MILL ROAD STORMWATER PUMP STATION REHABILITATION CITY OF LEWISTON

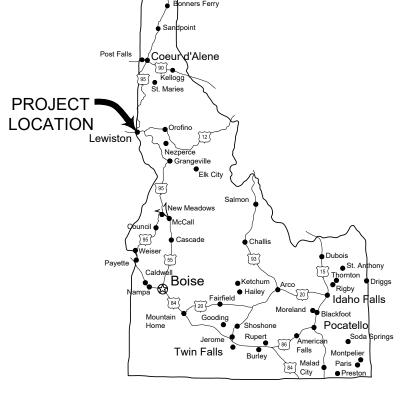
LEWISTON, IDAHO

JUNE 2019

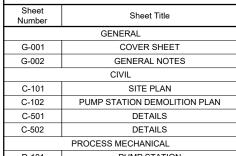
Clearwater LOCATION Rivel d Ave 26th St 4th Aye © 2019 Microsoft Corporation © 2019 HERE

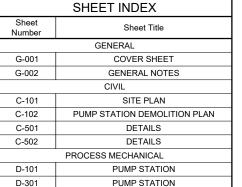
SITE MAP

PROJECT NO. 21-18-028



AREA MAP







ENGINEER:

201 South Jackson Street, Moscow, ID 83843 p 208 746 9010 w www.jub.com

OTHER J-U-B COMPANIES





OWNER:

CITY OF LEWISTON 215 D STREET STE. B P.O. BOX 617 LEWISTON, IDAHO 83501 TELEPHONE: (208) 746-1316

ENGINEERING PROJECT SUPERVISOR: JOE KAUFMAN. PE



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SHEET NUMBER G-001

GENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION," 2017 EDITION, AND THE CONTRACT DOCUMENTS, IN THE CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENT(S) SHALL PREVAIL.
- 2. RETAIN AND PROTECT ALL STRUCTURES, UTILITIES, ANCHORS AND OTHER SURFACE IMPROVEMENTS (E.G. CONCRETE AREAS, ASPHALT PAVEMENT, GRAVEL AREAS, ETC.), UNLESS OTHERWISE NOTED. REPAIR OR REPLACEMENT DUE TO DAMAGE DURING CONSTRUCTION SHALL BE AT NO COST TO THE OWNER.
- 3. CONTRACTOR SHALL PROVIDE UNINTERRUPTED EMERGENCY VEHICLE ACCESS THROUGH PROJECT WORK AREA AT ALL TIMES.
- 4. UNLESS OTHERWISE INDICATED, CONSTRUCT FINAL GRADE TO MATCH EXISTING GRADE.
- ALL MATERIALS REMOVED FROM PROJECT SHALL BE LEGALLY DISPOSED OF.
- PROVIDE A MINIMUM OF 48 HOURS NOTICE TO OWNER AND ENGINEER PRIOR TO COMMENCING ANY WORK ACTIVITIES. NOTICE TO HOMEOWNERS OR BUSINESSES AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE PROVIDED 48 HOURS IN ADVANCE.
- 7. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY PRIOR TO STARTING WORK NEAR ANY FACILITIES AND SHALL COORDINATE WORK WITH COMPANY REPRESENTATIVES. FOR EXISTING UTILITY LOCATIONS, CONTACT "CALL BEFORE YOU DIG" AT 1-800-342-1585 AT LEAST 48 HOURS PRIOR TO STARTING ANY EXCAVATIONS. COORDINATE SPECIFICALLY WITH AVISTA FOR HIGH PRESSURE GAS LINE AND POWER POLE ANCHORS.CONTACT TED BOYLE: (208) 794-0876.
- 8. WORK SHALL NOT BEGIN UNTIL A NOTICE TO PROCEED IS ISSUED BY THE CITY OR ENGINEER AND ALL NECESSARY PERMITS ARE OBTAINED
- 9. THE CONTRACTOR SHALL HAVE AN APPROVED SET OF IMPROVEMENT PLANS ON THE JOB SITE AT ALL TIMES.
- 10. IF ANY EXCAVATIONS ARE REQUIRED WITHIN PUBLIC EASEMENTS, COMPACTION TEST RESULTS SHALL BE SUBMITTED TO THE PROJECT ENGINEER AND THE CITY BY A QUALIFIED ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS COMPACTED AS REQUIRED IN ACCORDANCE WITH ISPWC.
- 11. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE
- 12. ALLOW OWNER TO MAINTAIN STORMWATER PUMPING SERVICE WITH THE USE OF BYPASS PUMPING(SEE TECHNICAL SPECIFICATIONS). BYPASS PUMPING IS NOT ANTICIPATED TO REQUIRE CONTINUOUS OPERATION, BUT IS REQUIRED TO BE INSTALLED AND IN STANDBY MODE FOR USE IN STORM EVENTS. OWNER WILL WORK WITH CONTRACTOR TO COORDINATE PLANNED OUTAGES.
- 13. THE PROJECT AREA SHOWN ON PLANS WITHIN THE WORK LIMITS IS LESS THAN ONE ACRE. WORK OUTSIDE THE WORK LIMITS MAY INCREASE THE AREA TO BE GREATER THAN ONE ACRE. FOR PROJECTS GREATER THAN ONE ACRE IN SIZE AND HAVING THE POTENTIAL FOR RUNOFF DISCHARGES TO ANY SURFACE WATER BODY: THE CONTRACTOR SHALL FILE A NOTICE OF INTENT (NOI) AND A STORMWATER POLLUTION PREVENTION PLAN WITH THE EPA.
- 14. PROVIDE TRAFFIC CONTROL AND BARRICADES AS REQUIRED BY CITY.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, IN ACCORDANCE WITH THE M.U.T.C.D., CURRENT EDITION. AT LEAST 48 HOURS PRIOR TO DISRUPTION OF ANY TRAFFIC, TRAFFIC CONTROL PLANS SHALL BE PREPARED AND SUBMITTED TO THE CITY AND ENGINEER FOR APPROVAL. NO WORK SHALL COMMENCE UNTIL A PERMIT IS ISSUED AND ALL APPROVED TRAFFIC CONTROL IS IN PLACE.
- 16. THE CONTRACTOR SHALL MAINTAIN THE STREETS, CURBS, AND ALL OTHER PUBLIC RIGHTS-OF-WAY IN A CLEAN, SAFE AND USEABLE CONDITION. ALL SOIL, ROCK, OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION, AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE AND USEABLE CONDITION.
- 17. ALL OPERATIONS CONDUCTED ON THE PREMISES SHALL BE RESTRICTED TO THE HOURS BETWEEN 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE APPROVED BY THE CITY IN WRITING. THIS INCLUDES THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTHMOVING EQUIPMENT CONSTRUCTION EQUIPMENT, SNOW REMOVAL, OR ANY OTHER ASSOCIATED EQUIPMENT
- 18. ALL PIPE AND FITTINGS SHALL HAVE RESTRAINED JOINTS.
- 19. OWNER RESERVES THE RIGHT TO SALVAGE ITEMS NOTED FOR DEMOLITION.
- 20. CONCRETE WORK SHALL BE PER ISPWC DIVISION 700. CONCRETE CLASS SHALL BE 4000A PSI PER SECTION 703 FOR FILLET IN THE BOTTOM OF THE WET WELL. CONCRETE SHALL BE 4000B PSI PER SECTION 703 FOR THE NEW WET WELL LID IF THE CONTRACTOR OPTS FOR A CAST-IN-PLACE LID.
- 21. CITY OF LEWISTON WILL PERFORM THE WET WELL CLEANING, INCLUDING BOTH INITIAL REMOVAL AND WASH DOWN

STORMWATER SYSTEM NOTES:

- 1. NO DISRUPTION OF EXISTING STORMWATER SERVICES WHILE MAKING CONNECTIONS WILL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF CITY.
- 2. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF MAINLINES, FORCEMAINS, AND SERVICES AS NEEDED TO COMPLETE THE WORK. WHEN CITY STAFF IS AVAILABLE, THE CONTRACTOR MAY REQUEST ASSISTANCE FROM THE CITY TO LOCATE MAINLINES, FORCEMAINS, AND SERVICE LINES.
- 3. PUMP STATION MECHANICAL MATERIAL/EQUIPMENT SHOWN IS SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR CORRECT QUANTITIES AND PIPE SPOOL LENGTHS AS REQUIRED FOR A FULL FUNCTIONAL INSTALLATION. VERIFY ALL DIMENSIONS (BOTH VERTICAL AND HORIZONTAL). VERIFY MANUFACTURER'S CONNECTION DETAILS AND INSTALLATION REQUIREMENTS. PROVIDE A DIMENSIONED DRAWING SHOWING ALL VALVES, GATES, FITTINGS, AND PIPE SPOOLS WITH SHOP DRAWING SUBMITTAL. COORDINATE ALL WORK WITH RELATED TRADES TO AVOID CONFLICTS.
- INSTALL EQUIPMENT IN STRICT ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND MANUFACTURERS RECOMMENDATIONS.
- 5. PROTECT ROAD SECTIONS (INCLUDING GRAVEL SHOULDER) ADJACENT TO THE SITE, UNLESS NOTED OTHERWISE. DAMAGE BY CONTRACTORS OPERATIONS SHALL BE REPAIRED AT CONTRACTORS EXPENSE
- UNLESS NOTED OTHERWISE, ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON CLASS 53 OR STRONGER AND HAVE INTERNAL LINING OF CEMENT MORTAR. COAT EXTERIOR SURFACES WITH ASPHALTIC COATING 1 MIL MINIMUM THICKNESS, PER ANSI/AWWA C151/A21.51 AND ANSI/AWWA C110/A21.10.
- 7. ALL BOLTS, NUTS, WASHERS, FASTENERS, ETC., BRACE MATERIAL INSTALLED IN MOIST OR CORROSIVE ENVIRONMENT SHALL BE STAINLESS STEEL, TYPE 316. BURIED PIPE AND FITTING HARDWARE AND MATERIALS SHALL BE STANDARD UNLESS ATTACHING TO STRUCTURES, INSIDE VALVE VAULT, INSIDE WETWELL OR OTHERWISE CALLED OUT.
- 8. NOT ALL FEATURES ARE SHOWN IN BOTH PLAN AND SECTION VIEWS FOR CLARITY.
- SOME ITEMS IN SECTION VIEW ARE ROTATED FOR CLARITY.
- 10. CLEAN, PRIME, AND PAINT ALL EXPOSED METAL, PIPING VALVES, AND FITTINGS WITHIN WETWELL (SEE TECHNICAL SPECIFICATIONS).

AGENCY AND ENTITY CONTACTS

CITY OF LEWISTON (JOE KAUFMAN, PE, ENGINEERING PROJECT SUPERVISOR). ..(208) 746-1316 CITY OF LEWISTON SHERIFF .911 or (800) 799-3131 **AMBULANCE** FIRE DEPARTMENT ..911 or (208) 743-3554 DIGLINE 811 IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (MICHAEL CAMIN, P.E.). .(208) 799-4370 (CALL CENTER)..

	KEYED NOTES:	
N1	EXISTING ELECTRICAL, SEE ELECTRICAL DRAWINGS.	1
N2	RETAIN AND PROTECT EXISTING SIDEWALK AND ROADWAY.	
N3	REMOVE AND DISPOSE OF EXISTING HATCH, VAULT LID, AND ACCESSORIES.	
N4	REMOVE AND DISPOSE OF EXISTING RAILS, PADS, AND APPURTENANCES FROM PUMP SUCTION TO DISCHARGE LINE FLANGES NEAR BASE OF EXISTING CONTROL VALVE BOX LID. SALVAGE PANEL PUMPS AND MOTORS TO CITY OF LEWISTON.	YRIGHT AND
N5	COORDINATE WITH CITY TO VERIFY DELIVERY TIME AND LOCATION OF SALVAGED ITEMS.	OPYR)
N6	NOT USED.	0
N7	DEMOLISH AND DISPOSE OF EXISTING WET WELL PUMP CABINET AND SKID AND ACCESSORIES. REPLACE WITH NEW REINFORCED CONCRETE LID.	INGS TATUTORY
N8	PROPOSED VALVE VAULT.	N S
N9	DEMOLISH EXISTING DISCHARGE LINE TO ALLOW INSTALLATION OF VALVE VAULT, RETAIN AND PROTECT WET WELL PENETRATION.	REUSE OF D
N10	SAWCUT EXISTING CONCRETE PIPE TO PROVIDE A NEAT CLEAN EDGE FOR RECONNECTION. CONTRACTOR TO COORDINATE CONNECTION TO EXISTING DISCHARGE LINE WITH THE ENGINEER.	AL CON

.(800) 227-9137



South Jackson Stre Moscow, ID 83843 J-U-B ENGINEERS, 201

> 90% SUBMITTAL NOT FOR CONSTRUCTION

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PUMP STATION REHABILITATION F LEWISTON GENERAL NERAL NOT STORMWATER F

MILL ROAD DRAWN BY: ALH

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SHEET NUMBER

G-002

KEYED NOTES:

- N1 EXISTING ELECTRICAL, SEE ELECTRICAL DRAWINGS.
- N2 RETAIN AND PROTECT EXISTING SIDEWALK AND ROADWAY.
- DEMOLISH AND DISPOSE OF EXISTING WET WELL PUMP CABINET AND SKID AND ACCESSORIES. REPLACE WITH NEW REINFORCED CONCRETE LID.
- N8 PROPOSED VALVE VAULT.

SITE MAP

SCALE:NTS

GENERAL NOTES:

- ALL LOCATIONS OF UNDERGROUND UTILITIES AND DEPICTED FEATURES ARE APPROXIMATE. CONTRACTOR TO ESTABLISH LOCATIONS OF ALL SITE UTILITIES AND FEATURES ARE APPROXIMATE. CONTRACTOR TO ESTABLISH LOCATIONS OF ALL SITE UTILITIES AND FEATURES.

 R-O-W IS VERY NEAR THE NORTH EDGE OF THE EXISTING WET WELL AND DISCHARGE LINE. CONTRACTOR IS TO COMPLETE WORK WITHIN THE R-O-W. DISCHARGE LINE TERMINATION IS ±1,000 FEET WEST SOUTH WEST AT
- STORMWATER RIVER OUTLET STRUCTURE.



LEGEND

REMOVE AND DISPOSE PER LOCAL, STATE, AND FEDERAL

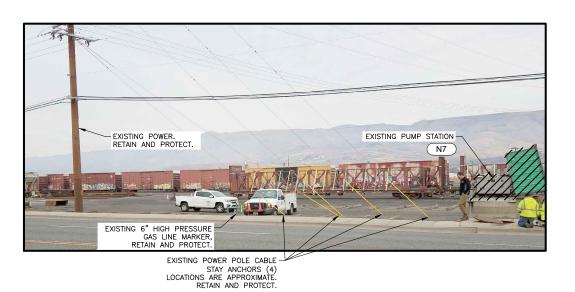
NOTES:

SALVAGE TO CITY OF LEWISTON THE PANEL, PUMPS, AND

1 PHOTO DETAIL

SCALE:NTS







MILL ROAD STORMWATER PUMP STATION REHABILITATION CITY OF LEWISTON

CIVIL SITE PLAN

J-U-B ENGINEERS, INC.

201 South Jackson Street Moscow, ID 83843

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ONE INCH |
AT FULL SIZE, IF NOT ONI

SHEET NUMBER: C-101

\PHOTO DETAIL

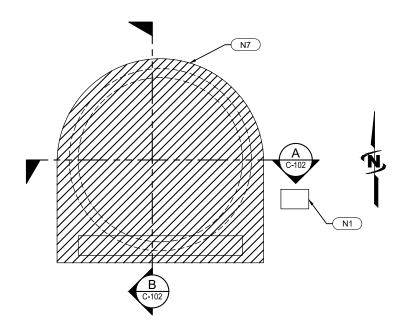
LEGEND

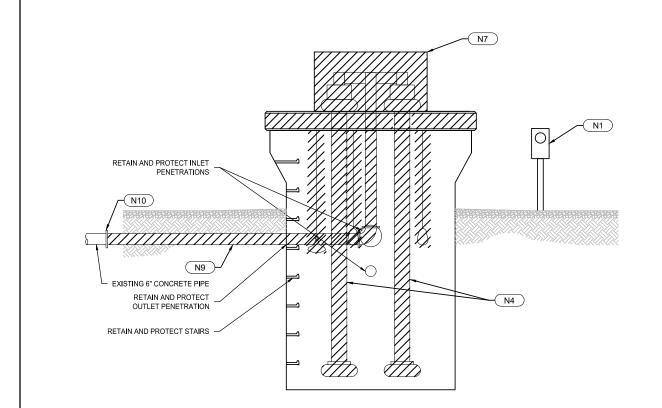
REMOVE AND DISPOSE PER LOCAL, STATE, AND FEDERAL REGULATIONS

GENERAL NOTES:

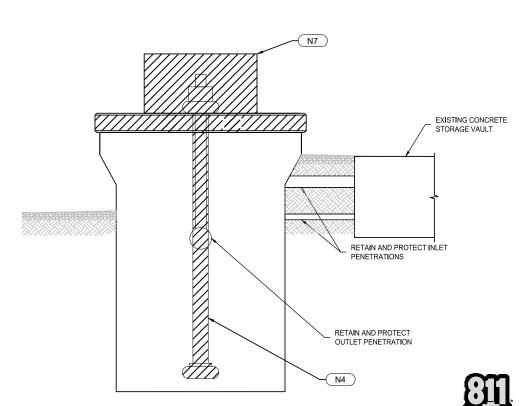
- 1. REFER TO ELECTRICAL SHEETS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- 2. COORDINATE ALL DEMOLITION WITH BYPASS PUMPING TO MAINTAIN UNINTERRUPTED SERVICE.

	KEYED NOTES:
N1	EXISTING ELECTRICAL, SEE ELECTRICAL DRAWINGS.
N4	REMOVE AND DISPOSE OF EXISTING RAILS, PADS, AND APPURTENANCES FROM PUMP SUCTION TO DISCHARGE LINE FLANGES NEAR BASE OF EXISTING CONTROL VALVE BOX LID. SALVAGE PANEL PUMPS AND MOTORS TO CITY OF LEWISTON.
N7	DEMOLISH AND DISPOSE OF EXISTING WET WELL PUMP CABINET AND SKID AND ACCESSORIES. REPLACE WITH NEW REINFORCED CONCRETE LID.
N9	DEMOLISH EXISTING DISCHARGE LINE TO ALLOW INSTALLATION OF VALVE VAULT, RETAIN AND PROTECT WET WELL PENETRATION.
N10	SAWCUT EXISTING CONCRETE PIPE TO PROVIDE A NEAT CLEAN EDGE FOR RECONNECTION. CONTRACTOR TO COORDINATE CONNECTION TO EXISTING DISCHARGE LINE WITH THE ENGINEER.





A PUMP STATION DEMOLITION SECTION



B PUMP STATION DEMOLITION SECTION

Know what's **below**.

SHEET NUMBER: C-102

ONE INCH =

MILL ROAD STORMWATER PUMP STATION REHABILITATION
CITY OF LEWISTON
CITY OF LEWISTON

CIVIL PUMP STATION DEMOLITION PLAN

J-U-B ENGINEERS, INC.

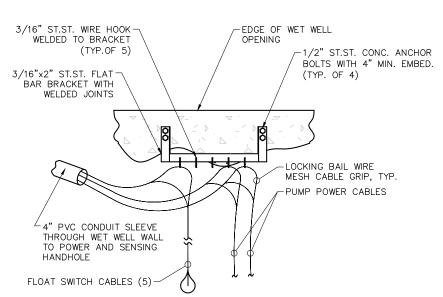
201 South Jackson Street Moscow, ID 83843

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J-U-B ENGINEERS, INC.

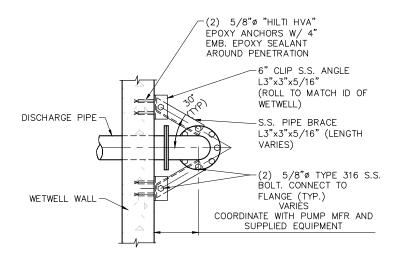
DEMOLITION SITE PLAN

SCALE:NTS



NOTES:

- 1. SEE LIFT STATION MECHANICAL PLAN FOR PROPER ORIENTATION.
- 2. FIELD ADJUST TO AVOID CONFLICTS WITH PUMP REMOVAL AND TO OPTIMIZE FLOAT SWITCH PERFORMANCE.
- 3. PROVIDE DIMENSIONED SHOP DRAWING SUBMITTAL.

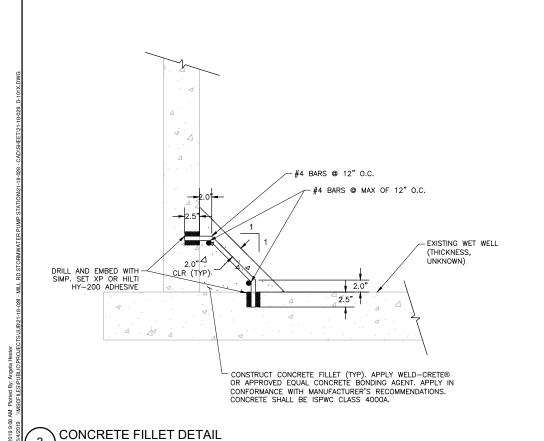


PLAN VIEW

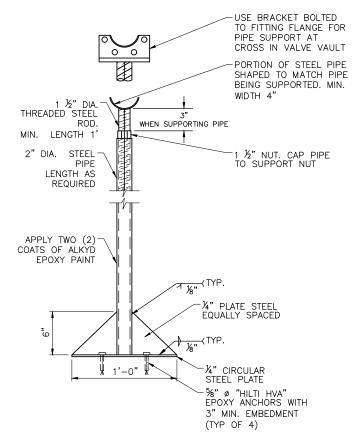
NOTES:

- 1. MATERIALS TO BE STAINLESS STEEL.
- 2. TOP SUPPORT MUST PROVIDE THRUST RESTRAINT.

THRUST RESTRAINT PIPE SUPPORT DETAIL SCALE:NOT TO SCALE



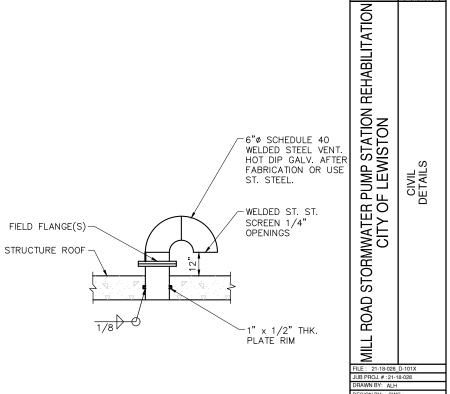
CABLE SUPPORT BRACKET DETAIL



TYP. STEEL PIPE SUPPORT DETAIL

SCALE:NOT TO SCALE





Know what's **below**. C-501 Call before you dig.

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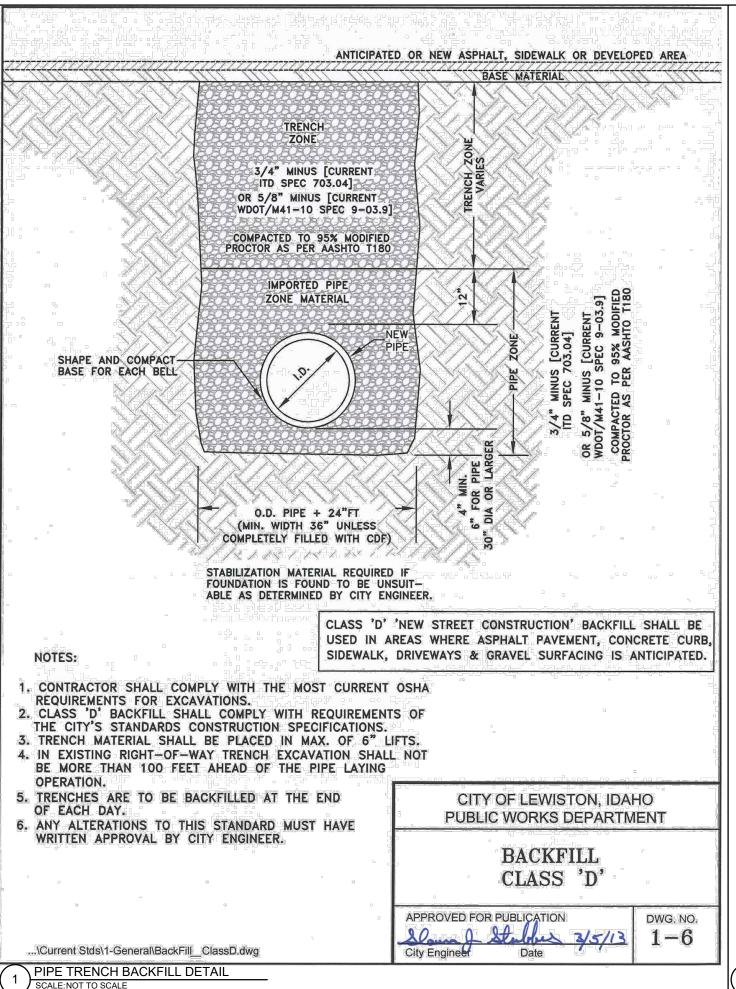
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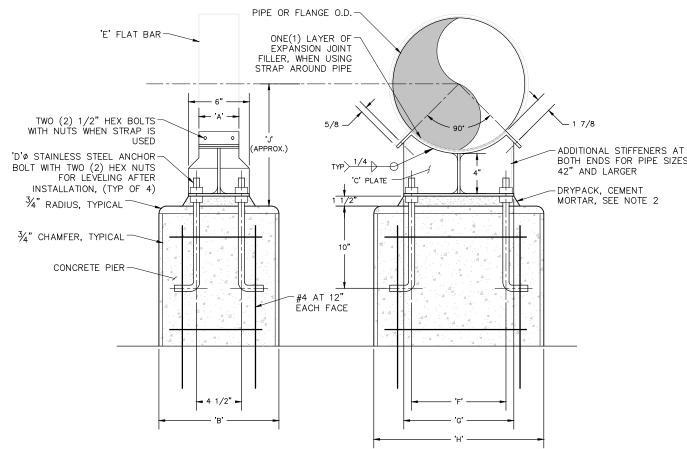
SCALE: NOT TO SCALE



NOTES:

- WHEN SUPPORTING PIPE AND FLANGE ALTERNATELY ON THE SAME LINE CONCRETE PIERS FOR PIPE SUPPORTS SHALL ALL HAVE THE SAME DIMENSION 'H' FOR FLANGE SUPPORT.
- WHERE DIFFERENTIAL SETTLEMENT IS LIKELY TO OCCUR, OMIT AS DIRECTED BY THE ENGINEER.
- HOT DIP GALVANIZE ENTIRE ASSEMBLY AFTER FABRICATION.

				DII	MENS	IONS	IN INC	HES					
									SUPPO	RTING			
NOMINAL PIPE SIZE							PI	PE			FLA	NGE	
1 11 2 0122	Α	В	С	D	Е	F	G	Н	J	F	G	Н	J
4 & 6	4	12	¾	%	1/4	4½	6	12	10	6½	9	16	13
8	4	12	3⁄8	5/8	1/4	5	8	13	11	71/2	9	16	14
10	4	12	3⁄8	5%	1/4	6	9	15	12	9	13	18	15
12	4	12	%	%	1/4	7	11	17	13	10	15	20	16
14	4	12	¾	%	1/4	8	12	17	14	11	16	21	17
16	4	12	¾	%	1/4	9	13	19	15	12	18	24	18
18	4	12	¾	%	1/4	10	14	20	16	13	19	24	19
20	5	12	%	5%	<i>¾</i>	10	15	21	17	15	21	26	21
22	5	12	%	%	3 %	12	18	24	18	16	23	28	22
24	5	12	¾	%	%	13	19	24	19	16	24	30	23
26	5	12	¾	3/4	%	14	21	27	20	18	26	32	24
30	5	12	¾	3/4	¾	15	23	28	22	20	29	34	26
34	5	15	3⁄8	3⁄4	3%	18	26	32	24	22	33	39	29
36	6	15	3⁄8	3/4	3⁄8	19	27	32	25	24	34	40	30
42	6	18	1/2	1	<i>¾</i>	21	31	36	28	27	39	45	33



CONCRETE PIPE SUPPORT DETAIL SCALE:NOT TO SCALE



J-U-B ENGINEERS, INC 201 South Jackson Stree Moscow, ID 83843

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MILL ROAD STORMWATER PUMP STATION REHABILITATION CITY OF LEWISTON

ONE INCH |

SHEET NUMBER C-502

what's **below**. Call before you dig.

CONSTRUCTION NOTES:

1. INITIAL LEVEL CONTROLLER SETTINGS (FIELD ADJUST TO OPTIMIZE PERFORMANCE AS REQUIRED):

ELEVATION FROM BOTTOM WET WELL (FEET)	CONTROLLER FUNCTION FOR RISING LEVEL	CONTROLLER FUNCTION FOR FALLING LEVEL
6.50 6.00 5.50	HIGH WATER ALARM ON LAG PUMP ON LEAD PUMP ON	HIGH WATER ALARM OFF
2.50		BOTH PUMPS OFF AND ALTERANATE LEAD/LAG
2.00 I	LOW WATER ALARM OFF I	IOW WATER ALARM ON

- INSTALL PUMP AND ALL RELATED PUMP EQUIPMENT IN STRICT ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND MANUFACTURERS RECOMMENDATIONS.
- INSTALL EXPANSION JOINT MATERIAL BETWEEN CONCRETE STRUCTURES AND ANY CONCRETE SLABS.
- SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR CONTROL PANEL LOCATION AND REQUIREMENTS.
- CONTRACTOR TO FIELD MEASURE AND PROVIDE A PRE-CAST CONCRETE LID FOR THE EXISTING WET WELL WITH ACCESS HATCH, VENT, HOIST BRACKET AND ACCESSORIES. CONTRACTOR SHALL SUBMIT STAMPED STRUCTURAL DESIGN DRAWINGS AND CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF IDAHO PRIOR TO PURCHASE OR INSTALLATION. THE LID SHALL SUPPORT A LIVE LOAD OF 100 PSF. AT THE CONTRACTOR'S OPTION CONTRACTOR CAN DESIGN AND PROVIDE A CAST-IN-PLACE CONCRETE LID INCORPORATING REQUIRED EQUIPMENT. FOR THE DESIGN OF CAST-IN-PLACE LID, THE CONTRACTOR SHALL SUBMIT STAMPED STRUCTURAL DESIGN DRAWINGS AND CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF IDAHO PRIOR TO PURCHASE OF INSTALLATION. THE LID SHALL SUPPORT A LIVE

KEYED NOTES (PROCESS MECHANICAL):

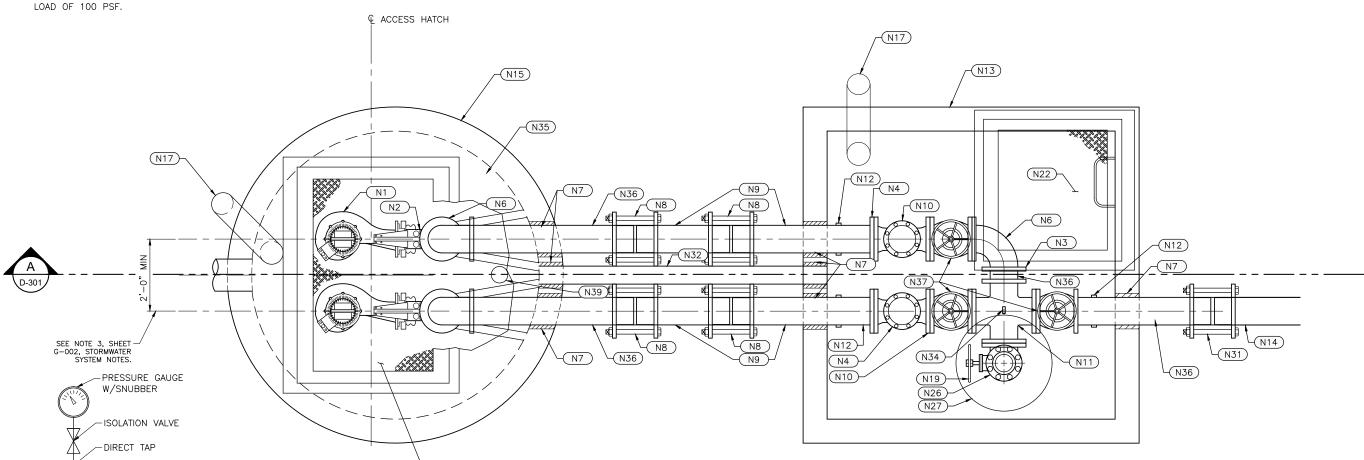
- (N1) SUBMERSIBLE PUMP
- N2 4" PUMP QUICK DISCONNECT DISCHARGE ELBOW AND MOUNTING BASE WITH EPOXY-SET ST.ST. ANCHOR BOLTS, VERIFY SIZE WITH PUMP MFTR.
- N3 6" UNI-FLANGE (MEGA-LUG)
- N4 6" RESTRAINED FLANGE COUPLING ADAPTER
- N5 4" PIPE SPOOL (FLGxPE)
- N6 6" 90° LONG RADIUS ELBOW (FLGxFLG)
- (N7) WATERTIGHT WALL PENETRATION, MANHOLE ADAPTER "A-LOK", "KOR-N-SEAL" OR EQUIVALENT
- N8 DUAL 6" FLEXIBLE SLEEVE-TYPE PIPE COUPLINGS
- N9 6" PIPE SPOOL (PExPE)
- N10 6" RUBBER FLAPPER SWING CHECK VALVE (EPOXY OR RUBBER LINED) (FLGxFLG)
- N11) 6"x6" CROSS (FLG)

N20

- (N12) STEEL VALVE/PIPE SUPPORT, SEE DETAIL
- N13 6'-0"x6'-6" HIGH PRECAST CONCRETE VALVE VAULT WITH PLASTIC COATED STEPS. 6" MIN. WALL THICKNESS. HS-20 RATED. MODIFY OPENINGS AS REQ'D TO ACCOMMODATE PIPING AND ACCESS HATCH AS SHOWN. COAT EXTERIOR WITH WATERPROOFING
- (N14) EXISTING 6" CONCRETE FORCEMAIN
- (N15) EXISTING 60"Ø PRECAST CONCRETE MANHOLE. MANHOLE LID IS 84"ø.

- $\overline{\mbox{N16}}$ Stainless steel pump removal system, complete with mounting brackets.
- (N17) SCREENED VENT, SEE DETAIL
- (N18) EXISTING STORMWATER INLETS.
- N19 4" PLUG VALVE WITH HANDWHEEL (FLGxFLG)
- (N20) 30"x48" MIN. ALUMINUM DOUBLE LEAF ACCESS DOOR WITH STAINLESS STEEL HARDWARE AND SAFETY GRATE OPENING DIMENSIONS AND DOOR LOCATION SHALL BE IN ACCORDANCE WITH PUMP MANUFACTURERS
 REQUIREMENTS. HATCH SHALL BE RATED FOR 100PSF
 LIVE LOAD AND WATER-TIGHT. PROVIDE RECESSED, LOCKABLE HASP COVERED WITH HINGED LID FLUSH WITH SURFACE. INSTALL DOOR SUCH THAT ENTRY SYSTEM IS NOT IN CONFLICT WITH DOOR. USE HALLIDAY OR APPROVED EQUAL. PLUMB HATCH RIM DRAIN TO WFTWFII.
- (N21) STAINLESS STEEL LIFTING CHAIN OR CABLE (MIN. STRENGTH 6,000 LBS.) WITH S.S. CLEVIS FITTING AT
- N22 30"x30" MIN. ALUMINUM SINGLE LEAF ACCESS DOOR WITH STAINLESS STEEL HARDWARE AND SAFETY GRATE. HATCH SHALL BE HS-20 TRAFFIC RATED AND WATER-TIGHT. PROVIDE RECESSED, LOCKABLE HASP COVERED WITH HINGED LID FLUSH WITH SURFACE. INSTALL DOOR SUCH THAT ENTRY SYSTEM IS NOT IN CONFLICT WITH DOOR. PLUMB HATCH RIM DRAIN TO VAULT FLOOR DRAIN. USE HALLIDAY OR APPROVED
- (N23) CABLE SUPPORT BRACKET. SEE DETAIL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- (N24) THRUST RESTRAINT PIPE SUPPORT, SEE DETAIL.

- $\stackrel{\hbox{\scriptsize (N25)}}{}$ CRUSHED AGGREGATE ($^3\!\!4''$ MINUS) COMPACTED TO 95% ASTM D-1557 OR MODIFIED PROCTOR
- N26 4" ALUM. CAM-LOCK FITTING WITH PRESSURE CAP
- N27) 24"Ø LOCKABLE MANHOLE LID CAST IN TOP SLAB.
- CENTER OVER CAM-LOCK FITTING
- N28 6"x4" REDUCER.
- N29 NOT USED.
- N30 4" FLAP CHECK VALVE.
- (N31) 6"x6" COUPLER FROM DIP TO CONCRETE PIPE.
- (N32) 4" PVC DRAIN TO WETWELL SLOPED AT 2% MIN.
- N33 FLOAT SWITCHES AND BRACKET. SEE DETAIL. SEE ELECTRICAL DRAWING FOR ADDITIONAL REQUIREMENTS.
- (N34) PRESSURE GAUGE ASSEMBLY (SEE DETAIL THIS SHEET)
- N35) NEW CONCRETE LID. SEE NOTE 5 (THIS SHEET). VERIFY EXISTING CONCRETE CONDITIONS WITH PROJECT ENGINEER PRIOR TO PROCUREMENT.
- N36 6" PIPE SPOOL (FLGxPE)
- N37 6" PLUG VALVE HANDWHEEL (FLGxPE)
- N38) CONCRETE VALVE/PIPE SUPPORT. SEE DETAIL.
- (N39) PUMP HOIST BRACKET.
- N40 BACKFILL PIPE TRENCH PER CITY OF LEWISTON'S STANDARD DWG 1-6, "BACKFILL CLASS D". SEE SHEET



PUMP STATION - MECHANICAL PLAN

"=1'-0" at Full Scale

PRESSURE GAUGE

ASSEMBLY

Know what's **below**.

JUB J-U-B ENGINEERS, INC

201 South Jackson Stree Moscow, ID 83843

J-U-B ENGINEERS,

90% SUBMITTAL NOT FOR CONSTRUCTION

STORMWATER PUMP STATION REHABILITATION CITY OF LEWISTON

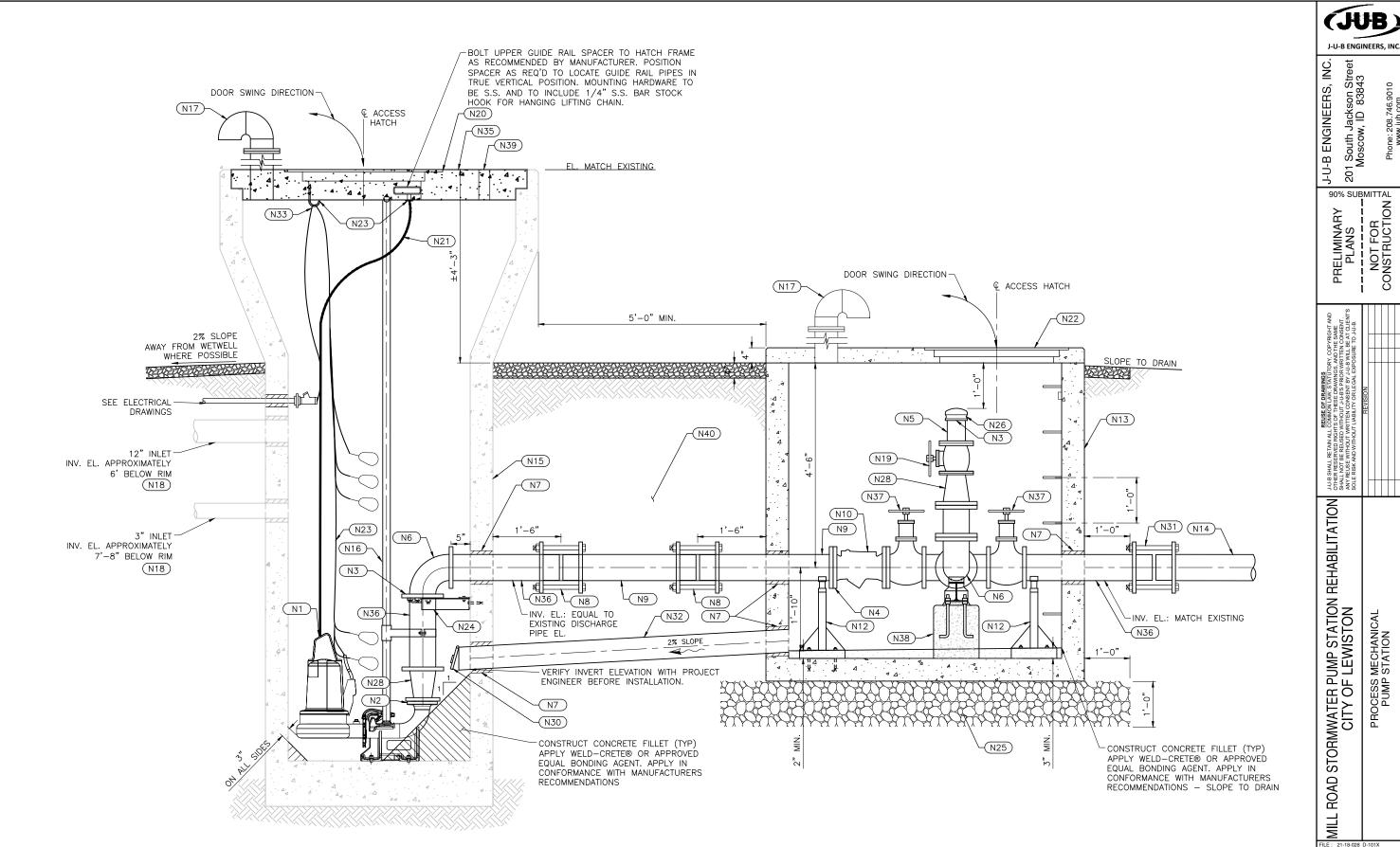
PROCESS MECHANICAL PUMP STATION

MILL ROAD RAWN BY: ALH

AT FULL SIZE, IF NOT O

SHEET NUMBER

D-101





201 South Jackson Street Moscow, ID 83843

PROCESS MECHANICAL PUMP STATION

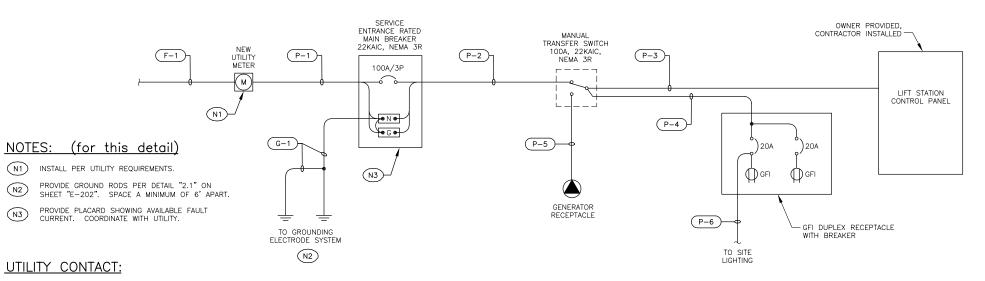
HECKED BY: CRB ONE INCH AT FULL SIZE, IF NOT ON INCH, SCALE ACCORDING

SHEET NUMBER:

D-301

LIFT STATION - MECHANICAL SECTION SCALE:0 6" 1'-0" 1"=1'-0" at Full Scale

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMI	BOL	DESCRIPTION	ABBREVIATIONS	REFERENCE	SYMBOLS	
			CONDUIT EXPOSED	SCHEMATIC	PLAN				EQUIPMENT CALLOUT P 3EE N EQUIPMENT CALLOUT	
	LED LUMINAIRE, WITH EMERGENCY BATTERY PACK		CONDUIT UNDER FLOOR OR UNDERGROUND TYPE—SOOW CABLE		•	GROUND ROD IN GROUND ROD BOX	A,AMP — AMPERE AL — ALARM AC — AIR COMPRESSOR AF — AMPERE FRAME	PV-1 N VAULT CALLOUT N-NEW E-EXISTING F-FUTURE	N-NEW F-EXISTING RATE OF THE PROPERTY OF THE P	J-U-B ENGINEERS, INC.
	LED LUMINAIRE	——EX——————————————————————————————————	EXISTING CONDUIT ROUTED UNDERGROUND UNDERGROUND PRIMARY POWER	₩ Jh	T	TRANSFORMER, PLAN VIEW SHOWN TO SCALE	AFF — ABOVE FINISHED FLOOR AFG — ABOVE FINISHED GRADE AFS — AMPERE FUSE AI — ANALOG INPUT POINT (PLC)	R-REPLACE	1038 V A SAN	Stree 343
		~~~~	MC-HL CABLE WITH XP SEAL FITTINGS  CONDUIT FLEXIBLE	£3	СТ	CURRENT TRANSFORMER, NUMBER INDICATES NUMBER OF C.T.'S. PLAN VIEW SHOWN TO SCALE	R AIC — AMPS INTERRUPTING CÀPAĆITY AIL — AMBER INDICATING LIGHT ALT — ALTERNATOR	DUCT BANK CALLOUT	DETAIL NUMBER OR SECTION LETTER  DETAIL/SECTION 2	<b>호</b> I 때 关으 ' 도리
0	LED LUMINAIRE	~	HEAT TAPE ON PIPING	(10)	M	MOTOR, NUMBER INDICATES HORSEPOWER	AO — ANALOG OUTPUT POINT (PLC) AS — AMPERE SWITCH AT — AMPERE TRIP ATS — AUTOMATIC TRANSFER SWITCH	CONDUIT IDENTIFICATION  (F-1) POWER FEEDER CONDUIT &	SCALE SHEET WHERE DETAIL	ENGINEI Outh Jack Iscow, ID
			MANUFACTURERS CORD/CABLE  CONDUIT TURNED UP OR TOWARD	4	ОТ	OVERTEMPERATURE CUTOUT	BC — BATTERY CHARGER BH — BLOCK HEATER BIL — BLUE INDICATING LIGHT	P-1 POWER & CONTROL CONDUIT & WIRE TAG, SEE SCHEDULE	IS TAKEN FROM	1-B El Mosc
	LED LUMINAIRE, WITH EMERGENCY BATTERY PACK	——— ¬	CONDUIT TURNED DOWN OR AWAY  CONDUIT CAPPED	CP H	XXXX	LOCAL EQUIPMENT CONTROL PANEL - MCP, LCP, FACP	BP — BYPASS CONTACTOR C — CONDUIT (GRS) CB — CIRCUIT BREAKER CGD — COMBUSTIBLE GAS DETECTOR	C-1 CONTROL CONDUIT & WIRE TAG SEE SCHEDULE SIGNAL CONDUIT & WIRE TAG, SIGNAL CONDUIT & WIRE TAG,	SECTION LETTER	7-7-7-1
	EMERGENCY WALL PACK		CONDUIT SEALS. CLASS 1. DIV.1 EXPLOSION PROOF	S S S S S	(sv)	SOLENOID VALVE	CP - CONTROL PANEL CPT - CONTROL POWER XFMR CT - CURRENT TRANSFORMER	SEE SCHEDULE  (T-1) TELEPHONE CONDUIT & WIRE TAG	SHEET ON WHICH	CESIONAL EWO
	LED LUMINAIRE, POLE MOUNTED	L-7	CONDUIT HOME RUN 3/4"C, 2#12 & 1#12 GND. TO PANEL L, CKT. 7 UNLESS SHOWN OTHERWISE		M	MAGNETIC MOTOR STARTER (SS—SOLID STATE)	CTL - CONTROL CV - CHECK VALVE DB - DIRECT BURIED	G-1 GROUND ELECTRODE SYSTEM  (R-1) SPARE CONDUIT	SECTION APPEARS  FIGURE OR PHOTO	DRAFT
	ELO COMINANCE, FOLE MOONED	P1	CONDUIT HOME RUN - SEE SCHEDULE			MAGNETIC MOTOR STARTER W/ DISCONNECT  FULL VOLTAGE STARTER/NEMA SIZE  MS = MOTOR STARTER CONTACT	DE — DOUBLE END D.E. — DEAD END DEM — DEMAND DF — DEMAND FACTOR	XXXA LETTER INDICATES CONTINUATION OF CONDUIT XXX. THE LETTER "N"	DETAIL NUMBER	NO TOF LOW OF
ŀ <b>⊗</b> ∱	LIGHTED EXIT SIGN, BACK OR END MOUNTED. SHADED AREA INDICATES FACE. ARROW INDICATES DIRECTIONAL ARROW.	VLT HH1	VAULT/HANDHOLE WITH DESIGNATION	MS = 2	(MS)	BP = BYPASS CONTACTOR IC = ISOLATION CONTACTOR	DI – AC DIGITAL INPUT POINT (PLC) DO – AC DIGITAL OUTPUT POINT (PLC) EF – EXHAUST FAN	SIGNIFIES MULTIPLE CONDUIT CONTINUATIONS.	SHEET WHERE DETAIL IS TAKEN FROM	R. JACO
		J ST	JUNCTION BOX  CKT. BKR, RATING/NO. OF POLES WITH THERMAL		HS	MAINTAINED ON/OFF SWITCH  DISCONNECT SWITCH, NON FUSED	ESD - EMERGENCY SHUTDOWN ESS - EMERGENCY STOP SWITCH EXIST - EXISTING	N1) SHEET KEYED NOTE	LIF PHOTO, ARROW DENOTES DIRECTION TAKEN	AND AND S. S. S. ATE
+¤	LED LUMINAIRE, WALL MOUNTED	30AT 125AF 3P	MAGNETIC CIRCUIT BREAKER TRIP AT = AMPERAGE TRIP AF = AMPERAGE FRAME	100AF	L/ _{60A}	(60A) INDICATES AMPERAGE RATING DISCONNECT SWITCH, FUSED	GFI — GROUND FAULT INTERRUPT GND — GROUND GIL — GREEN INDICATING LIGHT GRS — GALVANIZED RIGID STEEL	WIRING DIAGRAM DETAIL LOCATION	DETAIL NUMBER	OPYRIGHT. THE SAME THE SAME L BE AT CLI RE TO J-U-B APR. D
<b>₩</b>	LED LUMINAIRE, WALL MOUNTED WITH EMERGENCY BATTERY PACK	LSIG	P = POLE LSIG = LONG, SHORT, INSTANTANEOUS GROUND ST = SHUNT TRIP	200AS	200/100	200 = SWITCH RATING, 100 = FUSE RATING TIME DELAYED CONTACTS	H - HOT, HIGH HH - HAND HOLE HMI - HUMAN MACHINE INTERFACE	ADDENDUM NUMBER	XX DETAIL AREA	IS UTORY, CI NGS, AND OLU-BWITTE EXPOSUF
	SPECIAL PURPOSE RECEPTACLE — AS NOTED		TRANSFER SWITCH			(TIME DELAY TO OPEN) (TIME DELAY TO CLOSE)	HOA — HAND-OFF-AUTO HS — HAND SWITCH HTR — HEATER I — INTRUSION SWITCH	WH	EET ON —	DRAWING DRAWING SE DRAWII U-B'S PRIC NISENT BY OR LEGAL
	STEER TO NOTE THE STEER THE STEER THE STEER STEE	——————————————————————————————————————	POWER CAPACITOR  FULL VOLTAGE NON-REVERSING STARTER, NEMA SIZE 1	<b>◆</b> o R	R	INDICATING LIGHT:  A = AMBER G = GREEN W = WHITE  B = BLUE R = RED	IC - ISOLATION CONTACTOR ISR - INTRINSICALLY SAFE RELAY KS - KEY SWITCH			REUSE OF COMMON IN COMMON IN MITHOUT JA RITTEN CO TLABILITY REV REV
$\Rightarrow_{Y}$	DUPLEX RECEPTACLE Y=NOTATIONS FOR ALL RECEPTACLE TYPES: GFI = GROUND FAULT CIRCUIT	VFC VFC	FVR = FULL VOLTAGE REVERSING  VARIABLE FREQUENCY CONTROLLER	A A	R	PUSH TO TEST INDICATING LIGHT TRANSFORMER TYPE	kVARH — KILOVAR HOUR kWH — KILOWATT HOUR L — LOW LCP — LOCAL CONTROL PANEL	SYMBOL DESCRIPTION		TAIN ALL FED RIGH REUSED V THOUTW WITHOUT V THOUTW
	INTERRUPTER (GFCI)  HT = HEAT TRACE RECEPTACLE  W = WEATHER PROOF COVER	IC SSS	SOLID STATE STARTER, REDUCED VOLTAGE	OFF HAND AUTO		LIGHTED PUSHBUTTON  SELECTOR SWITCH:  HOR = HAND/OFF/REMOTE AS = AMP SWITCH	LS — LIMIT SWITCH  N — NEUTRAL  MCC — MOTOR CONTROL CENTER	\$x WALL MOUNTED TOGGLE SWITCH, SINGLE POLE, S	GENERAL NOTES	B SHALL RE IER RESERV ILL NOT BE ILL SE WISK AND
	I = ISOLATED GROUND C = CEILING MOUNTED RECEPTACLE SW= SPLIT CIRCUITING +X"= INDICATES CENTERLINE MOUNTING	BP	WITH ISOLATION & BYPASS CONTACTORS IC = ISOLATION CONTACTOR BP = BYPASS CONTACTOR	oo×	HOA	HOR = HAND/OFF/AUTO VS = VOLT SWITCH ROL = RMOTE/OFF/LOCAL RO = RUN/OFF	MCP — MAIN CONTROL PANEL MESR — MASTER EMERGENCY STOP RELAY MFGR — MANUFACTURER MOV — MOTOR OPERATED VALVE	THROW, MOUNTED AT 48" TO TOP OF PLATE UN OTHERWISE NOTED  X=NOTATIONS FOR SWITCHES:  2 = DOUBLE POLE	1. THIS IS A STANDARD LEGEND SHEET. THEREFORE SOME ABBREVIATIONS OR SYMBOLS THAT APPEAR ON THIS SHEET. MAY NOT BE USED ON THIS PROJECT.	N OTHE SHALL ANY FE SOLE NO.
	HEIGHT ABOVE FINISHED FLOOR OR GRADE		FUSE		EV	EV=ELECTRICAL VAULT, PV=POWER VAULT SV=SIGNAL VAULT	MTR – MOTOR  OFE – OWNER FURNISHED EQUIPMENT  OIT – OPERATOR INTERFACE TERMINAL	2 - DOUBLE FOLE 3 = 3-WAY 4 = 4-WAY D = DIMMER	THE ELECTRICAL PLAN DRAWINGS ARE GENERALLY DIAGRAMMATIC. THE	ATION
	QUAD RECEPTACLE	(AM)	AMMETER (WHM-WATT HOUR METER)  VOLTMETER		HS PB	HAND SWITCH PUSHBUTTON SWITCH. MOMENTARY ON	ORD — OXIDATION REDUCTION POTENTIAL P — PILOT LIGHT PBL — PUSH BUTTON — LIGHTED	K = KEY OPERATED P = SWITCH WITH PILOT LIGHT WP = WEATHER PROOF COVER M = MOTION SENSOR	LOCATION OF EQUIPMENT IS APPROXIMA UNLESS DIMENSIONED. EXACT LOCATION AND ROUTING OF CONDUITS AND	ATE
M		(VM)		(Fy)	ESS	EMERGENCY STOP SWITCH (PUSH/PULL)	PB — PUSH BUTTON PFR — PHASE FAILURE RELAY PS — PRESSURE SWITCH PT — POTENTIAL TRANSFORMER	M = MOTION SENSOR SW = SPLIT CIRCUITING +X" = INDICATES MOUNTING HEIGHT TO TO PLATE, ABOVE FINISHED FLOOR OR GRADE	WIREWAYS SHALL BE GOVERNED BY STRUCTURAL CONDITIONS AND PHYSICAL INTERFERENCES AND BY LOCATIONS OF ELECTRICAL TERMINATIONS ON EQUIPMEN	-   🕺
$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	SURFACE POWER/DATA RACEWAY.	AM (AS)	METER & SWITCH: A = AMP, V = VOLT	- <del>-</del>	PS	PRESSURE SWITCH. NORMALLY CLOSED	PTZ - PAN, TILT, ZOOM PVC - POLY VINYL CHLORIDE (CONDUIT) PWR - POWER	c c INDICATES SWITCHES a & b MOUNTED IN	3. NOT ALL CONDUIT MAY BE SHOWN OR CALLED OUT FOR CLARITY. SEE CONDUI	~   <u>~</u>
	,		CONTROL RELAY  RUN TIME METER/ELAPSED TIME METER		FS	FLOW SWITCH. NORMALLY CLOSED	RHP — RADIANT HEAT PANEL RIL — RED INDICATING LIGHT RR — REMOTE RACK RTM — RUN TIME METER	SELAMIE BOXES WITH SELAMIE GOVERNE	conduit.	
abla	DATA OUTLET	RTM ETM	PHOTO ELECTRIC CELL	—o_to—	ZS	LIMIT SWITCH, NORMALLY OPEN	SA — SURGE ARRESTOR SIG — SIGNAL SPC — SHIFLDED POWER CARLE	\$a, b, c INDICATES MULTIPLE SWITCHES IN GANGED E WITH COMMON COVERPLATE. "a,b,c" INDICAT NUMBER OF INDIVIDUAL SWITCHES AND FIXTURES CONTROLLED.		P SI WIS
E-001, DWG		(PE)				LEVEL SWITCH, CLOSES ON RISING LEVEL TS-TEMP. SWITCH, (SEE DWG. FOR OPERATION)	SSOL – SOLID STATE OVERLOAD RELAY  SS – SOLID STATE OR STAINLESS STEEL  SV – SOLENOID VALVE			PUM F LE
SIM19111-E	THERMOSTAT		PANEL HEATER WITH FAN AND THERMOSTAT	<u>رگ</u>		TC-THERMOCOUPLE, T-THERMOSTAT POTENTIOMETER	STP — SHIELDED TWISTED PAIR STT — SHIELDED TWISTED THREE CONDUCTOR (TRIAD) T — THERMOSTAT	SYMBOL SECURITY SYMI	BOL FIRE PROTECTION	ATER TY O
<u>LIDRAWING</u>	HUMIDISTAT		CONDUCTORS NOT CONNECTED	(I) 7 %	LT	LEVEL (T=TRANSMITTER, E=ELEMENT, S=SWITCH)	TC - THERMOCOUPLE TDOE - TIME DELAY ON ENERGIZATION TDOD - TIME DELAY ON DE-ENERGIZATION	MD MOTION DETECTOR FAC		ORMWA'
AP STATION	CARLE TV COMMENTAL SOUT	<b>→</b>	CONDUCTORS CONNECTED  PULL OUT SWITCH/PLUG-RECEPTACLE CONNECTION	(P)	PT	PRESSURE TRANSMITTER	TR — TRIP RELAY TNI — TELEPHONE NETWORK INTERFACE TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSOR	DC DOOR CONTACTS		STOR
VATER PUMP	CABLE TV CONNECTION POINT		NORMALLY OPEN CONTACT. (WHEN DE-ENERGIZED)	(SI) (FT)	SI FT	SPEED INDICATOR  FLOW TRANSMITTER	UH – UNIT HEATER UTP – UNSHIELDED TWISTED PAIR VFD – VARIABLE FREQUENCY DRIVE	EOL END OF LINE RESISTOR		A
D STORWW	PANELBOARD		NORMALLY CLOSED CONTACT. (WHEN DE-ENERGIZED) THERMAL OVERLOAD RELAY	0-4-0	DS	DOOR SECURITY SWITCH	WIL — WHITE INDICATING LIGHT WP — WEATHER PROOF WS — TORQUE SWITCH PROOF XFMR — TRANSFORMER	KP KEYPAD HS ()-	XX CD FIRE ALARM HORN STROBE, WALL MOUNTED	.   윤
- MILL BOA		SS OL	SOLID STATE OVERLOAD	vs	ws vs	TORQUE SWITCH  VIBRATION SENSOR	XP - EXPLOSION PROOF		XX FIRE ALARM STROBE	FILE: M19111-E-001
N 1111 UUB-11118	TERMINAL	M			cs	CONTROL STATION, SINGLE OR MULTIPLE SWITCHES		F	FIRE ALARM PULL STATION	JUB PROJ. # : 21-18-028  DRAWN BY: TLS  DESIGN BY: SRJ
S:22019:M1:	TERMINAL IN MCP		EXHAUST FAN		MS HTR	MOISTURE SENSOR HEATER		н	FIRE ALARM HORN	CHECKED BY: RJW
5/23/2019 5	TERMINAL REMOTE DEVICE OF DANIEL		GRAVITY LOUVER		RTD	RESISTANCE TEMPERATURE DEVICE				INCH, SCALE ACCORDINGLY LAST UPDATED: 6/5/2019 SHEET NUMBER:
ite Greated:	TERMINAL REMOTE DEVICE OR PANEL	⟨k⟩	KURT KEY INTERLOCK	**************************************		UNIT HEATER				E-001
. 💆										



G-2 GROUNDING ELECTRODE SYSTEM GROUND ROD

MAIN SWITCHBOARD	J LOAD OALOOL	AHON	
120/240 \	/AC, 3Ø, 4w		
		LOAD (VA)	
	ØA	ØΒ΄	ØС
PUMP 1	2,600	2,600	2,600
PUMP 2	2,600	2,600	2,600
LIGHTING	70	70	70
RECEPTACLE	180	180	180
CONTROL POWER	5	5	5
Total Connected Load (VA):	5,455	5,455	5,455
+ 25% of Largest Motor:	650	650	650
Total Code Load (VA):	6,105	6,105	6,105
Total Code Load (Amps):	51	51	51

LOU-B ENGINEERS, INC. 201 South Jackson Street Moscow, ID 83843

J-U-B ENGINEERS, INC.

DRA SOFFR	0/
AND IT. ENT'S	

<u> </u>	J-U-B OTHE SHAL ANY SOLE	REUSE OF DRAWINGS  OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME ALL NOT BE REUSED WITHOUT LAYES PRORNWINGS, AND THE SAME NAM REUSE WITHOUT WRITTEN CONSENT BY JULB WILL BE AT CLIENTS. SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-LU-B.	NY, CC NND T SITTE	PYRIC HE SA N CON BE AT	SHT AND ME ISENT. CLIENT'S
		REVISION			
	9	DESCRIPTION	Æ	APR.	BY APR. DATE

| MILL ROAD STORMWATER PUMP STATION REHABILITATIC ONE-LINE DIAGRAM AND ELECTRICAL SCHEDULES

DESIGN BY: SRJ

CHECKED BY: SHJ

CHECKED BY: RJW

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGL'
LAST UPDATED: 6/5/2019

SHEET NUMBER:

E-002

			C&W SCHEDULE					
ABBREV	IATIONS: CAB-CABLE CTL-CONTR	OL <b>DISC</b> -DISCONNECT <b>JB</b> -JUNCTION BOX <b>LEV</b> -LEV	EL MFG-MANUFACTURER MTR-MOTOR PF	RESS-PRE	SSURE	PR-PAIR PWR-P	OWER RCP	T-RECEPTACLE
SIG-SIGN	NAL SPC-SHIELDED POWER CABLE	STP-SHIELDED TWISTED PAIR CABLE SW-SWITC	H XMITTER-TRANSMITTER (2-7C)- INDICATE	S TWO-SE	EVEN CO	NDUCTOR CABLE	ES	
CONDUIT		ROL	ITING	CON	NDUIT	CONDUC	TORS	
TAG	SERVICE	FROM	то	QTY	SIZE	(QTY) & SIZE	GROUND SIZE	REMARKS OR REFERENCE DRAWING
F-1	UTILITY SERVICE	EXISTING UTILITY SERVICE TRANSFORMER	UTILITY METER	1	EX.			COORDINATE WITH UTILITY TO EXTEND
P-1	ELECTRICAL SERVICE	UTILITY METER	SERVICE DISCONNECT MAIN BREAKER	1	1-1/2"	4 (3) AWG		SERVICE TO NEW LOCATION
P-2	ELECTRICAL SERVICE	SERVICE DISCONNECT MAIN BREAKER	MANUAL TRANSFER SWITCH	1	1-1/2"	4 (3) AWG	8 AWG	
P-3	ELECTRICAL SERVICE	MANUAL TRANSFER SWITCH	LIFT STATION CONTROL PANEL	1	1-1/2"	3 (3) AWG	8 AWG	
P-4	POWER OUTLET	MANUAL TRANSFER SWITCH	POWER OUTLET BOX	1	1"	(2) 8 AWG	10 AWG	
P-5	GENERATOR CONNECTION	MANUAL TRANSFER SWITCH	GENERATOR RECEPTACLE	1	-	(4) 3 AWG	8 AWG	
P-6	SITE LIGHTING	POWER OUTLET BOX	SITE LIGHTING SWTCH	1	3/4"	(2) 12 AWG	12 AWG	
P-7	PUMP POWER	LIFT STATION CONTROL PANEL	NEMA 4X SS JUNCTION BOX	1	1"	3 (10) AWG	12 AWG	
P-8	PUMP POWER	LIFT STATION CONTROL PANEL	NEMA 4X SS JUNCTION BOX	1	1"	3 (10) AWG	12 AWG	
P-9	PUMP POWER	NEMA 4X SS JUNCTION BOX	PUMP 1	1	2"	MFG CAB		
P-10	PUMP POWER	NEMA 4X SS JUNCTION BOX	PUMP 2	1	2"	MFG CAB		
C-1	ALARM BEACON	NEW LIFT STATION CONTROL PANEL	NEW ALARM BEACON	1	3/4"	(2) 14 AWG	14 AWG	
C-2	FLOATS	NEW LIFT STATION CONTROL PANEL	NEMA 4X SS JUNCTION BOX	1	1"	(10) 14 AWG	14 AWG	
C-3	FLOATS	NEMA 4X SS JUNCTION BOX	FLOATS IN WET WELL	1	2"	MFG CAB		
G-1	SERVICE GROUND	SERVICE DISCONNECT MAIN BREAKER	GROUND ROD	1	3/4"		4 AWG	PVC CONDUIT ABOVE GROUND ONLY

GROUND ROD

				LUMINA	AIRE SCHEE	DULE	
TYPE	DESCRIPTION	VOLTS	LAMPS	WATTS / FIXTURE	MOUNTING	MANUFACTURE NUMBER BASIS OF DESIGN	NOTES
F1	LED POLE LIGHT, TYPE III DISTRUBUITION, 4K, DARK BRONZE FINISH, BACK LIGHT CONTROL, BUTTON PHOTOCELL, SINGLE FUSE, BIRD DETERRENT SPIKES, SQUARE POLE UNIVERSAL MOUNTING ADAPTER	120 VAC	LED	45	POLE	ISPHMBA-PE-SE-BSW-DDBXD OR APPROVED	MOUNTING HEIGHT SHALL BE 12'-3" (8' ABOVE TOP OF WET WELL)
F2	ROTATING ALARM BEACON, RED LENS, TYPE 4X, IP66 ENCLOSURE	120 VAC	INC	25		FEDERAL SIGNAL #225-120A, OR APPROVED EQUAL	

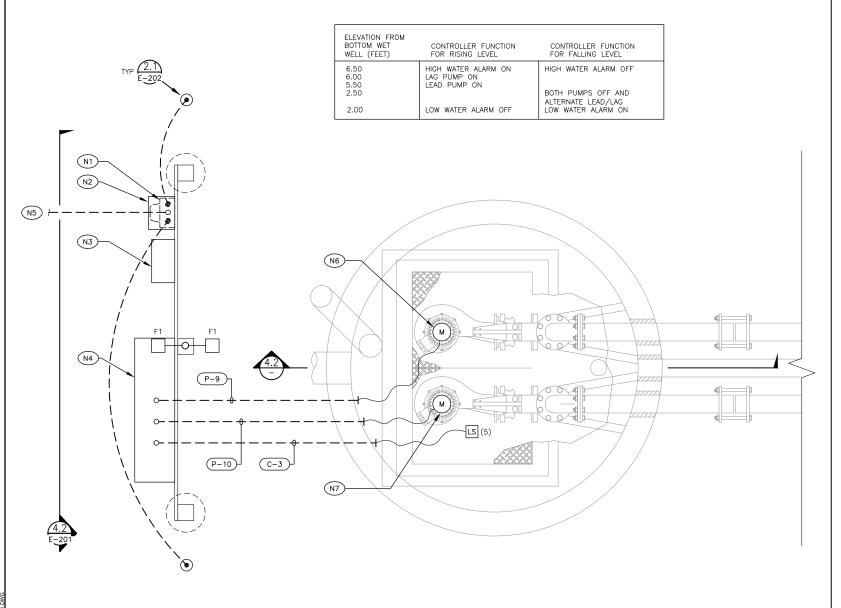
4 AWG

ELECTRICAL SCHEDULES NOT TO SCALE

AVISTA, TOD BOYLE, (208) 794-0876.

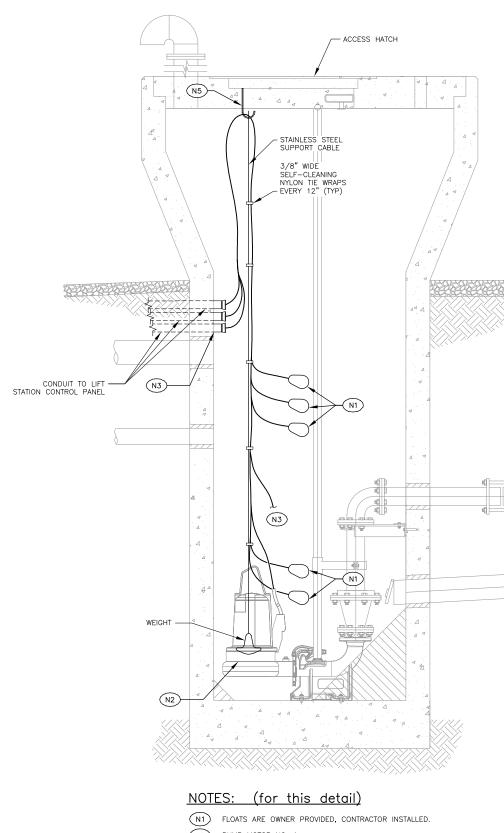
1 ONE-LINE DIAGRAM

NOT TO SCALE



# NOTES: (for this detail)

- NEW UTILITY METER (BELOW).
- N2 SERVICE ENTRANCE RATED MAIN BREAKER (ABOVE).
- (N3) MANUAL TRANSFER SWITCH.
- N4 LIFT STATION CONTROL PANEL.
- EXISTING ELECTRICAL SERVICE TO BE RELOCATED TO NEW METER ON NEW RACK. COORDINATE WITH UTILITY. N5
- N6 PUMP MOTOR NO. 1.
- PUMP MOTOR NO. 2.



- N2 N3 PUMP MOTOR NO. 1.
- CONTINUE TO PUMP MOTOR NO. 2.
- CONDUITS ARE SHOWN DIAGRAMMATICALLY FOR CLARITY. COORDINATE LIFT STATION ENTRANCE WITH ENGINEER.
  - SEE DETAIL "1" ON SHEET "C-501" OR DETAIL "2.2" ON SHEET "E-202" (OPTIONAL).

PUMP STATION POWER AND CONTROL PLAN



PUMP STATION SECTION DETAIL SCALE: 1"=1'-0"

MILL ROAD STORMWATER PUMP STATION REHABILITATION CHECKED BY: SHJ

CHECKED BY: RJW

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH. SCALE ACCORDINGL
LAST UPDATED: 6/5/2019

AEI 1038 W. Davkson Engineering Coar d'Alene, ID 1038 W. Davkson ID 10

J-U-B ENGINEERS, INC.

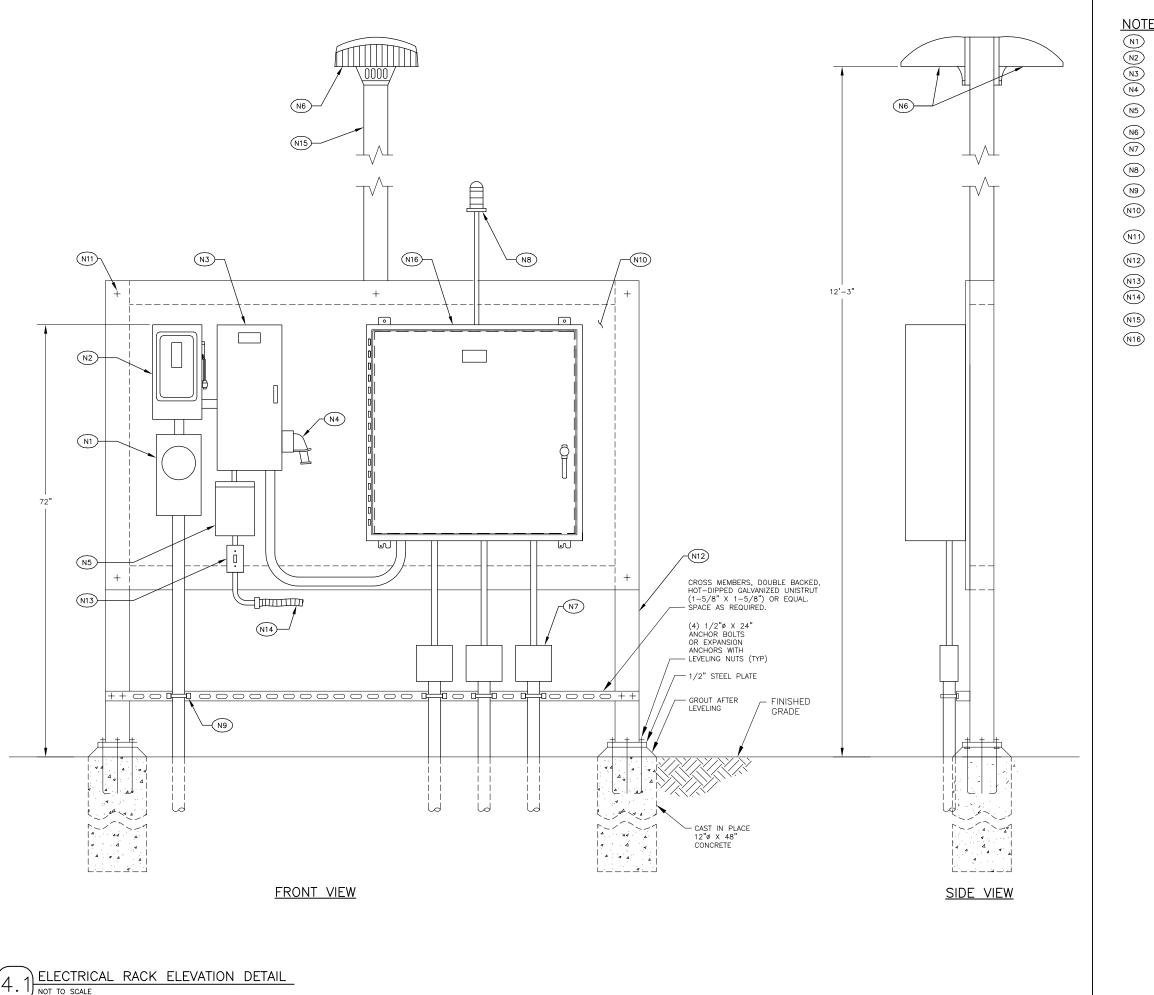
201 South Jackson Street Moscow, ID 83843

**DRAF1** 

SHEET NUMBER:

STATION POWER AND CONTROL PLAN AND SECTION DETAIL

E-101



#### NOTES: (for this sheet)

N1) NEW UTILITY METER.

N2 NEW SERVICE ENTRANCE RATED MAIN BREAKER.

MANUAL TRANSFER SWITCH.

(N4) GENERATOR RECEPTACLE.

UN-METERED DUPLEX RECEPTACLE POWER OUTLET BOX. MIDWEST ELECTRIC #U011C010.

N6 FIXTURE TYPE "F1".

NEMA 4X, JUNCTION BOX (3 PLACES).

ALARM BEACON "F2", RED, ROTATING PARABOLIC REFLECTOR, NEMA 4X, 120VAC, PIPE MOUNT.

CONDUIT STRAP. STAINLESS STEEL, TYPICAL.

EPOXY COATED SHEET STEEL (3/16" THICK) OR EQUAL. SIZE AS REQUIRED.

ALL FASTENING HARDWARE SHALL BE STAINLESS STEEL. HARDWARE SHALL BE FLUSH MOUNTED.

UPRIGHTS, HOT-DIPPED GALVANIZED POSTS (4" X 4" X 1/4"), OR EQUAL. ALL CONNECTION HARDWARE SHALL BE STAINLESS STEEL.

(N13) LIGHT SWITCH, 20A, 120V, WEATHERPROOF COVER.

(N14) CONTINUE TO FIXTURE "F1".

N15 LUMINAIRE POLE, (4' X 4' X 1/8") HOT-DIPPED, GALVANIZED FIXTURE POLE. LENGTH AS REQUIRED.

(N16) LIFT STATION CONTROL PANEL.

J-U-B ENGINEERS, INC.

AEI 1038 W. Davkson Caser of Abrea. D. Town of A

201 South Jackson Street Moscow, ID 83843



J-BE SHALL RETAIN LECOMMON LWW STATUTORS COPPRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWNINGS AND THE SAME SHALL NOT BE REUSED WITHOUT J-J-B'S PRIOR WRITTEN CONSENT. ANY REUSE WITHOUT WRITTEN CONSENT BY J-J-B WILL BE AT CLIENT'S SOLE RISK AND WITHOUT WRITTEN CONSENT BY LAUB WILL BE AT CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-J-B. REVISION
9

MILL ROAD STORMWATER PUMP STATION REHABILITATIC CITY OF LEWISTON DETAILS

DESIGN BY: SRJ

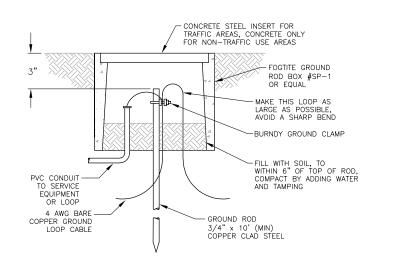
CHECKED BY: SHJ

CHECKED BY: RJW

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH. SCALE ACCORDINGL
LAST UPDATED: 6/5/2019

SHEET NUMBER:

E-201



S.S. EYE BOLT
W/ NUT & WASHER

VAULT CEILING

S.S. CARABINER,
SIZE TO FIT CABLE

CORD GRIP "STRAIN RELIEF"
USE S.S. MESH GRIP
HUBBEL # 02217002 OR EQUAL

PROVIDE NO SHRINK GROUT
SEAL. TYPICAL OF ALL
CONDUIT PENETRATIONS
BELL END

BELL END

ELEVATION

PROVIDE NO SHRINK GROUT
SEAL. TYPICAL OF ALL
CONDUIT PENETRATIONS
BELL END

DRAFT

J-U-B ENGINEERS, INC.

201 South Jackson Street Moscow, ID 83843

AEI 1038 W. Dawkson Engineering (2008 Gee-4001 law Incorporated (2008) 666-4001 law Incorporated (2

TYPICAL GROUND ROD DETAIL

TYPICAL FLOAT CORD
SUPPORT DETAIL

NOT TO SCALE

WET WELL CONDUIT DETAIL

NOT TO SCALE



# NOTES: (for this detail)

- N1 EXISTING ELECTRICAL FEED AND EQUIPMENT TO BE DEMOLISHED.
- EXISTING ELECTRIC METER TO BE DEMOLISHED.

MILL ROAD STORMWATER PUMP STATION REHABILITATION
CITY OF LEWISTON

ELECTRICAL DETAILS

FILE: M19111-E-202

JUB PROJ. #: 21-18-028

DRAWN BY: TLS

DESIGN BY: SRJ

CHECKED BY: SKJ

CHECKED BY: RJW

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH. SCALE ACCORDINGLY
LAST UPDATED: 6/5/2019

E-202

SHEET NUMBER:

NOT USED NOT TO SCALE

DEMOLITION PHOTO DETAIL

NOT TO SCALE