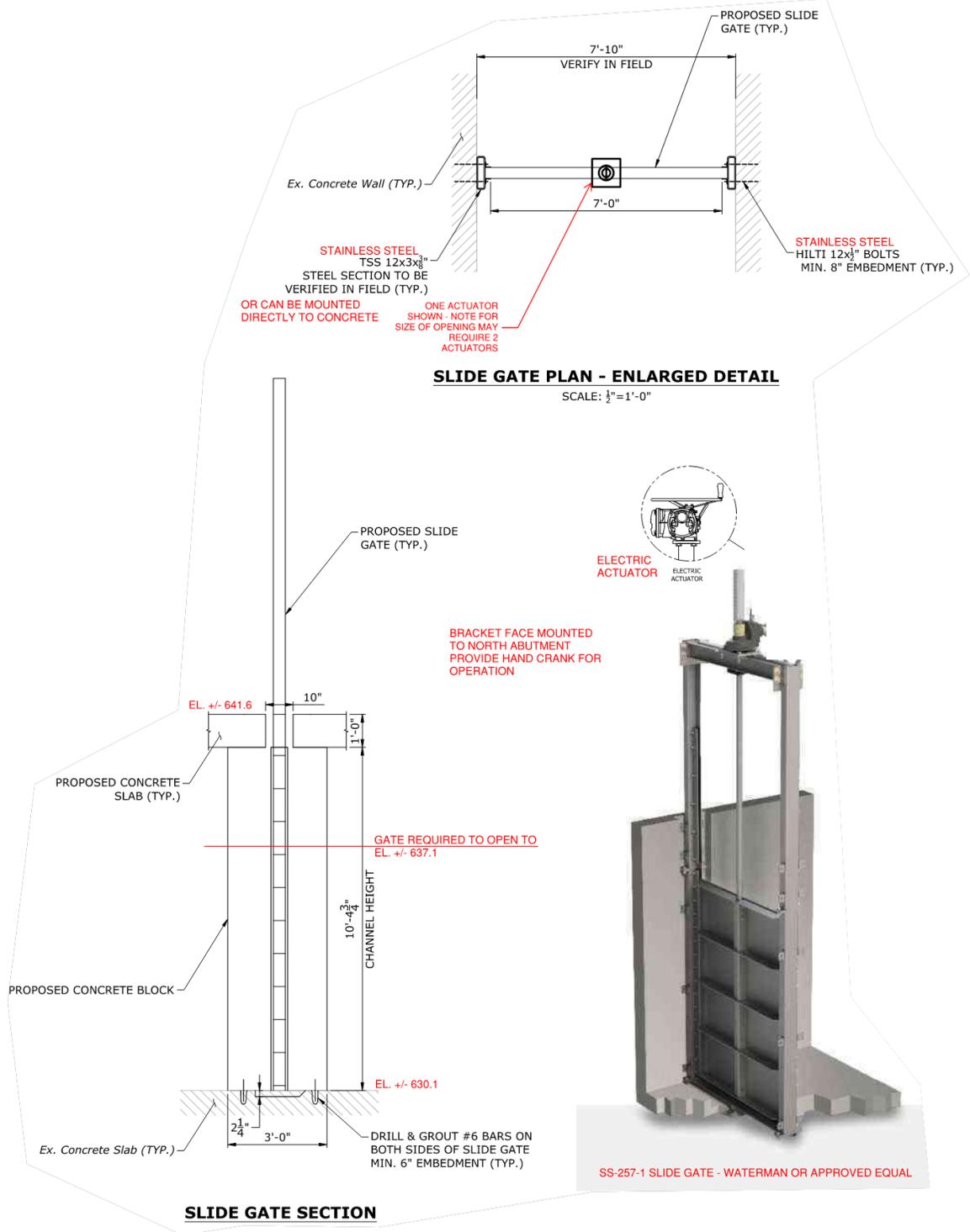
### 3.02 FIELD TESTING

- A. After installation, all gates will be field tested in the presence of the ENGINEER and OWNER to ensure that all items of equipment are in full compliance with this Section. Each gate assembly shall be water tested by the CONTRACTOR at the discretion of the ENGINEER and OWNER, to confirm that leakage does not exceed the specified allowed leakage.

1. Slide Gate 1 - SS-251-1 Slide Gate



2. Slide Gate 1 - SS-257-1 Slide Gate



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**ADDENDUM 2 - ATTACHMENT E**

**REVISED BID FORM**

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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



## BID FORM

Having fully examined, read, and in understanding of the specifications for this job and being familiar with all of the conditions surrounding the proposed work, including any addenda for which receipt of is acknowledged below, the undersigned proposes to complete all work as specified in this Request for Bids for the price stated below. By submitting this bid, you agreed to accept the Project Requirements as written. Exclusions on bids that alter these requirements will not be considered valid. It is expected that all contractors comply with requirements as written.

Company Information:

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Telephone \_\_\_\_\_  
Fax \_\_\_\_\_

**ADDENDA RECEIPT**

Receipt of the following Addenda is hereby acknowledged:

Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_      Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_  
Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_      Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_  
Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_      Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_

Bidder has examined and studied the Bid Documents and the other related information identified in the Bid Documents, and this bid **complies with the requirements, specifications and conditions issued by SED.**

Bidder Initials: \_\_\_\_\_ Date: \_\_\_\_\_

Bidder understands and agrees that, if this Bid is accepted, he/she will furnish all the materials and equipment, provide all labor, services, and all other supplies required to perform in the time, and can meet the insurance requirements as stated within the request for bids and the requirements stated.

Bidder Initials: \_\_\_\_\_ Date: \_\_\_\_\_

## Lump Sum Bid Items – Smiths Falls Hydroelectric Project

ITEM NO.	ITEM DESCRIPTION (ITEM PRICE IN WORDS – DOLLARS & CENTS)	ITEM PRICE (IN FIGURES)
1.	MOBILIZATION / DEMOBILIZATION _____ _____ per LS	\$
2.	DEMOLITION / REMOVALS / SITE PREPARATION _____ _____ per LS	\$
3.	SEDIMENT & EROSION CONTROLS / DEWATERING _____ _____ per LS	\$
4.	EARTHWORK / SITE GRADING _____ _____ per LS	\$
5.	UTILITY CONDUIT / STORM DRAINAGE _____ _____ per LS	\$
6.	DAM REHABILITATION – SITE ACCESS & PREPARATION _____ _____ per LS	\$
7.	DAM REHABILITATION – COFFERDAM / WATER CONTROL _____ _____ per LS	\$
8.	DAM REHABILITATION – DEMOLITION / REMOVALS _____ _____ per LS	\$
9.	DAM REHABILITATION – ROCK ANCHORS _____ _____ per LS	\$
10.	DAM REHABILITATION – CAST-IN-PLACE CONCRETE _____ _____ per LS	\$
11.	DAM REHABILITATION – SPILLWAY CREST GATE _____ _____ per LS	\$
12.	DAM REHABILITATION – MILL INTAKE RESTORATION _____ _____ per LS	\$

ITEM NO.	ITEM DESCRIPTION (ITEM PRICE IN WORDS – DOLLARS & CENTS)	ITEM PRICE (IN FIGURES)
13.	TRASH RACK, SLUICeway SLIDE GATE, LOW-LEVEL OUTLET SLIDE GATE  _____per LS	\$
14.	HYDROELECTRIC – INTAKE STRUCTURE  _____per LS	\$
15.	HYDROELECTRIC – SLUICeway & EXTENSION  _____per LS	\$
16.	HYDROELECTRIC – POWERHOUSE SUBSTRUCTURE  _____per LS	\$
17.	HYDROELECTRIC – POWERHOUSE BUILDING  _____per LS	\$
18.	HYDROELECTRIC – POWERHOUSE ELECTRICAL / MECHANICAL  _____per LS	\$
19.	HYDROELECTRIC – ELECTRICAL  _____per LS	\$
20.	MILL REPAIRS – WEST WALL & FOUNDATION  _____per LS	\$
21.	PORTAGE TRAIL & RIVER ACCESS  _____per LS	\$
22.	SITE RESTORATION / LANDSCAPING / PLANTINGS  _____per LS	\$

Refer to Section 01 29 00 – Payment Procedures for description of lump sum bid items.

**BASE BID LUMP SUM PRICE – SMITHS FALLS HYDROELECTRIC PROJECT  
(TOTAL OF ABOVE ITEM NUMBERS 1 THROUGH 22)**

**WRITTEN IN WORDS** \_\_\_\_\_

\_\_\_\_\_ **DOLLARS**

**WRITTEN IN FIGURES**    \$ \_\_\_\_\_

All work for this project shall be performed under the above Lump Sum Bid Items. The value of each Lump Sum Item when added together shall equal the Total Lump Sum Bid Price.

**Unit Price Schedule**

Complete this table:

01	Common Excavation	CY	\$
02	Rock Excavation	CY	\$
03	Cast-in-Place Concrete	CY	\$
04	Granular Backfill for Structures	CY	\$
05	Stone Fill, Type II	CY	\$
06	Subbase of Gravel	CY	\$
07	Subbase of Dense Graded Crushed Stone	CY	\$
08	Topsoil	CY	\$
09	Marshall Bituminous Concrete Pavement	SY	\$
10	Crushed Stone Walkway – In Place	LF	\$
11	Utility Conduit – In Place	LF	\$
12	Stone Masonry Repair / Repointing	SF	\$
13	Cast-in-Place Concrete – Integral Colored	CY	\$

Refer to Section 01 29 00 – Payment Procedures for a description of unit prices. Unit prices will only be used as the basis for change orders to adjust the amount of the contract.

**BID FORM ( CONTINUED )**

**Signature for Individual**

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Name and Title of Individual Authorized  
to Sign

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Signature for Partnerships (must be signed by ALL general partners)**

\_\_\_\_\_  
Name of Partnership

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Partner

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone Number of Company Offices

\_\_\_\_\_  
Fax Number of Company Offices

**Use additional sheet if necessary**

**BID FORM ( CONTINUED )**

**Signatures for Corporation**

\_\_\_\_\_  
Name of Corporation

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Duly Authorized  
Company Officer

\_\_\_\_\_  
Signature

Corporate Seal (affix below)

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Signature of Clerk

Please furnish the following additional information:

Incorporated in what state? \_\_\_\_\_

President: \_\_\_\_\_

Treasurer: \_\_\_\_\_

Secretary: \_\_\_\_\_

If you are a foreign (out of state) corporation, are you registered with the Vermont Secretary of the State in accordance with the provisions of 11A V.S.A. § 15.01? \_\_\_\_\_

**If you are selected for this work, you are required, under 11A V.S.A. § 15.01, to obtain from the Vermont Secretary of State a certificate stating that your corporation is registered, and to furnish said certificate to the Stowe Electric Department before award.**

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**ADDENDUM 2 - ATTACHMENT F**

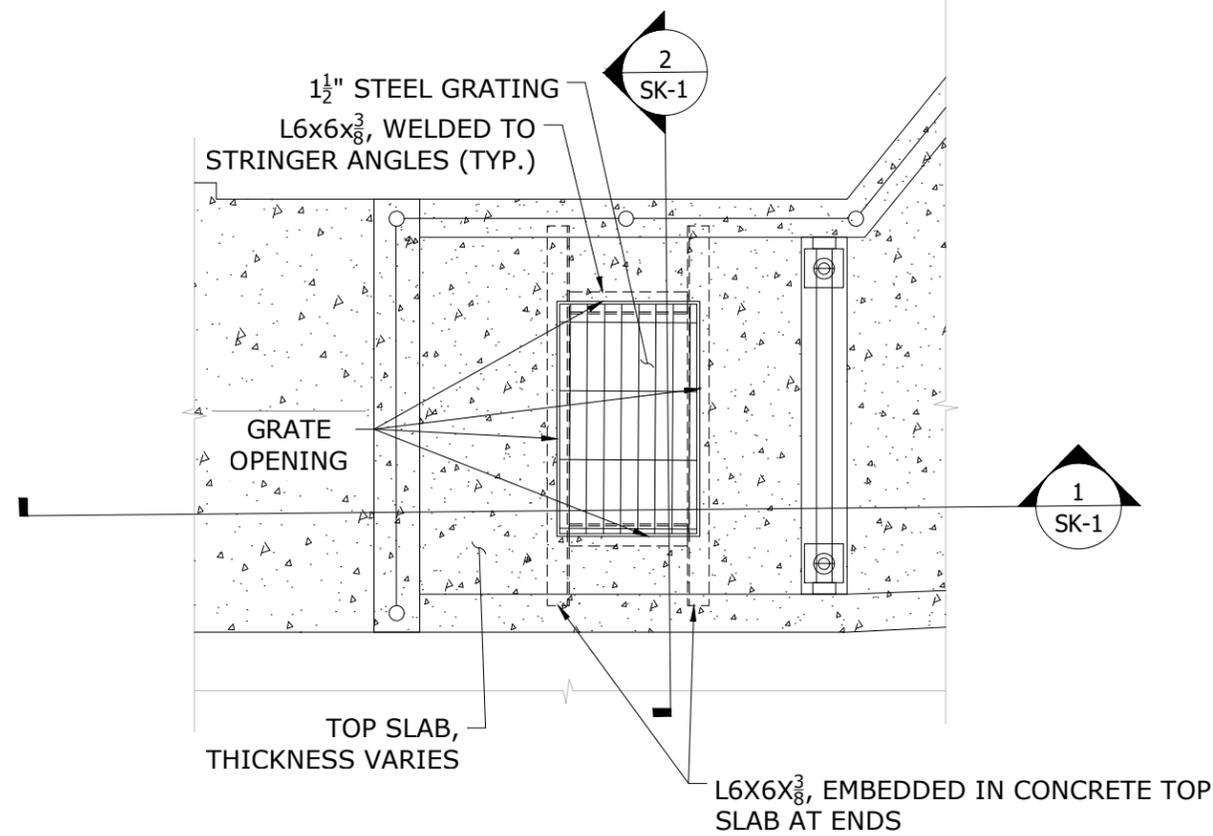
**SK-1**

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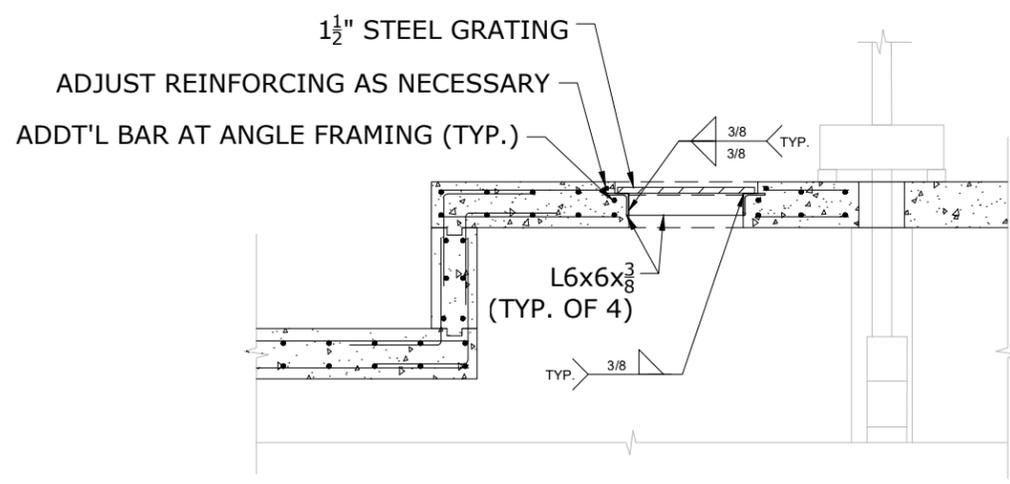
TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT





**PLAN VIEW @ UPSTREAM GRATE**

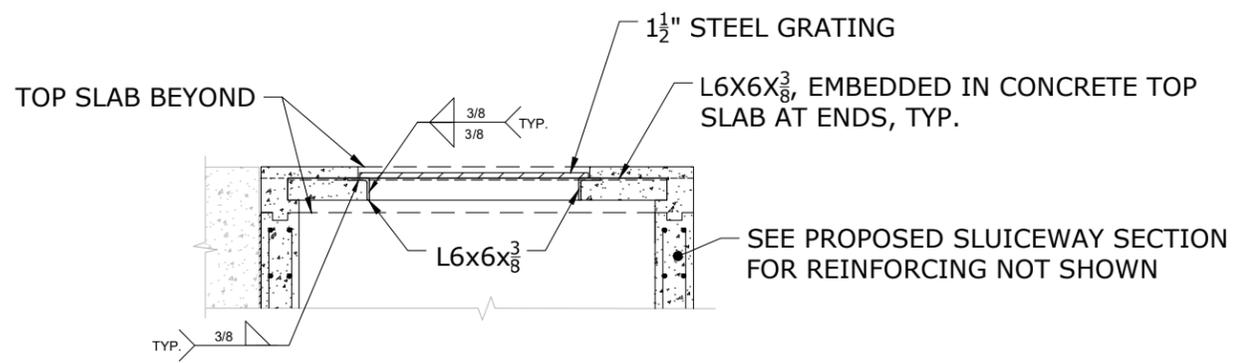
SCALE: 1/4" = 1'-0"



**SECTION @ UPSTREAM GRATE**

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

1 SK-1



**SECTION @ UPSTREAM GRATE**

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

2 SK-1



1 SOUTH MAIN STREET  
WATERBURY, VT 05676  
SLRCONSULTING.COM

REVISIONS

ADDENDUM 2 - STRUCTURAL DETAILS

SMITHS FALLS HYDROELECTRIC PROJECT  
STOWE ELECTRIC DEPARTMENT  
435 MOSCOW ROAD  
STOWE, VERMONT

DESIGNED	MQ	MQ	KP
DRAWN			CHECKED
SCALE: 1/4" = 1'-0"			
DATE: JANUARY 23, 2026			
PROJECT NO: 17412.00001			

**SK-1**

SHEET NO.

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**ADDENDUM 2 - ATTACHMENT G**

**ROCK ANCHOR SUMMARY**

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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT





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**ADDENDUM 2 - ATTACHMENT H**

**ARCHITECTURAL COMPONENTS**

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TOWN OF STOWE ELECTRIC DEPARTMENT  
REQUEST FOR BIDS – SMITH’S FALLS HYDROELECTRIC PROJECT



# STANDING SEAM

# RIDGE VENT

BY DCI

**Over 300 Channels Per Piece  
For Maximum Airflow With  
External Weather Guard Protection**

- ✓ **Prevents entry of rain, snow & sleet.**
- ✓ **Pre-cut for perfect fit between ribs.**
- ✓ **Virtually invisible and crush resistant.**
- ✓ **Guards against insects, rodents & debris.**



DCI PRODUCTS  
415 SOUTH PENN STREET  
CLIFTON HEIGHTS, PA 19018

[WWW.DCIPRODUCTS.COM](http://WWW.DCIPRODUCTS.COM)

# *Standing Seam Vent by DCI*

*(Rugged 12" & 16" Ventilation for Metal Roofs)*

**Description:** The Standing Seam Vent (SS-Vent) is 2.375"W X 7/8"H and comes in 12" and 16" lengths. Each Standing Seam Vent (SS-Vent) is pre-mitered at our factory to easily fit between each standing seam on the metal roof. The SS-Vent is an effective & efficient exhaust vent for the metal roofing industry. Built tough to stand up to nail guns or hand nails. Resists the infiltration of windblown rain or snow and keeps out insects as well. The black protective weather guard looks like a shadow line after installation. It is virtually invisible.

SS-Vents are constructed of non-collapsing material with lifetime durability. Ease of installation by the contractor is achieved by the design, engineering and technology inherent in the ventilation product.

SS-Vents are manufactured in the United States by DCI Products located in Clifton Heights, Pennsylvania.

## **SPECIFICATIONS:**

<b>MODEL NUMBER:</b>	<b>Standing Seam Vents (SS-Vents)</b>
<b>PRODUCT DIMENSIONS:</b>	12" - 2.375"W X 11.75"L X 20mm (7/8" thick) Angled Ends 16" - 2.375"W X 15.75"L X 20mm (7/8" thick) Angled Ends
<b>MINIMUM ORDER:</b>	1 Box
<b>TERMS:</b>	Net 30
<b>TOTAL BOX QUANTITY AND DIMENSIONS</b>	12" - 32 Pieces Per Box -7 lbs. - 12" x 12" x 8" 16" - 48 Pieces Per Box -14 lbs. - 18" x 18" x 8"
<b>PALLET SIZE:</b>	39" Wide x 39" Long 12" SS-Vent - 36 boxes/half pallet • 72 boxes/full pallet 16" SS-Vent - 20 boxes/half pallet • 40 boxes/full pallet
<b>PALLET WEIGHT:</b>	Based on size and quantity ordered.
<b>INCLUDED ITEMS:</b>	Installation Instructions with product.
<b>RETURN POLICY:</b>	<b>30 DAYS UNCONDITIONAL MONEY BACK GUARANTEE.</b> Unopened products can be returned to DCI stock with return shipping at customer's expense with invoice and reason for return. Upon receipt of those items, DCI may replace the product or may refund the purchase amount after approval of DCI Products. Only full box quantities can be returned for credit in the original box. Return to our location printed on this sell sheet.
<b>DCI Products</b> 415 South Penn Street Clifton Heights, PA 19018 Phone: 610-622-4455 www.dciproducts.com	

**EXTEND THE LIFE OF  
YOUR ROOF WITH  
PRE-ENGINEERED  
VENTILATION SYSTEMS**





# A New Degree of Ventilation



# THE PROVEN PROTECTION OF SLOPED ROOF VENTILATION PRODUCTS

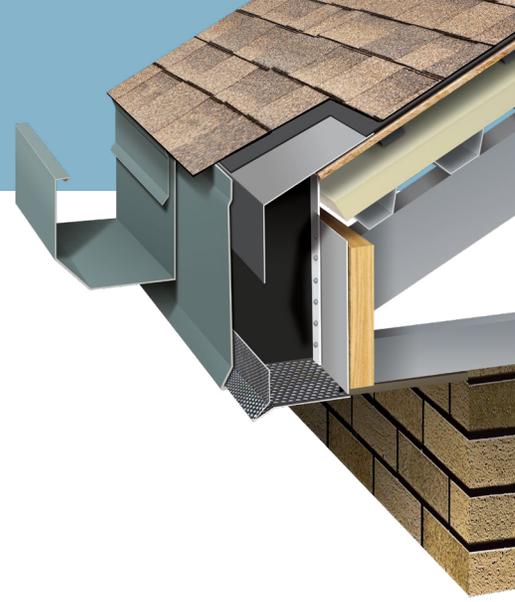
Many roof ventilation products on the market are designed for residential applications. But commercial building ventilation requirements are typically more complex. That's why we have perfected our Airflow Solutions products, creating carefully balanced systems that are as unique as the buildings you design and build. Proper roof ventilation is critical to the

longevity and effectiveness of the roof system. Our patented ventilation systems are backed by some of the strongest warranties in the industry. You can choose from an array of options that will look great with your design. Plus, all our products are easy to install, ensuring proper fit and keeping your project on schedule.



## THE INDUSTRY'S BEST DESIGNED, MOST RIGOROUSLY TESTED PRODUCTS

- Custom engineered for aesthetics and functionality
- Fabricated via advanced robotic methods
- Tested to exacting standards including heavy snow loads, wind driven rain TAS 100(A) and Miami-Dade



# Hi-Perf

Custom Engineered to Make Your Job Easier

Heat build-up. Moisture accumulation.  
Heavy snow loads.

Your building can withstand it all with Hi-Perf® roof ventilation products. Custom engineered to extend the life of your roof by providing optimal airflow, our Hi-Perf line is simple to install and affordable to your budget.

Top it off with up to a 20 year, 130 MPH Wind & Ventilation Warranty – the industry’s leading performance guarantee – and Hi-Perf is the simple answer for your ventilation needs.

## HI-PERF ADVANTAGES

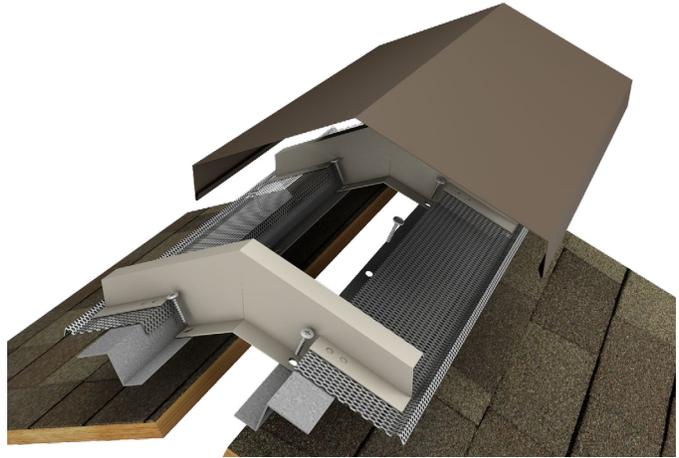
- 20 Year, 130 MPH Wind & Ventilation Warranty
- Easy installation – no wood blocking or vented soffits required
- Reduced field labor costs
- Proper fastening location and thermal movement ensured with pre-slotted holes
- 12’ lengths enable quicker installation and fewer splice joints



# HI-PERF PRODUCT CHOICES

## Hi-Perf Ridge Vent - Slope to Slope

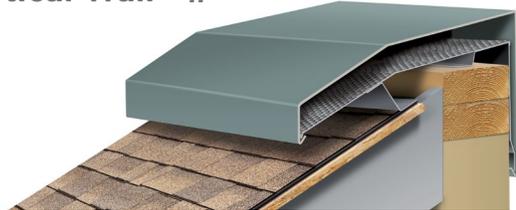
- Shingled Version \*+ #
- Standing Seam Version \*+ #
- Field Roofed Version + #



## Hi-Perf Ridge Vent - Sloped Roof Meets High Wall \* #

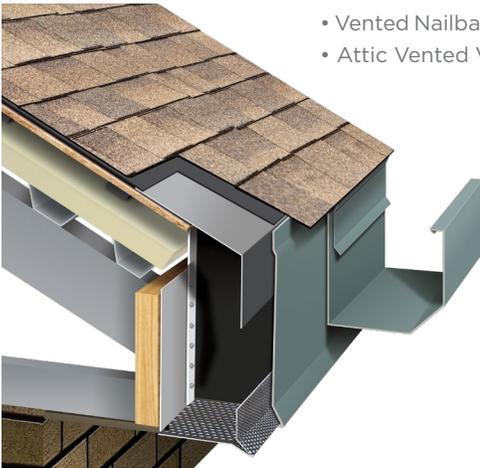


## Hi-Perf Ridge Vent - Sloped Roof Meets Vertical Wall \* #



## Hi-Perf Vented Fascia #

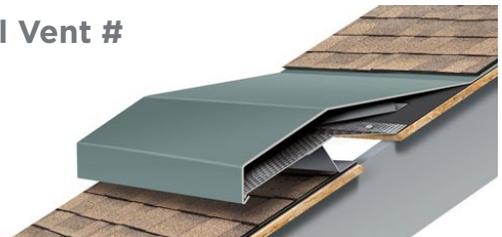
- Vented Nailbase Version
- Attic Vented Version



## Hi-Perf Ridge Vent - Sloped Roof Meets Flat Roof \* #



## Hi-Perf Dual Vent #



## Hi-Perf Rake Fascia



## Hi-Perf Rake Panel



\* TAS 100 (A) Tested

+ Heavy Snow Load Tested

# California Wildfire Building Code Compliant



# Eco-Perf

Superior Venting for Any Climate or Budget

An engineered solution that's quick-to-ship and easy on your budget - and that's not all Eco-Perf® offers. These ventilation products also come with the same high quality and performance you expect from Metal-Era.

Eco-Perf's ventilation products ensure proper airflow underneath the roof covering. They hold up to severe weather, neutralizing any negative effects to increase the life of your roof.



## ECO-PERF ADVANTAGES

- 5 Year Workmanship Warranty
- Designed to fit a variety of roof pitches
- Detailed installation instructions
- Convenient 12' lengths for less material handling
- Pre-slotted fastening holes ensure proper location and thermal movement
- Vented fascia accommodates gutters or fascia covers using various metals or other materials

## ECO-PERF PRODUCT CHOICES

Eco-Perf Vented Fascia #



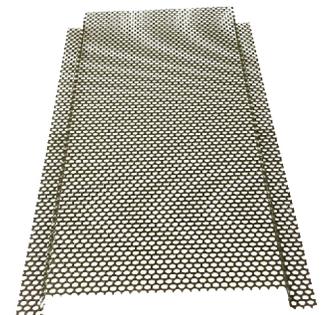
Eco-Perf Ridge Vent #



Eco-Perf Truss Vent #



Eco-Perf Vented Screen #



# THE INDUSTRY'S BEST WARRANTIES

Because every Metal-Era product is carefully designed, fabricated, and tested, we stand by our quality with industry leading wind and performance warranties.

## WIND & VENTILATION WARRANTY 20 YEAR, 130 MPH

This warranty guarantees designs according to the Metal-Era calculated NFA, proper ventilation for the project, 130 MPH wind protection, and zero defects.

## 5 YEAR WORKMANSHIP WARRANTY

The 5 year Workmanship Warranty is available on all Metal-Era products and covers the replacement or repair of products that are defective in material or workmanship.

## VIBRANT COLORS THAT CAPTURE YOUR VISION

Choose among a wide range of standard colors and finishes that meet your job requirements. A 30 year Kynar 500® finish warranty is included on coil-coated standard colors. Custom post-coated Kynar 500® colors are available with an included 10 year Kynar 500® finish warranty or a 20 year Kynar 500® finish warranty is available upon request.

### Express Colors\*



### Premium Colors



### Standard Colors



\* Available in three other stone colors \* Available in Mill Finish ▲ Must specify supplier



Metal-Era, Inc.  
1600 Airport Road  
Waukesha, WI 53188

[www.metalera.com](http://www.metalera.com)  
[info@metalera.com](mailto:info@metalera.com)  
800-558-2162





## Hinkley Forge 22" High Black LED Outdoor Post Top-Pier Mount Light

**\$279.00**

As low as \$26.64/mo with **PayPal**. [Learn more](#)

[Free Shipping & Free Returns\\*](#) | [Price Matching Policy](#)

[Ships in 4 to 6 Weeks](#)

1

ADD TO CART

♡ SAVE



Traditional barn-inspired gooseneck styling offers rich character to an industrial metal outdoor post top/pier mount light.

### Product Details

- 22" high x 16" wide x 21 1/4" deep. Weighs 4 lbs.
- Uses one maximum 14 watt E26 standard-medium base LED bulb (not included). Comparable to a 100 watt incandescent.
- Traditional industrial metal outdoor post top/pier mount light from the Forge collection by Hinkley.
- Black finish over composite construction.
- Fits on a 3" diameter pole (not included). May also be pier mounted with an adapter which is sold separately.
- Voltage 120V.
- Dark Sky compliant. California Prop 65 Warning.

Inspired by a lighting industry staple barn light, this traditional industrial outdoor LED post top/pier mount light features a practical outdoor lighting solution to withstand the elements. Whether it is enduring harsh sunrays, extreme cold or continuous salt air, Forge by Hinkley is built to last with an industrial chic flair. Its black finish is cool and crisp, with a classic silhouette that includes a shepherd's hook detail for a rich, refined look.

**HINKLEY**



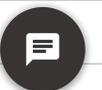
[Shop all Hinkley.](#)

### Product Attributes

Style	Industrial
Finish	Black

### Technical Specifications

Height	22.00 inches
Weight	4.00 pounds





## Gretchen 121 1/2" High Black Outdoor Post Pole

[Z-Lite Outdoor Post Black Collection](#)

**\$1,870.00**

As low as \$100.69/mo with **PayPal**. [Learn more](#)

Free Shipping\* | [Price Matching Policy](#)

In Stock - [Ships in 1 to 2 Days](#)

1

ADD TO CART

SAVE



Thicker and heavier than standard posts, this ultra-practical modern metal outdoor post pole in a black finish can withstand more rigorous weather conditions.

### Product Details

- 121 1/2" high x 16 3/4" wide. Weighs 32 lbs.
- Modern metal outdoor post pole for post light.
- Black finish over aluminum construction.
- Come complete with mounting template, bolts, and cap nuts.
- Thicker and heavier than standard posts, can withstand more rigorous weather conditions.

This modern metal outdoor post pole in a black finish is thicker and heavier than standard posts. With this feature, the pole can withstand more rigorous weather conditions, making it an essential outdoor design tool. All posts come complete with mounting template, bolts, and cap nuts.

### Product Attributes

Style	Contemporary
Finish	Black
Type	Accessories
Color	Black

### Technical Specifications

Height	121.50 inches
Weight	32.00 pounds
UPC Code	685659011531



# 16002

## TWO-LAMP OUTDOOR ADJUSTABLE FLOODLIGHT

### FINISHES

MW - Matte White  
PBK - Powder Coated Black  
PBZ - Powder Coated Bronze

### DIMENSIONS

Width 4.72"  
Height 9.12"  
Depth 6.15"  
Backplate Width 4.72"  
Backplate Extension 1.34"  
Weight 0.946 lbs.

### MATERIAL

Aluminum

### GLASS

Glass No

### LAMPING

# Bulbs 2 - PAR38  
Bulbs Base Medium (E26)  
Watts per Bulb 150W  
Voltage 120V  
Total Wattage 300W  
Bulbs Included No

### CERTIFICATION

UL/ETL Wet Location

### ITEM NUMBER

SKU's 16002 MW  
16002 PBK  
16002 PBZ



16002 PBK



16002 MW



16002 PBZ

- Twin adjustable heads.
- Connects easily to the junction box.
- Weather-resistant aluminum housing.
- Easy installation.
- Adjustable lamp heads for directional lighting.

Millennium Lighting  
105 Declaration Drive  
McDonough, GA 30253  
[www.millenniumlighting.com](http://www.millenniumlighting.com)

# GENERATION LIGHTING

## 8637401-15: Medium One Light Outdoor Wall Lantern **Dimensions:**



**Diameter:** 12"                      **Extends:** 17 1/8"  
**Width:** 12"                           **Extends Max:** 23 1/8"  
**Height:** 10 5/8"                   **Wire:** 6 1/2" (color/Black/White)  
**Weight:** 1.8 lbs.                   **Mounting Proc.:** Cap Nuts  
**Connection:** Mounted To Box

### Bulbs:

1 - Medium A19 75w Max. 120v - Not included

### Features:

- Dark sky friendly. Designed to emit no light above the 90° horizontal plane. Photometry unavailable.
- Easily converts to LED with optional replacement lamps
- Meets Title 24 energy efficiency standards
- Title 24 compliant if used with Joint Appendix (JA8) approved light bulbs listed in the California Energy Commission Appliance database.

**Collection:** Barn Light

Featured in the decorative Barn Light collection

1 A19 Medium 75 watt light bulb

Dark sky friendly. Designed to emit no light above the 90° horizontal plane. Photometry unavailable.

Easily converts to LED with optional replacement lamps

Meets Title 24 energy efficiency standards

**UPC #:**785652092749

**Finish:** White (15)

### Material List:

1 Body - Aluminum - White

### Safety Listing:

Safety Listed for Wet Locations

### Instruction Sheets:

Trilingual (English, Spanish, and French) (990W8\_37401-BRL)

### Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate			1 1/4	5	5 1/4	8 1/4

### Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Fr. Class	UPS Ship
Individual	8737401-12	1	785652092749	20.5	16.5	16.38		1	60	Yes
NJ Pallet		38		48	40	77	85.556	136.8		No
NV Pallet		38		48	40	77	85.556	136.8		No

