ADDENDUM NO. 1
October 28, 2014
Contract B – Water Supply Pump Stations
Spirit Mountain Recreation Authority
SEH No. FOSJJ 129137

From: Short Elliott Hendrickson Inc.
416 South 6th Street, Suite 200
Brainerd, MN 56401-3540
218.855.1700

To: Document Holders

DOCUMENT HOLDERS on the above-named project are hereby notified that this document shall be appended
to, take precedence over and become part of the original bidding documents dated October 2014 for this work.
Bids submitted for the construction of this work shall conform to this document.

This addendum consists of 1 page and attached Drawings (all drawings for Contract B).

Changes to Drawings:
1. Please replace the set of drawings with this complete set for Contract B with revision date of October 28,
   2014.

Note: Receipt of this Addendum No. 1 (dated October 28, 2014 shall be acknowledged on Page 1 of the
submitted City of Duluth Official Sealed Bid Form. Failure to do so may subject Bidder to disqualification.

END OF ADDENDUM
SEQ RIVER SITE PLAN

<table>
<thead>
<tr>
<th>ITEM DESCRIPTION</th>
<th>UNIT OF MEASUREMENT</th>
<th>APPLY QUANTITY</th>
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<tbody>
<tr>
<td>COMMON EXCAVATION</td>
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<td>COMMON BORROWED</td>
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<td>GRAVEL SURFACING</td>
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<tr>
<td>BOLLARD</td>
<td>EA</td>
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</table>

NOTE: WORK CONSTRUCTION FROM CONTRACT A
GENERATED A MEASURE OF MATERIAL TO BE USED
AS FILL AT SITE PLAN.

EXCAVATION AND BORROW QUANTITIES GENERATED BY
TOP SURFACES.

"RIVER" PUMPSTATION

ON-HILL IMPROVEMENTS
SPRINT MOUNTAIN
DULUTH, MN
PLAN STATION
SITE / GRADE PLAN
FILE NO.
POLICY UDD
NOTES:

1. PROVIDE ADDITIONAL REINFORCEMENT AT CMU OPENINGS PER DETAIL E/S/12 U.N.O.

2. SEE SHEET C6 FOR SOIL CORRECTION DIAGRAM.

3. CJ - INDICATES SLAB CONSTRUCTION JOINT PER DETAIL A/S/12.

4. SEE MECHANICAL FOR PIPE LOCATIONS.
FRAMING NOTES

1. PLYWOOD SHALL BE INSTALLED LENGTHWISE PERPENDICULAR TO TRUSSES.
2. PROVIDE 2x4 BLOCKING AT ALL JOINTS IN PLYWOOD ROOF.
3. NAIL 5/8 PLYWOOD ROOF DECK TO TRUSSES WITH 10D NAILS, 4" O.C., AT DIAPHRAGM EDGES, 6" O.C. AT OTHER EDGES, AND 12" O.C. AT INTERMEDIATE SUPPORTS.
4. TRUSS MANUFACTURER SHALL DETERMINE TRUSS CONFIGURATION TO MEET ROOF PROFILE.
5. TRUSS MANUFACTURER SHALL DETERMINE LATERAL BRACING REQUIREMENTS FOR TRUSSES.

PRE-ENGINEERED MANUFACTURED WOOD TRUSSES @ 2'-0" O.C., DESIGNED BY TRUSS MFR.
BUILDING SECTION

SOIL CORRECTION DIAGRAM

SAND w/NOT MORE THAN 8% PASSING #200 SIEVE
COMPACT IN 6" LOOSE LIFTS TO 95% OF THE
STANDARD MAXIMUM DRY UNIT WEIGHT PER ASTM
D698 (STANDARD PROCTOR TEST)

SELECT GRANULAR BORROW

USP HGA-A10 OR SIMPSON HGA-EXIT
HURRICANE GUSSET ANGLES @ 24" O.C.
AND AT EXISTING INTERIOR TRUSS

INTAKE LOUVER OPENING
- COORDINATE WITH MECH.

12" x 8" BOND BEAM w/ 24" CONTINUOUS ALL AROUND

1'-0" EXP. JOINT MAT'IL & SEALANT ALL AROUND

1/2" EXP. JOINT MAT'IL & SEALANT ALL AROUND

#4 @ 12" EW, CENTERED

#4 DWL'S @ 12" (TYP.)

3-#5 CONTINUOUS (TYP.)

#4 @ 12" EW, CENTERED

MATERIAL BY PREVIOUS CONTRACT.

BUILDING CONTRACTOR TO COMPACT PER NOTE BELOW, AND SUPPLY AND PLACE TOPSOIL AND AGGREGATE SURFACING.

SELECT GRANULAR BORROW

COMPACT IN 6" LOOSE LIFTS TO 95% OF THE STANDARD MAXIMUM DRY UNIT WEIGHT PER ASTM D698 (STANDARD PROCTOR TEST)
**FRAMING NOTES**

1. PLYWOOD SHALL BE INSTALLED LENGTHWISE PERPENDICULAR TO TRUSSES.
2. PROVIDE 2x4 BLOCKING AT ALL JOINTS IN PLYWOOD ROOF.
3. NAIL ½" PLYWOOD ROOF DECK TO TRUSSES WITH 15d NAILS 4" O.C. AT DIAPHRAGM EDGES, 6" O.C. AT OTHER EDGES, AND 12" O.C. AT INTERMEDIATE SUPPORTS.
4. TRUSS MANUFACTURER SHALL DETERMINE TRUSS CONFIGURATION TO MEET ROOF PROFILE.
5. TRUSS MANUFACTURER SHALL DETERMINE LATERAL BRACING REQUIREMENTS FOR TRUSSES.

**ROOF FRAMING PLAN**

- plywood shall be installed lengthwise perpendicular to trusses.
- provide 2x4 blocking at all joints in plywood roof.
- nail ½" plywood roof deck to trusses with 15d nails 4" o.c. at diaphragm edges, 6" o.c. at other edges, and 12" o.c. at intermediate supports.
- truss manufacturer shall determine truss configuration to meet roof profile.
- truss manufacturer shall determine lateral bracing requirements for trusses.
12"W x 8"H CONT. BOND BEAM W/ 2-#5 AT EACH ANCHOR & ABOVE & BELOW (4 TOTAL COURSES MIN.), RUN VERTICAL REINF. CONT. THROUGH BOND BEAMS.

NOTES:
1. NOTED STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
2. NOTED STEEL BOLTS, NUTS, & WASHERS TO BE HOT DIPPED GALVANIZED IN ACCORDANCE W/ ASTM A153.
3. TOP OF CRANE GIRDER SHALL BE 3" BELOW LOWEST OBSTRUCTION BUT NOT HIGHER THAN 17'-9" ABOVE FIN. FLR.
SAND OR NOT MORE THAN 8% PASSING #200 SIEVE
COMPACT IN 8" LOOSE LIFTS TO 95% OF THE
STANDARD MAXIMUM DRY UNIT WEIGHT PER ASTM
D698 (STANDARD PROCTOR TEST). PROVIDE CLSM
AROUND PUMP CAN SLEEVES.
NOTES:
1. SEE PLAN FOR CONTROL JOINT LOCATIONS.
2. MAKE SURE ALL JOINTS ARE AT LEAST 6" APART.
3. PL-JOINTS W/ JOINT BAR AS SHOWN UNLESS OTHERWISE NOTED.

NOT TO SCALE

BOND BEAM CORNER REINFORCEMENT DETAIL

CONCRETE APRON DETAIL

CONCRETE STOOP DETAIL

GALVANIZED STEEL GRATING AND SUPPORT

MASONRY CONTROL JOINT DETAIL

PLUMB BUILDING PLANS

CONTRACT BY

SPURT MOUNTAIN

DULUTH, MN

STRUCTURAL STANDARD DETAILS

DUE NO. 60427.0221

PUMP STATION 1018

NOT TO SCALE
1. SHALL NOT BE USED UNLESS SPECIFICALLY APPROVED BY THE MANUFACTURER.  LOCATE AND AVOID REINFORCING AREAS SHALL BE GRADED TO SLOPE AWAY FROM BUILDINGS AND OTHER STRUCTURES.

3. RUNWAY BEAMS SHALL BE SIMPLE SPAN AND SHALL NOT BE SPLICED EXCEPT AT COLUMNS.  NO WELDING OR DRILLING ARE PERMITTED.

5. MASONRY WALLS SHALL BE REINFORCED WITH HOT DIPPED GALVANIZED TRUSS HORIZONTAL REINFORCING (PER ASTM TYPE S ABOVE GRADE).  PAINT FINISH PER ARCHITECTURAL.

7. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS FOR REINFORCED CONCRETE "MSP2 "CRSI MANUAL OF STANDARD PRACTICE"  AWS D1.4 "STRUCTURAL STEEL CODE", AND THE INDEPENDENT TESTING AGENCY'S REQUIREMENTS AND RECOMMENDATIONS:

8. ALL ANCHORS SHALL BE DESIGNED PER THE AISC MANUAL OF STEEL CONSTRUCTION APPROPRIATE EDITION OF ANSI/TP-1.

GENERAL STRUCTURAL NOTES

1.0 (BASED ON OCC CAT II)

1.0 PSF + DRIFTING & UNBALANCED PER IBC

2.0 PSF + DRIFTING & UNBALANCED PER IBC

6.0 PSF + DRIFTING & UNBALANCED PER IBC

EXERCISE CAUTION IN THE INSTALLATION OF WITNESS INSTALLATION WITH TORQUE WRENCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS TO ENSURE INTEGRITY OF CONNECTIONS.  ALL WORK MACHINES SHALL BE PREFERABLY HAND HELD OR POWERED TO AVOID EXCESS VIBRATION AND DAMAGE TO THE CONNECTIONS.  WRAP THE SUPPORT BRACING WITH DIFFERENT MATERIAL AND REQUIRED PHYSICAL DIMENSIONS MATCHING OR SIMILAR TO THE REFERENCED LOCATIONS IN THE DRAWINGS SET.

3.0 PSF + DRIFTING & UNBALANCED PER IBC

4.0 PSF + DRIFTING & UNBALANCED PER IBC

5.0 PSF + DRIFTING & UNBALANCED PER IBC

12.0 PSF + DRIFTING & UNBALANCED PER IBC

15.0 PSF + DRIFTING & UNBALANCED PER IBC

25.0 PSF + DRIFTING & UNBALANCED PER IBC

50.0 PSF + DRIFTING & UNBALANCED PER IBC

DIE W/ EXPANSION/SCREW:

EXPANSION/SCREW:

EXPANSION/SCREW:

EXPANSION/SCREW:

EXPANSION/SCREW:

EXPANSION/SCREW:

EXPANSION/SCREW:

JOINT TYPES:

A. ALL JOINTS SHALL BE CONCT. TOOLS: JOHN ABBEY AND BILLOW DESIGNS.

B. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B,collected by WITNESS INSTALLATION WITH TORQUE WRENCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS TO ENSURE INTEGRITY OF CONNECTIONS.  ALL WORK MACHINES SHALL BE PREFERABLY HAND HELD OR POWERED TO AVOID EXCESS VIBRATION AND DAMAGE TO THE CONNECTIONS. WRAP THE SUPPORT BRACING WITH DIFFERENT MATERIAL AND REQUIRED PHYSICAL DIMENSIONS MATCHING OR SIMILAR TO THE REFERENCED LOCATIONS IN THE DRAWINGS SET.

CONTRACTOR SHALL BEAR COST OF TESTING TO PROVE CONCRETE IS UNAFFECTED, AND SHALL REMOVE AND REPLACE CONCRETE MATERIAL IF CONCRETE TESTING INDICATES CONCRETE IS AFFECTED.  CONCRETE TESTING SHALL BE PERFORMED BY AN INDEPENDENT ACR-APPROVED LABORATORY.  CONCRETE ENSURING INTEGRITY OF CONNECTIONS.  ALL WORK MACHINES SHALL BE PREFERABLY HAND HELD OR POWERED TO AVOID EXCESS VIBRATION AND DAMAGE TO THE CONNECTIONS.

JOINTS SHALL BE ACCEPTED OR REFUSED BASED ON THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.  CONCRETE MASONRY UNITS: ASTM C90-11a

MODE OF FAILURE:

A. ALL JOINTS SHALL BE CONCT. TOOLS: JOHN ABBEY AND BILLOW DESIGNS.

B. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B.

C. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B.

D. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B.

E. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B.

F. ALL JOINTS SHALL BE CONNECTED WITH BESSEMER ROD (S) 3/16" X 4" "A" TYPE OR B.
PERFORMED. SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC CHAPTER 17 SHALL BE
A.
INSIDE DIAMETER
I.D.
6 PILING, PIERS AND CAISSONS
HIGH POINT
H.P.
5 GRADING, EXCAVATION AND FILLING
HORIZONTAL
HORIZ.
4 WOOD CONSTRUCTION
HOLLOW CORE
H.C.
DETAILS: GROUTING, LINTELS, ETC.
PRISMS
GND
GALVANIZED
GALV.
REINFORCEMENT: SIZE AND SPACING
WATERSTOP
WS
FOOTING
FTG
3 MASONRY CONSTRUCTION
HORIZONTAL
VERTICAL
HEIGHT
FFE
PRECAST/PRESTRESSED CONCRETE
UNLESS NOTED OTHERWISE
BOLTING
TOP AND BOTTOM
T&B
EQUIPMENT
ENCLOSURE
STAINLESS STEEL
S.S.
SQUARE
SQ
EACH FACE
EF
ELEVATION
EL.

NOTES
1. SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC CHAPTER 17 SHALL BE
PERFORMED.
PAD CONSTRUCTION NOTES:
1. AIR ENTRAINED CONCRETE - 4000 PSI AFTER 28 DAYS, MAX AGGREGATE 3/4".
2. STEEL FLOAT FINISH
3. REINFORCEMENT: TYPE A-305 BILLET STOCK A.S.T.M. GRADE 80
4. ALL REINFORCING TO BE #4 BAR 12" O.C. EACH WAY. WIRE TIE ALL CROSSINGS
5. IF THE ANTICIPATED FORECAST TEMPERATURE IS 35 DEGREES F OR LESS, THE PAD WILL BE INSULATED WITH EITHER BLANKETS OR POLY AND STRAIN FOR A MIN. OF 3 DAYS
6. APPLY MEMBRANE CURING COMPOUND, MEETING ASTM C 309, AT MANUFACTURER'S PRESCRIBED RATE AFTER REMOVAL OF FORMS
7. EDGE TROWEL WITH CHAMFERED OUTSIDE EDGES
8. A SAFE OPERATING CLEARANCE OF A MIN 10'-0" (UNOBSTRUCTED) IS REQUIRED IN FRONT OF THE TRANSFORMER DOOR. THE DOOR(S) CAN FACE ANY DIRECTION EXCEPT TOWARDS THE BUILDING UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. DECISIONS SHALL BE BASED UPON SOUND ENGINEERING PRACTICES AND SITE SPECIFIC CONDITION
9. IF NECESSARY, ELECTRICAL CONTRACTOR MAY REMOVE TOP UP OF FIBERGLASS GROUND SLEEVE IN THE LOW VOLTAGE SECTION
10. GROUND SLEEVE MAY BE PICKED UP AT MINNESOTA POWER SERVICE CENTER, MONDAY-FRIDAY, BETWEEN 8 AM-5 PM OR BY ARRANGEMENT
11. FIBERGLASS GROUND SLEEVE FURNISHED BY MINNESOTA POWER
12. A SAFE OPERATING CLEARANCE OF A MIN 4'-0" (UNOBSTRUCTED) IS REQUIRED IN FRONT OF THE CABINET ACCESS DOOR(S). THE DOOR(S) CAN FACE ANY DIRECTION EXCEPT TOWARDS A PAD MOUNT TRANSFORMER WHERE INSTALLED ON THE SAME PAD AS THE TRANSFORMER
13. THE CABINET SHOULD BE LOCATED ON THE SAME SLAB AS THE PAD MOUNT TRANSFORMER OR NEXT TO THE RIDER POLE (NO CLOSER THAN 10'-0") OF ANY OVERHEAD TRANSFORMER BANK
14. A MIN. OF 3'-0" CLEARANCE SHALL BE REQUIRED FROM ANY EDGE OF A PAD MOUNT TRANSFORMER. THE CABINET SHALL NEVER BE PLACED IN FRONT OF THE ACCESS DOORS TO A PAD MOUNT TRANSFORMER
15. THE CABINET SHALL BE BOLTED DOWN TO THE CONCRETE WITH ANCHOR BOLTS
### Panel Schedule

<table>
<thead>
<tr>
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<th>PSI-P</th>
<th>Amps</th>
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### Luminaire Schedule

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### Motor and Equipment Schedule

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<th>Description</th>
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<td>Heister 1</td>
<td>480 1</td>
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**NOTES**

**ABBREVIATIONS**

- E: ELECTRICAL CONTRACTOR
- M: MECHANICAL CONTRACTOR
- G: GENERAL CONTRACTOR
- O: OTHERS
- U: W/UNIT
1. Air Entrained Concrete - 4000 psi after 28 days, Max Aggregate 3/4"

2. Steel Float Finish

3. Reinforcement: Type A-305 Billet Stock A.S.T.M. Grade 60

4. All reinforcing to be #4 bar 12" o.c. each way. Wire tie all crossings

5. If the anticipated forecast temperature is 35 degrees F or less, the pad will be insulated with either blankets or poly and straw for a min. of 3 days

6. Apply membrane curing compound, meeting ASTM C 399, at manufacturer's prescribed rate after removal of forms

7. Edge trowel with chamfered outside edges

8. A safe operating clearance of a min 10'-0" (unobstructed) is required in front of the transformer door. The door(s) can face any direction except toward the building unless prior approval has been obtained from the engineer. Decisions shall be based upon sound engineering practices and site specific condition

9. If necessary, electrical contractor may remove top up of fiberglass ground sleeve in the low voltage section

10. Ground sleeve may be picked up at Minnesota Power Service Center, Monday-Friday, between 8 AM-3 PM or by arrangement

11. Fiberglass ground sleeve furnished by Minnesota Power

12. A safe operating clearance of a min 4'-0" (unobstructed) shall be required in front of the cabinet access door(s). The door(s) can face any direction except towards a pad mount transformer where installed on the same pad as the transformer.

13. The cabinet should be located on the same slab as the pad mount transformer or next to the power pole (no closer than 10'-0") of any overhead transformer bank.

14. A min. of 3'-0" clearance shall be required from any edge of a pad mount transformer. The cabinet shall never be placed in front of the access doors to a pad mount transformer.

15. The cabinet shall be bolted down to the concrete with anchor bolts.

16. The customer shall provide the cables to the cabinet from the customer premises. The cabinet, connection lugs for the customer and utility side, conduit between the transformer and cabinet (size to be specified by utility), and the concrete slab. Utility will provide the C/T and V/T transformers, the meter socket, and the cables between the cabinet and transformer (above or underground).
PUMP STATION INSTALLATION
REFERENCE DRAWINGS

PROCESS MECHANICAL AND ELECTRICAL DESIGN DRAWINGS

OCTOBER 20, 2014

DRAWING SCHEDULE:

782013-M1 RIVER PUMP STATION GENERAL ARRANGEMENT & MECHANICAL LAYOUT
782013-E1 RIVER PUMP STATION ELECTRICAL LAYOUT
782013-M2 MAIN PUMP STATION GENERAL ARRANGEMENT & MECHANICAL LAYOUT
782013-E2 MAIN PUMP STATION ELECTRICAL LAYOUT
PLAN VIEW

SCALe: \(\frac{\text{1/2"}}{\text{1'-0"}}\)

WET WELL DIMENSIONS (INSIDE):

14'-0" L x 4'-0" W x 20'-0" D

RIVER SNOW MAKING PUMPHOUSE

SPIRIT MOUNTAIN SKI AREA, MN

RIVER PUMPSTATION

THIS DRAWING IS FOR THE INFORMATION USEOF THE CONTRACTORS, AND IS CONSIDERED CONFIDENTIAL AND SUBJECT TO THIRD PARTY PRIVATE WRITING. IT CONTAINS INFORMATION OF TORRENT ENGINEERING AND EQUIPMENT, LLC, AND SHALL NOT BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT FROM THE COMPANY.

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

JDM

10-16-2014

JDC

09-29-14

09-08-14

03-21-13

2 OF 7

REV : 5

782013-M1
Building Plan

Scale: 1" = 1'-0"

Spirit Mountain Ski Area, MN
River Pumpstation

10-16-2014
JDM

Approved:

Checked:

Drawn by:

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www.torrentee.com
LOAD SUMMARY

<table>
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<tr>
<th>LOAD</th>
<th>DESCRIPTION</th>
<th>HP</th>
<th>AMPS</th>
<th>SWBD CB (AMPS)</th>
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<tbody>
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<td>RP1</td>
<td>RIVER PUMP #1 - VFD</td>
<td>200</td>
<td>230</td>
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<td>30 KVA TRANSFORMER</td>
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<td>50</td>
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</tr>
<tr>
<td>HTR1</td>
<td>10 KW HEATER 1</td>
<td>13</td>
<td>20</td>
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</tr>
<tr>
<td>HTR2</td>
<td>10 KW HEATER 2</td>
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<tr>
<td>CVT1</td>
<td>CUSTOMER USE / SPARE</td>
<td>40</td>
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</tr>
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<td>CUSTOMER USE / SPARE</td>
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</tr>
</tbody>
</table>

TOTAL CONNECTED LOAD (AMPS) = 822 AMPS
TOTAL CONNECTED LOAD (KVA) = 822 KVA

MINIMUM SIZE TRANSFORMER RECOMMENDED = 750 KVA

SPIRIT MOUNTAIN SKI AREA
RIVER SNOW MAKING PUMPHOUSE
480V POWER ONE-LINE

**REVISION DATE NO.**

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3 TON MIN.
BRIDGE CRANE
ESTIMATED WEIGHTS —
MOTOR = 3600 LBS
PUMP = 2500 LBS

SECTION B-B
SCALE: 1/2" = 1'-0"

SHEET:
REV:
DATE:
DRAWN BY:
CHECKED:
APPROVED:
FOR:

SPIRIT MOUNTAIN SKI AREA, MN
SNOWMAKING PRIMARY PUMPSTATION LAYOUT

782013-M2
SPIRIT MOUNTAIN SKI AREA, MN
P.O. BOX 270
DULUTH, MINNESOTA
USA
MILFORD, IN 46542
ENGINEERING AND EQUIPMENT
SPIRIT MOUNTAIN SKI AREA, MN
SNOWMAKING PRIMARY PUMPHOUSE LAYOUT

SLAB PLAN
SCALE: 1/8" = 1'-0"

SECTION D-D
SCALE: NTS

1. (1) 20" STUB UP @ 3'-0" ABOVE SLAB
   CUT & FIELD WELD

2. (1) 2" STUB UP @ 3'-0" ABOVE SLAB
   CUT & FIELD WELD

BY CONTRACTOR

SPIRIT MOUNTAIN SKI AREA, MN
ENGINEERING AND EQUIPMENT, LLC
P.O. BOX 270
MILFORD, IN 46542
USA

REV.: 6
SHEET: 5 OF 6
DATE: 10-20-2014
DRAWN BY: JDM
CHECKED BY: JDC
APPROVED:

ALL TORRENT DRAWINGS ARE PROTECTED FOR PROCESS EQUIPMENT DESIGN AND INSTALLATION. SITE PLAN AND BUILDING DETAILS ARE REPRESENTATIVE AND SHOWN FOR GENERAL SYT. NOT TO SCALE FOR ALL SITE AND BUILDING CONSTRUCTION INFORMATION AND CONDITIONS.

TORRENT ENGINEERING AND EQUIPMENT, LLC
P.O. BOX 270
MILFORD, IN 46542
USA

www.torrentee.com

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SPIRIT MOUNTAIN SKI AREA
480V POWER ONE-LINE

PRINCIPAL ENCLOSURE:

PRIMARY SNOW MAKING PUMPHOUSE

480V POWER ONE-LINE

CONTRACTOR TO FIELD TERMINATE FACTORY SUPPLIED MOTOR LEADS, SPACE HEATER, AND THERMOSTAT WIRING AT MOTOR J-BOXES.

CONTRACTOR TO FIELD TERMINATE FACTORY SUPPLIED MOTOR LEADS, SPACE HEATER, AND THERMOSTAT WIRING AT MOTOR J-BOXES.

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CONTRACTOR TO FIELD TERMINATE FACTORY SUPPLIED MOTOR LEADS, SPACE HEATER, AND THERMOSTAT WIRING AT MOTOR J-BOXES.
LOAD SUMMARY

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<th>LOAD</th>
<th>DESCRIPTION</th>
<th>MAIN A HP</th>
<th>MAIN A AMPS</th>
<th>MAIN B HP</th>
<th>MAIN B AMPS</th>
<th>SWING CB (AMPS)</th>
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<td>PRIMARY PUMP A4 - VFD</td>
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</tr>
<tr>
<td>HTR1</td>
<td>10 KW HEATER 1</td>
<td>13</td>
<td>20</td>
<td>13</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>HTR2</td>
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</tbody>
</table>

TOTAL CONNECTED LOAD (AMPS) 
MAIN A: 1409 AMPS
MAIN B: 1409 AMPS

TOTAL CONNECTED LOAD (kVA) 
MAIN A: 1171 kVA
MAIN B: 1171 kVA

MINIMUM SIZE TRANSFORMER RECOMMENDED = 2 x 1500 kVA (TRANSFORMERS A AND B)