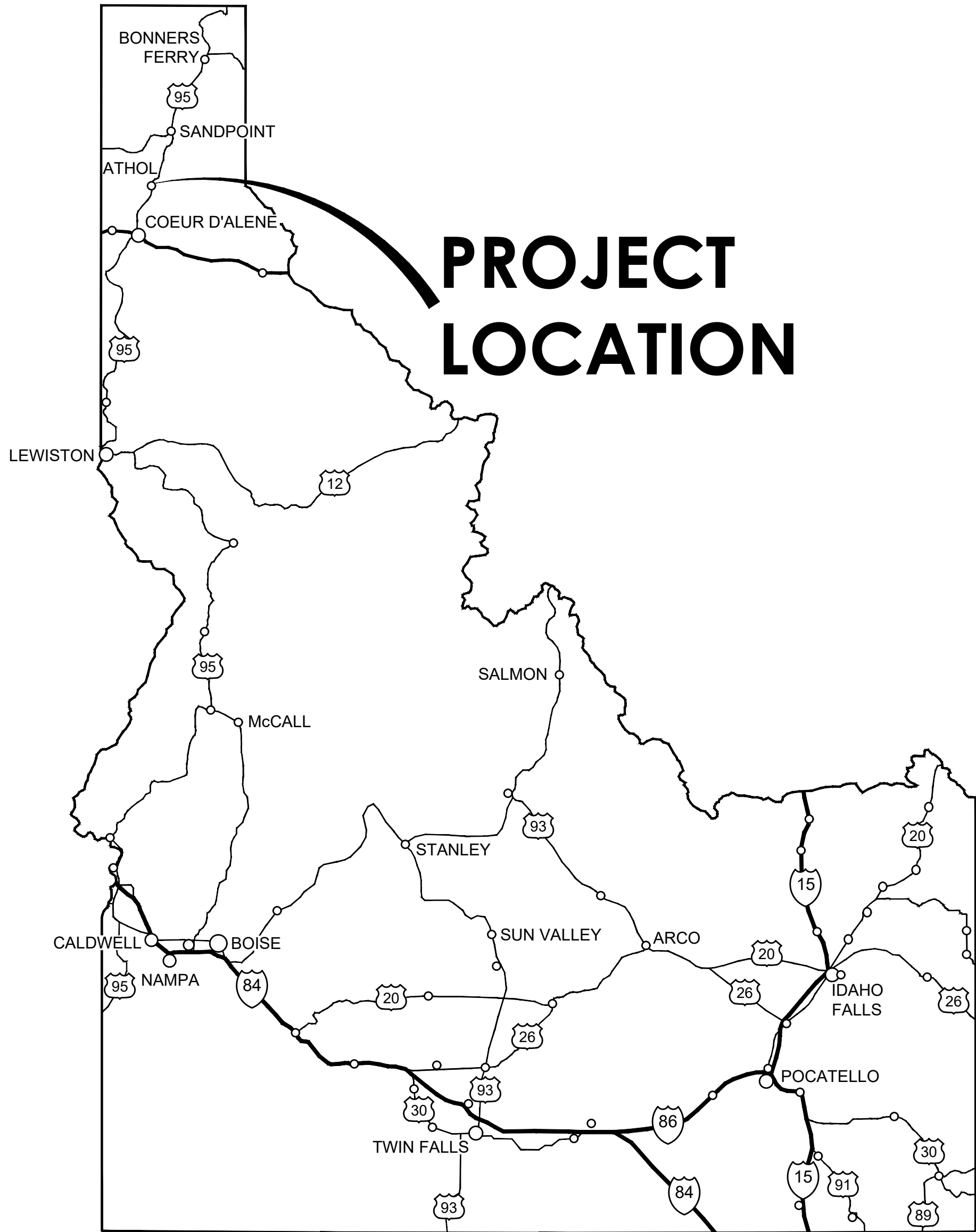


J:\216064-001_ATHOL WATER SYSTEM IMPROVEMENTS\SC_DESN\CAD\3_DESIGN\DWG_PLANS-101_GENG-001.DWG
LAST SAVED: 6/2/2020 3:10 PM
PRINTED: 6/2/2020 3:12 PM

City of
ATHOL, IDAHO
WATER SYSTEM IMPROVEMENTS

JUNE 2020

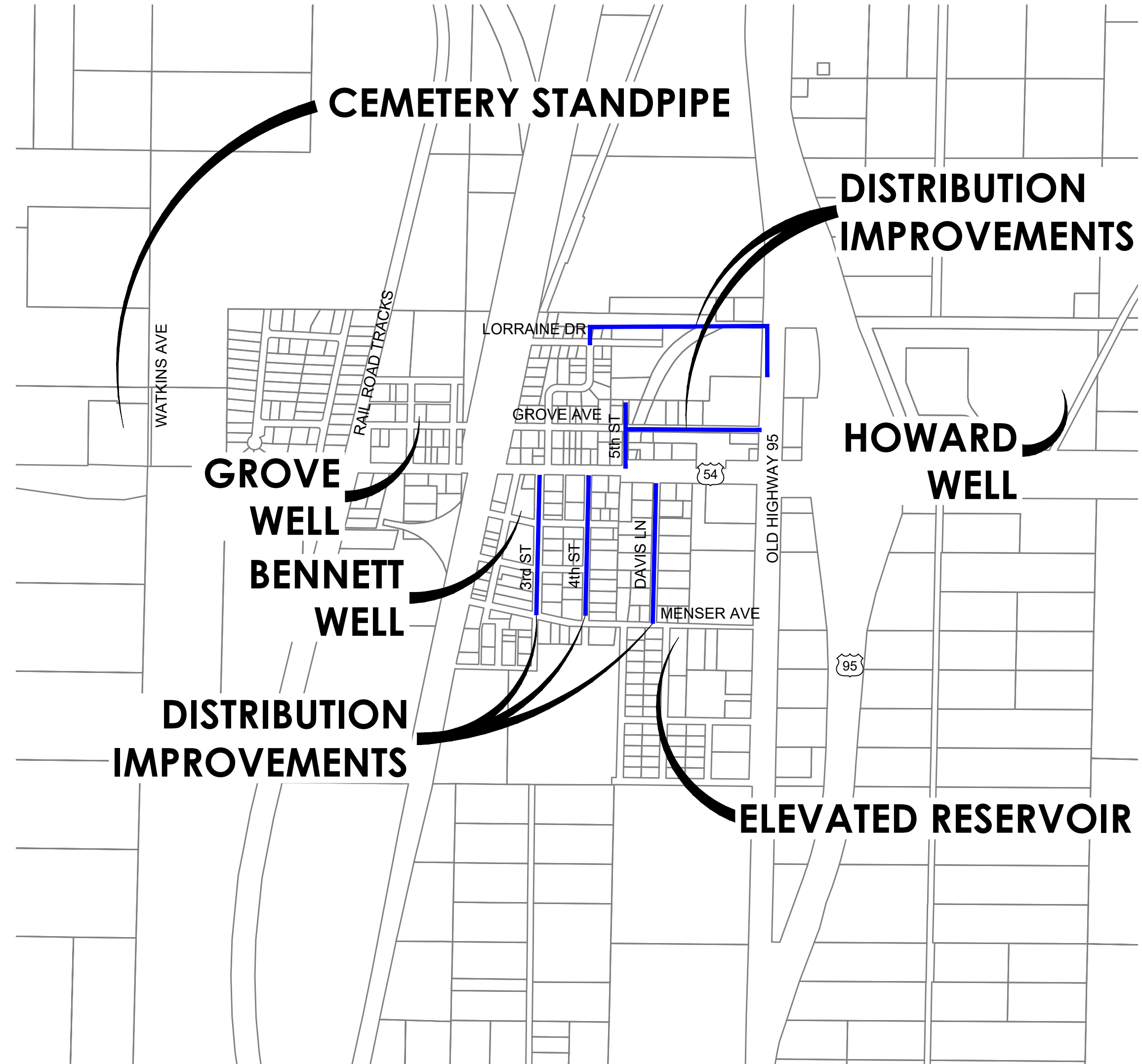
FUNDED BY DEQ, IDOC, AND USDA-RD
SRF LOAN PROJECT NUMBER DW 1906
AIS & WAGE REQUIREMENTS APPLY



A1 LOCATION MAP
N.T.S.

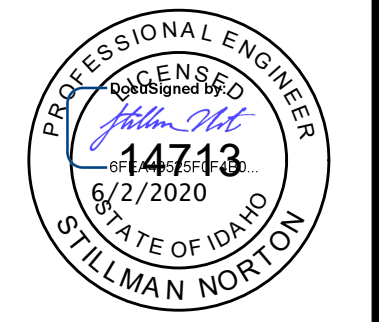
OWNER
CITY OF ATHOL
30355 N 3rd ST
P.O. BOX 249
ATHOL, ID 83801
CONTACT: ANTHONY BRANDT
PHONE: 208.683.2101

CIVIL ENGINEER
KELLER ASSOCIATES, INC.
733 5TH STREET SUITE A
CLARKSTON, WA 99403
CONTACT: STILLMAN NORTON
PHONE: 509.295.6095



A3 VICINITY MAP
N.T.S.

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

**CITY OF
ATHOL, ID**

**ATHOL WATER SYSTEM
IMPROVEMENTS**

COVER SHEET

DRAWN: JLP CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches

PROJECT NO. 216064-001	PAGE
SHEET NO. G-001	

LIST OF DRAWINGS		DISCIPLINE DESIGNATORS		<div><div><div>KELLERXASSOCIATES</div><div>601 Sherman Avenue, Suite 1 Coeur d'Alene, Idaho 83814 (208) 813-7603</div></div><div><div>PROFESSIONAL ENGINEER JENNIFER 14743 5/4/2020 STATE OF IDAHO STILLMAN NORTON</div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></</div></div></div></div></div>
------------------	--	------------------------	--	---


J:\216064-001 ATHOL WATER SYSTEM IMPROVEMENTS\C_DESN\CAD\3_DESIGN\PLANS-101_GEN\G-002.DWG LAST SAVED: 5/1/2020 9:13 AM PRINTED: 5/1/2020 9:19 AM

ATHOL WATER SYSTEM IMPROVEMENTS

SYMBOLS & LINE LEGEND

DRAWN: JLP

VERIFY SCALE: Scales based on 22"x34" prints.



1-1/2 Inches

PROJECT NO. 216064-001

SHEET NO. G-003

CHECK: SAN

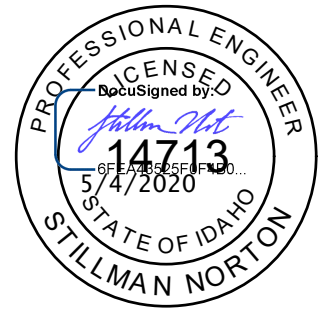
PAGE

GENERAL ABBREVIATIONS

A/C	-AIR CONDITIONING	FIN	-FINISH	OD	-OUTSIDE DIAMETER	UV	-ULTRA VIOLET
AFF	-ABOVE FINISHED FLOOR	FIT	-FLOW INDICATOR TOTALIZER		-OVERALL DIAMETER	UW	-UTILITY WATER (NONPOTABLE)
ARCH	-ARCHITECTURAL	FL	-FLANGE	OF	-OVERFLOW		
ARV	-AIR RELEASE VALVE		-FLOORING	OFF	-OFFSET		<u>V</u>
ASME	-AMERICAN SOCIETY OF MECHANICAL ENGINEERS	FLG	-FLOORING	OHF	-OVERHEAD POWER	VCT	-VINYL COMPOSITE TILE
ASTM	-AMERICAN SOCIETY OF TESTING MATERIALS	FO	-FIBER OPTIC			VERT	-VERTICAL
AVAR	-AIR VACUUM AND AIR RELEASE	FRP	-FIBERGLASS REINFORCED PLASTIC			VOL	-VOLUME
AVE	-AVENUE	FT	-FEET	P	-PUMP		
			-FOOT	PC	-POINT OF CURVATURE		<u>W</u>
		FUT	-FUTURE	PDR	-POND DRAIN	W	-POTABLE WATER
				PE	-PLANT EFFLUENT		-WEST
BF	<u>B</u> -BLIND FLANGE			PG	-POLYMER	W/	-WITH
BFP	-BACKFLOW PREVENTER	GA	<u>G</u> -GAGE	PI	-PRESSURE GAUGE	W/O	-WITHOUT
BLDG	-BUILDING		-GAUGE		-PLANT INFLUENT	WS	-WATER SURFACE
BLVD	-BOULEVARD	GAL	-GALLON		-POINT OF INTERSECTION	WSP	-WELDED STEEL PIPE
BFV	-BUTTERFLY VALVE	GALV	-GALVANIZED		-PRESSURE INDICATOR	WWP	-WATER WORKING PRESSURE
BP	-POINT OF BEGINNING	GAS	-NATURAL GAS		-PRESSURE IRRIGATION		
BVCE	-BEGIN VERTICAL CURVE ELEVATION	GB	-GRADE BREAK	P/L	-PROPERTY LINE		<u>Y</u>
BVCS	-BEGIN VERTICAL CURVE STATION	GCO	-GROUND CLEAN OUT	PLUMB	-PLUMBING	YD	-YARD
		GFD	-FLUX UNITS	PP	-POWER POLE	YR	-YEAR
		GI	-GALVANIZED IRON		-UTILITY POLE		
C	<u>C</u> -CELSIUS		-GRAVITY IRRIGATION	PPD	-POUND PER DAY		
	-CONDUIT		-GLASS	PRV	-PRESSURE REGULATING		
CATV	-CABLE TELEVISION	GL	-GLASS LINED		-PRESSURE RELIEF		
CB	-CATCH BASIN	GPM	-GALLONS PER MINUTE		-PRESSURE REDUCING VALVE		
CF	-CUBIC FOOT	GYP	-GYPSUM	PS	-PRESSURE SWITCH		
CFS	-CUBIC FEET PER SECOND				-PRESSURE SEWER		
CI	-CAST IRON			PSH	-PRESSURE SENSORS		
CJ	-CONSTRUCTION JOINT	H/B	<u>H</u> -HOSE BIBB	PSI	-POUNDS PER SQUARE INCH		
	-CONTROL JOINT	HM	-HOLLOW METAL	PSIG	-POUNDS PER SQUARE INCH GAUGE		
CL	-CHAIN LINK	HP	-HORSEPOWER	PT	-POINT		
	-CLEARANCE		-HIGH PRESSURE		-POINT OF TANGENCY		
	-CENTERLINE	HV	-HAND VALVE	PVC	-POLYVINYL CHLORIDE		
CLR	-CLEAR	HVAC	-HEATING AND AIR CONDITIONING	PVI	-POINT OF VERTICAL INTERSECTION		
CMP	-CORRUGATED METAL PIPE	HWL	-HIGH WATER LEVEL	PW	-POTABLE WATER		
CMU	-CONCRETE MASONRY UNIT	HW	-HOT WATER				
CO	-CLEANOUT			<u>Q</u>			
COMM	-COMMUNICATIONS			QTY	-QUANTITY		
CONC	-CONCRETE	ID	<u>I</u> -INSIDE DIAMETER	QTR	-QUARTER		
CONST	-CONSTRUCT	IE	-INVERT ELEVATION				
	-CONSTRUCTION	IN	-INCH		<u>R</u>		
COR	-CORNER	INT	-INTERSECTION	RCP	-REINFORCED CONCRETE PIPE		
COTG	-CLEANOUT TO GRADE	INV	-INVERT	RE	-REFERENCE		
CPLG	-COUPLING	IP	-IRON PIN	RED	-REDUCER		
CPVC	-CHLORINATED POLYVINYL CHLORIDE	IRR	-IRRIGATION		-REDUCING		
CR	-CIRCLE	ISPCW	-IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	RI	-RAPID INFILTRATION		
CT	-CONTACT TIME			RO	-ROUGH OPENING		
CU	-CUBIC	JT	<u>J</u> -JOINT	ROW	-RIGHT OF WAY		
CV	-CHECK VALVE		-JOINT UTILITY TRENCH	R/W	-RIGHT OF WAY		
CW	-CULINARY WATER (POTABLE)						
CW	-COLD WATER				<u>S</u>		
CY	-CUBIC YARD			S	-SOUTH		
		K	<u>K</u> -CURVE DESIGN K VALUE		-SECOND		
		KW	-KILOWATT		-SLOPE		
		KWH	-KILOWATT HOUR	SA	-SAMPLE		
DET	<u>D</u> -DETAIL			SCFM	-STANDARD CUBIC FEET PER MINUTE		
DEMO	-DEMOLISH			SD	-STORM DRAIN		
DI	-DUCTILE IRON	LB	<u>L</u> -POUND	SD	-STANDARD DRAWING		
DIA	-DIAMETER	LBS/DAY	-POUNDS PER DAY	SDMH	-STORM DRAIN MANHOLE		
DIM	-DIMENSION	LF	-LINEAL FOOT	SEC	-SECTION		
DIP	-DUCTILE IRON PIPE	LIT	-LEVEL INDICATOR TRANSDUCER	SHT	-SHEET		
DR	-DRAIN	LSH	-LEVEL SWITCH HIGH	SIM	-SIMILAR		
DWG	-DRAWING	LSL	-LEVEL SWITCH LOW	SPECS	-SPECIFICATIONS		
		LSLL	-LEVEL SWITCH LOW LOW	SS	-SANITARY SEWER		
(E)	<u>E</u> -EXISTING	LVC	-LENGTH VERTICAL CURVE		-STAINLESS STEEL		
E	-EPOXY	LWL	-LOW WATER LEVEL		-SERVICE TANK		
	-EAST			SSMH	-SANITARY SEWER MANHOLE		
	-ELECTRICAL			SST	-STAINLESS STEEL TUBING		
ECC	-ECCENTRIC	M	<u>M</u> -METER	ST	-STREET		
EF	-EACH FACE		-MALE (PIPE THREAD)	STA	-STATION		
	-EXHAUST FAN		-MOTOR	STD	-STANDARD		
EG	-EDGE OF GRAVEL	MAG	-MAGNETIC	STRC	-STRUCTURAL		
EJ	-EXPANSION JOINT	MBR	-MEMBRANE BIO-REACTOR		-STRUCTURE		
EL	-ELEVATION		-MEMBER	STL	-STEEL		
ELEC	-ELECTRICAL	MECH	-MECHANICAL				
ELEV	-ELEVATION	MFR	-MANUFACTURER		<u>T</u>		
EOR	-ENGINEER OF RECORD	MGD	-MILLION GALLONS PER DAY	T	-TANGENT		
EP	-EDGE OF PAVEMENT	MH	-MANHOLE		-TOP		
	-POINT OF ENDING	MISC	-MISCELLANEOUS	TBC	-TOP BACK CURB		
EQ	-EQUAL	MJ	-MECHANICAL JOINT	TC	-TOP OF CURB		
	-EQUATION	MM	-MILLIMETER	T/D	-TELEPHONE/DATA COMMUNICATIONS		
EVCE	-END VERTICAL CURVE ELEVATION	MTR	-MOTOR	TEL	-TELEPHONE		
EVCS	-END VERTICAL CURVE STATION			TEMP	-TEMPERATURE		
EW	-EACH WAY				-TEMPORARY		
EX	-EXISTING	(N)	<u>N</u> -NEW	T&G	-TONGUE AND GROOVE		
EXIST	-EXISTING	N	-NORTH	TK	-TANK		
		NC	-NORMALLY CLOSED	TOC	-TOP OF CONCRETE		
		NEMA	-NATIONAL ELECTRICAL MANUFACTURERS	TOG	-TOP OF GROUT		
F	<u>F</u> -FAHRENHEIT	NG	-NATURAL GAS	TOW	-TOP OF WALL		
FCV	-FLOW CONTROL VALVE	NIC	-NOT IN CONTRACT	TRANS	-TRANSMITTANCE		
FD	-FLOOR DRAIN	NO	-NORMALLY OPEN	TV	-TELEVISION		
	-FOUND	NPS	-NOMINAL PIPE SIZE	TYP	-TYPICAL		
FE	-FLOW ELEMENT	NPT	-NATION PIPE THREAD				
	-FINAL EFFLUENT	NTS	-NOT TO SCALE		<u>U</u>		
FF	-FINISH FLOOR			UGP	-UNDERGROUND POWER		
FG	-FINISH GATE			UH	-UNIT HEATER		
FH	-FIRE HYDRANT			UL	-UNDERWRITERS LABORATORIES		
		OC	<u>O</u> -ON CENTER				



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.		

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

ABBREVIATIONS

DRAWN: JLP	CHECK: SAM
------------	------------

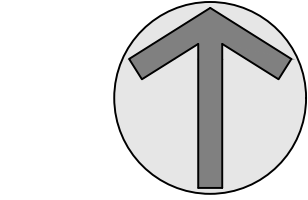
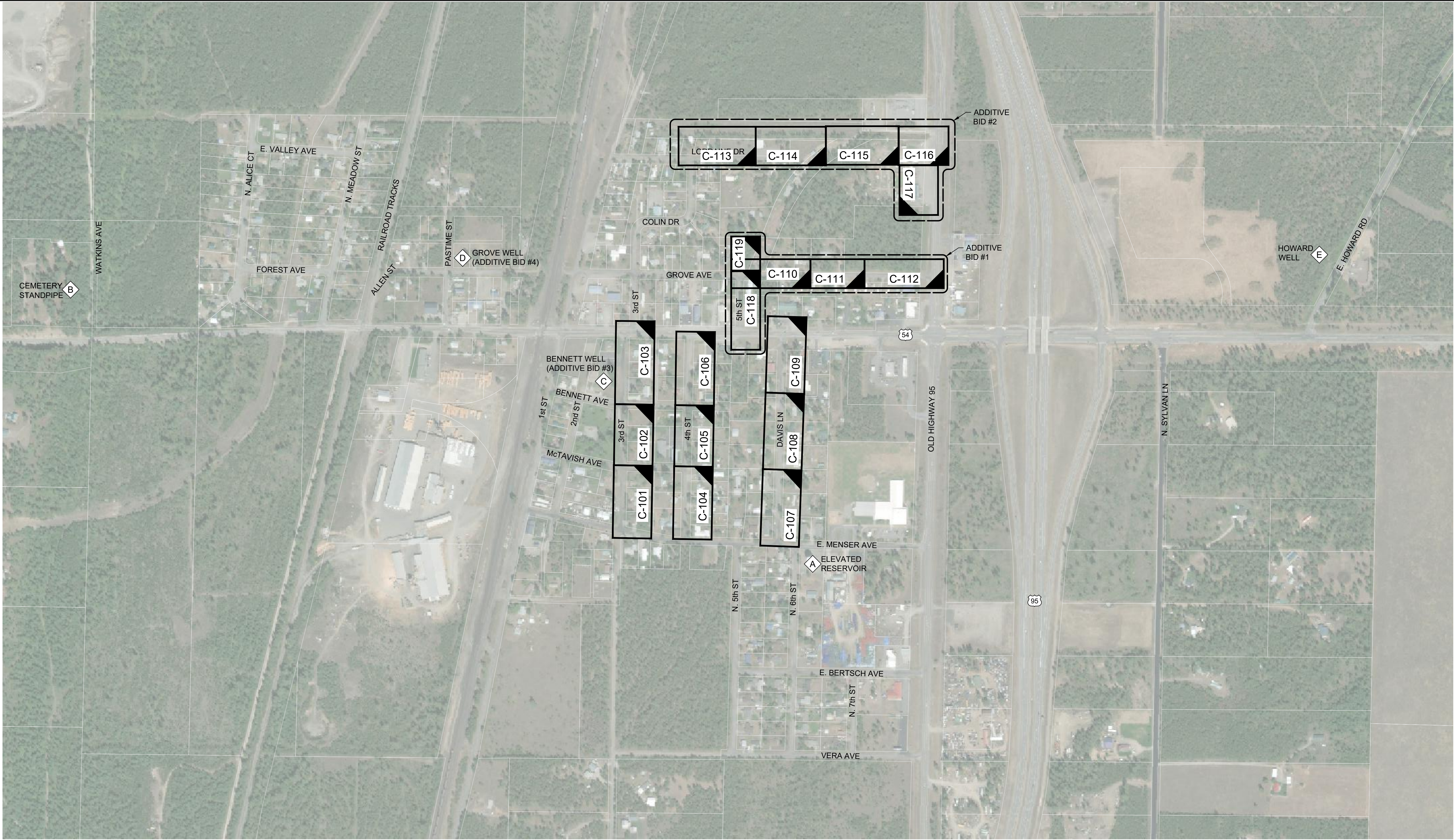
VERIFY SCALE: Scales based on 22"x34" prints

A horizontal scale bar with a vertical tick mark at the left end. Below the bar, the text "1-1/2 Inches" is centered.

PROJECT NO. 216064-001	PAGE
---------------------------	------

SHEET NO.

G-004



0 300 600

PLAN WINDOW ON PLAN AND PROFILE SHEET

UTILITY PLAN & PROFILE PLAN WINDOW

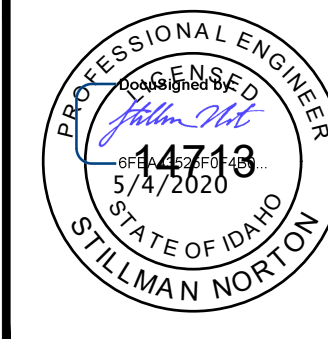
C-1XX

INDICATES LOWER RIGHT HAND CORNER OF THE SHEET



KELLER ASSOCIATES


601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



PROFESSIONAL ENGINEER
STILLMAN NORTON
STATE OF IDAHO
NO. 14743
5/4/2020

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

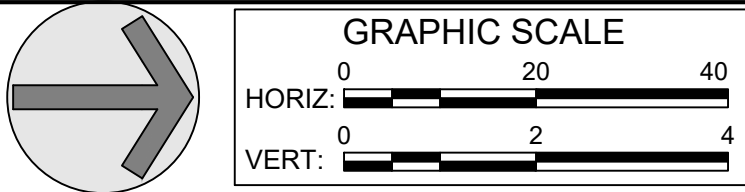
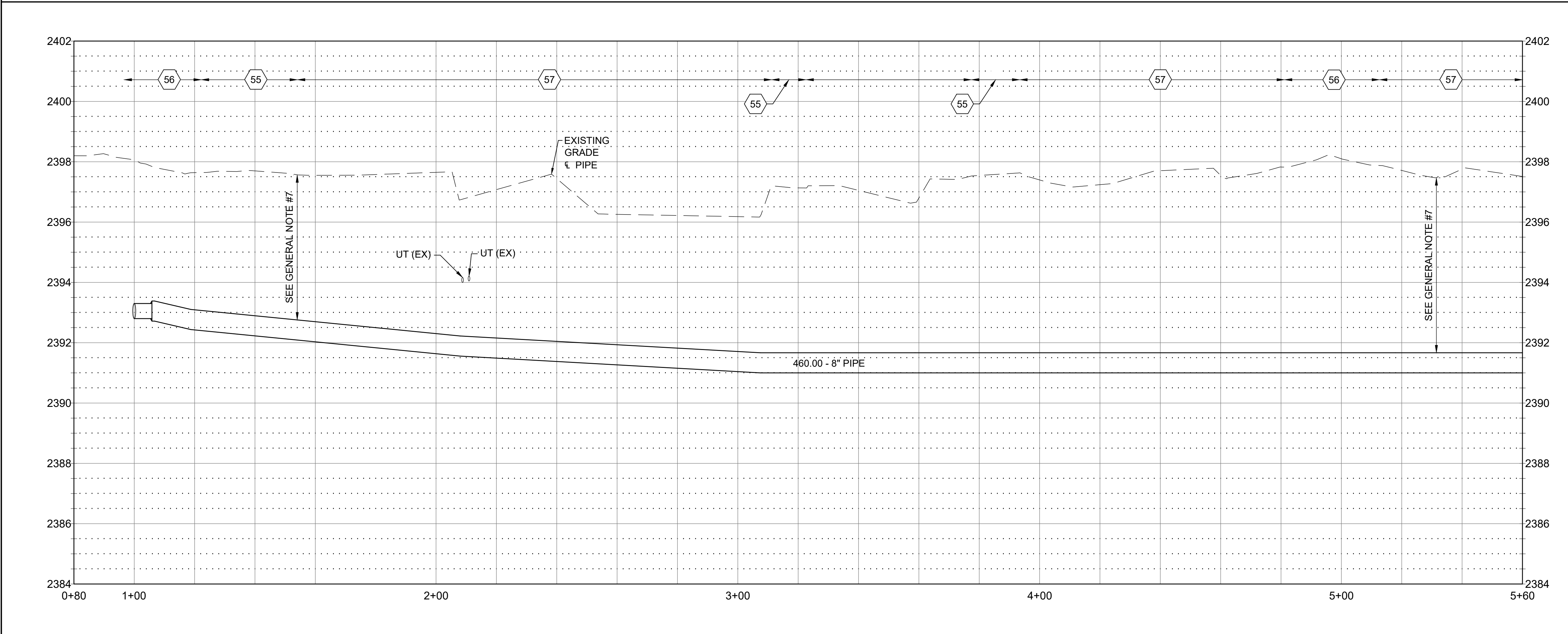
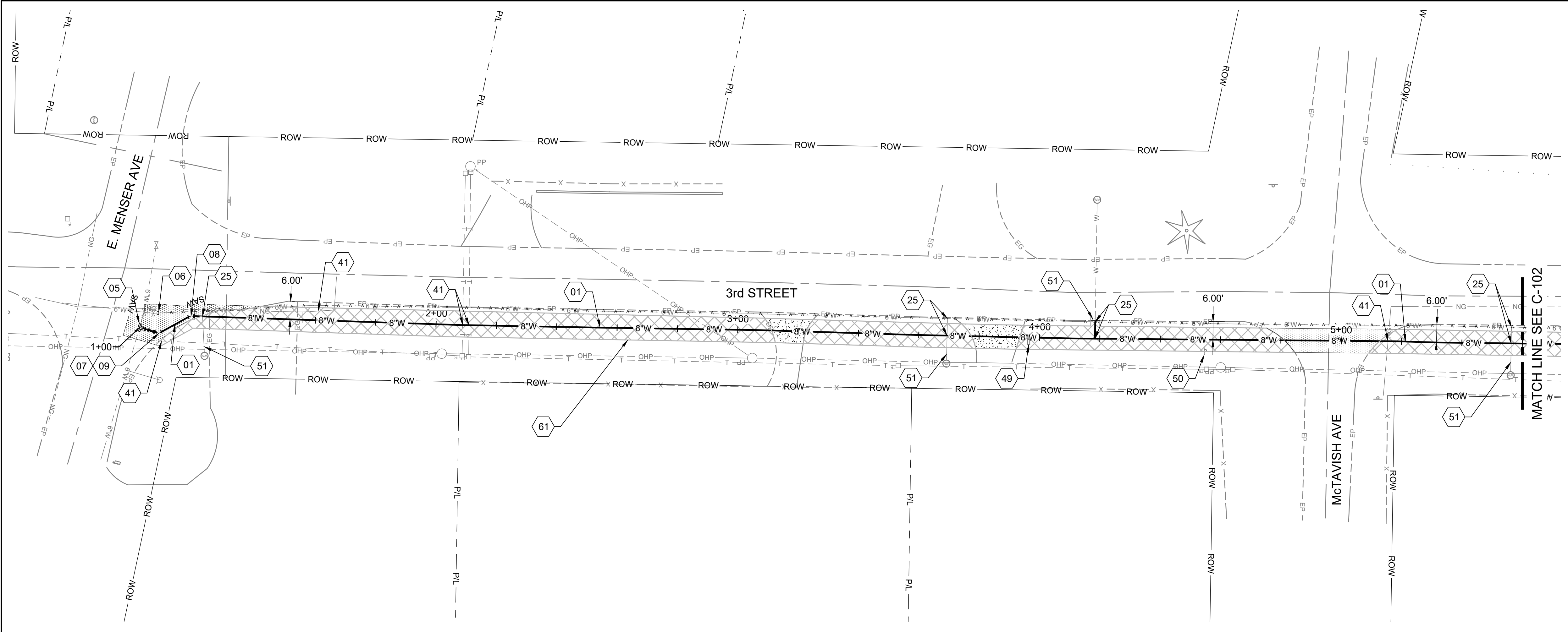


**CITY OF
ATHOL, ID**

**ATHOL WATER SYSTEM
IMPROVEMENTS**

PROJECT OVERVIEW

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO.	G-005



GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPPWC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 06 | INSTALL FITTING - 6" CAP |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 08 | INSTALL FITTING - 8" 22.5° BEND |
| 09 | INSTALL FITTING - 8" 45° BEND |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 50 | REMOVE & REPLACE EXISTING SIGN |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
GENS
14713
5/4/2020
STILLMAN NORTON

NO.	REVISIONS	DATE

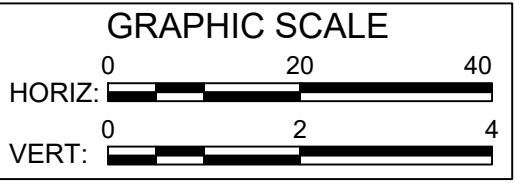
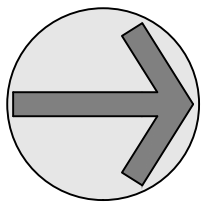
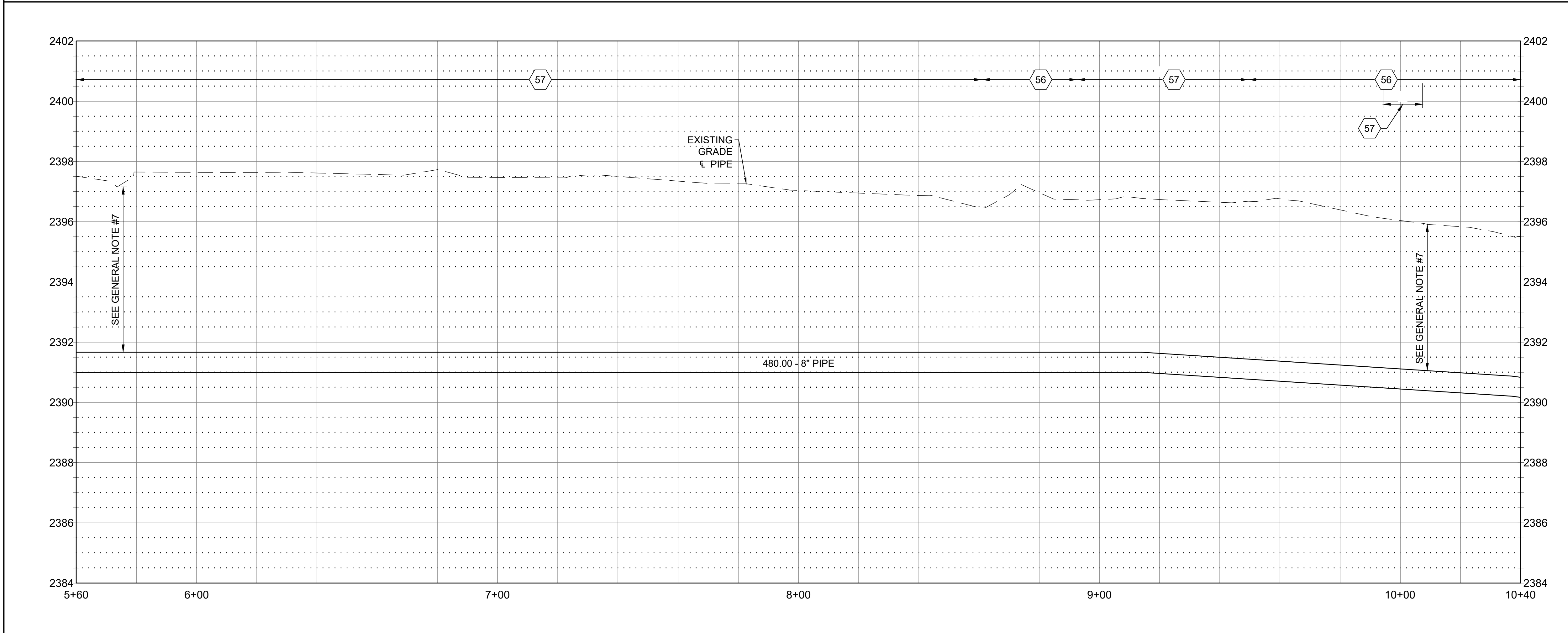
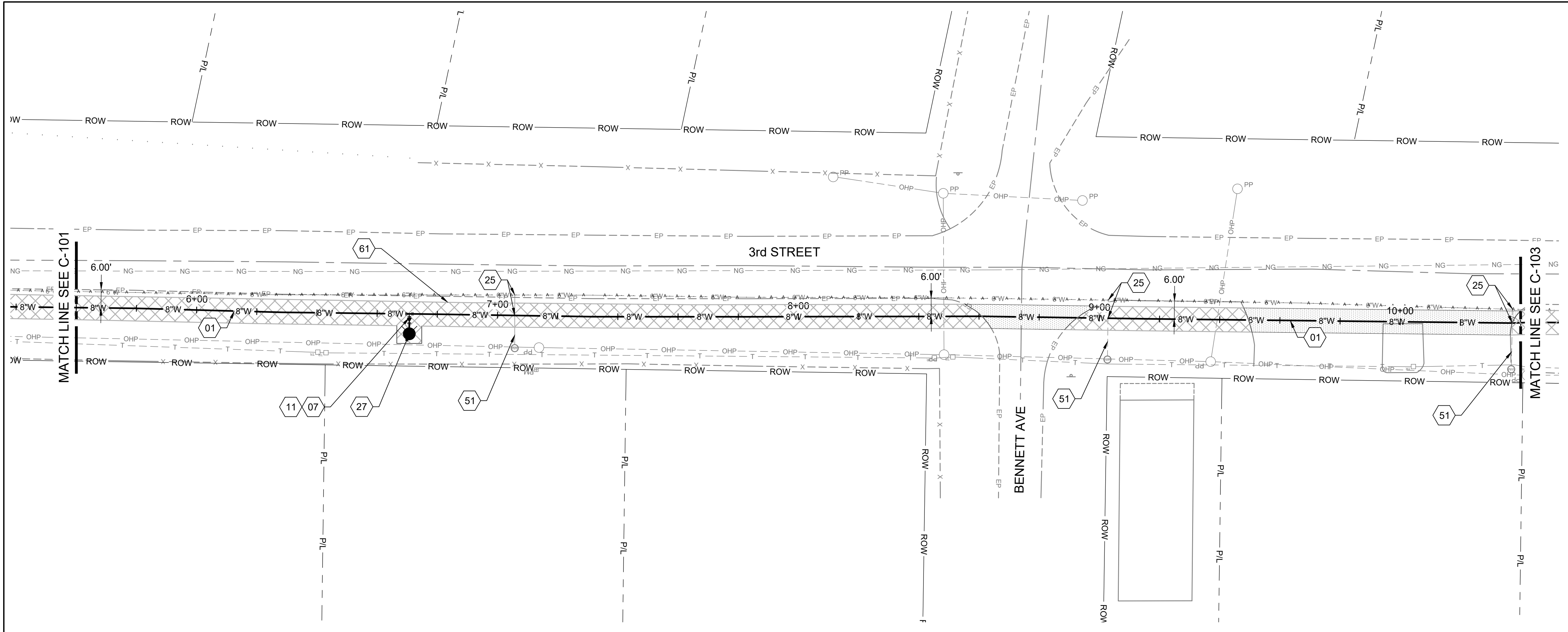
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

3RD STREET WATER MAIN PLAN &
PROFILE - 1+00 TO 5+60

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-101	



GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPWC SD-301 AND SD-302 |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 11 | INSTALL FITTING - 8" TEE |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 27 | INSTALL FIRE HYDRANT ; RE: ISPWC SD-404 |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE. REPLACE PER ISPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

KELLERX

ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
DESIGNED BY
14713
5/4/2020
STILLMAN NORTON
STATE OF IDAHO

NO.	REVISIONS	DATE

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

3RD STREET WATER MAIN PLAN &
PROFILE - 5+60 TO 10+40

DRAWN: EWC | CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
216064-001

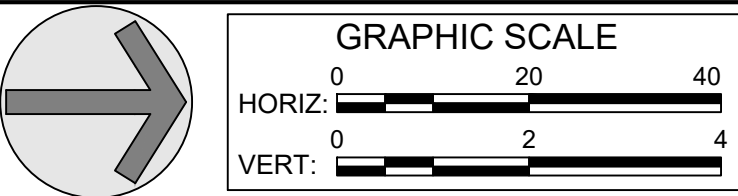
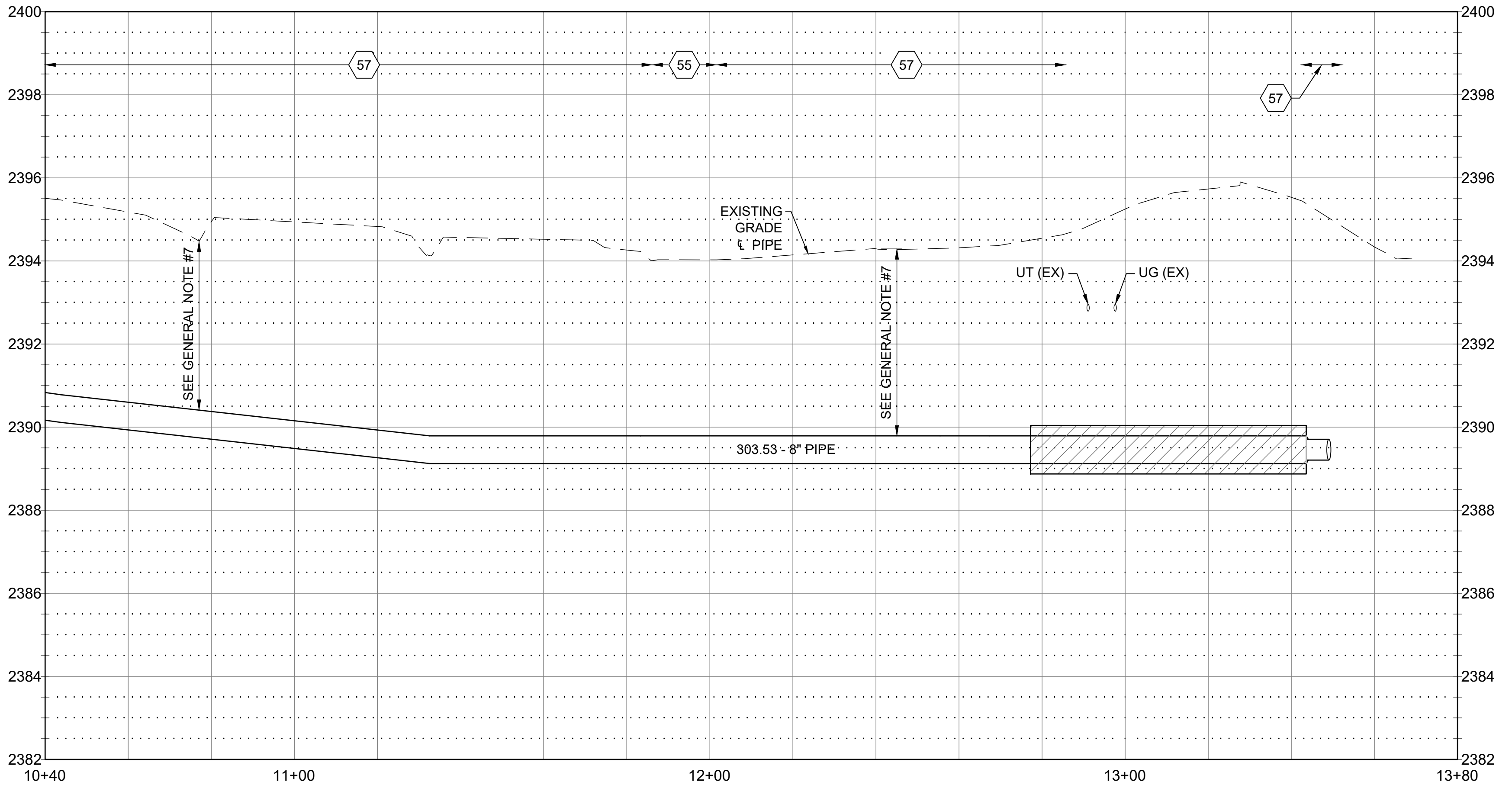
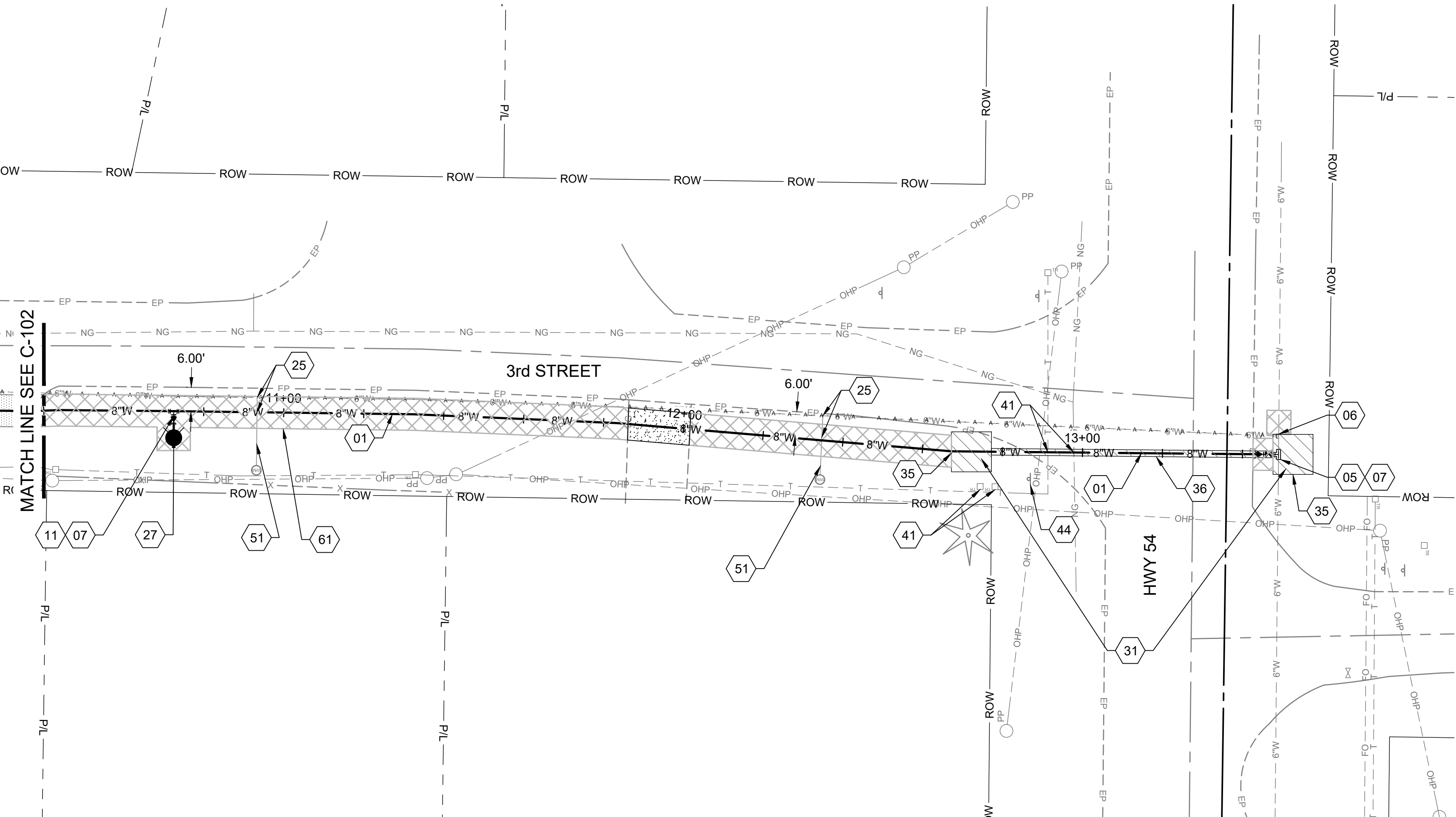
PAGE

SHEET NO.

C-102

SHEET KEYNOTES

- 01
- INSTALL PIPE - 8" WATER MAIN: RE: ISPWC SD-301 AND SD-302
- 05
- INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE
- 06
- INSTALL FITTING - 6" CAP
- 07
- INSTALL FITTING - 6"x8" REDUCER
- 11
- INSTALL FITTING - 8" TEE
- 25
- WATER SERVICE CONNECTION (SEE GENERAL NOTE #9)
- 27
- INSTALL FIRE HYDRANT ; RE: ISPWC SD-404
- 31
- PROVIDE ADEQUATE TEMPORARY SHORING OR BRACING SYSTEMS TO PREVENT EXCAVATION FROM DAMAGING EXISTING ITD PAVEMENT. ITD PAVEMENT SHALL NOT BE DISTURBED UNDER ANY CIRCUMSTANCES. DESIGN OF SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER
- 35
- JACKING & RECEIVING PIT (SIZE TO BE DETERMINED BY CONTRACTOR)
- 36
- INSTALL CASING; RE: A1/C-501
- 41
- RETAIN & PROTECT EXISTING UTILITY
- 44
- RETAIN & PROTECT EXISTING SIGN
- 51
- AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE. REPLACE PER ISPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5
- 55
- CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303
- 57
- SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION.
- 61
- DEFINED CONSTRUCTION ZONE.



GENERAL SHEET NOTES

1.
- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
5.
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

KELLERXASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
SEAL
14713
5/4/2020
STATE OF IDAHO
STILLMAN NORTON

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

3RD STREET WATER MAIN PLAN &
PROFILE - 10+40 TO END

DRAWN: EWC/CHECK: SAN

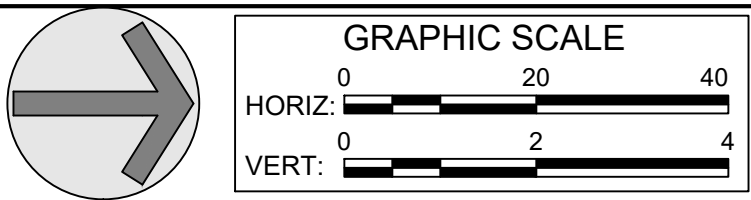
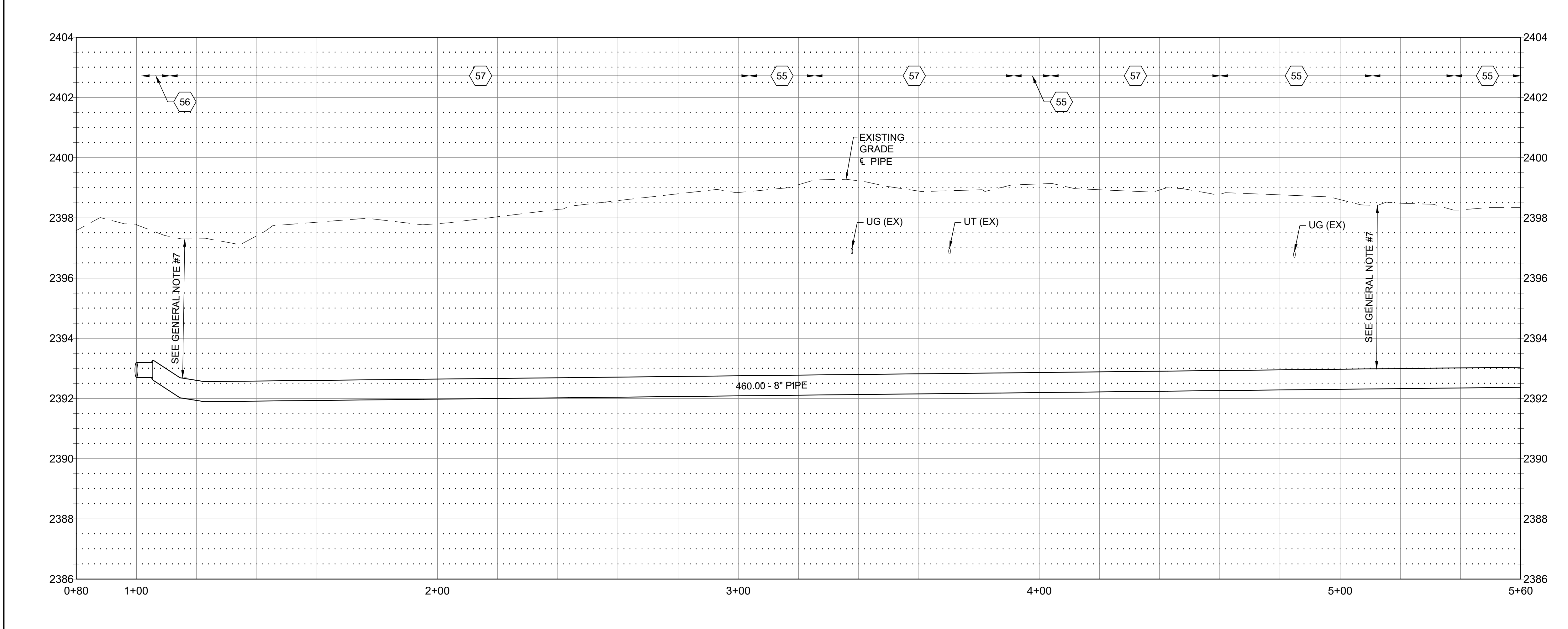
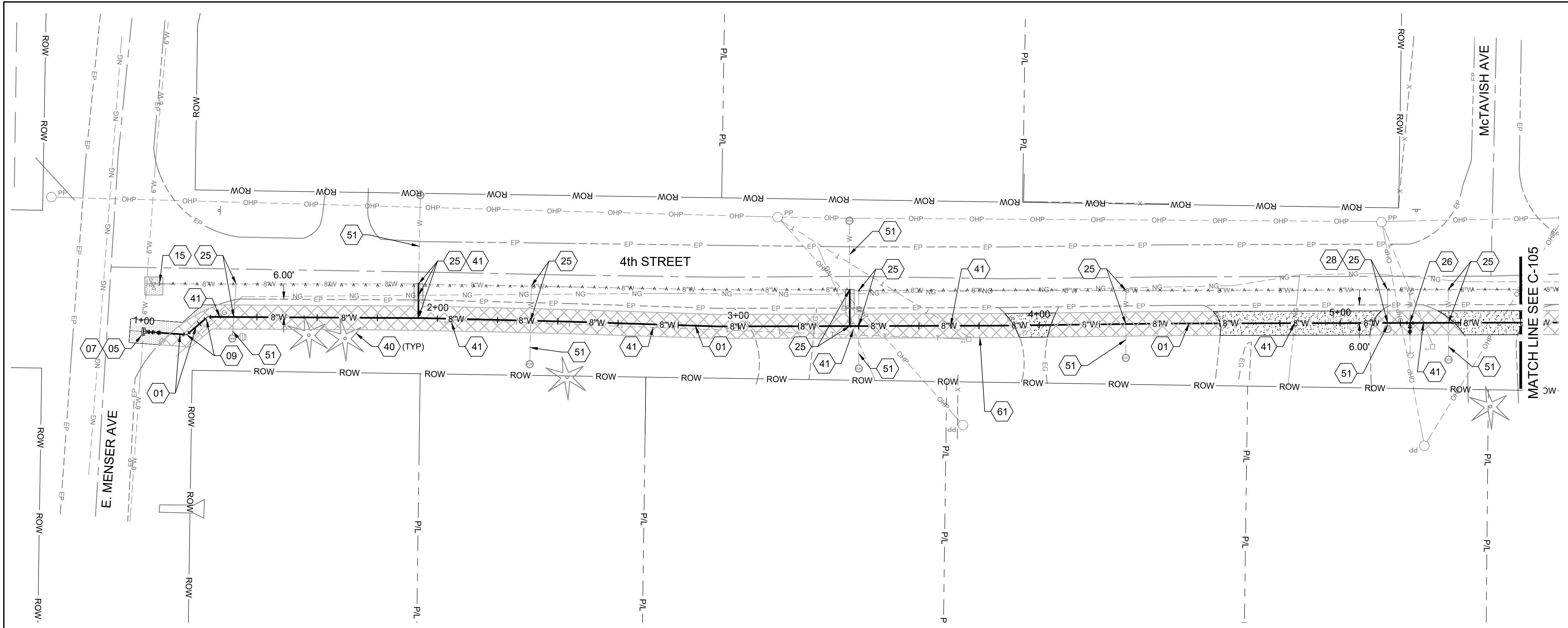
VERIFY SCALE: Scales
based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
216064-001

PAGE

SHEET NO.
C-103



GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPPWC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 09 | INSTALL FITTING - 8" 45° BEND |
| 15 | INSTALL FITTING - 8" CAP |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 26 | DEFINED CONSTRUCTION ZONE. |
| 28 | RELOCATE WATER METER AS REQUIRED |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE. REPLACE PER ISPPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
14743
5/4/2020
STILLMAN NORTON

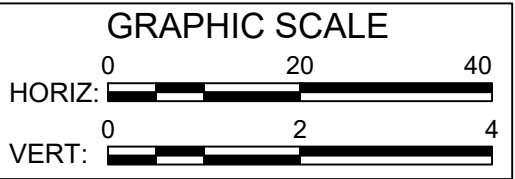
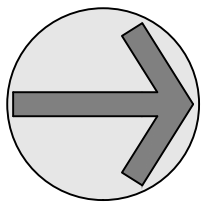
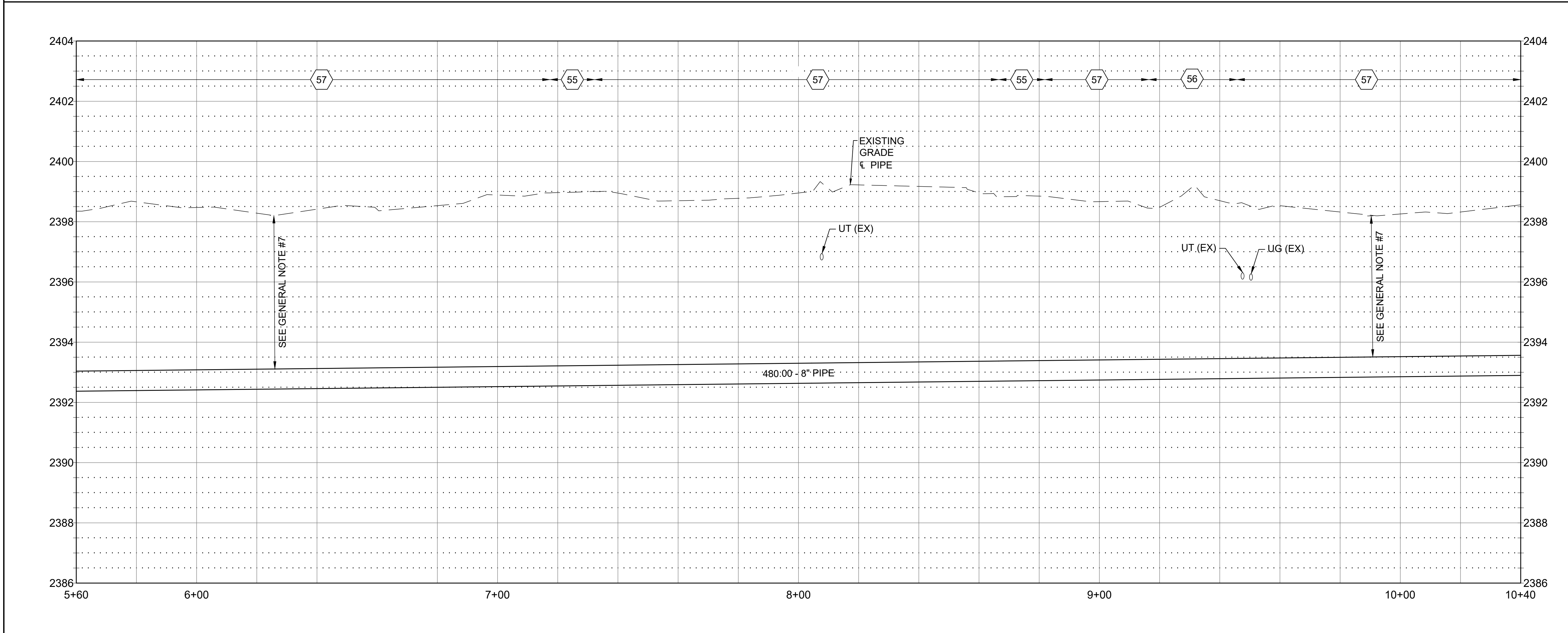
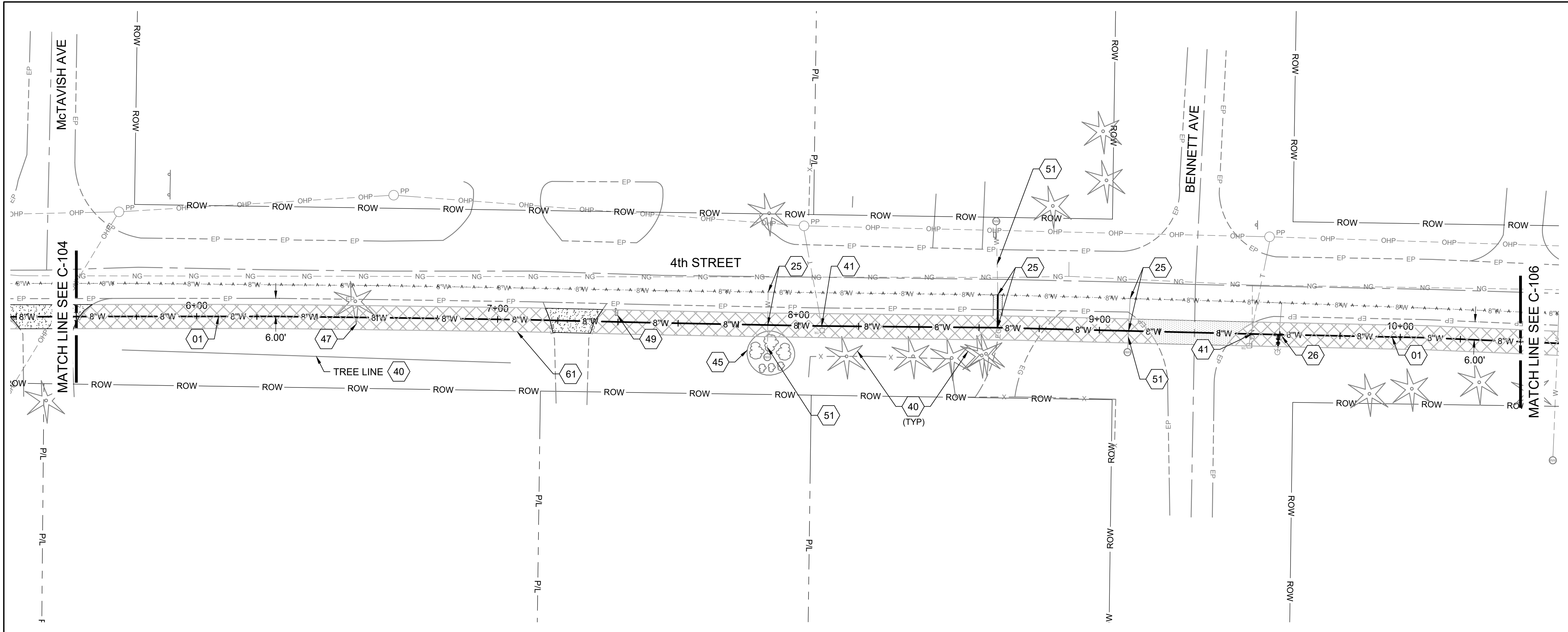
NO.	REVISIONS	DATE

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

4TH STREET WATER MAIN PLAN &
PROFILE - 1+00 TO 5+60

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-104	



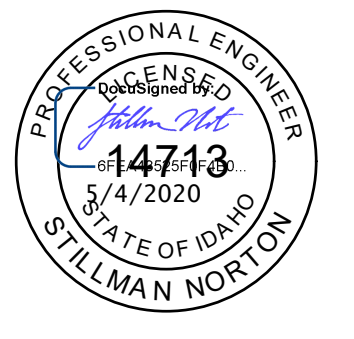
GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPWC SD-301 AND SD-302 |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 26 | DEFINED CONSTRUCTION ZONE. |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 45 | RETAIN & PROTECT EXISTING LANDSCAPE |
| 47 | REMOVE EXISTING TREE(S) |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

CITY OF ATHOL, ID

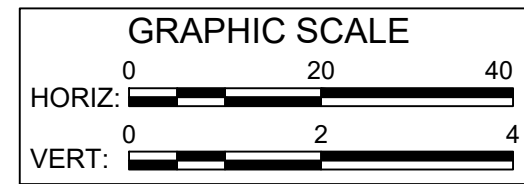
ATHOL WATER SYSTEM IMPROVEMENTS

4TH STREET WATER MAIN PLAN & PROFILE - 5+60 TO 10+40

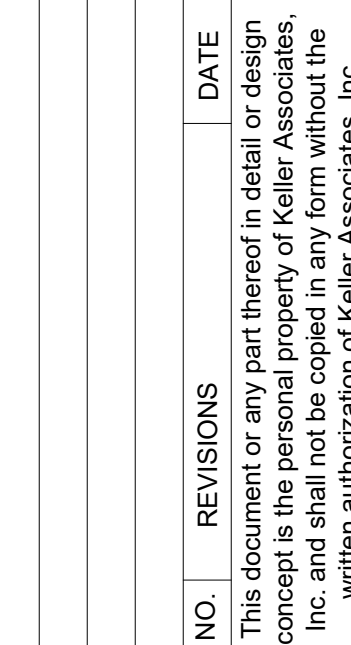
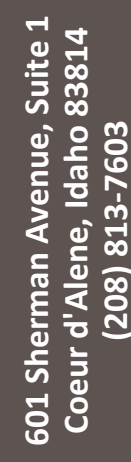
DRAWN: EWG	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-105	



-

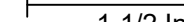


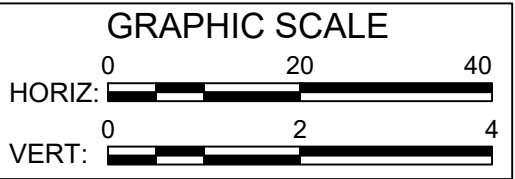
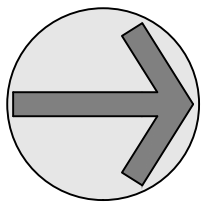
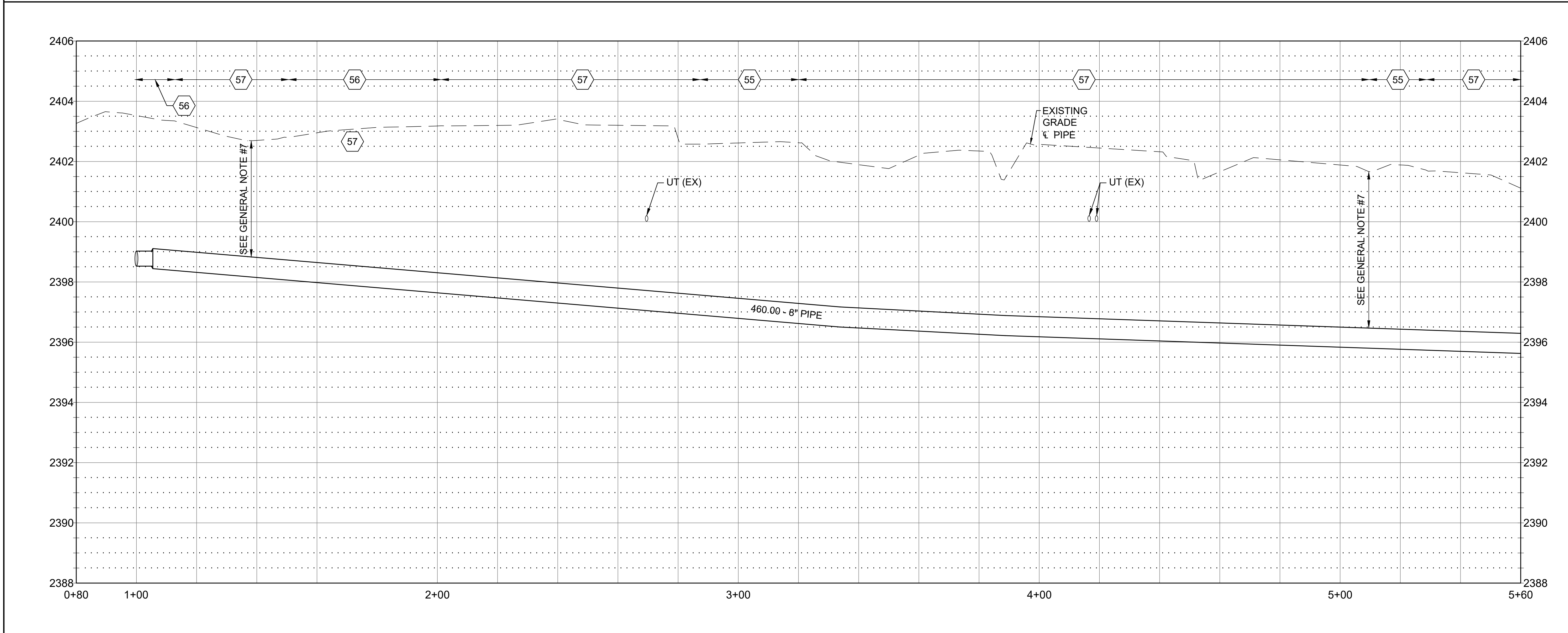
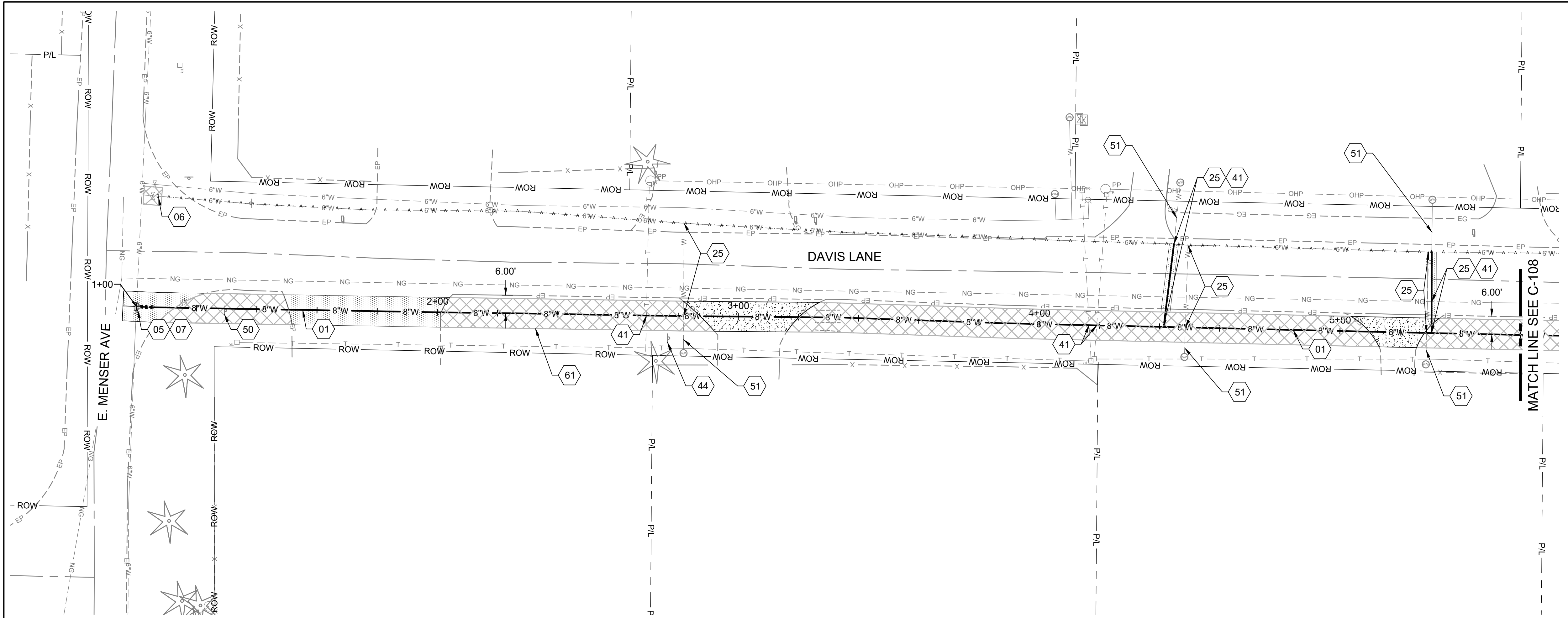
1. PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

4TH STREET WATER MAIN PLAN &
PROFILE - 10+40 TO END

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints. 	
PROJECT NO. 216064-001	PAGE
SHEET NO. <div style="font-size: 2em; font-weight: bold; text-align: center;">C-106</div>	

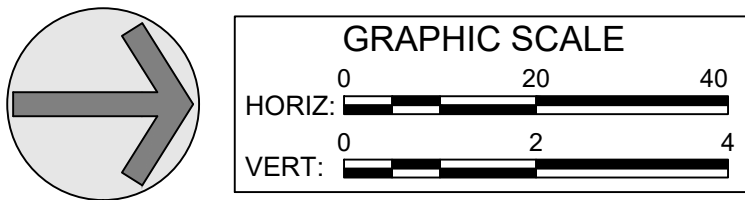
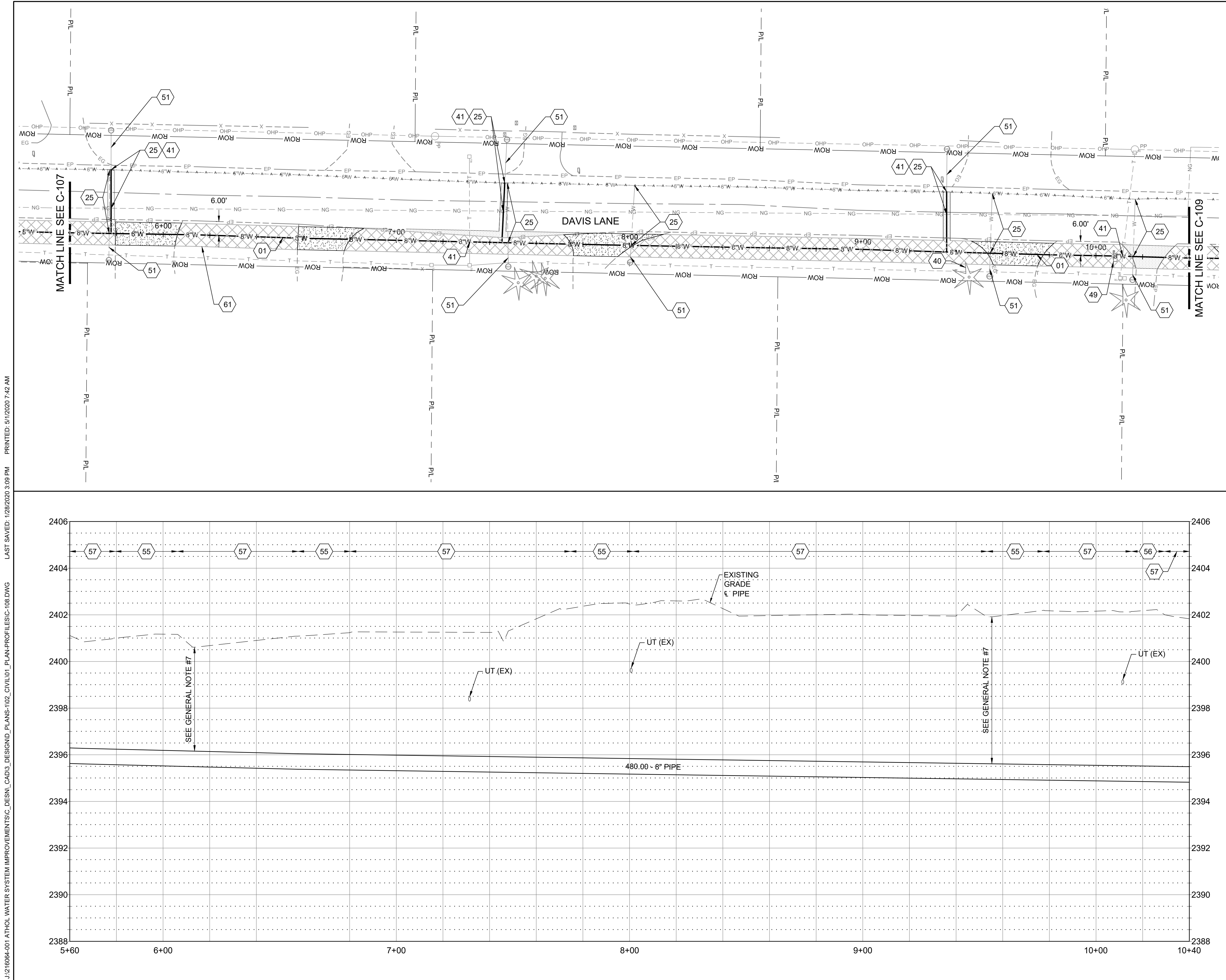


GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPPWC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 06 | INSTALL FITTING - 6" CAP |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 44 | RETAIN & PROTECT EXISTING SIGN |
| 50 | REMOVE & REPLACE EXISTING SIGN |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

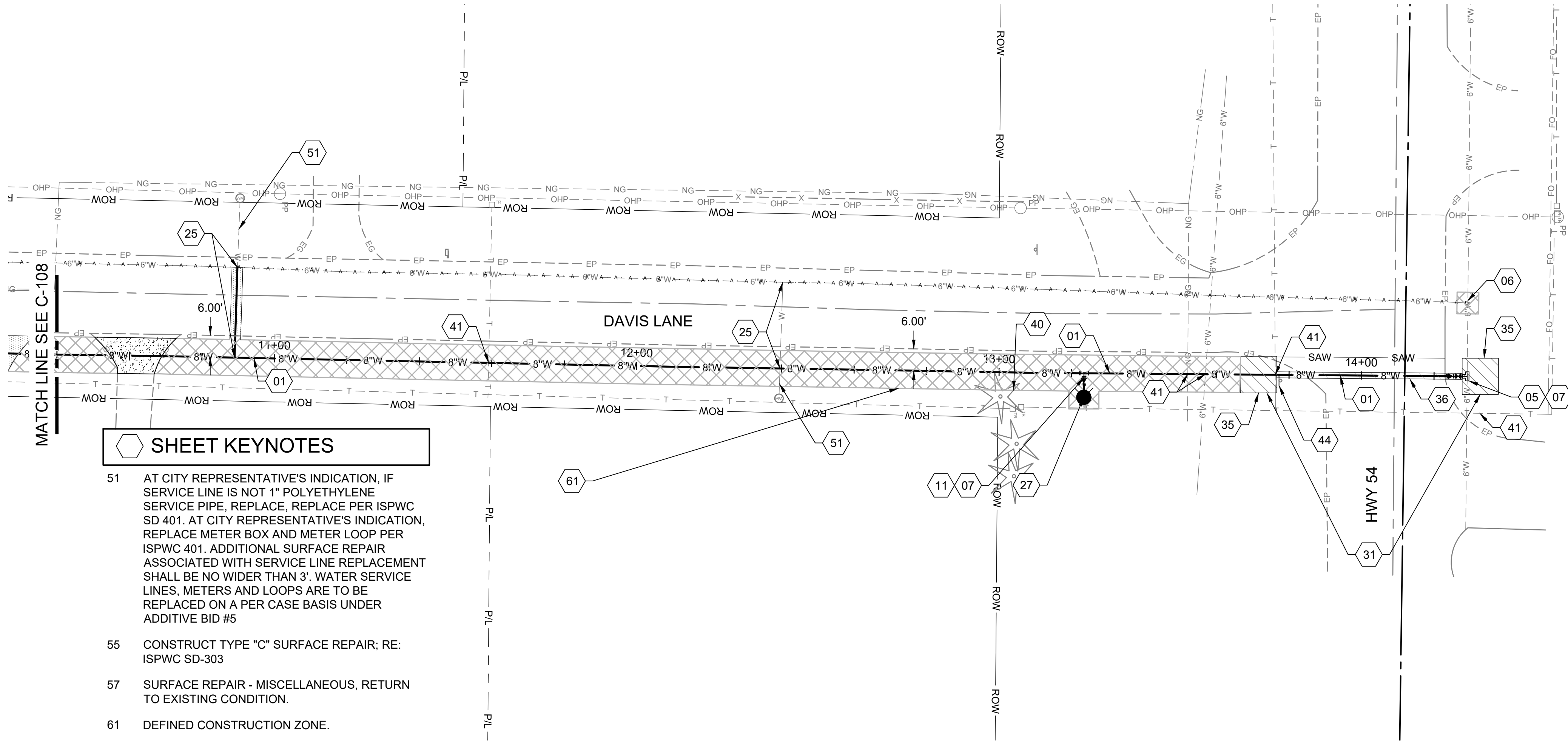


GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

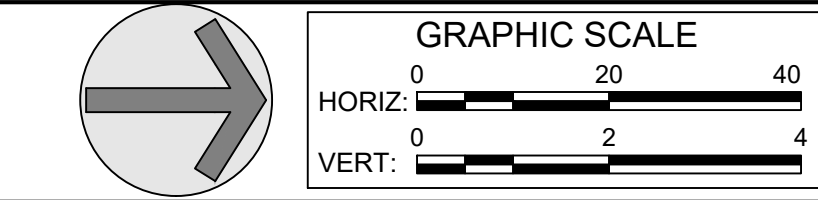
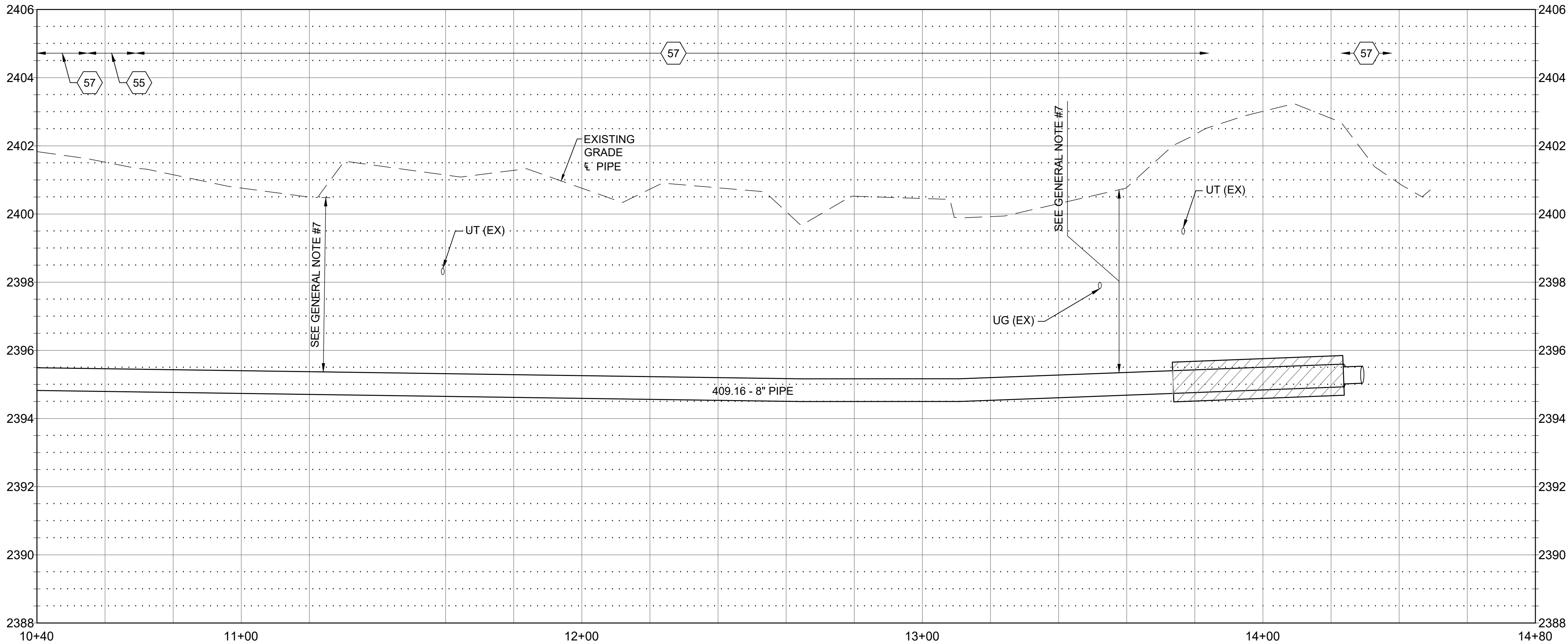
SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPPWC SD-301 AND SD-302 |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |



SHEET KEYNOTES

- 51 AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE PER ISPMC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPMC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5
- 55 CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPMC SD-303
- 57 SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION.
- 61 DEFINED CONSTRUCTION ZONE.

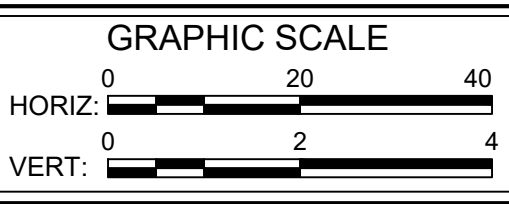
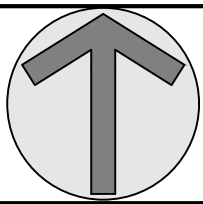
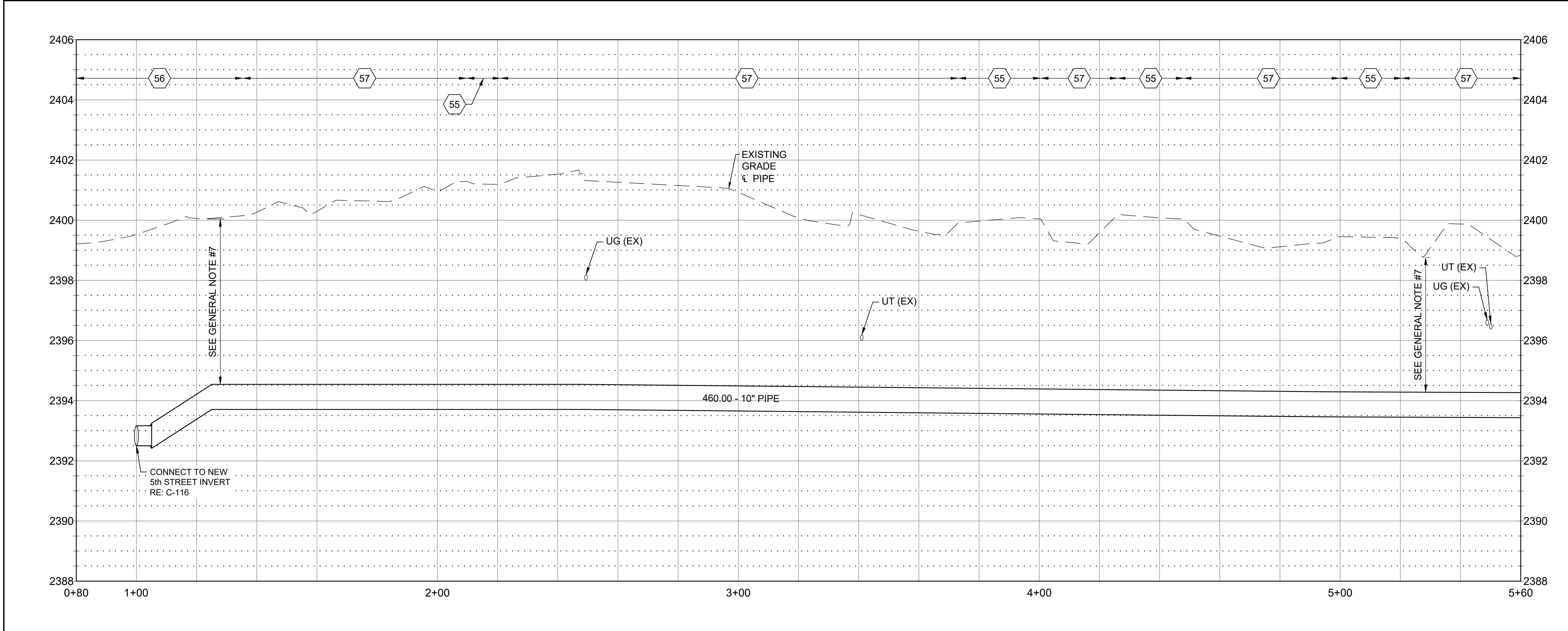
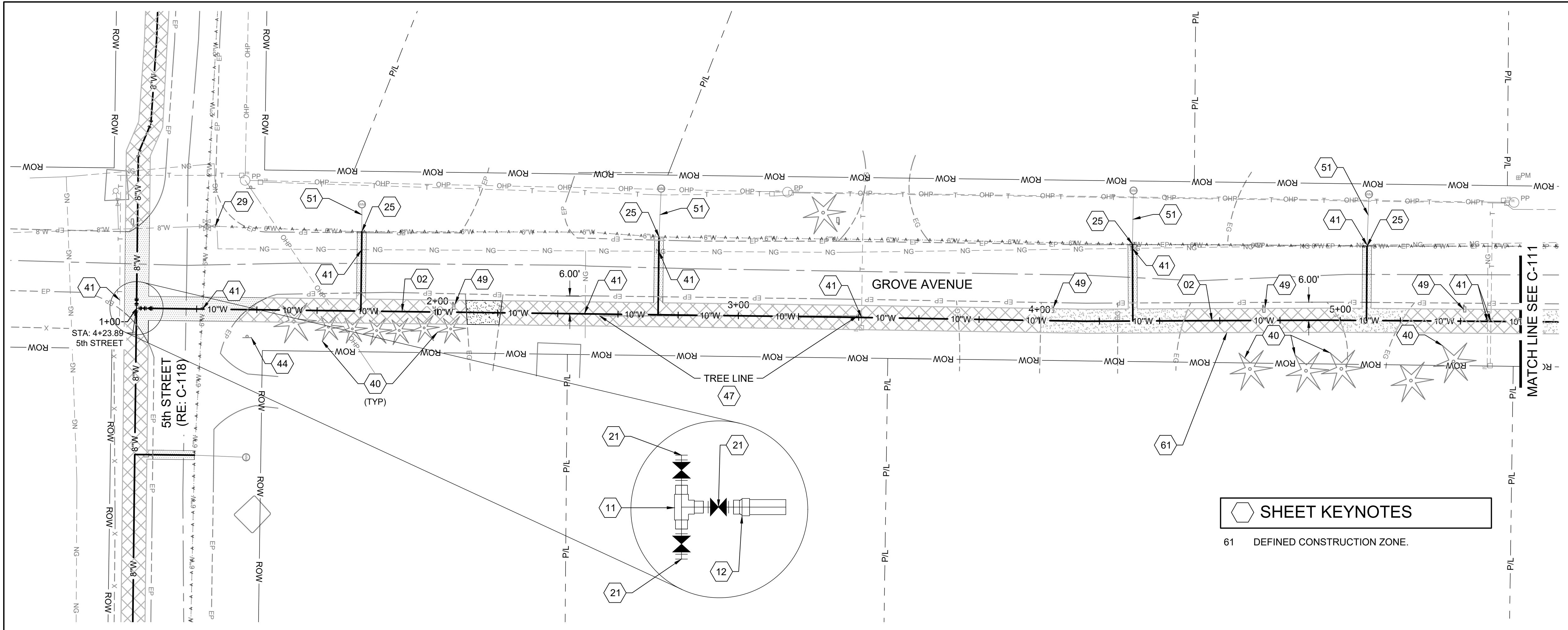


GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPMC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- 01 INSTALL PIPE - 8" WATER MAIN; RE: ISPMC SD-301 AND SD-302
- 05 INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE
- 06 INSTALL FITTING - 6" CAP
- 07 INSTALL FITTING - 6"x8" REDUCER
- 11 INSTALL FITTING - 8" TEE
- 25 WATER SERVICE CONNECTION (SEE GENERAL NOTE #9)
- 27 INSTALL FIRE HYDRANT ; RE: ISPMC SD-404
- 31 PROVIDE ADEQUATE TEMPORARY SHORING OR BRACING SYSTEMS TO PREVENT EXCAVATION FROM DAMAGING EXISTING ITD PAVEMENT. ITD PAVEMENT SHALL NOT BE DISTURBED UNDER ANY CIRCUMSTANCES. DESIGN OF SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER
- 35 JACKING & RECEIVING PIT (SIZE TO BE DETERMINED BY CONTRACTOR)
- 36 INSTALL CASING; RE: A1/C-501
- 40 RETAIN & PROTECT EXISTING TREE(S)
- 41 RETAIN & PROTECT EXISTING UTILITY
- 44 RETAIN & PROTECT EXISTING SIGN



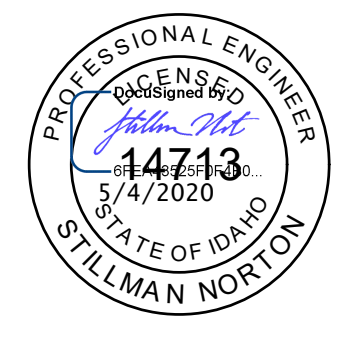
GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPMC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 02 | INSTALL PIPE - 10" WATER MAIN; RE: ISPMC SD-301 AND SD-302 |
| 11 | INSTALL FITTING - 8" TEE |
| 12 | INSTALL FITTING - 8"x10" REDUCER |
| 21 | INSTALL VALVE - 8" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPMC SD-406 |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 29 | ABANDON VALVE, CLOSE VALVE & REMOVE VALVE STEM |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 44 | RETAIN & PROTECT EXISTING SIGN |
| 47 | REMOVE EXISTING TREE(S) |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPMC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPMC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPMC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPMC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



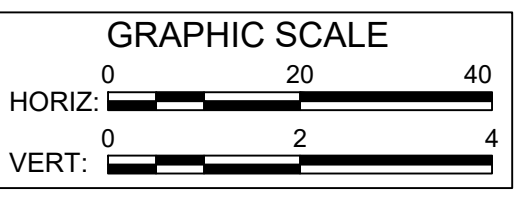
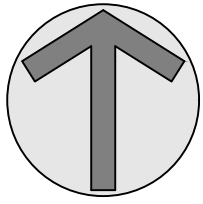
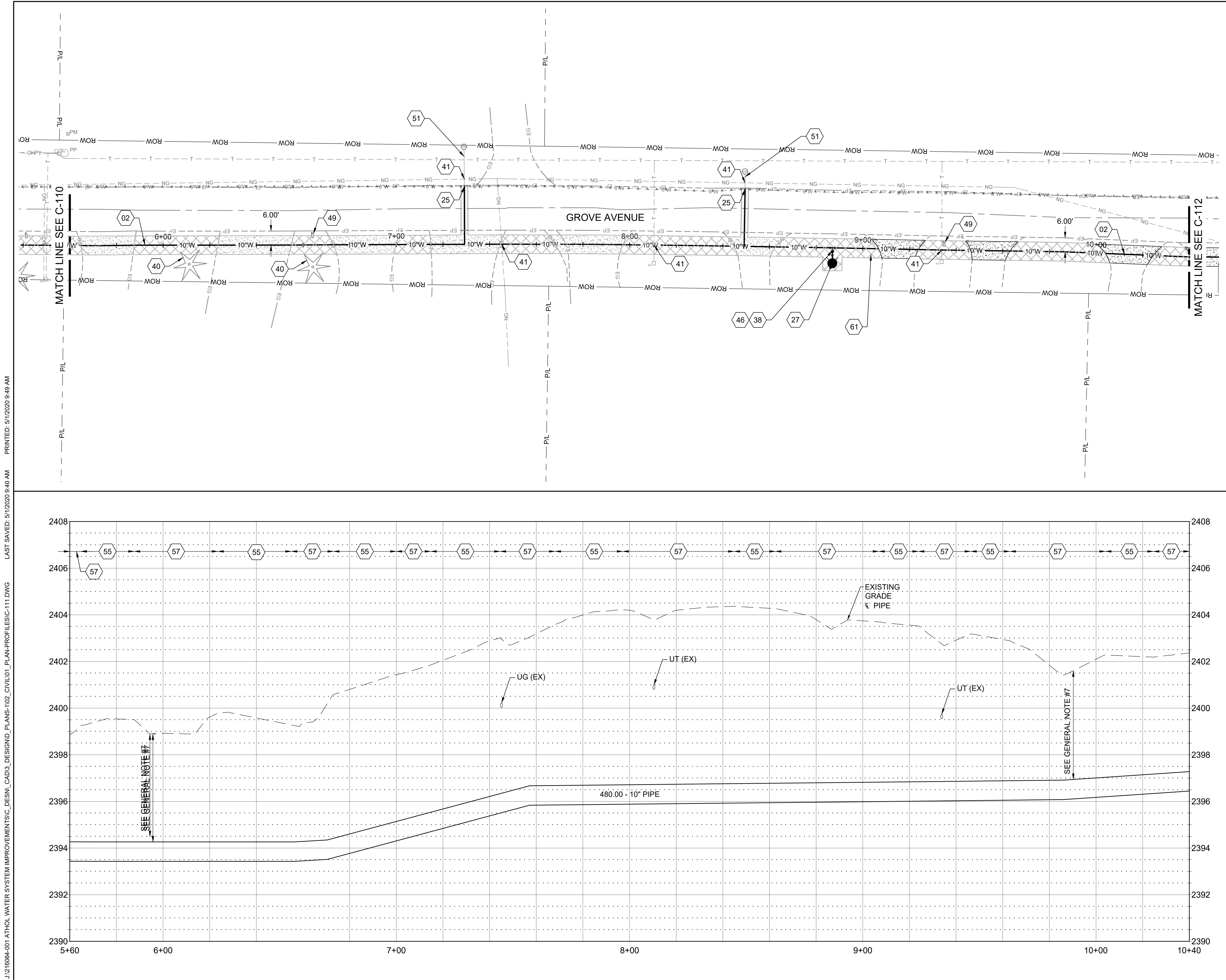
NO.	REVISIONS	DATE

CITY OF ATHOL, ID

**ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 1**

**GROVE AVENUE WATER MAIN
PLAN & PROFILE - 1+00 TO 5+60**

DRAWN: EWC / CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.
PROJECT NO. 216064-001 / PAGE
SHEET NO. C-110



GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 02 | INSTALL PIPE - 10" WATER MAIN; RE: ISPWC SD-301 AND SD-302 |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 27 | INSTALL FIRE HYDRANT ; RE: ISPWC SD-404 |
| 38 | INSTALL FITTING - 6"x10" REDUCER |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 46 | INSTALL FITTING - 10" TEE |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPWC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPWC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

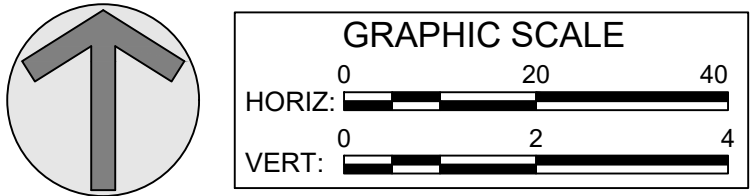
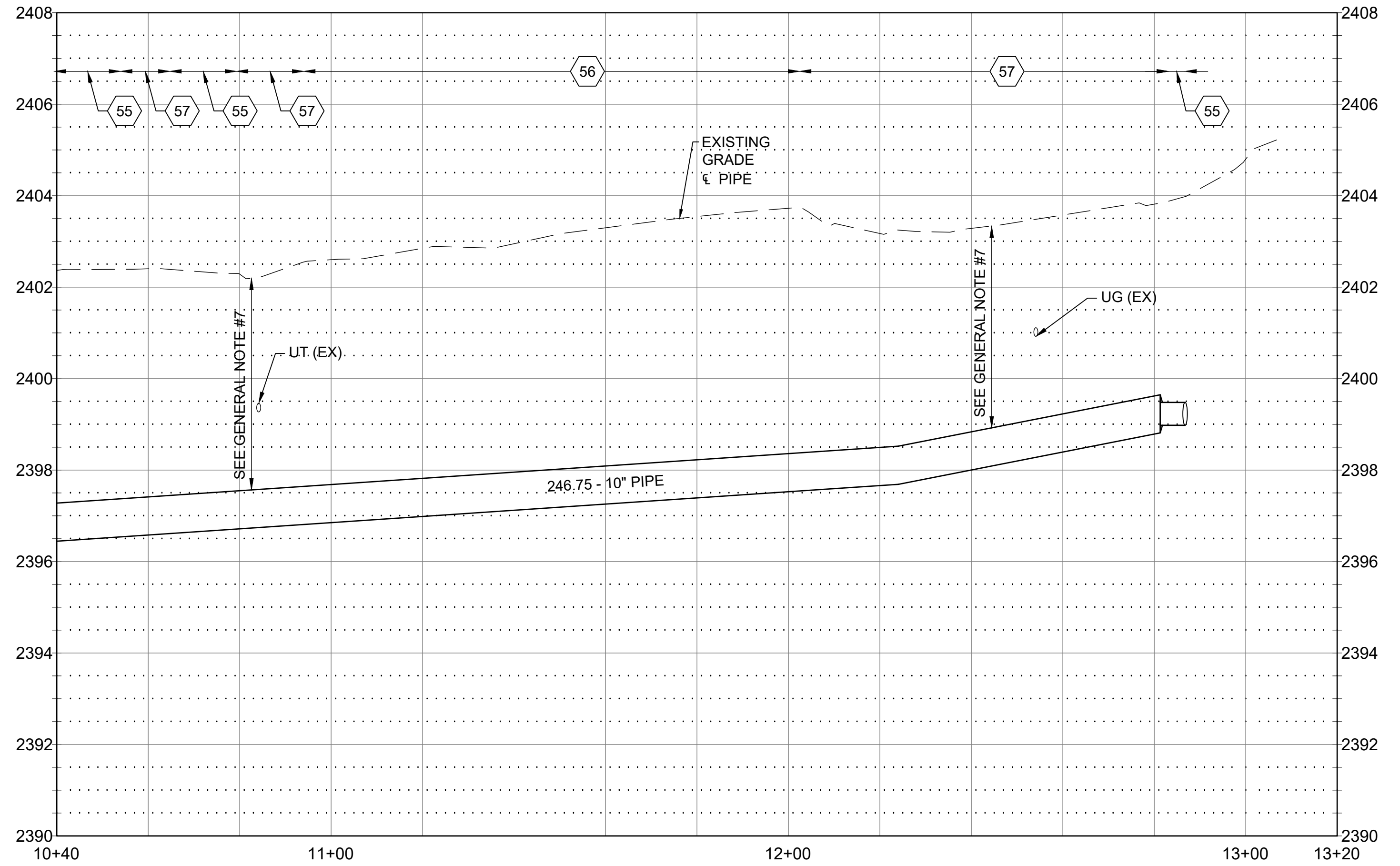
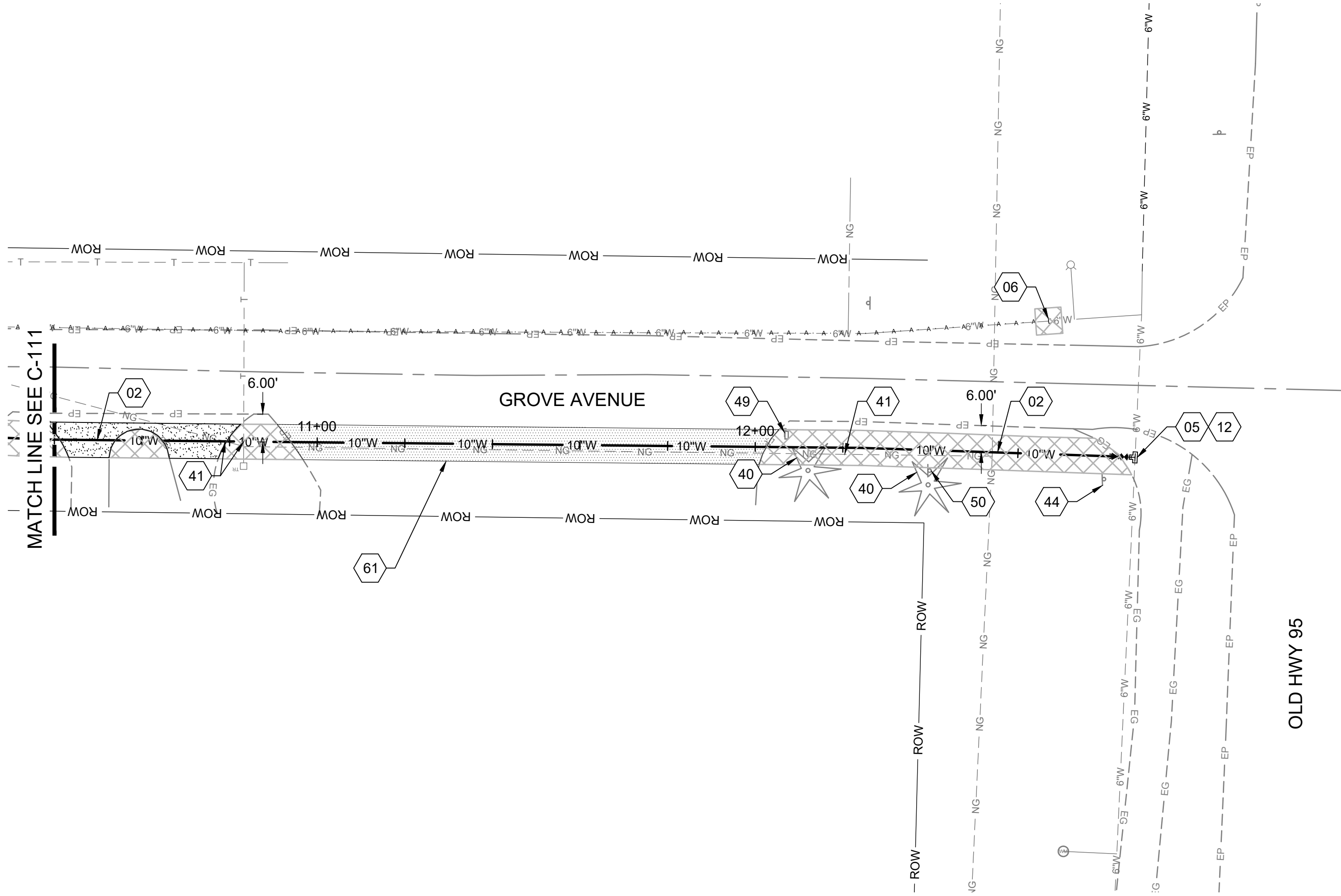
NO.	REVISIONS	DATE

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 1

GROVE AVENUE WATER MAIN PLAN &
PROFILE - 5+60 TO 10+40

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-111	



GENERAL SHEET NOTES

1. PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|---|
| 02 | INSTALL PIPE - 10" WATER MAIN; RE: ISPWC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 06 | INSTALL FITTING - 6" CAP |
| 12 | INSTALL FITTING - 8"x10" REDUCER |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 44 | RETAIN & PROTECT EXISTING SIGN |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 50 | REMOVE & REPLACE EXISTING SIGN |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
147713
5/4/2020
STILLMAN NORTON

STATE OF IDAHO

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 1

GROVE AVENUE WATER MAIN PLAN &
PROFILE - 10+40 TO END

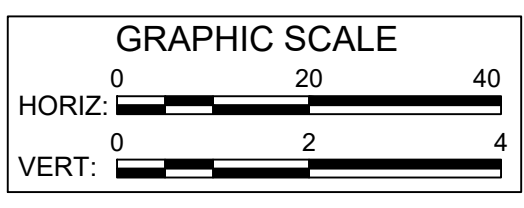
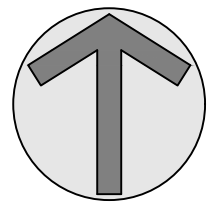
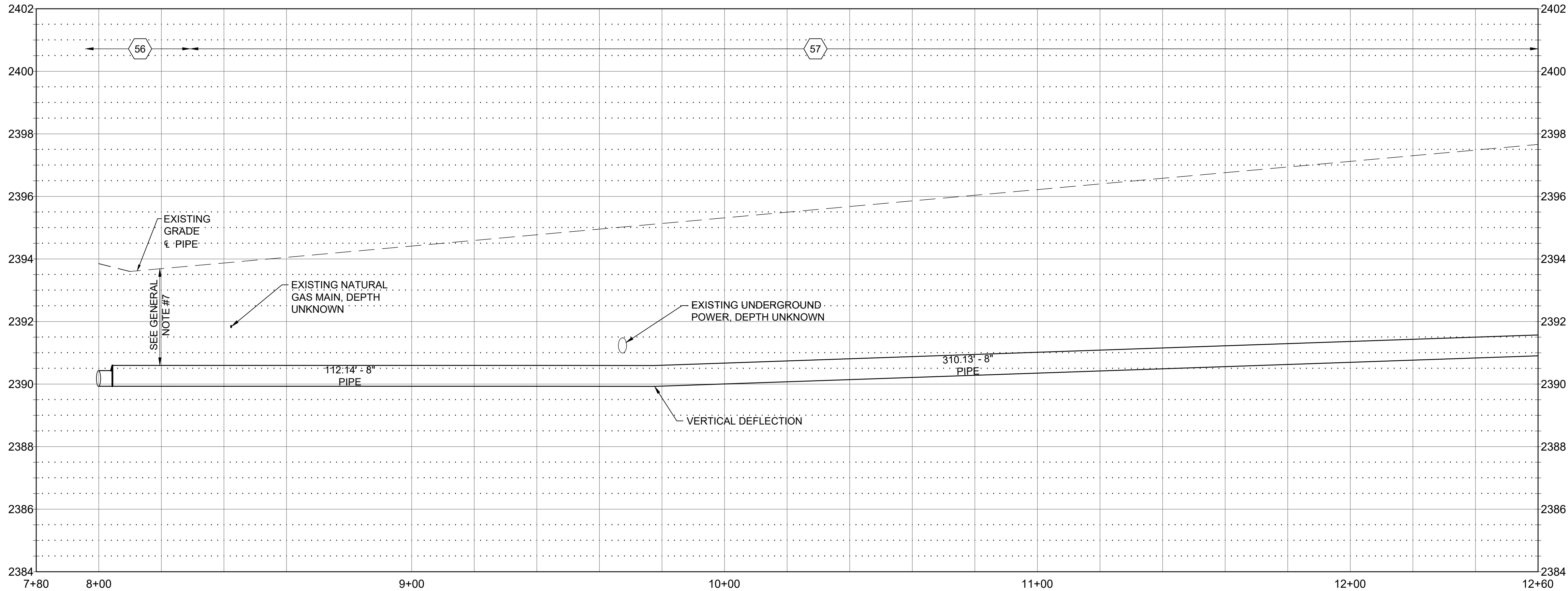
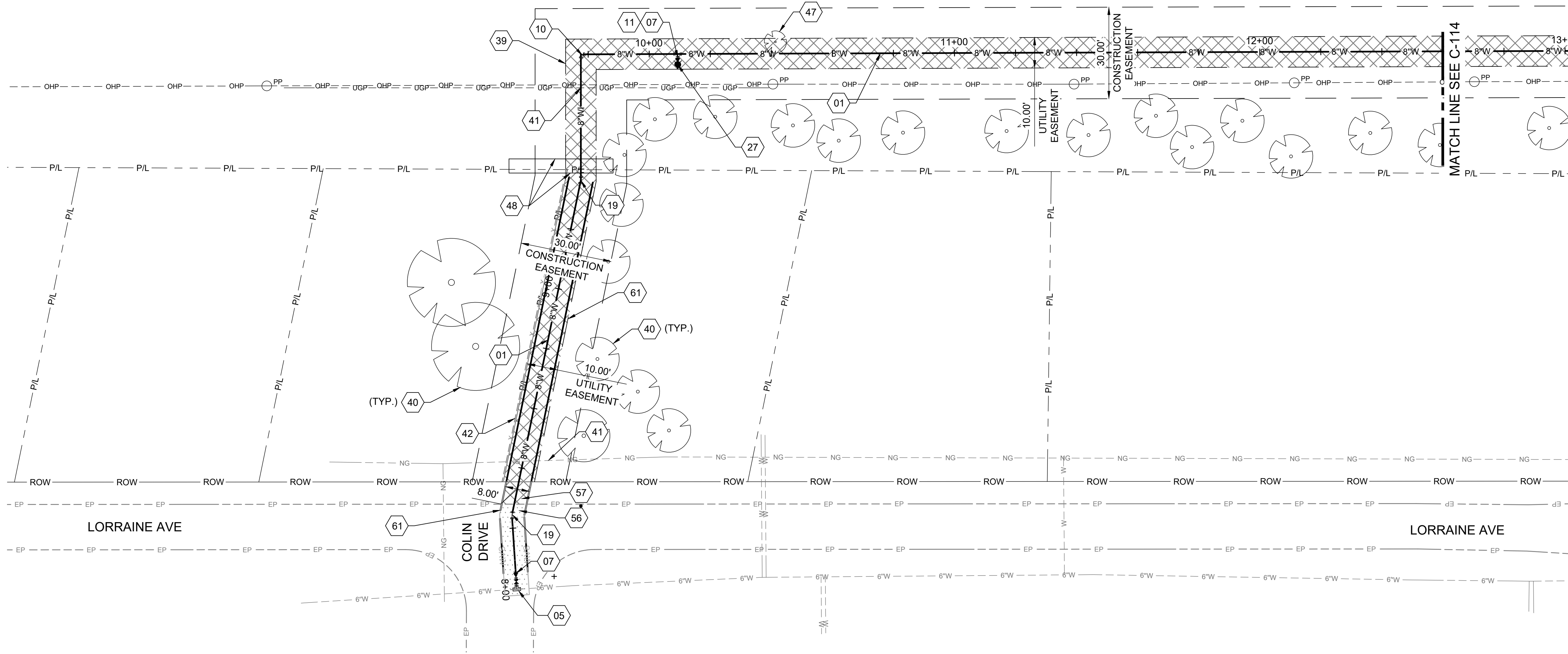
DRAWN: EWC | CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO. 216064-001 | PAGE

SHEET NO. C-112



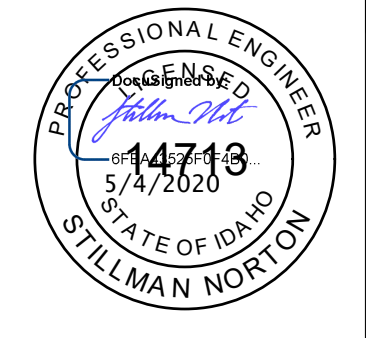
GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
- CONTRACTOR TO MAINTAIN AN ASCENDING PROFILE FROM STATION 8+00 TO 29+17.6.



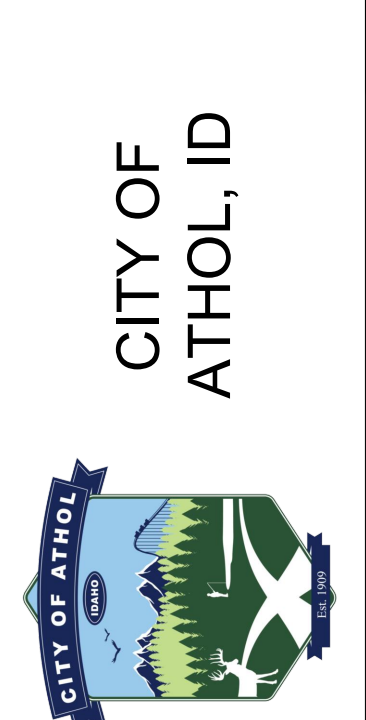
SHEET KEYNOTES

- | | |
|----|---|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPWC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 10 | INSTALL FITTING - 8" 90° BEND |
| 11 | INSTALL FITTING - 8" TEE |
| 19 | INSTALL FITTING - 8" 11.25° BEND |
| 27 | INSTALL FIRE HYDRANT ; RE: ISPWC SD-404 |
| 39 | RESTORE EXISTING RAILROAD BED TO EXISTING CONDITIONS OR BETTER. CONTRACTOR TO REUSE EXISTING RAILROAD ROCK, AND REMOVE ORGANIC MATERIAL FROM TRENCH. RESTORED SURFACE SHALL BE DRIVEABLE. |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 42 | RETAIN & PROTECT EXISTING FENCE |
| 47 | REMOVE EXISTING TREE(S) |
| 48 | REMOVE & RESET EXISTING FENCE AND GATE IN THE SAME OR BETTER CONDITION. |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |



NO.	REVISIONS	DATE

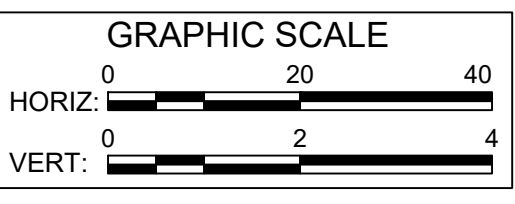
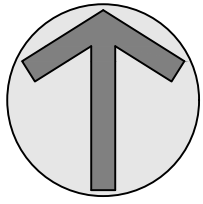
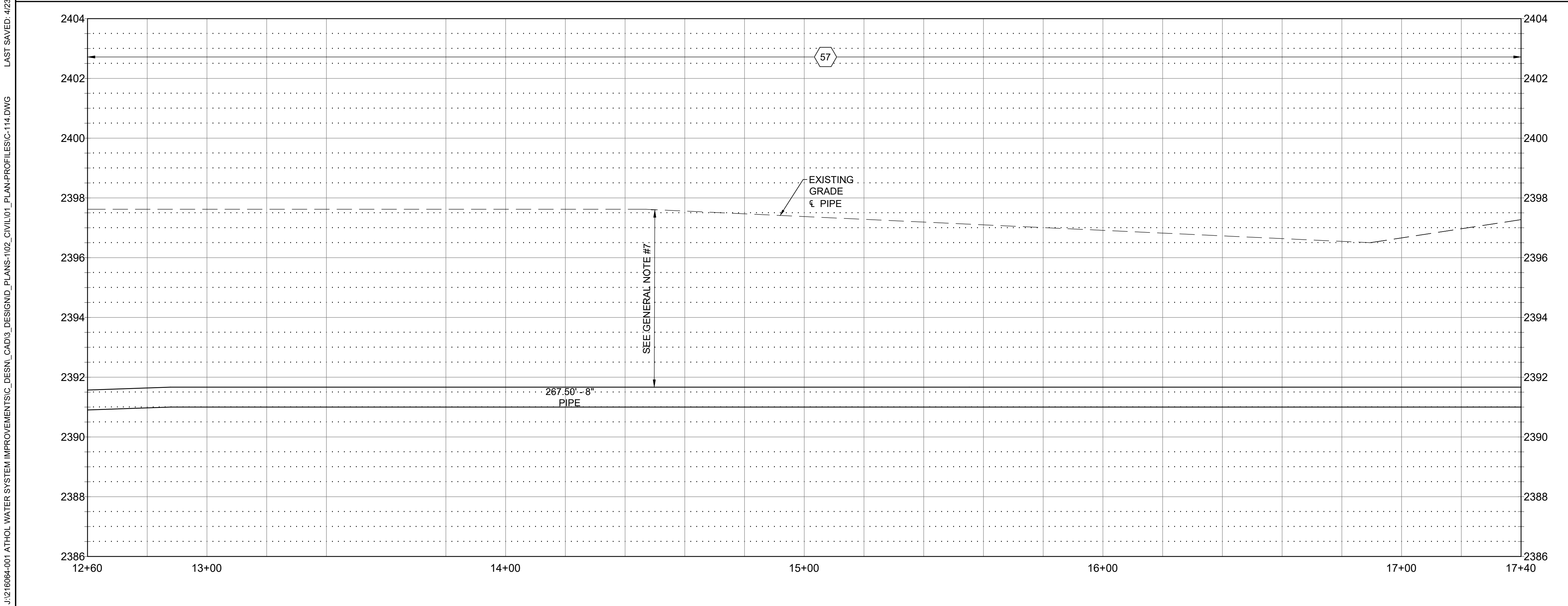
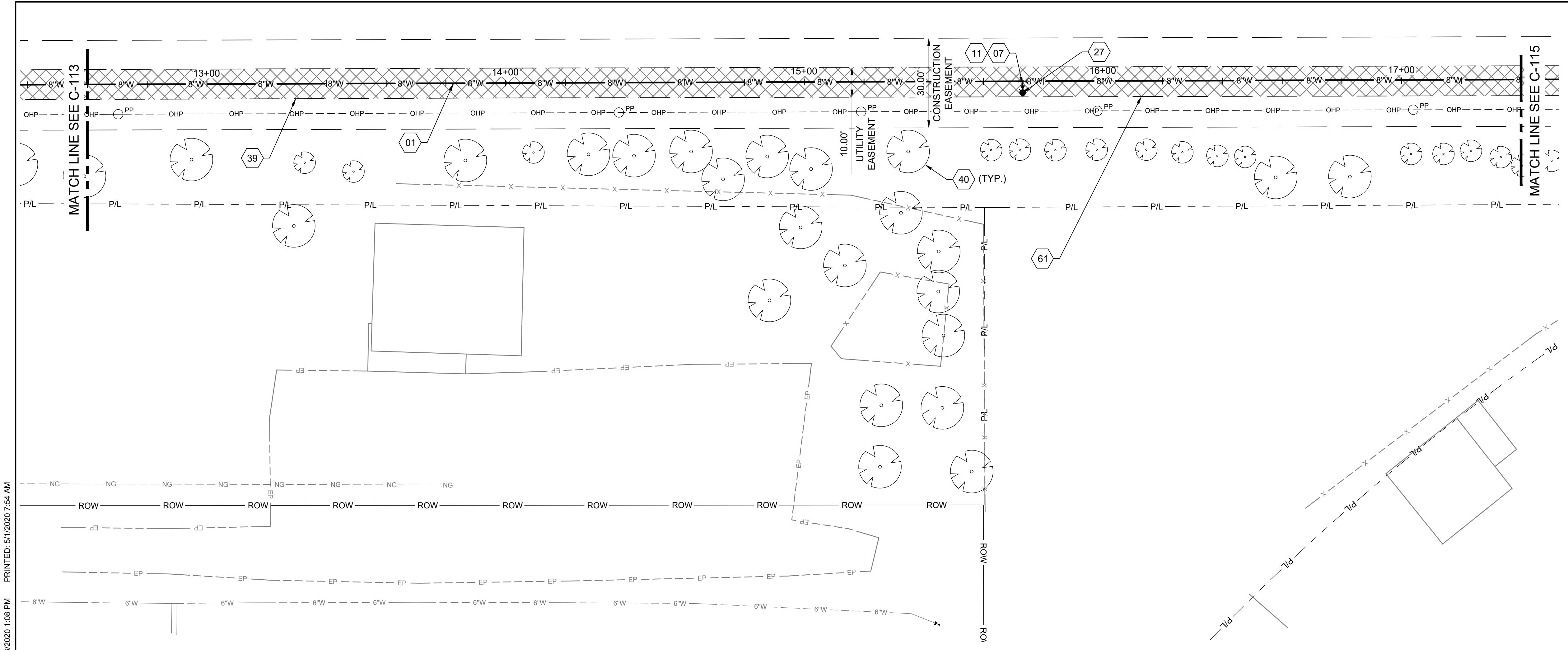
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 2

LORRAINE DR LOOP WATER MAIN PLAN
& PROFILE -10+00 TO 14+40

DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-113	

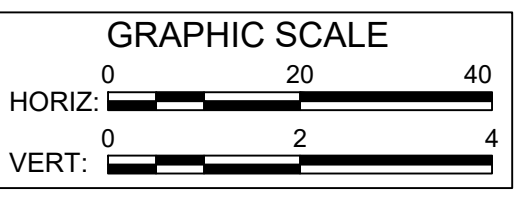
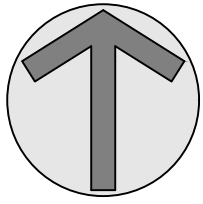
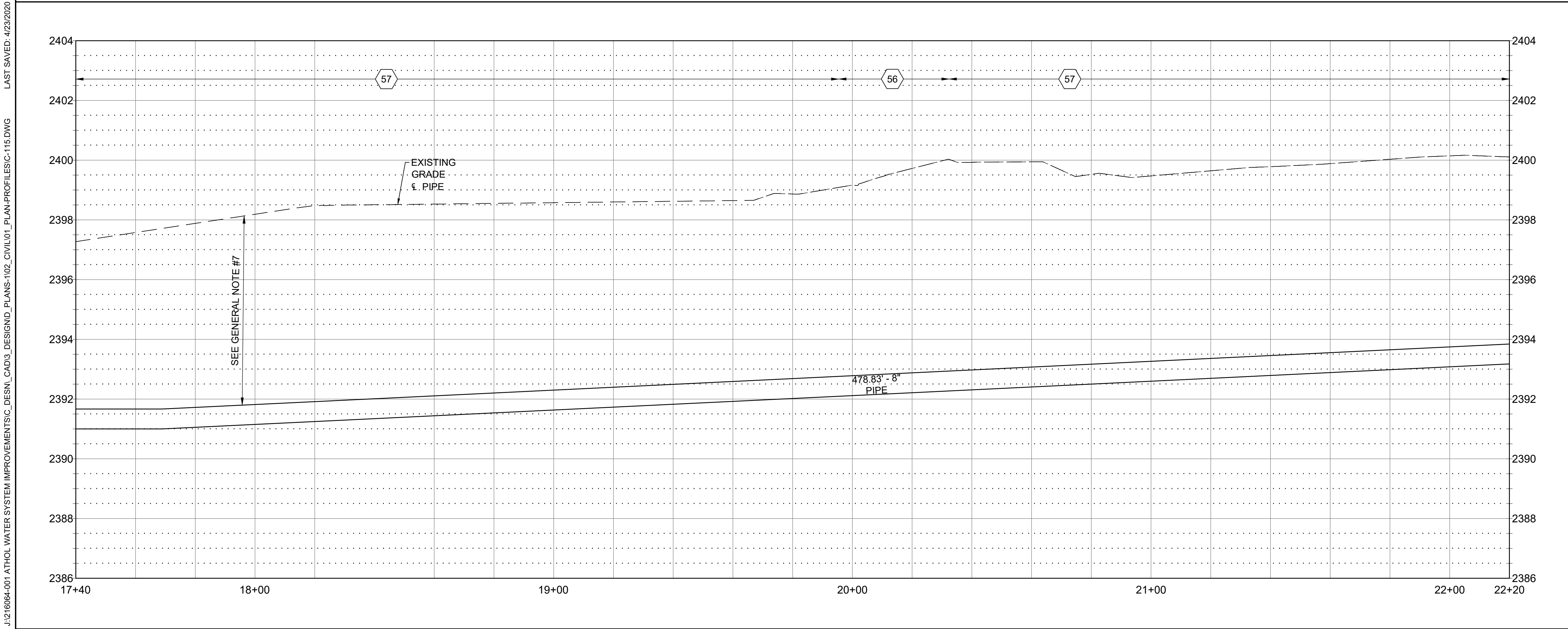
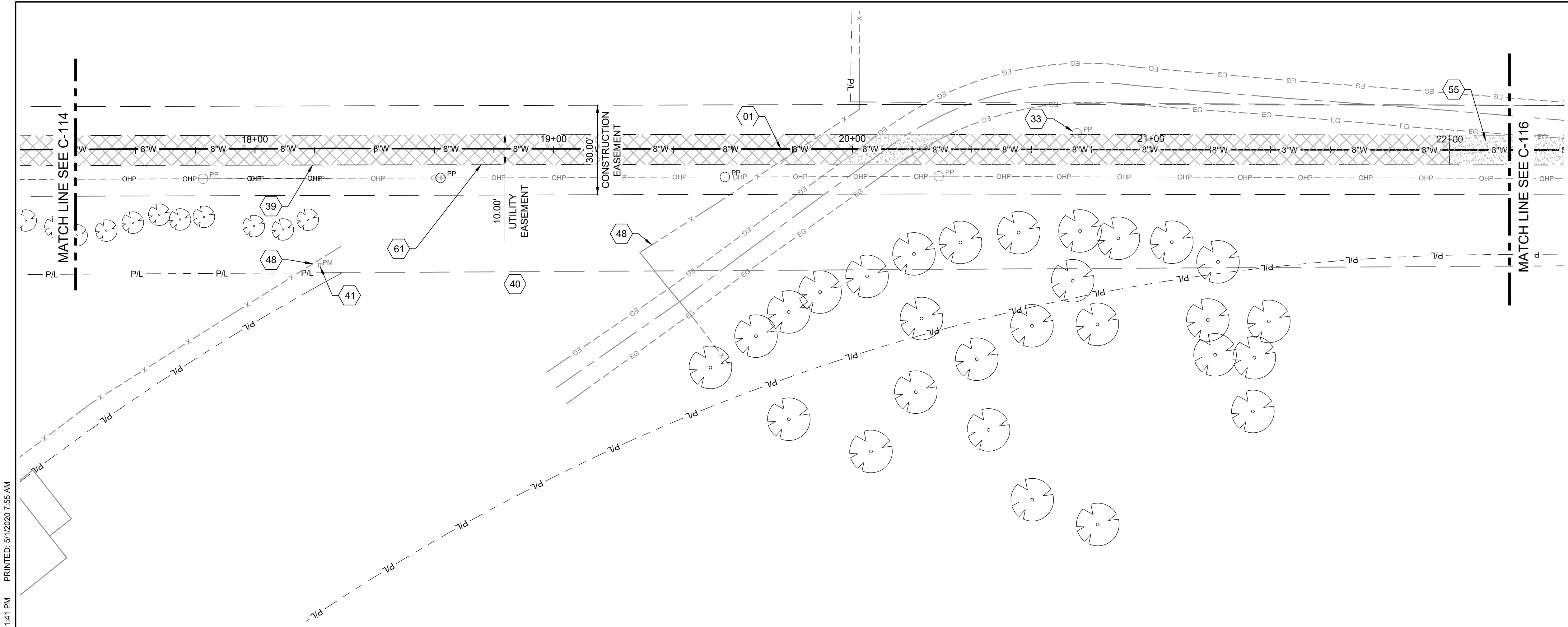


GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
- CONTRACTOR TO MAINTAIN AN ASCENDING PROFILE FROM STATION 8+00 TO 29+17.6.
- SEE SHEET C-504 FOR PHOTOS.

SHEET KEYNOTES

- | | |
|----|---|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPPWC SD-301 AND SD-302 |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 11 | INSTALL FITTING - 8" TEE |
| 27 | INSTALL FIRE HYDRANT ; RE: ISPPWC SD-404 |
| 39 | RESTORE EXISTING RAILROAD BED TO EXISTING CONDITIONS OR BETTER. CONTRACTOR TO REUSE EXISTING RAILROAD ROCK, AND REMOVE ORGANIC MATERIAL FROM TRENCH. RESTORED SURFACE SHALL BE DRIVEABLE. |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |



GENERAL SHEET NOTES

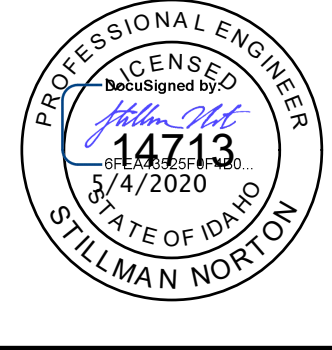
1. PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
11. CONTRACTOR TO MAINTAIN AN ASCENDING PROFILE FROM STATION 8+00 TO 29+17.6.

SHEET KEYNOTES

- | | |
|----|---|
| 01 | INSTALL PIPE - 8" WATER MAIN: RE: ISPWC SD-301 AND SD-302 |
| 33 | TEMPORARY POLE SUPPORT, CONTRACTOR RESPONSIBLE FOR COORDINATION WITH POWER UTILITY |
| 39 | RESTORE EXISTING RAILROAD BED TO EXISTING CONDITIONS OR BETTER. CONTRACTOR TO REUSE EXISTING RAILROAD ROCK, AND REMOVE ORGANIC MATERIAL FROM TRENCH. RESTORED SURFACE SHALL BE DRIVEABLE. |
| 40 | RETAIN & PROTECT EXISTING TREE(S) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 48 | REMOVE & RESET EXISTING FENCE AND GATE IN THE SAME OR BETTER CONDITION. |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



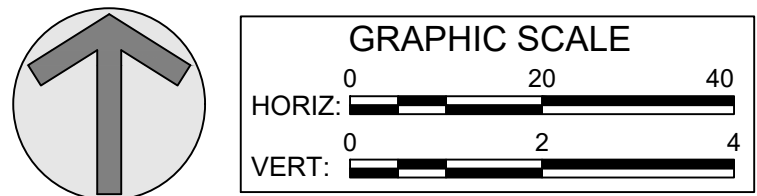
NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

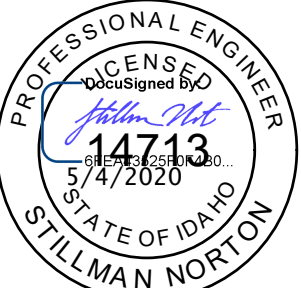


ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 2
LORRAINE DR LOOP WATER MAIN PLAN
& PROFILE - STA 17+40 TO 22+20

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-115	

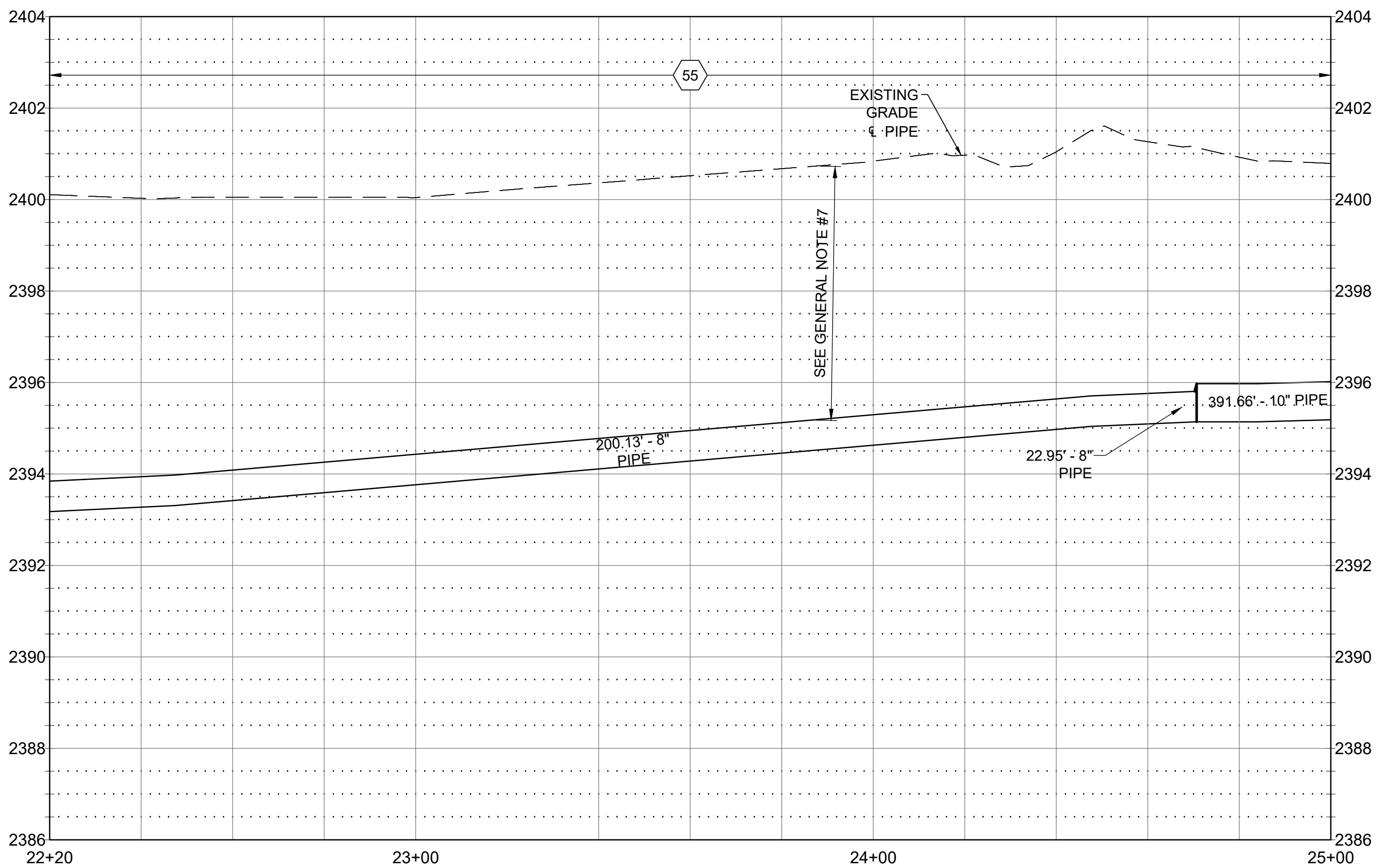


1. PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
11. CONTRACTOR TO MAINTAIN AN ASCENDING PROFILE FROM STATION 8+00 TO 29+17.6.
12. SEE SHEET C-503 FOR PHOTOS.



NO.	REVISIONS	DATE
	This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.	

CITY OF
ATHOL, ID



01	INSTALL PIPE - 8" WATER MAIN; RE: ISPWC SD-301 AND SD-302
02	INSTALL PIPE - 10" WATER MAIN; RE: ISPWC SD-301 AND SD-302
14	INSTALL FITTING - 10" 45° BEND
17	INSTALL FITTING - 10" CAP NORTH END
21	INSTALL VALVE - 8" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPWC SD-406
22	INSTALL VALVE - 10" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPWC SD-406
23	INSTALL FITTING - 8"x10" REDUCING TEE
27	INSTALL FIRE HYDRANT ; RE: ISPWC SD-404
33	TEMPORARY POLE SUPPORT, CONTRACTOR RESPONSIBLE FOR COORDINATION WITH POWER UTILITY
38	INSTALL FITTING - 6"x10" REDUCER
39	RESTORE EXISTING RAILROAD BED TO EXISTING CONDITIONS OR BETTER. CONTRACTOR TO REUSE EXISTING RAILROAD ROCK, AND REMOVE ORGANIC MATERIAL FROM TRENCH. RESTORED SURFACE SHALL BE DRIVEABLE.
41	RETAIN & PROTECT EXISTING UTILITY
46	INSTALL FITTING - 10" TEE
55	CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303
61	DEFINED CONSTRUCTION ZONE.

ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 2

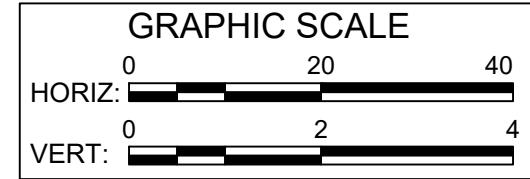
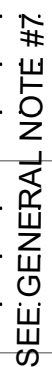
OLD HIGHWAY 95 WATER MAIN PLAN &
PROFILE - 22+20 TO 25+00

PRAWN: JLP CHECK: SAN
VERIFY SCALE: Scales
based on 22"x34" prints

1-1/2 Inches

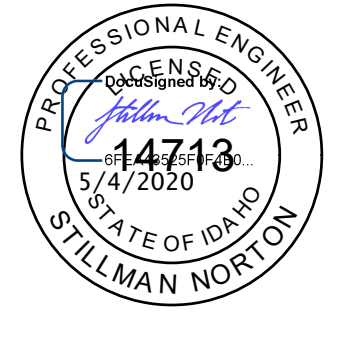
PROJECT NO. 216064-001	PAGE
SHEET NO.	

C-116



1. PRIOR TO CONSTRUCTION CONTRACTOR TO POT HOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
11. CONTRACTOR TO MAINTAIN AN ASCENDING PROFILE FROM STATION 8+00 TO 29+17.6.
12. SEE SHEET C-502 FOR PHOTOS.

02	INSTALL PIPE - 10" WATER MAIN; RE: ISPWC SD-301 AND SD-302
13	INSTALL FITTING - 6"x10" REDUCER
22	INSTALL VALVE - 10" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPWC SD-406
24	CONNECT TO EXISTING, FITTINGS AS REQUIRED
55	CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303
58	EXISTING 6" WATER LINE
61	DEFINED CONSTRUCTION ZONE.



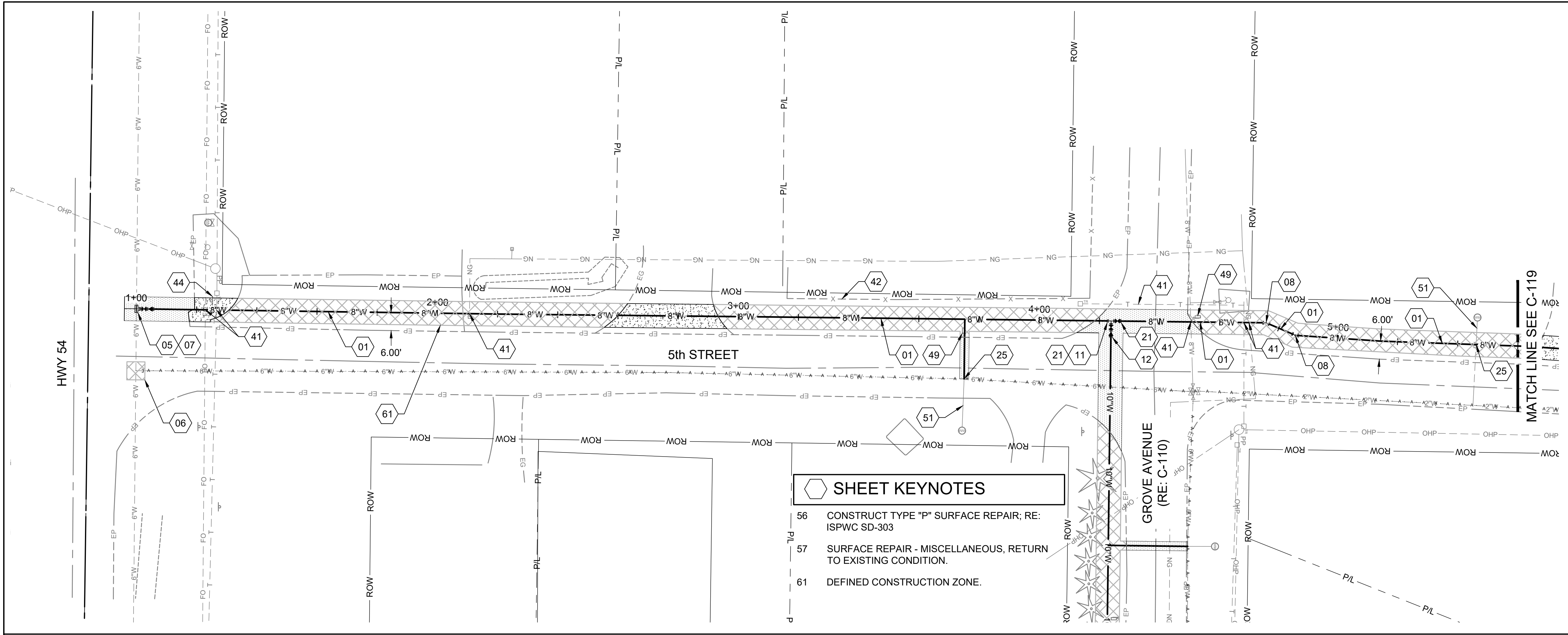
NO.	REVISIONS	DATE
	This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.	

OLD HIGHWAY 95 WATER MAIN PLAN &
PROFILE - 25+00 TO END

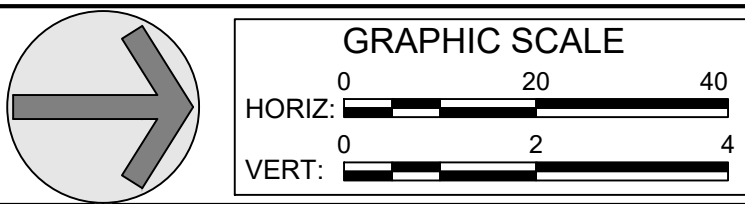
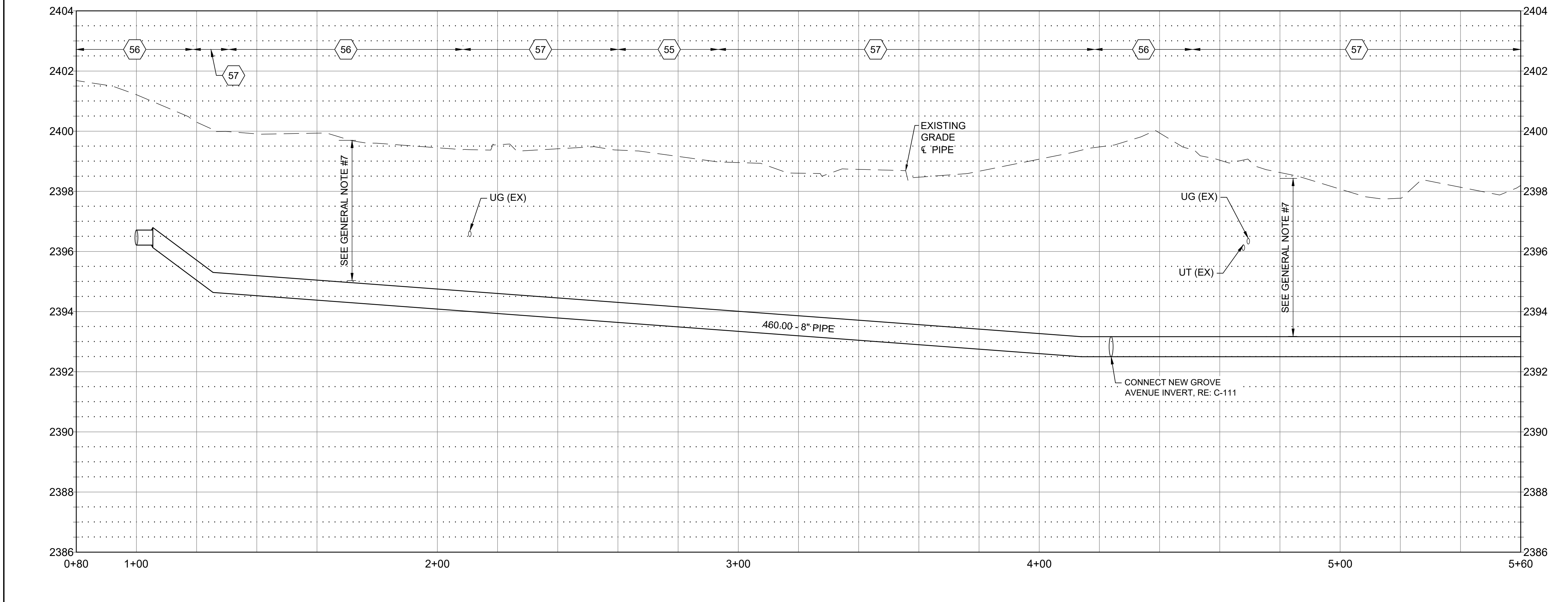
VERIFY SCALE: Scales based on 22"x34" prints

PROJECT NO.	PAGE
-------------	------

C-117



SHEET KEYNOTES	
56	CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPMC SD-303
57	SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION.
61	DEFINED CONSTRUCTION ZONE.

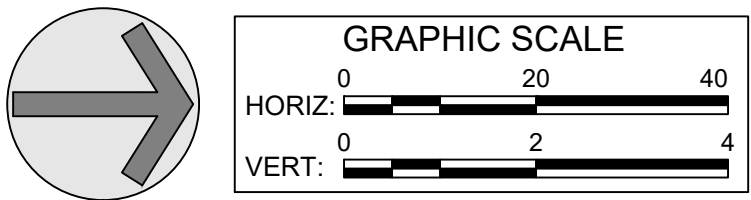
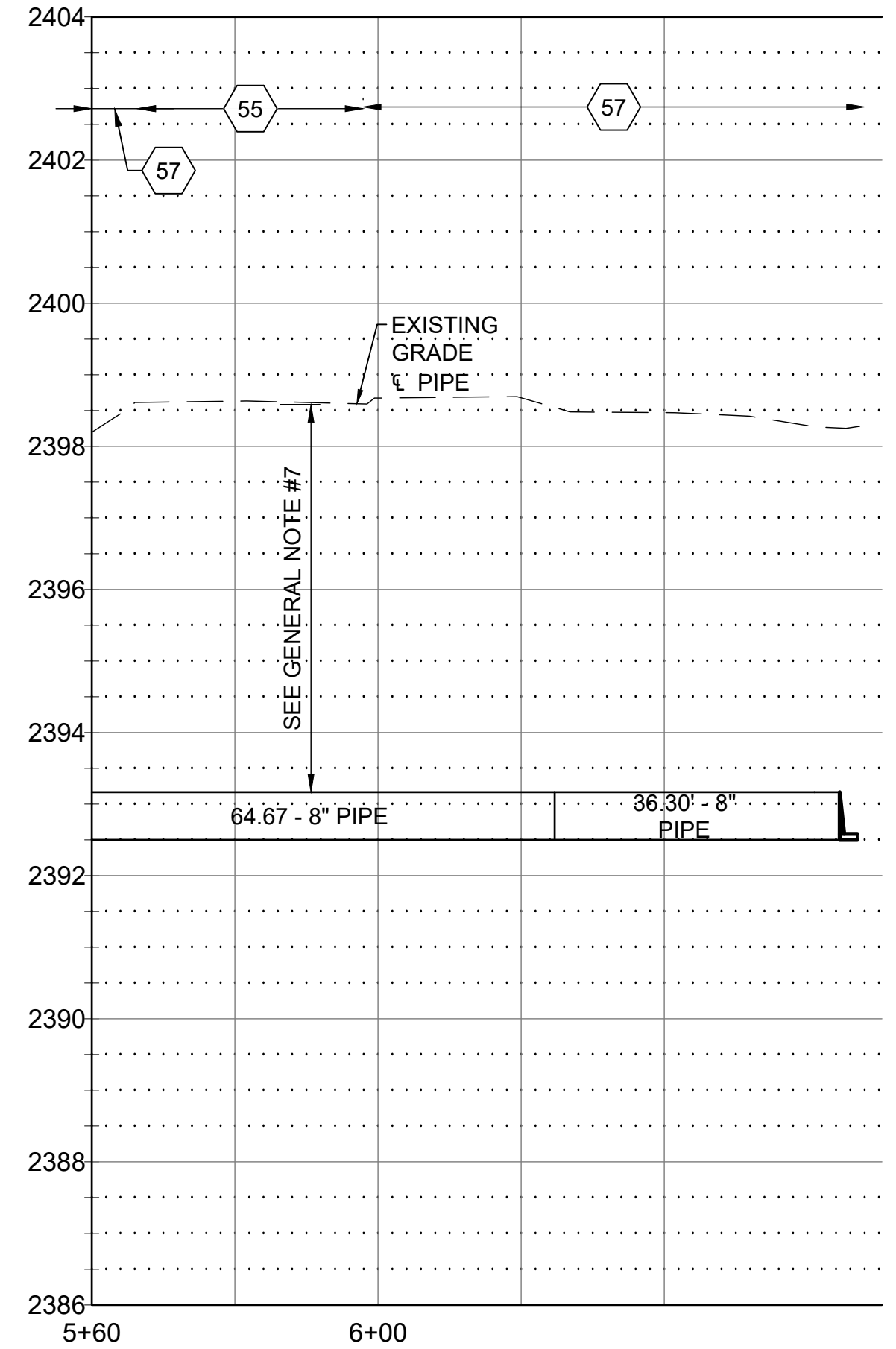
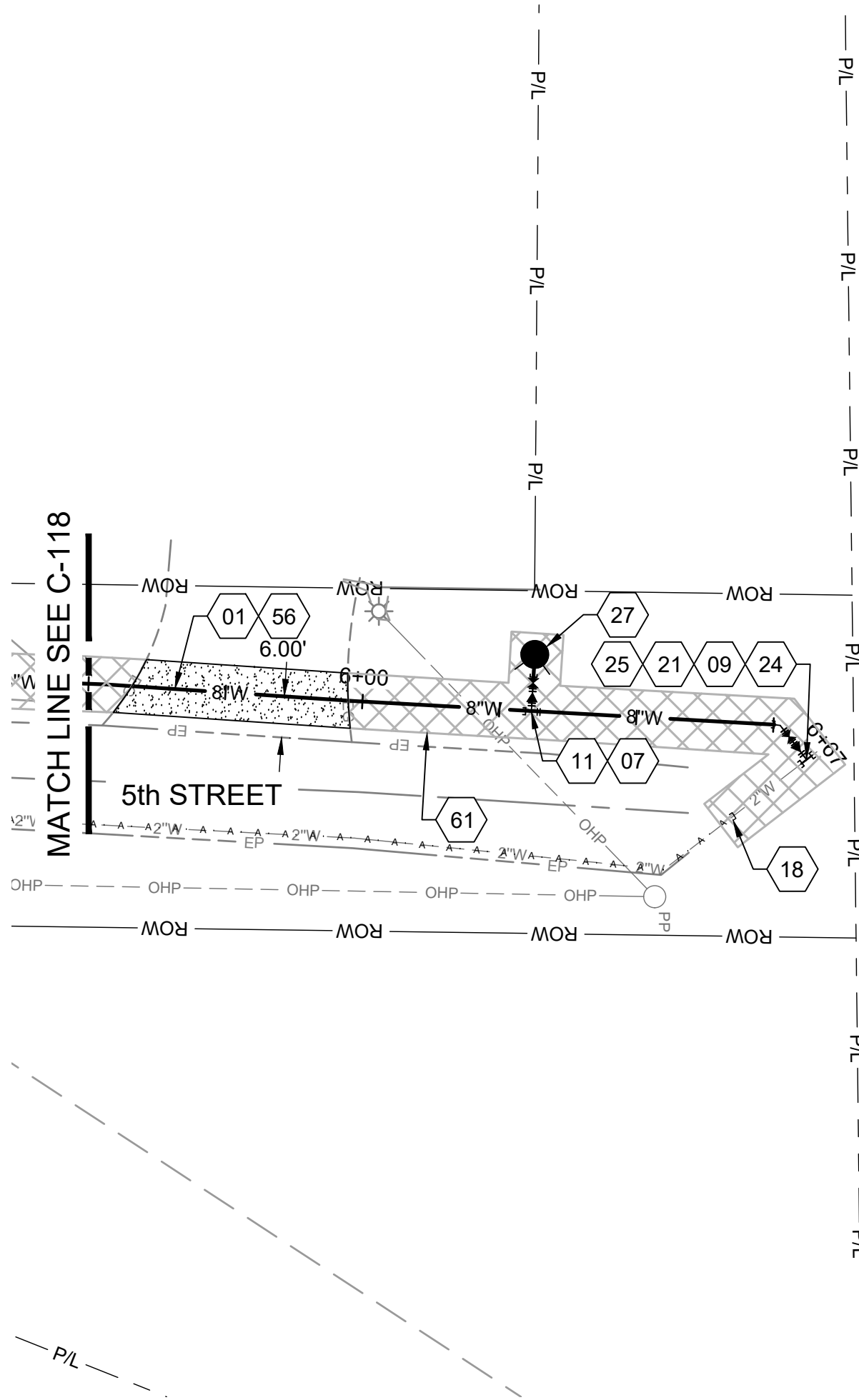


GENERAL SHEET NOTES

- PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
- INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPMC SD-403
- HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
- FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
- WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
- ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
- CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN; RE: ISPMC SD-301 AND SD-302 |
| 05 | INSTALL FITTING - 6" TAPPING SLEEVE WITH VALVE |
| 06 | INSTALL FITTING - 6" CAP |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 08 | INSTALL FITTING - 8" 22.5° BEND |
| 11 | INSTALL FITTING - 8" TEE |
| 12 | INSTALL FITTING - 8"x10" REDUCER |
| 21 | INSTALL VALVE - 8" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPMC SD-406 |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 41 | RETAIN & PROTECT EXISTING UTILITY |
| 42 | RETAIN & PROTECT EXISTING FENCE |
| 44 | RETAIN & PROTECT EXISTING SIGN |
| 49 | REMOVE & REPLACE EXISTING MAILBOX |
| 51 | AT CITY REPRESENTATIVE'S INDICATION, IF SERVICE LINE IS NOT 1" POLYETHYLENE SERVICE PIPE, REPLACE, REPLACE PER ISPMC SD 401. AT CITY REPRESENTATIVE'S INDICATION, REPLACE METER BOX AND METER LOOP PER ISPMC 401. ADDITIONAL SURFACE REPAIR ASSOCIATED WITH SERVICE LINE REPLACEMENT SHALL BE NO WIDER THAN 3'. WATER SERVICE LINES, METERS AND LOOPS ARE TO BE REPLACED ON A PER CASE BASIS UNDER ADDITIVE BID #5 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPMC SD-303 |



GENERAL SHEET NOTES

1. PRIOR TO CONSTRUCTION CONTRACTOR TO POTHOLE IN A NON-DESTRUCTIVE MANNER EXISTING UTILITIES TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL PRIOR TO CONSTRUCTION. WHERE EXISTING UTILITIES WILL BE ENCOUNTERED IT IS RECOMMENDED THAT THE CONTRACTOR HAND DIG OR VACUUM TRUCK EXCAVATE FOR MATERIAL EXCAVATION IN THESE AREAS.
2. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION.
3. INSTALL FITTING TO DEFLECT WATER PIPE VERTICALLY & HORIZONTALLY. WHERE BEND IS LESS THAN 50% OF SMALLEST AVAILABLE FITTING ANGLE, BEND THE PIPE RATHER THAN DEFLECT THE JOINT TO ACHIEVE SMALL CHANGES IN DIRECTION. DO NOT EXCEED ONE-HALF OF MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE CONCRETE THRUST BLOCKS AT ALL TAPPING SLEEVES AND EACH VERTICAL AND HORIZONTAL CHANGE IN DIRECTION OF WATER LINES. RE: ISPWC SD-403
5. HORIZONTAL & VERTICAL LOCATION OF EXISTING UTILITIES ARE APPROXIMATE, SEE GENERAL NOTE #1.
6. FURNISH MATERIALS WHERE INSTALL, PLACE OR CONSTRUCT IS REQUIRED, UNLESS NOTED OTHERWISE.
7. WATER MAIN TO HAVE BETWEEN 4.5 AND 6.0 FEET OF COVER. CONSTRUCT WATER MAIN AT CONTINUOUS UPWARD OR DOWNWARD SLOPE TO AVOID HIGH POINTS.
8. ABANDONED UTILITY PIPING TO REMAIN UNLESS IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO PLUG ENDS OF EXPOSED PIPING.
9. CONTRACTOR TO FIELD VERIFY AND RE-CONNECT ALL WATER SERVICES, FIRE HYDRANTS AND ASSOCIATED WATER LINES. FITTINGS AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | INSTALL PIPE - 8" WATER MAIN; RE: ISPWC SD-301 AND SD-302 |
| 07 | INSTALL FITTING - 6"x8" REDUCER |
| 09 | INSTALL FITTING - 8" 45° BEND |
| 11 | INSTALL FITTING - 8" TEE |
| 18 | INSTALL FITTING - 2" CAP |
| 21 | INSTALL VALVE - 8" GATE WITH VALVE BOX & TRAFFIC RATED LID; RE: ISPWC SD-406 |
| 24 | CONNECT TO EXISTING, FITTINGS AS REQUIRED |
| 25 | WATER SERVICE CONNECTION (SEE GENERAL NOTE #9) |
| 27 | INSTALL FIRE HYDRANT ; RE: ISPWC SD-404 |
| 55 | CONSTRUCT TYPE "C" SURFACE REPAIR; RE: ISPWC SD-303 |
| 56 | CONSTRUCT TYPE "P" SURFACE REPAIR; RE: ISPWC SD-303 |
| 57 | SURFACE REPAIR - MISCELLANEOUS, RETURN TO EXISTING CONDITION. |
| 61 | DEFINED CONSTRUCTION ZONE. |



NO.	REVISIONS	DATE

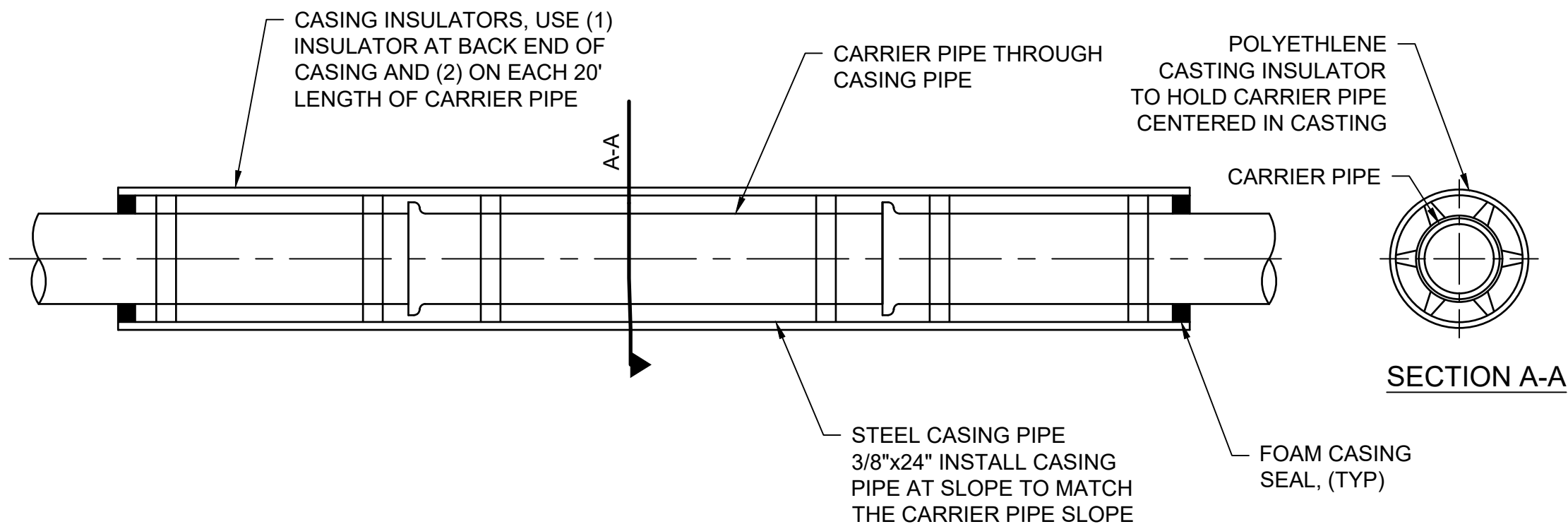
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



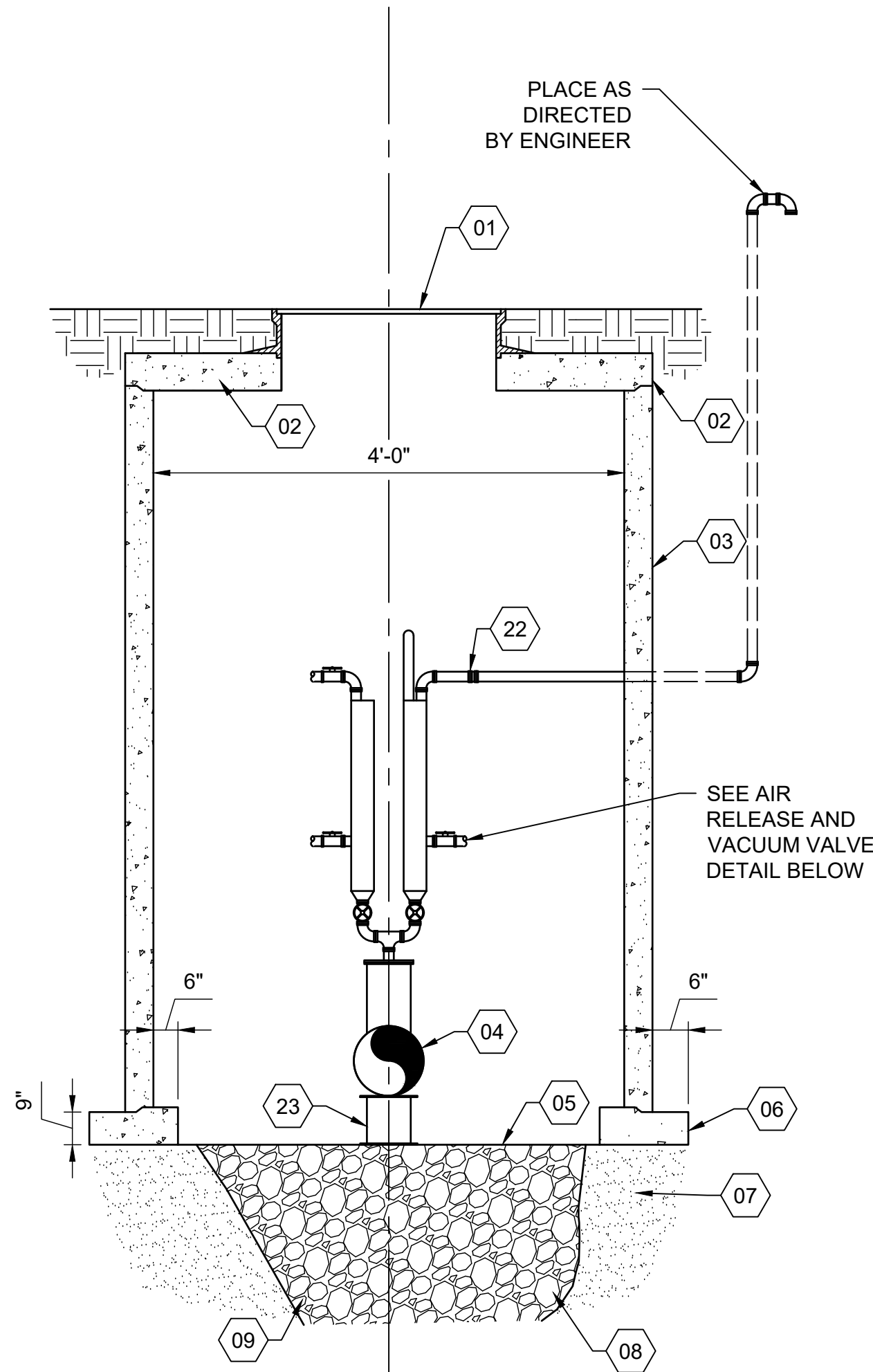
ATHOL WATER SYSTEM IMPROVEMENTS -
ADD ALTERNATIVE BID 1

5TH STREET WATER MAIN PLAN &
PROFILE - 5+60 TO END

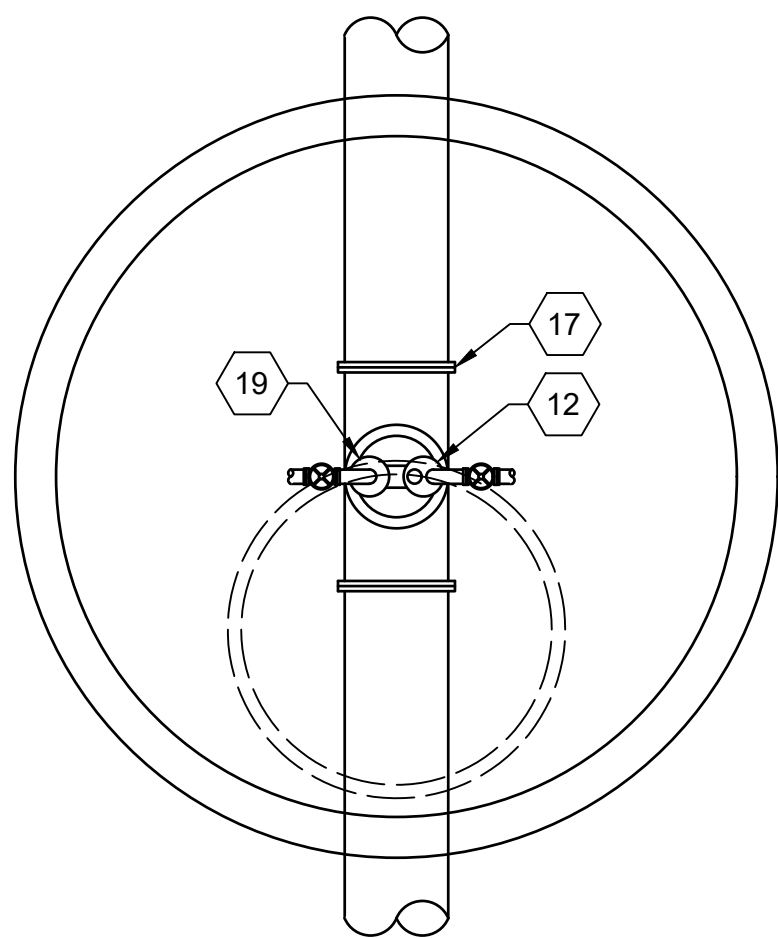
DRAWN: EWC	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-119	



A1 CASING
N.T.S.



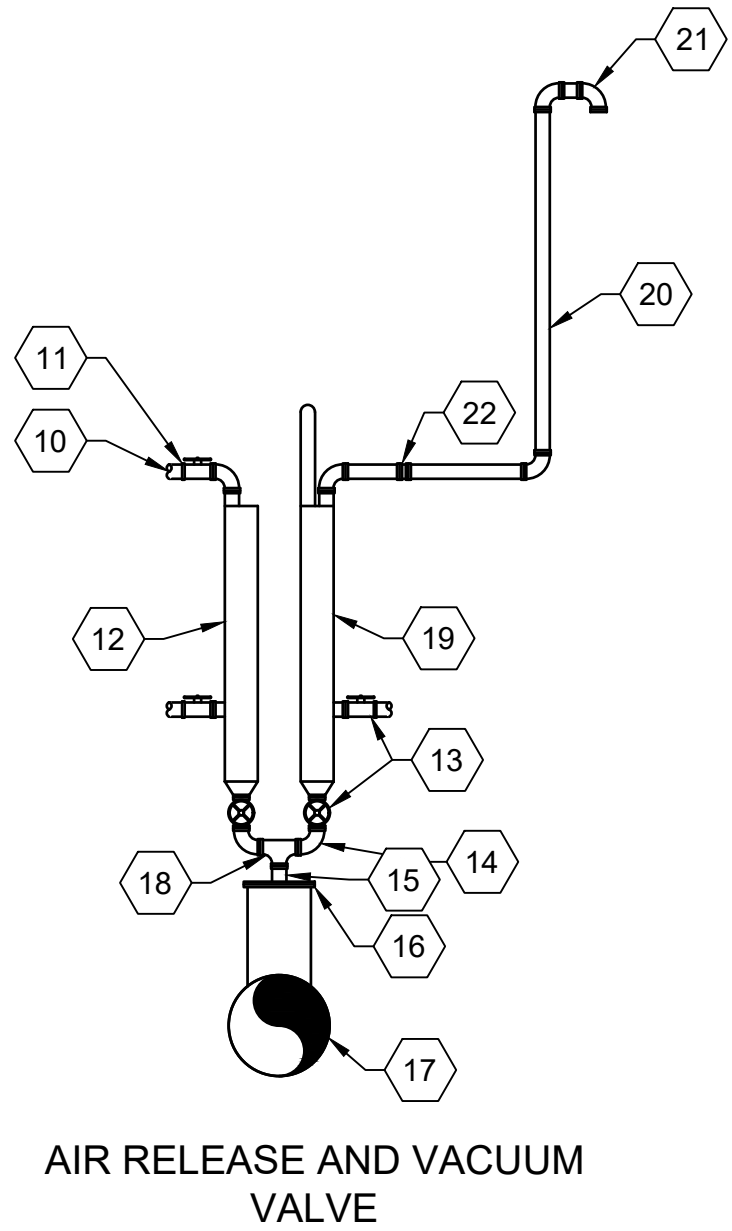
ELEVATION



PLAN

A2 AIR RELEASE AND VACUUM VALVE
N.T.S.

- KEYNOTE**
- 01 CAST IRON RING AND COVER MARKED "WATER".
 - 02 PRECAST CONC. LID, HS-25 LOAD RATED.
 - 03 PRECAST CONC. MANHOLE-BARREL SECTION.
 - 04 WATER PIPE.
 - 05 VOLUME OF ROCK TO BE 15 CUBIC FEET MINIMUM.
 - 06 CONCRETE FOOTING.
 - 07 COMPACTED NATIVE/FILL MATERIAL.
 - 08 DRAIN ROCK ABSORPTION SUMP WITH GEOTEXTILE FABRIC.
 - 09 2" MINUS WASHED DRAIN ROCK.
 - 10 SHUT-OFF VALVE (TYP.).
 - 11 QUICK DISCONNECT COUPLING.
 - 12 2" AIR RELEASE, VENT TO SUMP WITH AIR GAP.
 - 13 GATE VALVE.
 - 14 90° ELBOW.
 - 15 2" THREADED CONNECTION.
 - 16 BLIND FLANGE TAPPED FOR 2" IPS NIPPLE.
 - 17 CAST IRON FLANGED X FLANGED TEE.
 - 18 2" X 2" X 2" TEE.
 - 19 VACUUM RELEASE VALVE.
 - 20 2"Ø BRASS NIPPLE OR C.I. SPOOL DISCHARGE PIPE.
 - 21 COMPANION FLANGE W/ BUG SCREEN.
 - 22 FLANGE OR UNION.
 - 23 PIPE SUPPORT.



AIR RELEASE AND VACUUM VALVE

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.





HYDRANT, JUST SOUTH OF TIE IN POINT
ON OLD HIGHWAY 95

A1

N.T.S.



STANDING EAST OF TIE IN POINT ON LD
HIGHWAY 95, LOOKING SOUTH

A2

N.T.S.

NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.		




A1 LOOKING EAST (FROM OLD HIGHWAY 95) INTO E LORRAINE LOOP
N.T.S.



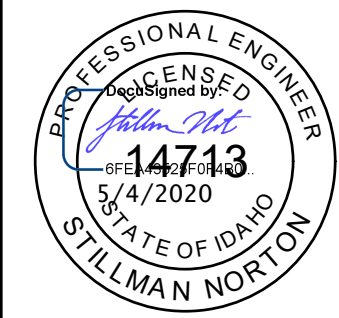
A2 LOOKING EAST (FROM OLD HIGHWAY 95) E LORRAINE LOOP
N.T.S.



A3 LOOKING SOUTHWEST FROM E LORRAINE LOOP & OLD HIGHWAY 95)
N.T.S.




601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

DETAILS

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-503	


J:\216064-001 ATHOL WATER SYSTEM IMPROVEMENTS\CAD\3_DESIGN\PLANS-102_CIVIL\01_PLAN\PROFILES-C-504.DWG LAST SAVED: 1/28/2020 2:48 PM PRINTED: 5/1/2020 8:03 AM



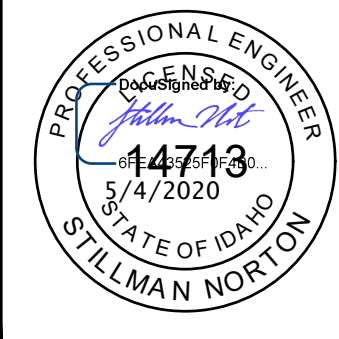
A1 LOOKING NORTH FROM COLIN
DRIVE & E LORRAINE DRIVE
N.T.S.




A2 LOOKING NORTHEAST FROM COLIN
DRIVE & E LORRAINE DRIVE
N.T.S.



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.		REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.			



CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

DETAILS

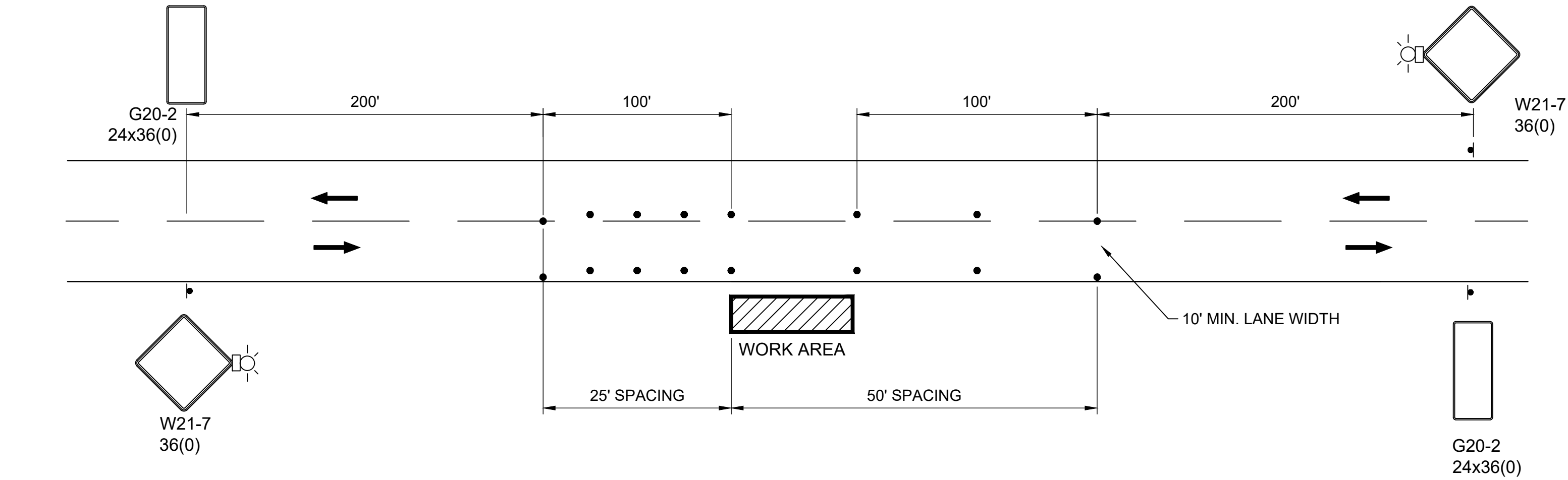
DRAWN: JLP | CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches

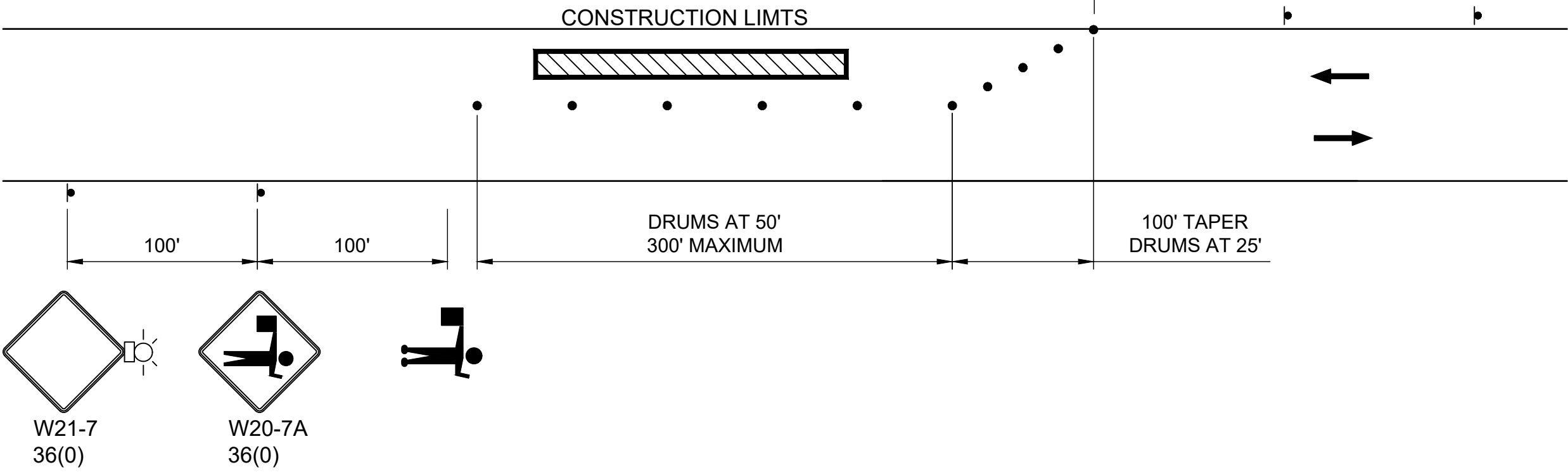
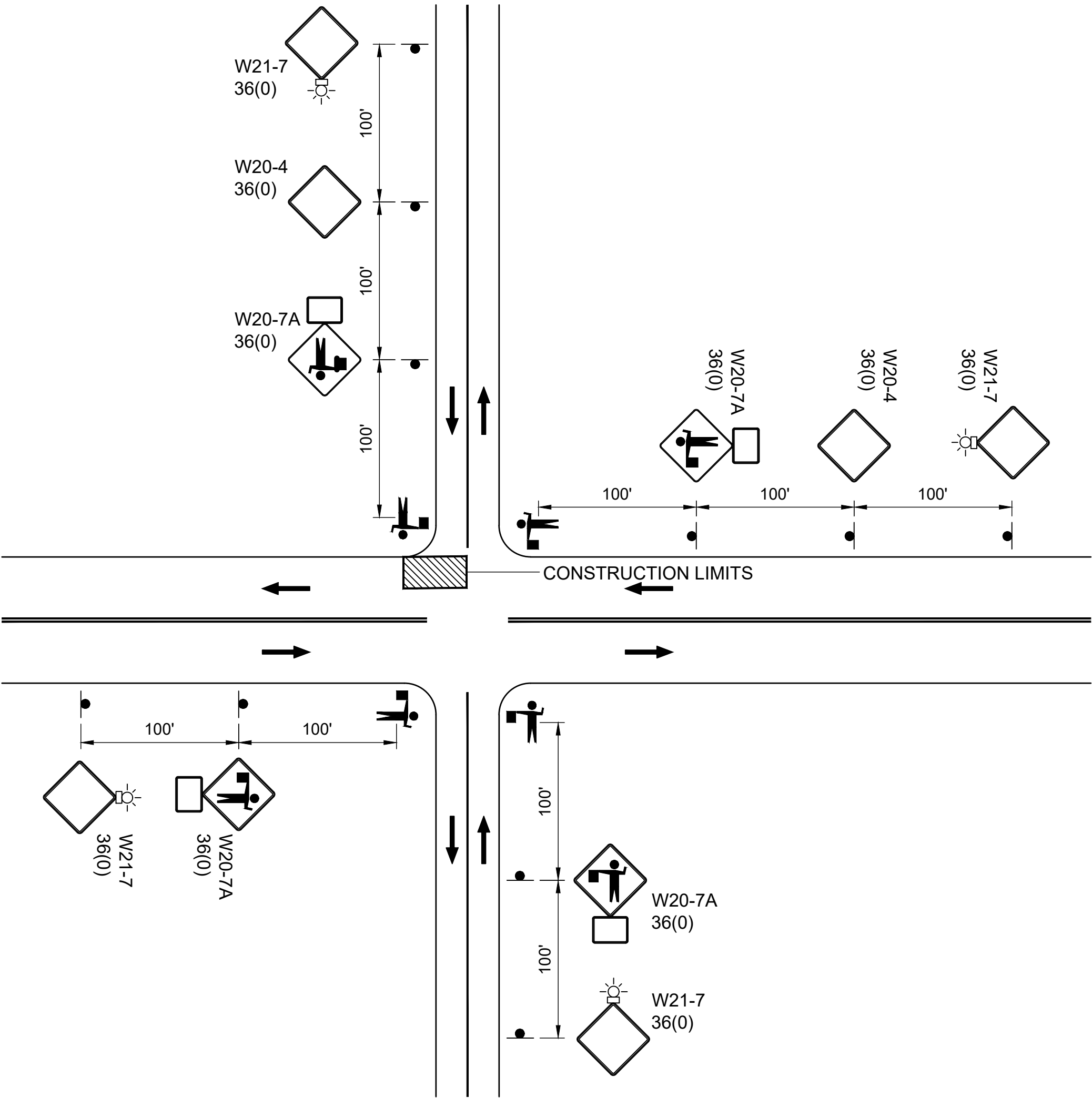
PROJECT NO.
216064-001

SHEET NO.
C-504

C1
N.T.S.



A1
N.T.S.



A3
N.T.S.

LEGEND

- CONSTRUCTION WARNING SIGN LOCATION
- DIRECTION OF TRAFFIC
- WARNING LIGHT OR FLASHER
- BARREL OR OTHER APPROVED CHANNELIZING DEVICE
- WORK ZONE
- FLAGGER

GENERAL NOTES

- THIS TRAFFIC CONTROL PLAN MAY BE MODIFIED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC THROUGH THE PROJECT AREA WHENEVER POSSIBLE FOR LOCAL TRAFFIC AND ACCESS TO ADJACENT PROPERTY.
- ALL CONSTRUCTION SIGNS, BARRICADES, CONES AND DRUMS IN PLACE DURING HOURS OF DARKNESS SHALL HAVE A MINIMUM OF CLASS "A" REFLECTIVE SHEETING.
- ALL CONSTRUCTION WARNING SIGNS SHALL HAVE TWO WARNING FLAGS. WARNING SIGNS IN PLACE DURING HOURS OF DARKNESS SHALL HAVE BATTERY OPERATED FLASHING WARNING LIGHTS IN ADDITION TO FLAGS.
- ALL CONSTRUCTION SIGNING AND TRAFFIC CONTROLS WILL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CHANNELIZING DEVICES SHALL HAVE INTERVALS BETWEEN DEVICES AS SHOWN ON PLANS.
- USE EXTREME CARE IN SITING CONSTRUCTION SIGNS SO AS NOT TO BLOCK OR OBSCURE ANY OTHER TRAFFIC CONTROL SIGNS FROM VIEW OF THE TRAVELING PUBLIC.
- OTHER TRAFFIC CONTROL DEVICES, SUCH AS CONES AND OR BARRELS, WITHIN THE CONSTRUCTION WORK ZONE TO PROTECT THE CONTRACTOR'S WORK AREA, ARE AT THE CONTRACTOR'S EXPENSE.

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

NO.	REVISIONS	DATE

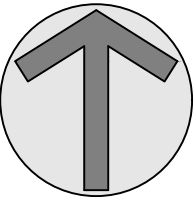
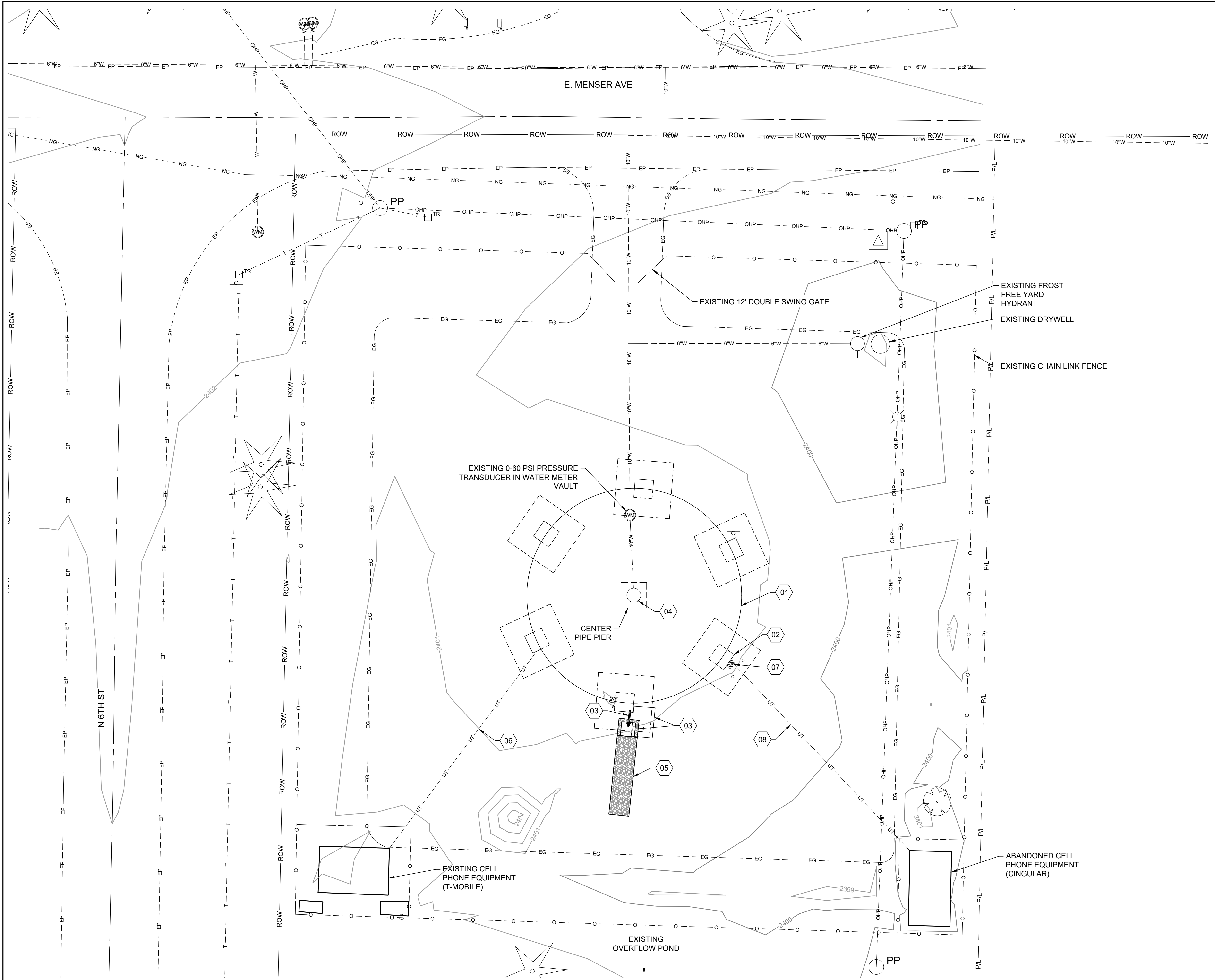
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

CONSTRUCTION TRAFFIC CONTROL
DETAILS

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO.	
C-601	



0 10 20

GENERAL SHEET NOTES

- EQUIPMENT & WIRING MOUNTED ON EXISTING ELEVATED RESERVOIR TO BE REMOVED BY THE RESPONSIBLE OWNER AT NO COST TO THE CITY. CONTACT T-MOBILE AT 913-940-0780
- RETAIN & PROTECT EXISTING STRUCTURES UNLESS OTHERWISE NOTED.
- INSTALL TEMPORARY ROBUST COVER OVER RESERVOIR INLET/OUTLET PIPE TO PREVENT ENTRY OF SOIL OR DEBRIS DURING CONSTRUCTION ACTIVITIES.
- FLUSH & DISINFECT TANK INTERIOR AFTER MODIFICATIONS ARE COMPLETE.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN THAT PRIOR TO CONSTRUCTION.
- PORTIONS OF PERIMETER FENCE MAY BE REMOVED IF NECESSARY FOR CONSTRUCTION ACCESS. REPLACE IN-KIND PRIOR TO COMPLETION.

SHEET KEYNOTES

- MODIFY EXISTING 250,000-GALLON ELEVATED RESERVOIR, RE: A1/C-201-A
- EXISTING FOUNDATIONS
- DEMOLISH EXISTING OVERFLOW SPLASH PAD AND CONSTRUCT NEW OVERFLOW STRUCTURE, RE: A1/C-501-A
- EXISTING 36" DIA. RISER TO BE MODIFIED, RE: A1/C-201-A
- DRAINAGE SWALE RE: A3/C-501-A
- EXISTING UNDERGROUND TELEPHONE WIRE & CONDUIT, DO NOT DISTURB (LOCATION SHOWN IS APPROXIMATE)
- EXISTING CELL PHONE EQUIPMENT TO BE REMOVED BY CELL PHONE COMPANY. (SEE NOTE 1)
- EXISTING UNDERGROUND TELEPHONE WIRE & CONDUIT; REMOVE IF CONVENIENT OR EXPOSED, OTHERWISE ABANDON IN PLACE.

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
J. M. KELLEY
14743
5/4/2020
STATE OF IDAHO
STILLMAN NORTON

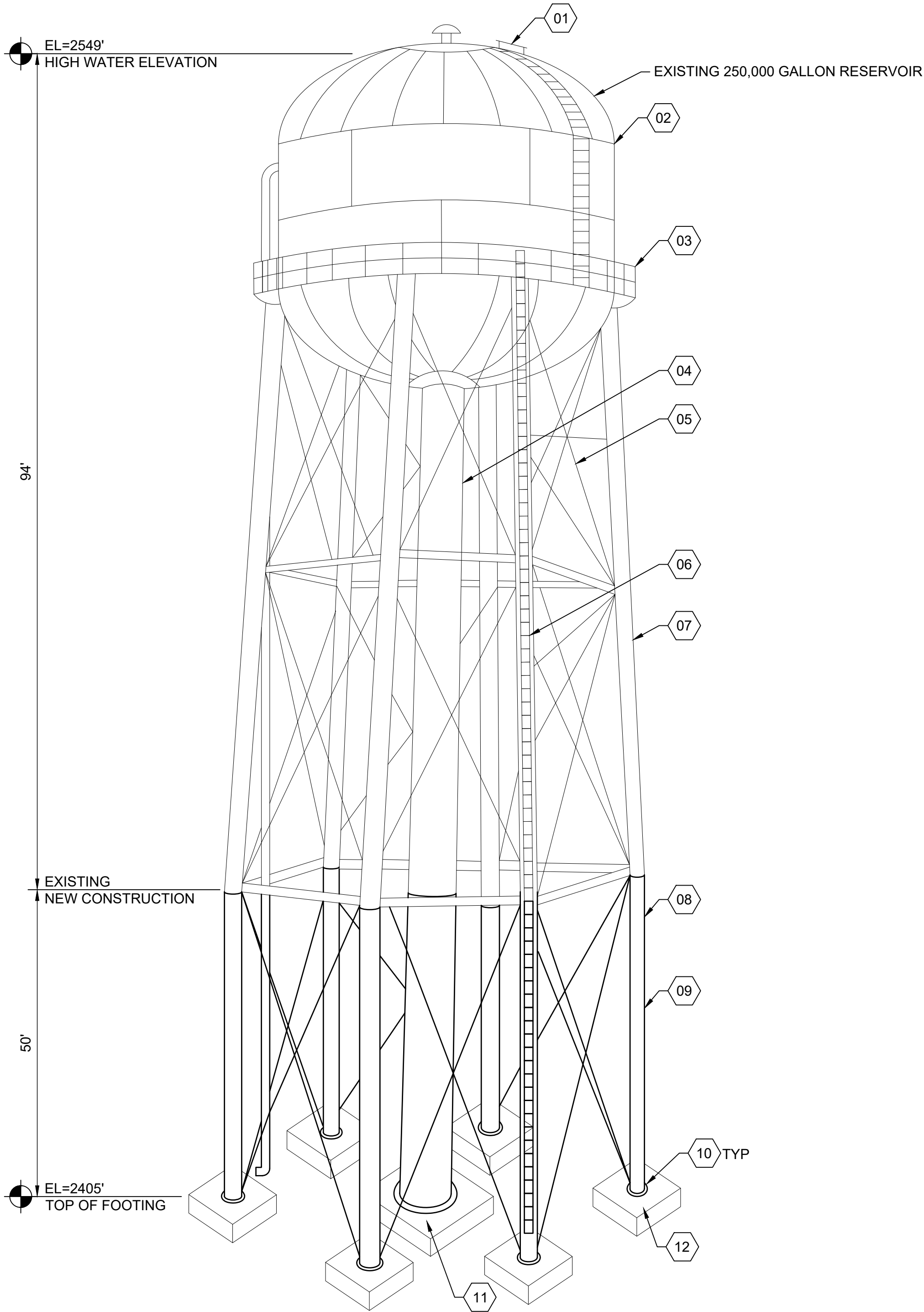
NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS ELEVATED RESERVIOR - SITE PLAN

DRAWN: JLP CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches
PROJECT NO. 216064-001 PAGE
SHEET NO. C-101-A



A1

ELEVATED RESERVOIR

N.T.S.

SHEET KEYNOTES

- 01 REPLACE SEAL ON EXISTING MANWAY HATCH
- 02 RECOAT TANK EXTERIOR PER SPECIFICATIONS
- 03 EXISTING 24"x36" BALCONY
- 04 EXISTING 36" DIAMETER RISER
- 05 REFER TO SPECIFICATION SECTION 02 43 16.
- 06 ADD FALL PROTECTION TO LADDER AND LANDING PLATFORMS EVERY 50 FEET, RE: A3/A-501-B
- 07 RETAIN AND PROTECT EXISTING RESERVOIR AND SUPPORTS DURING CONSTRUCTION ACTIVITIES
- 08 FIELD WELD EXISTING RESERVOIR SUPPORTS TO VERTICAL EXTENSION PER MANUFACTURER
- 09 50' VERTICAL EXTENSION, PER MANUFACTURER
- 10 SECURE COLUMN EXTENSIONS TO EXISTING ANCHOR BOLTS. EXISTING FOUNDATIONS TO BE UTILIZED. FOUNDATION CONNECTIONS PER MANUFACTURER. INSTALL MICROPILES, RE: SPECIFICATIONS & B3/C-201-A
- 11 LEG FOUNDATION DETAIL, RE: A3/C-201-A
- 12 CENTER PIER FOUNDATION DETAIL, RE: A4/C-201-A

KELLER
ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
DESIGNED BY
John M. Stillman
14713
5/4/2020
STATE OF IDAHO
STILLMAN NORTON

				NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.						

CITY OF ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

ELEVATED RESERVOIR - ELEVATION

DRAWN: DAC CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.

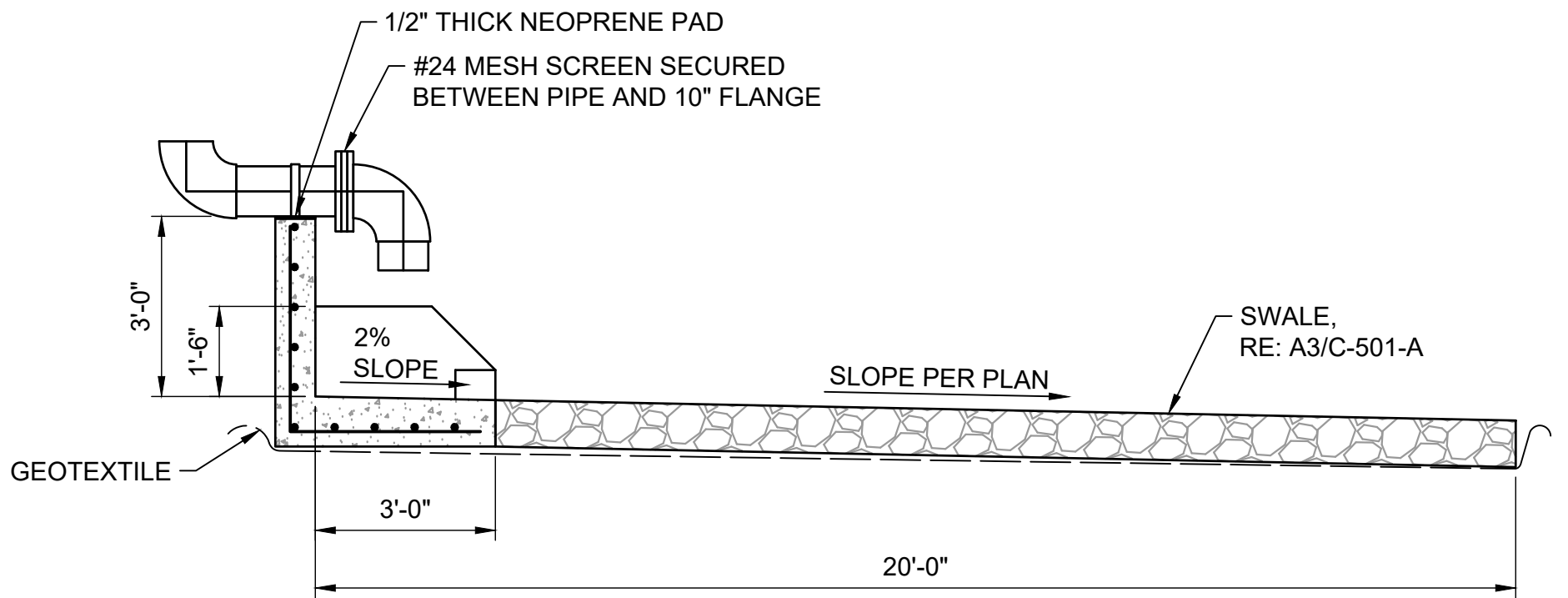
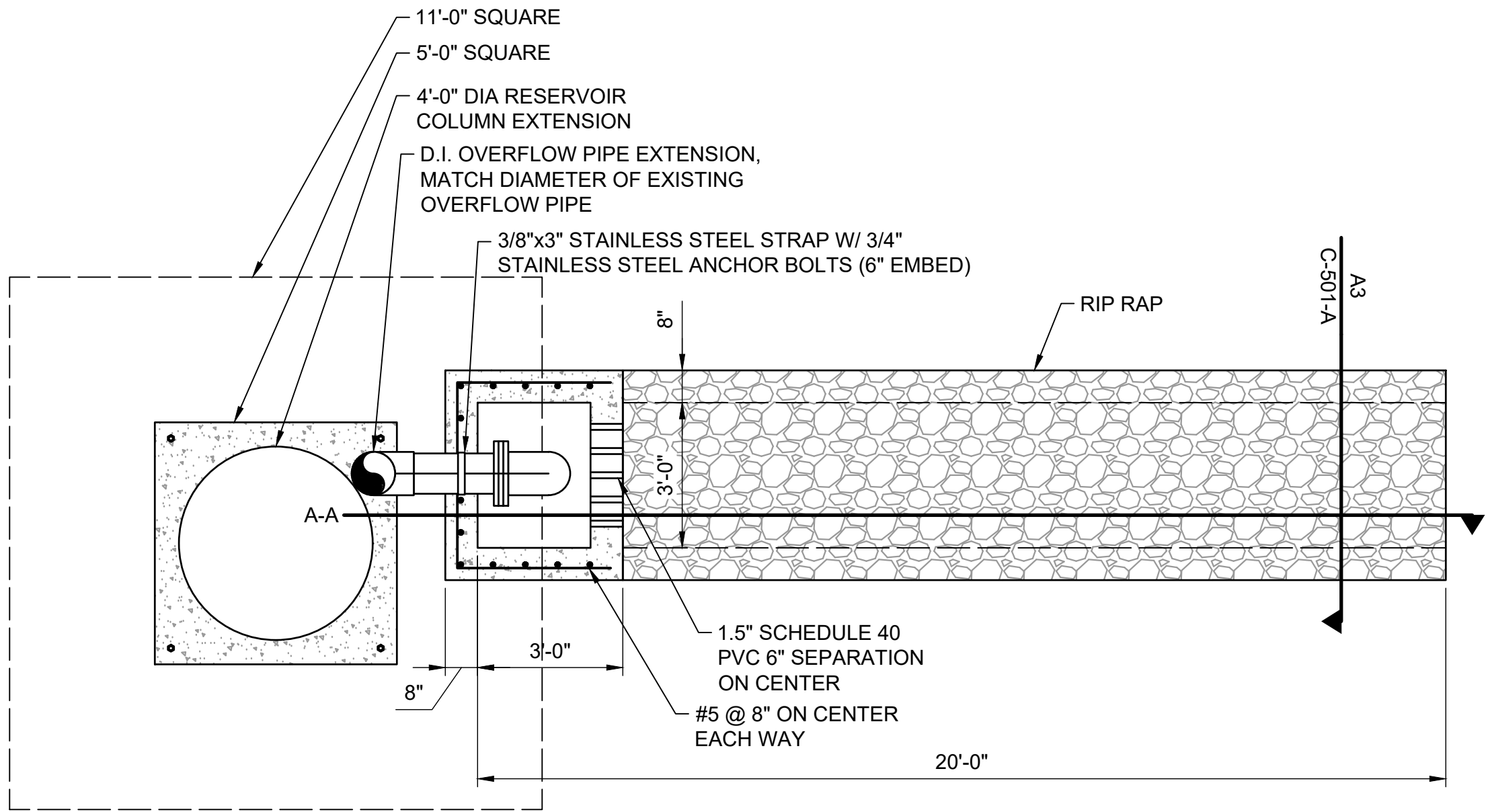
1-1/2 Inches

PROJECT NO.
216064-001

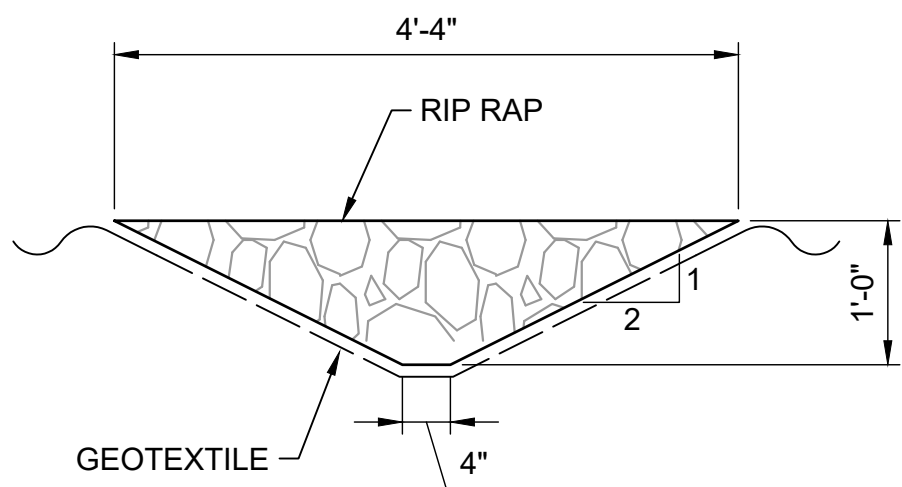
PAGE

SHEET NO.
C-201-A

J:\216064-001 ATHOL WATER SYSTEM IMPROVEMENTS\C_DESN\CAD3_DESIGN\PLANS-102_CIVIL\02_A-RESERVOIR\C-501-A.DWG LAST SAVED: 4/17/2020 11:47 AM PRINTED: 5/1/2020 8:05 AM



SECTION A-A

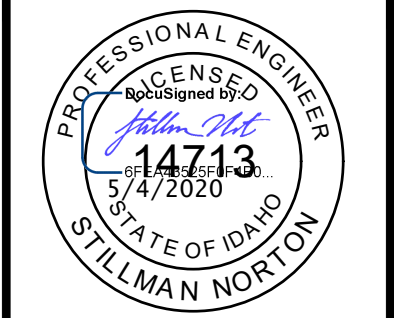


OVERFLOW SWALE SECTION

N.T.S.

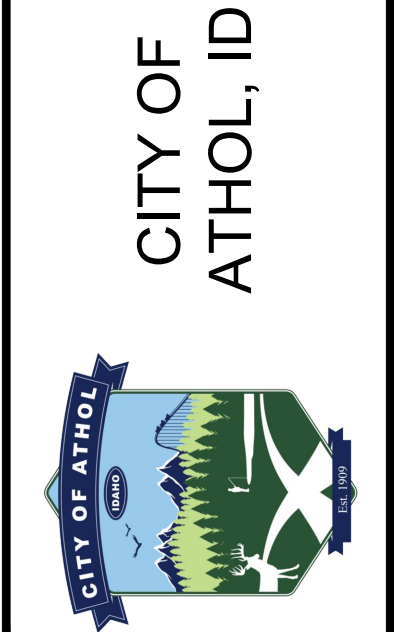
A1 OVERFLOW PIPE OUTLET

3/8" = 1'-0"



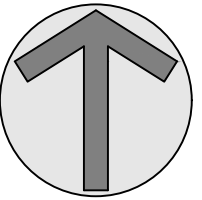
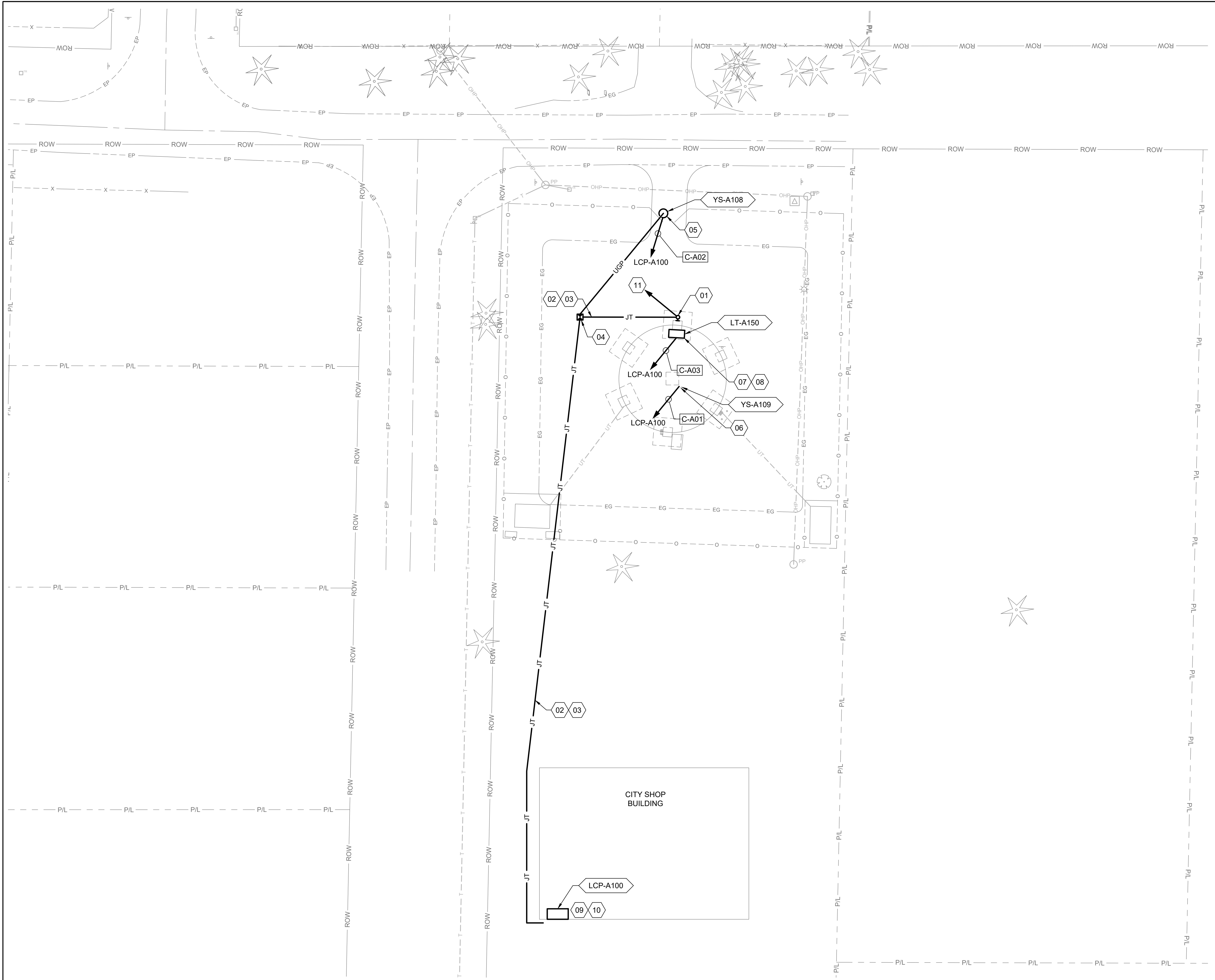
NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM
IMPROVEMENTS
ELEVATED RESERVOIR - CIVIL DETAILS

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-501-A	



0 20 40

GENERAL SHEET NOTES

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER STATE OR LOCAL CODE.
- CABLE AND CONDUIT RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
- ALL OUTDOOR EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
- UNDERGROUND ELECTRICAL EQUIPMENT AND WIRING SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
- IDENTIFY EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING. ANY DISRUPTION OR DAMAGE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING CELLULAR EQUIPMENT RELOCATION TO BE BY CELLULAR COMPANY.

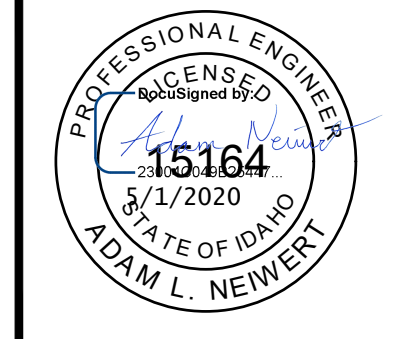
SHEET KEYNOTES

- SECURITY LIGHT WITH MOTION DETECTOR AND PHOTOCELL, OLW 23. COORDINATE MOUNTING ON TANK STRUCTURES 8 FOOT ABOVE TOP OF FOOTING.
- PROVIDE TRENCHING, CONDUIT WIRING BACKFILL AND COMPACTION FOR NEW ELECTRICAL AND CONTROL. COORDINATE ROUTING WITH OWNER.
- (2) 1" CONDUIT BURIED 2'-0".
- INSTALL NEW JUNCTION BOX. HEAVY DUTY BOX AND LID, 11" x 18", LID MARKED "ELECTRIC". OLD CASTLE PRECAST OR EQUAL.
- INSTALL SECURITY SENSOR ON EXISTING GATE. INSTALL NEW GATE CABLE C-A02. RUN CONDUIT THROUGH LEVEL SENSOR BOX AND TO LCP-A100 18 AWG TSP.
- NEW INTRUSION SWITCH ON TANK HATCH CABLE C-A01. RUN CONDUIT THROUGH LEVEL SENSOR BOX AND TO LCP-A100 18 AWG TSP.
- REUSE PRESSURE TRANSMITTER LT-A150 FOR LEVEL MEASUREMENT IN LEVEL SENSOR BOX (E). CONNECT TO LCP-A100 USING 18 AWG TSP C-A03.
- INSTALL NEW CONDUIT TO PULL THE (3) 18 AWG TWP CONTROL CABLES TO CITY SHOP BUILDING.
- INSTALL PANEL LCP-A100 WITH 110 VAC. MOUNT ANTENNA MINIMUM 10' ABOVE ROOF USING LMR-400 CABLE. RE: E045/E-501.
- ACTUAL LOCATION AND MOUNTING TO BE IN NEW OFFICE AREA PER CUSTOMER DIRECTION. CONNECT LCP-A100 TO CUSTOMER SUPPLIED INTERNET.
- (2) 12 CU, (1) 12 CU GND, 1" C TO CITY SHOP 120V CIRCUIT. PROVIDE NEW BREAKER AS REQUIRED.

EQUIPMENT KEYNOTES

LCP-A100 LOCAL CONTROL PANEL
LT-A150 PRESSURE TRANSDUCER

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

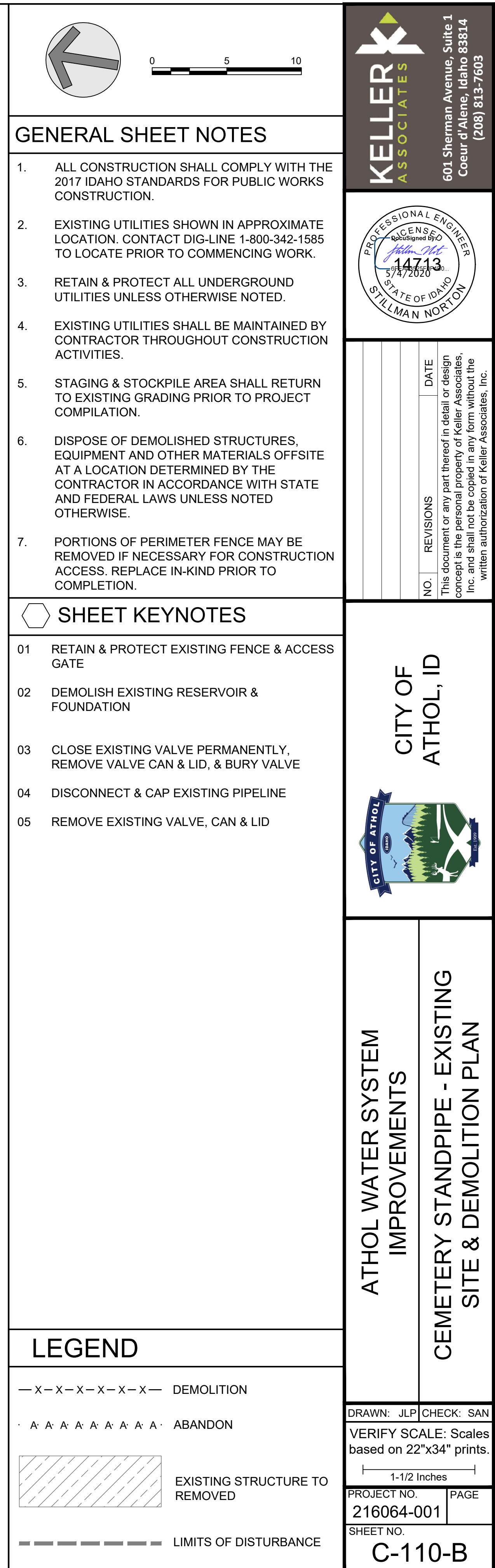
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

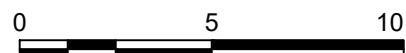
CITY OF ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

ELEVATED RESERVOIR - ELECTRICAL SITE PLAN

DRAWN: JRR CHECK: ALN
VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches
PROJECT NO. 216064-001 PAGE
SHEET NO. E-101-A





1. ALL CONSTRUCTION SHALL COMPLY WITH THE 2017 IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
2. RETAIN & PROTECT ALL UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
3. EXISTING UTILITIES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES.
4. FURNISH MATERIAL WHERE INSTALL, PLACE, OR CONSTRUCT IS REQUIRED UNLESS OTHERWISE NOTED.
5. AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN THAT PRIOR TO COMPLETION.
6. PORTIONS OF PERIMETER FENCE MAY BE REMOVED IF NECESSARY FOR CONSTRUCTION ACCESS, AND REPLACED IN-KIND PRIOR TO COMPLETION.

01	OVERFLOW PIPE, RE: A1/M-501-B
02	CONCRETE OUTLET STRUCTURE, RE: A1/C-501-B
03	ACCESS LADDER, RE: A1/A-501-B
04	RETAIN & PROTECT EXISTING FENCE & ACCESS GATE
05	CONSTRUCT OVERFLOW POND, RE: C-201-B
06	FINISH GRADE WITH NATIVE MATERIAL, FREE FORM ORGANICS, INSTALL HYDROSEED, RE: A3/C-501-B
07	RIPRAP SURFACING; RE: C2/C-501-B
08	GRAVEL SURFACING; RE: C1/C-501-B
09	INSTALL BOLLARD; RE: C4/C-501-B

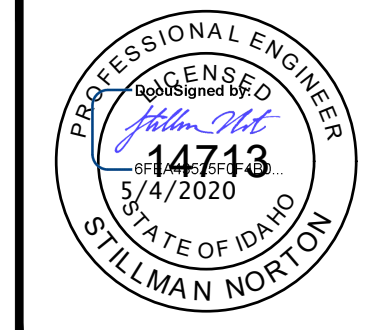
The diagram illustrates four different cross-sections of a riprap structure, arranged vertically. Each section is represented by a rectangular box with a specific internal pattern, and a corresponding label is placed to the right of each box.

- NEW STRUCTURE:** The top box is a solid gray rectangle.
- GRAVEL SECTION:** The second box is a white rectangle containing small, scattered black dots.
- RIPRAP:** The third box is a white rectangle containing a pattern of irregular, rounded shapes representing stones.
- NATIVE MATERIAL W/ HYDROSEED:** The bottom box is a white rectangle containing small, scattered black dots, similar to the Gravel Section.

#	STRUCTURE & LOCATION	NORTHING	EASTING
A	STANDPIPE CENTER	2291846.198	2386714.216
B	VALVE VAULT EAST CORNER	2291846.198	2386739.525
C	VALVE VAULT WEST CORNER	2291847.885	2386730.345

KELLER
ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603




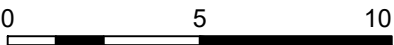
NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.		

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

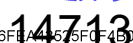
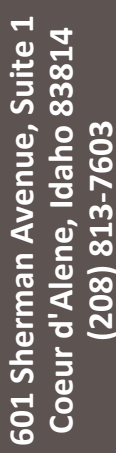
CEMETERY STANDPIPE - SITE PLAN

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints. 	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-120-B	

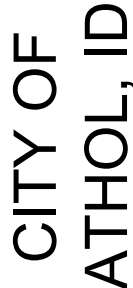


AC - TOP OF ASPHALT
 BOP - BOTTOM OF POND
 CON - TOP OF CONCRETE
 EG - EXISTING GRADE
 FF - FINISHED FLOOR
 FG - FINISHED GRADE
 FL - FLOW LINE
 FOWB - FACE OF SIDEWALK
 GB - GRADE BREAK
 GVL - EDGE OF GRAVEL
 RIM - RIM OF LID
 TBC - TOP BACK OF CURB
 TOC - TOP OF CONCRETE
 TOF - TOP OF FOUNDATION
 TOP - TOP OF POND
 TOS - TOP OF SLAB
 TOW - TOP OF WALL
 TSW - TOP OF SIDEWALK

AC - TOP OF ASPHALT
 BOP - BOTTOM OF POND
 CON - TOP OF CONCRETE
 EG - EXISTING GRADE
 FF - FINISHED FLOOR
 FG - FINISHED GRADE
 FL - FLOW LINE
 FOWB - FACE OF SIDEWALK
 GB - GRADE BREAK
 GVL - EDGE OF GRAVEL
 RIM - RIM OF LID
 TBC - TOP BACK OF CURB
 TOC - TOP OF CONCRETE
 TOF - TOP OF FOUNDATION
 TOP - TOP OF POND
 TOS - TOP OF SLAB
 TOW - TOP OF WALL
 TSW - TOP OF SIDEWALK



This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM
IMPROVEMENTS

CEMETERY STANDPIPE - GRADING &
DRAINAGE PLAN

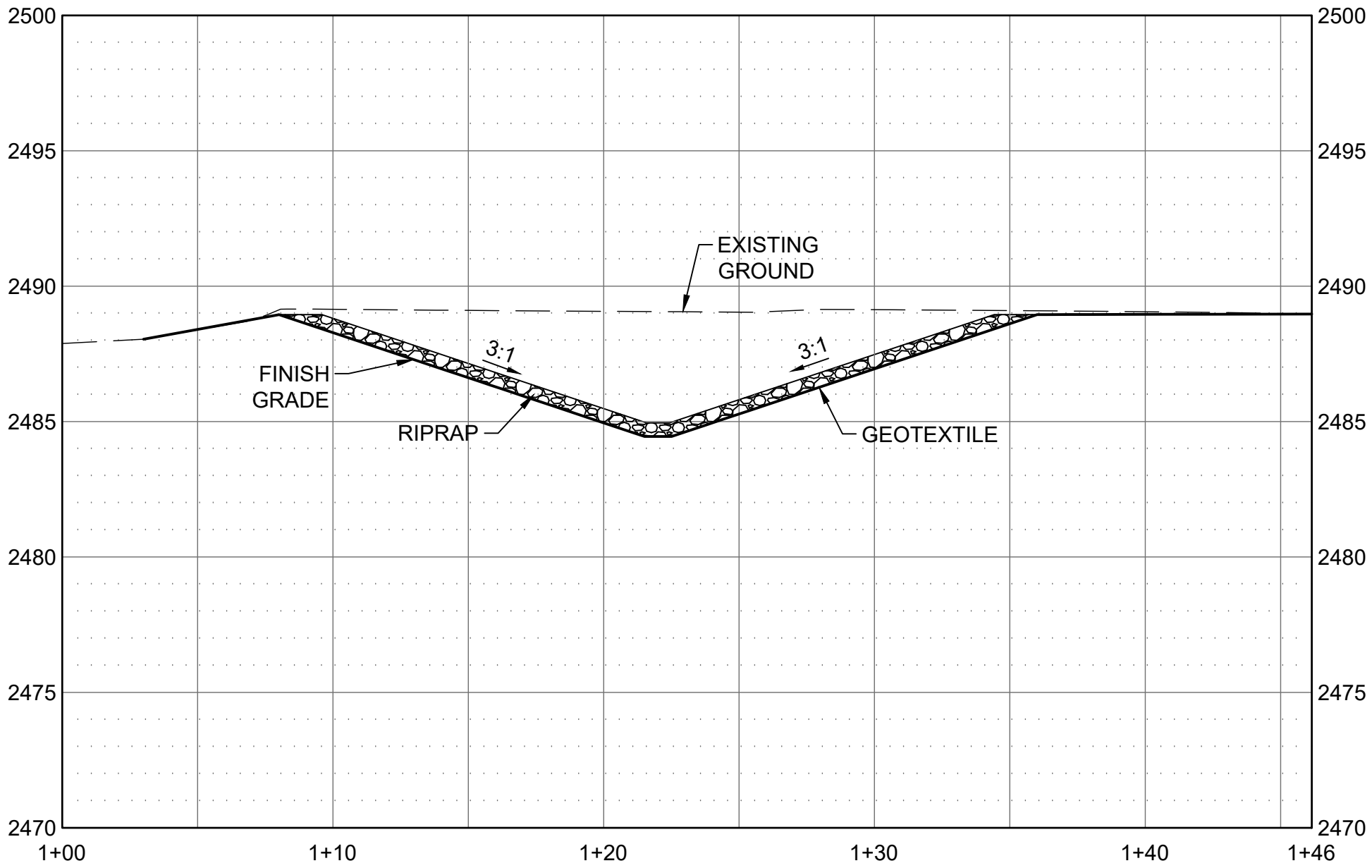
DRAWN: JLP	CHECK: SAN
------------	------------

VERIFY SCALE: Scales based on 22"x34" prints.

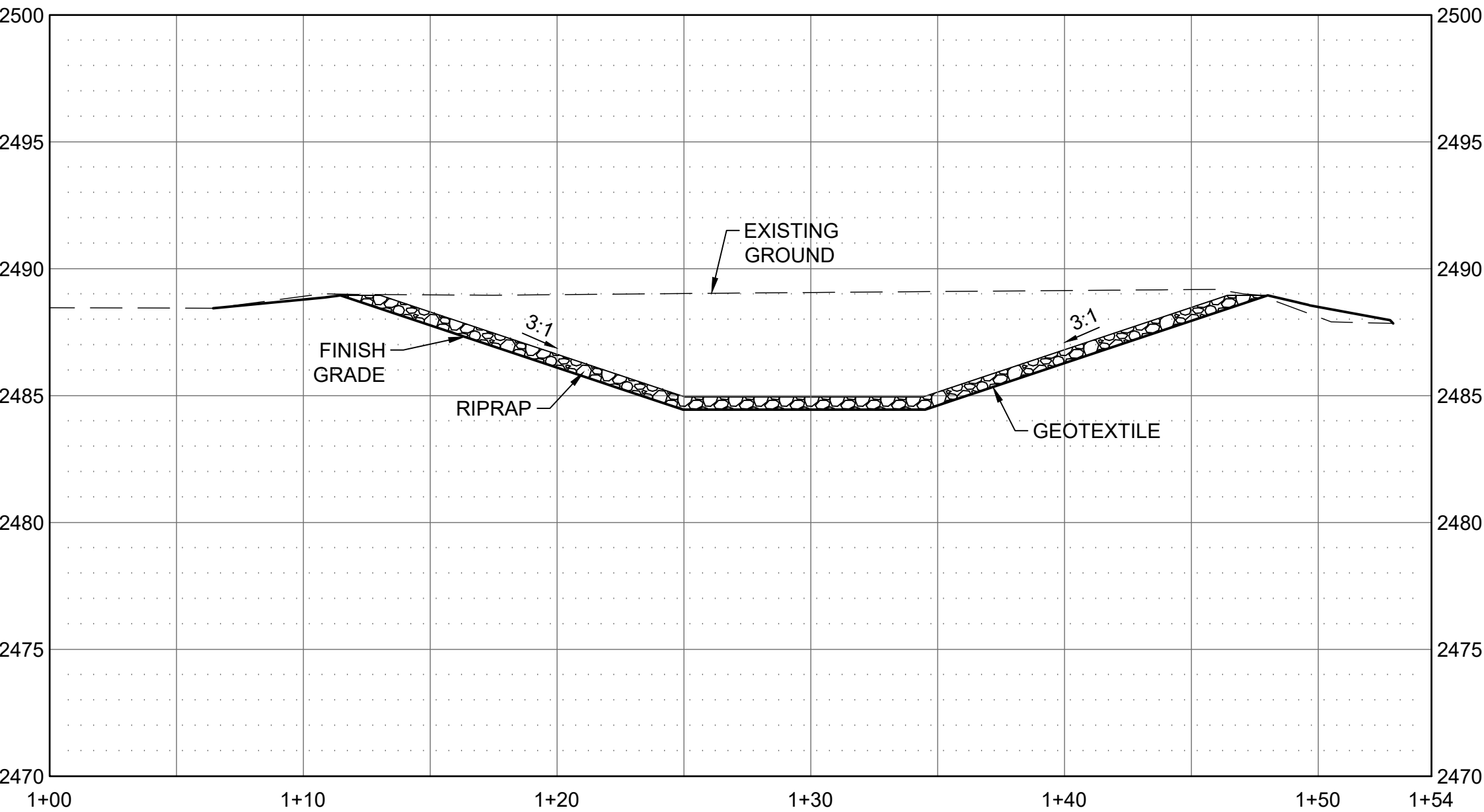
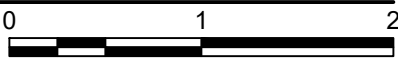
1-1/2 Inches

PROJECT NO.	PAGE
216064 001	

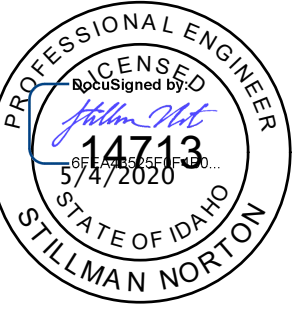
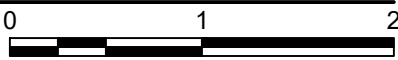
ET NO.
C-201-B



B1 OVERFLOW POND SECTION
SCALE: 1"=1'



A1 OVERFLOW POND SECTION
SCALE: 1"=1'



NO.	REVISIONS	DATE

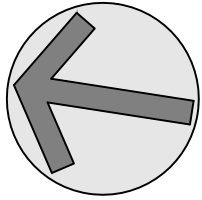
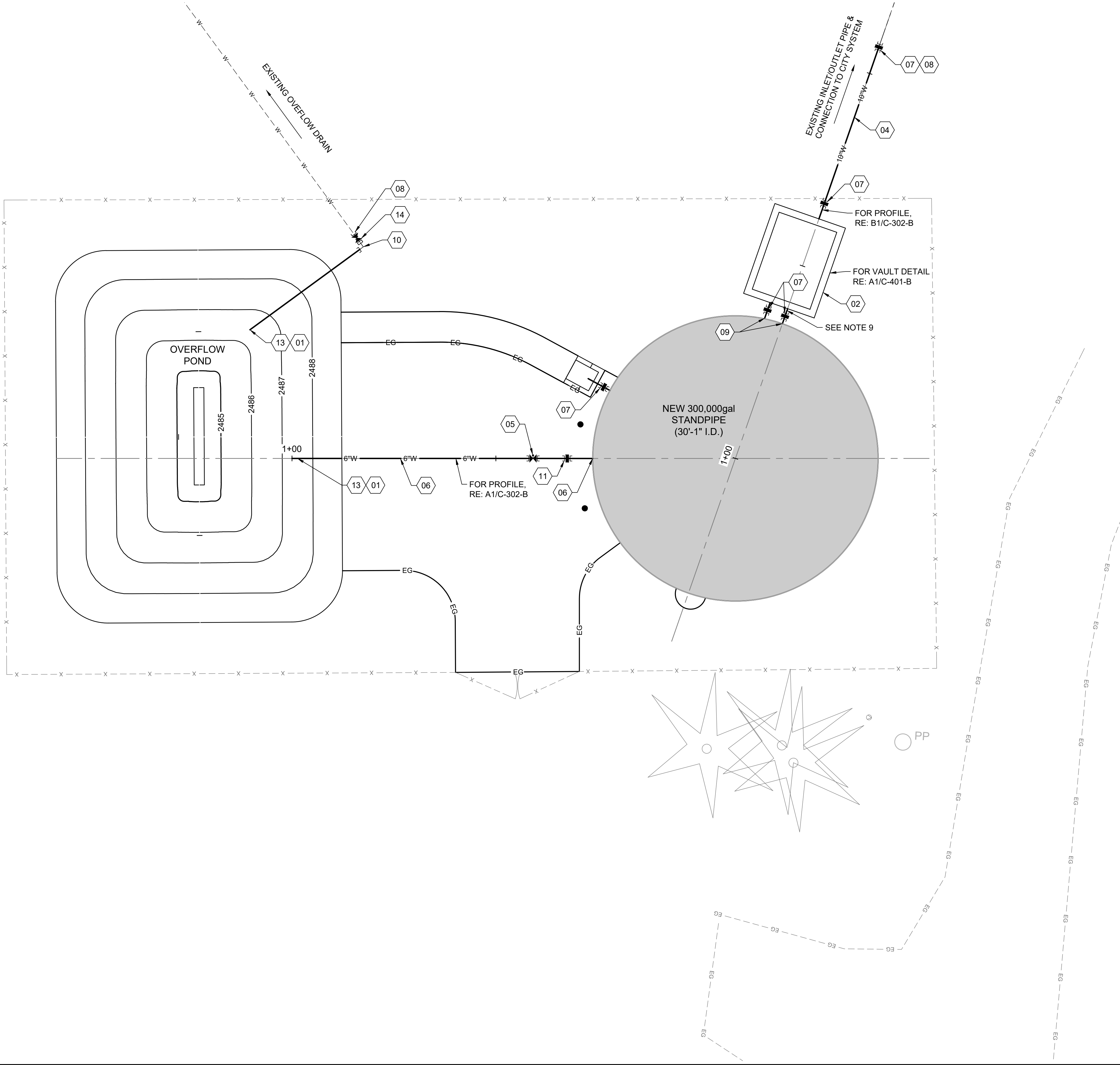
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM
IMPROVEMENTS

CEMETERY STANDPIPE -
EXCAVATION SECTIONS

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-202-B	



0 5 10

GENERAL SHEET NOTES

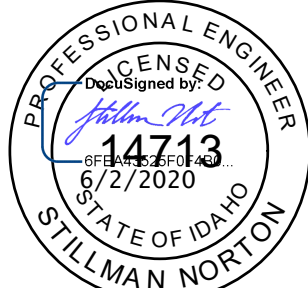
- ALL CONSTRUCTION SHALL COMPLY WITH THE 2017 IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
- EXISTING UTILITIES SHOWN IN APPROXIMATE LOCATION. CONTACT DIG-LINE 1-800-342-1585 TO LOCATE PRIOR TO COMMENCING WORK.
- RETAIN & PROTECT ALL UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES.
- FURNISH MATERIAL WHERE INSTALL, PLACE, OR CONSTRUCT IS REQUIRED UNLESS OTHERWISE NOTED.
- AREAS DISTURBED BY CONSTRUCTION WHERE SURFACE REPAIR IS NOT INDICATED SHALL BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN THAT PRIOR TO COMPLETION.
- PORTIONS OF PERIMETER FENCE MAY BE REMOVED IF NECESSARY FOR CONSTRUCTION ACCESS, AND REPLACED IN-KIND PRIOR TO COMPLETION.
- CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING PIPE PRIOR TO CONSTRUCTION.
- THE DIMENSIONS OF THE STANDPIPE RINGWALL FOUNDATION SHALL BE DESIGNED TO ACCOMMODATE THE LOCATION OF THE VALVE VAULT.

SHEET KEYNOTES

- | | |
|----|---|
| 01 | DAYLIGHT INSIDE POND |
| 02 | CONSTRUCT PRECAST CONCRETE VAULT, RE: C-401-B |
| 03 | OVERFLOW STANDPIPE, RE: C3/C-401-B |
| 04 | INSTALL PIPE - 10" C-900 PVC |
| 05 | INSTALL VALVE - 6" BUTTERFLY |
| 06 | INSTALL PIPE - 6" C150 D.I. PIPE |
| 07 | INSTALL FITTING - 10" COUPLER |
| 08 | CONNECT TO EXISTING, FITTINGS AS REQUIRED |
| 09 | SEE MECHANICAL FOR CONTINUATION, RE: M-301-B |
| 10 | INSTALL FITTING - 6" 90° BEND, SEE GENERAL SHEET NOTE 8 |
| 11 | INSTALL FITTING - 6" COUPLER |
| 12 | NOT USED |
| 13 | DRAIN OUTLET, RE: C4/C-401-B |
| 14 | INSTALL VALVE - 6" GATE, SEE GENERAL SHEET NOTE 8 |



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

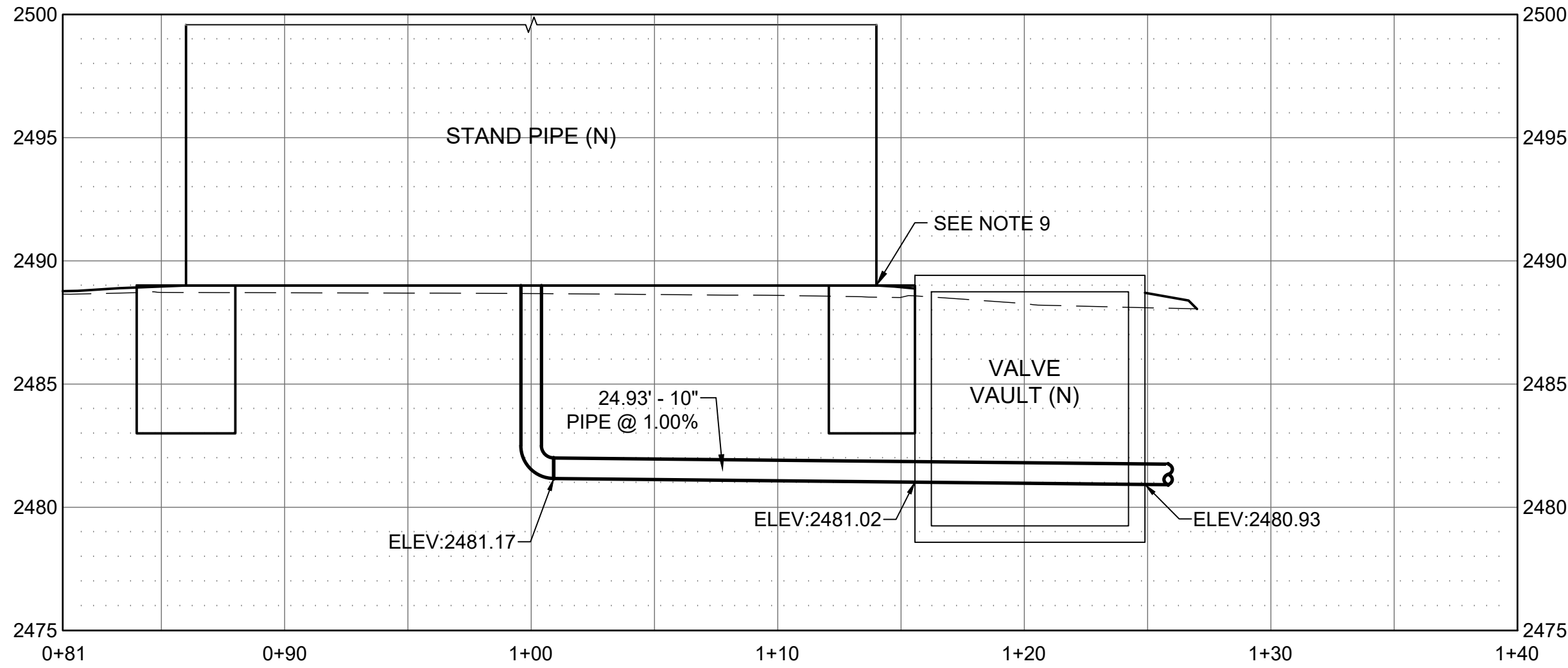
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



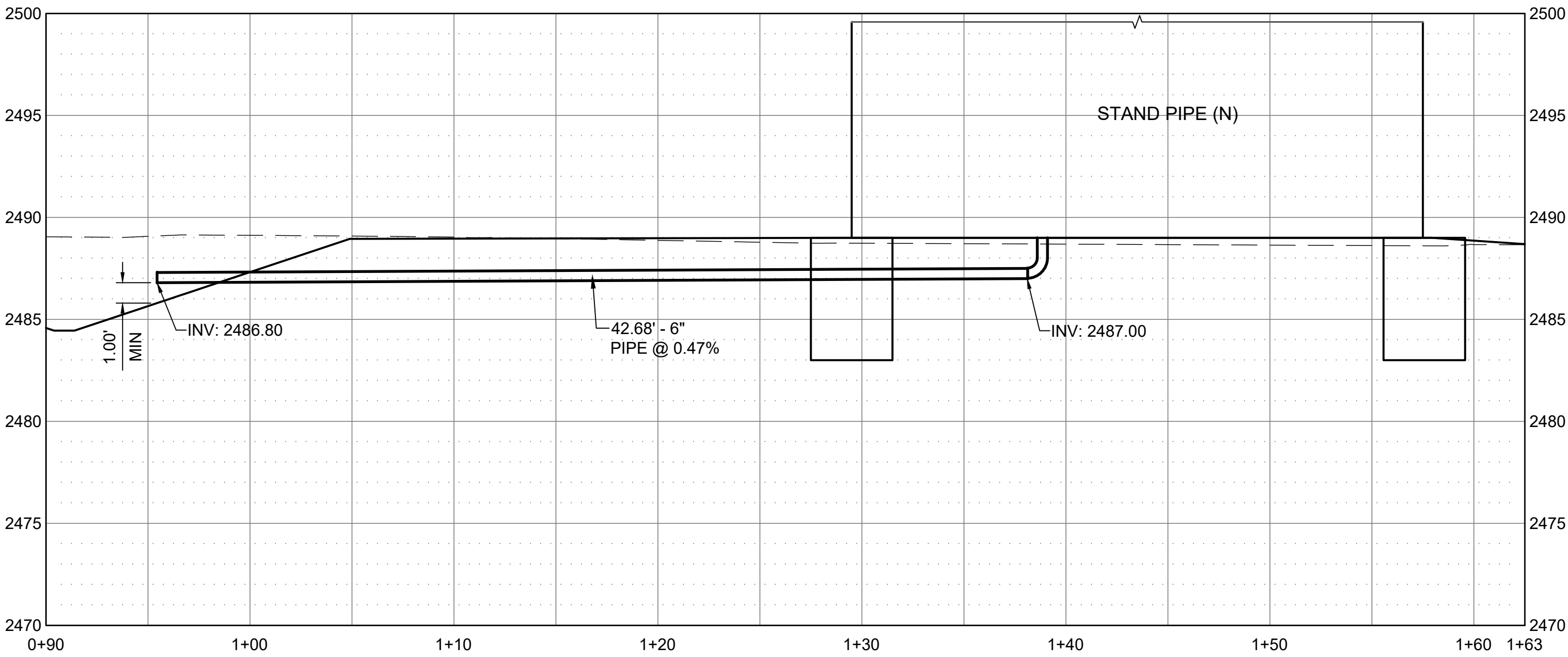
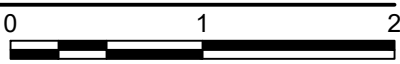
ATHOL WATER SYSTEM
IMPROVEMENTS
CEMETERY STANDPIPE -
UTILITY PLAN

DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-301-B	

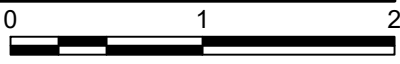
J:\216064-001 ATHOL WATER SYSTEM IMPROVEMENTS\CAD\3_DESIGN\DESIGN\102_CIVIL\03_B-STANDPIPE\C-302-B.DWG LAST SAVED: 5/21/2020 1:15 PM PRINTED: 6/2/2020 7:22 AM



B1 DRAIN TO DISTRIBUTION SYSTEM
SCALE: 1"=1'

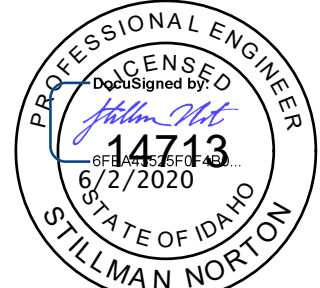


A1 DRAIN TO DAYLIGHT
SCALE: 1"=1'



GENERAL SHEET NOTES

9. THE DIMENSIONS OF THE STANDPIPE RINGWALL FOUNDATION SHALL BE DESIGNED TO ACCOMMODATE THE LOCATION OF THE VALVE VAULT.

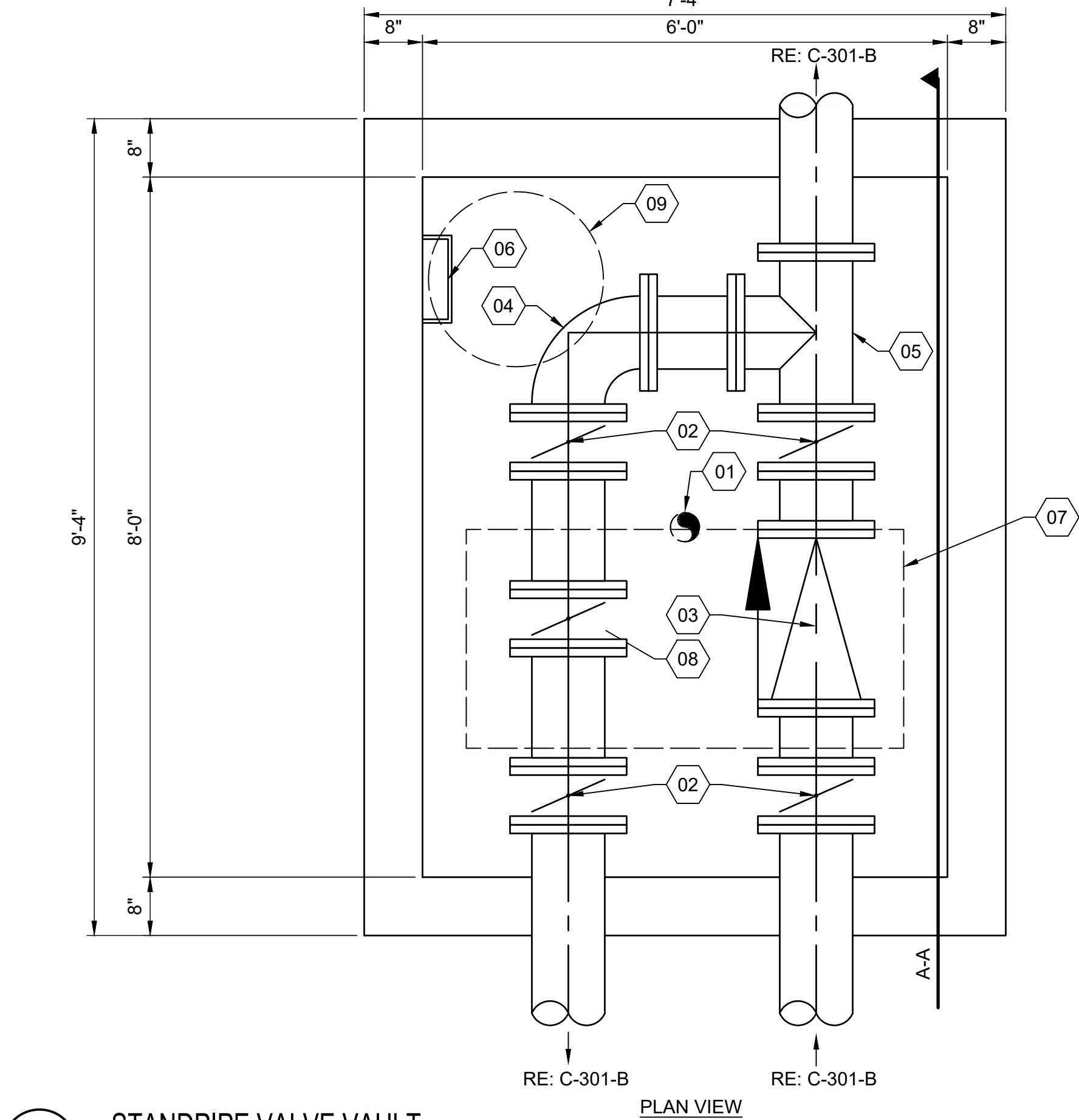
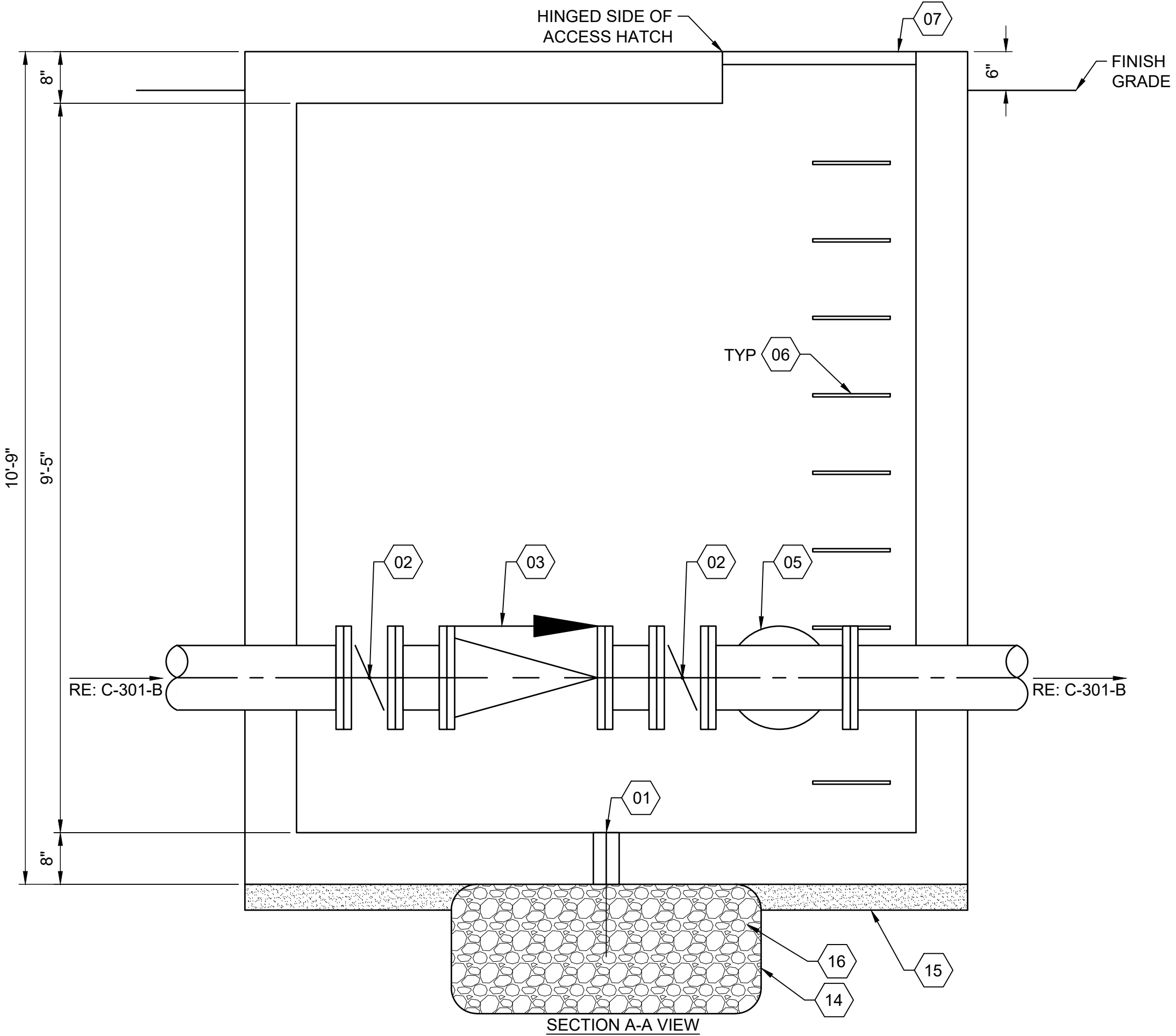


NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.		

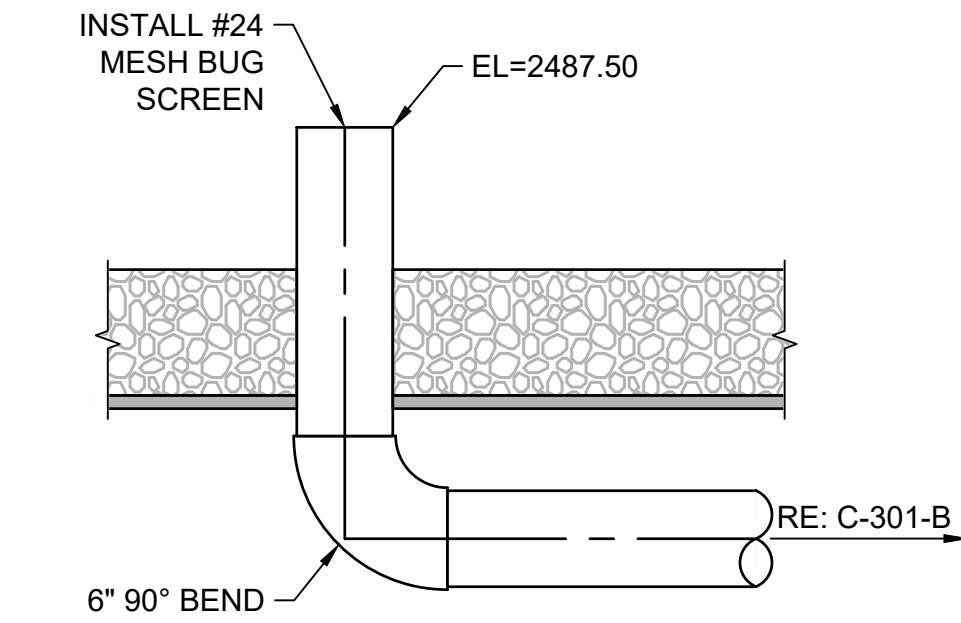
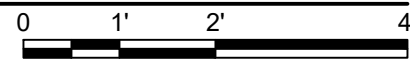


ATHOL WATER SYSTEM
IMPROVEMENTS
CEMETERY STANDPIPE -
UTILITY PROFILE

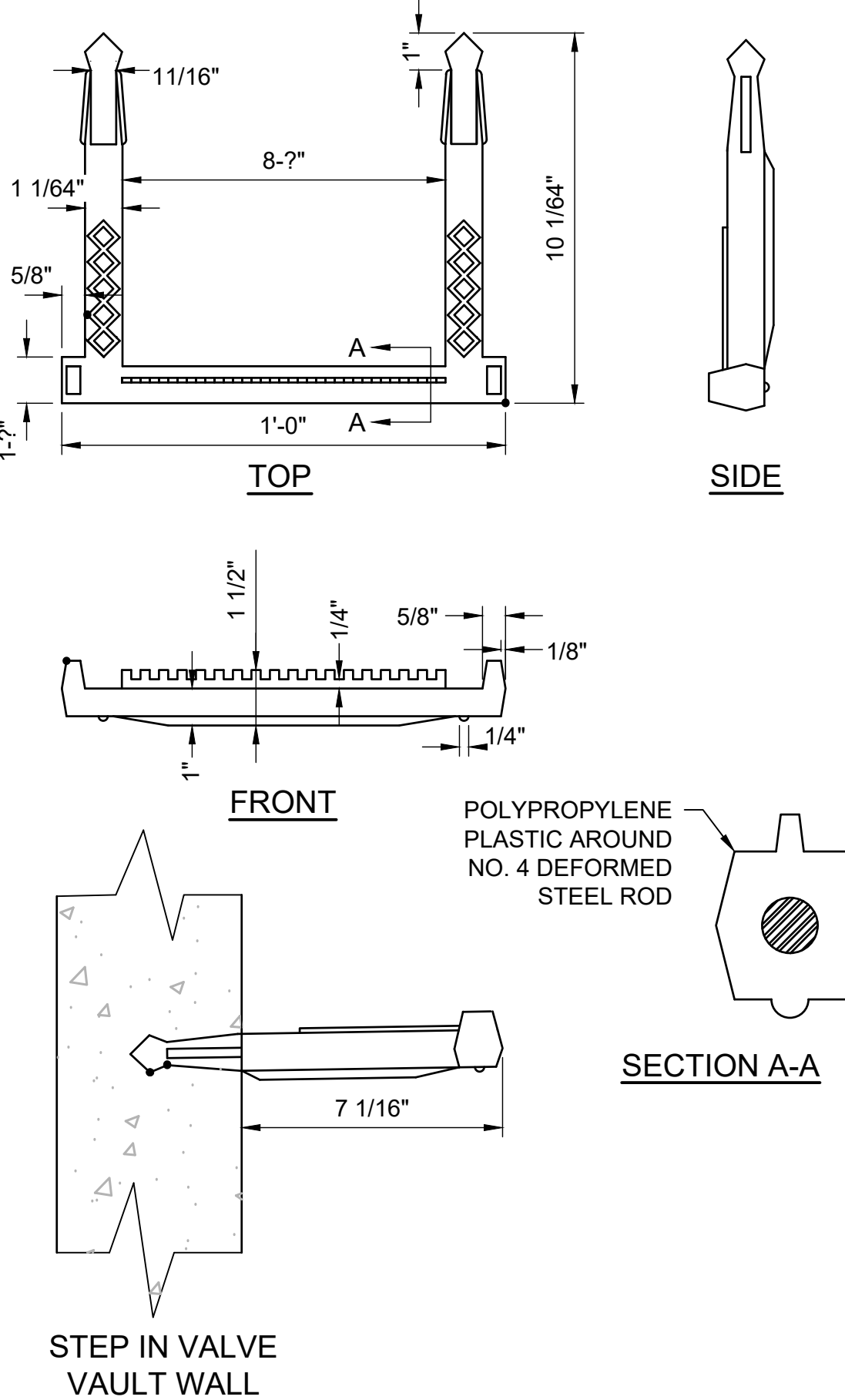
DRAWN: JLP	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. C-302-B	



A1 STANDPIPE VALVE VAULT
1/2" = 1'-0"



C3 OVERFLOW STANDPIPE
N.T.S.

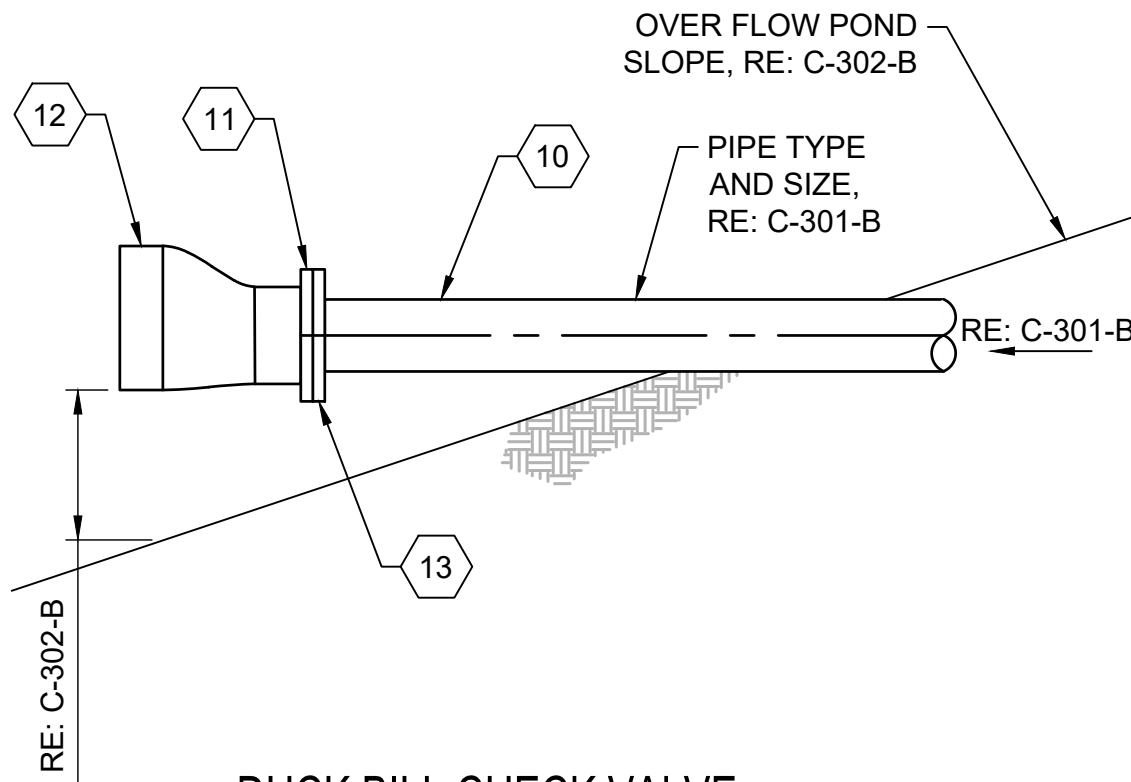


NOTES:
1 PLACE INTO WET CONCRETE WALL DURING MANUFACTURER OR MORTAR INTO HOLES AFTER CONCRETE HAS SET.
2 PLASTIC COATED STEPS AS PER THIS STANDARD DRAWING OR AS APPROVED BY THE ENGINEER.

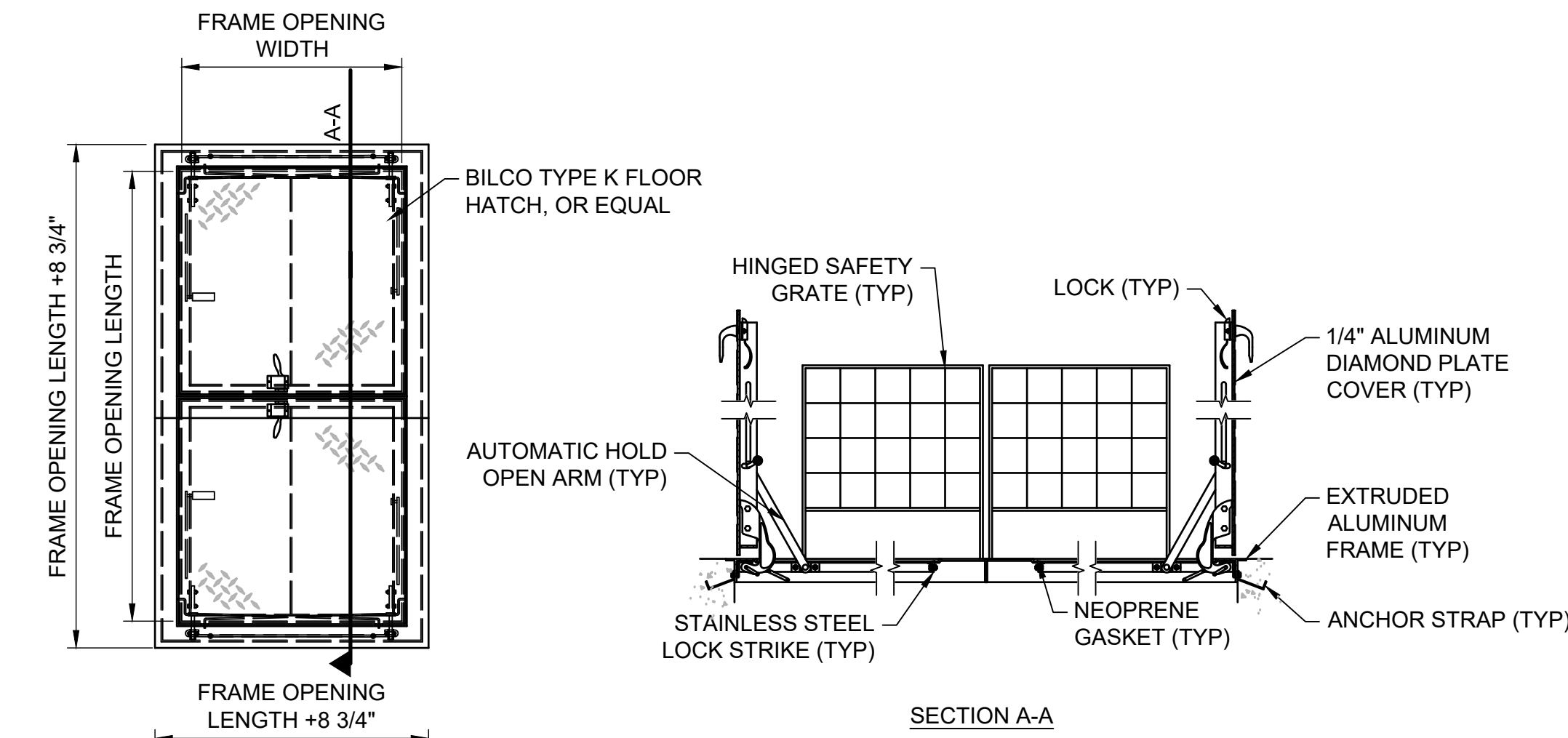
A3 VALVE VAULT STEPS
3" = 1'-0"



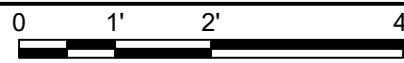
GENERAL NOTES:
1. ALL HARDWARE & BOLTS SHALL BE SS



C4 DUCK BILL CHECK VALVE
N.T.S.



A4 DOUBLE LEAF ACCESS HATCH
1/2" = 1'-0"

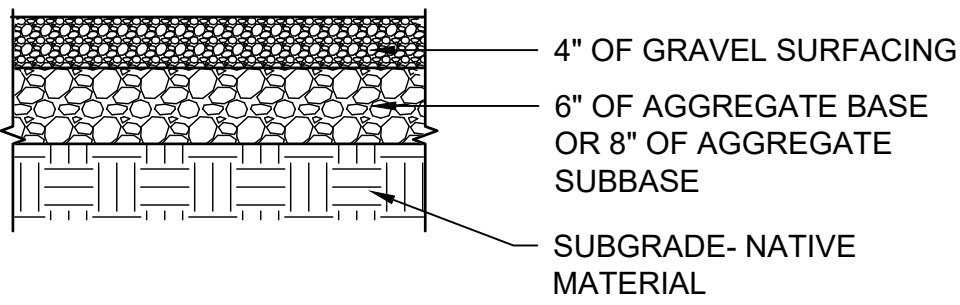


SHEET KEYNOTES

- 01 4" DIAMETER WEEP HOLE
- 02 10" BUTTERFLY VALVE
- 03 10" DISK CHECK VALVE
- 04 10" 90 DEGREE ELBOW
- 05 10" TEE
- 06 VALVE VAULT STAIRS, RE: A3/C-401-B
- 07 30"x60" DOUBLE SINGLE LEAF ACCESS HATCH, RE: SPECS & A4/C-401-B
- 08 10" MOTOR-ACTUATED BUTTERFLY VALVE
- 09 24" MANHOLE LID
- 10 NOT USED
- 11 6" 150# ANSI PLATE FLANGE, SS
- 12 6" TIDFLEX CHECK VALVE SERIES 35-1 OR APPROVED EQUAL
- 13 INSTALL #24 SCREEN BETWEEN FLANGES

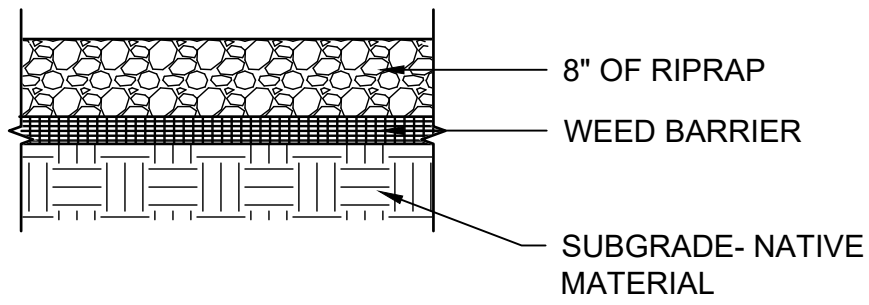
NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



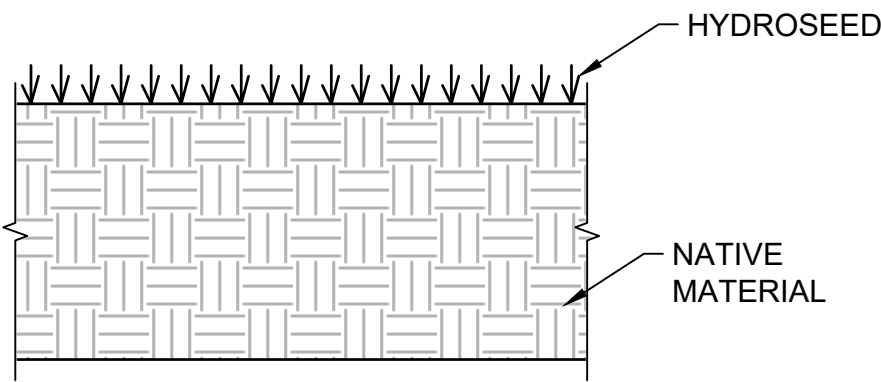
- NOTES:
1. COMPACT SUBGRADE, SUBBASE, BASE AND GRAVEL SURFACING TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D698.

C1 GRAVEL SURFACING
N.T.S.

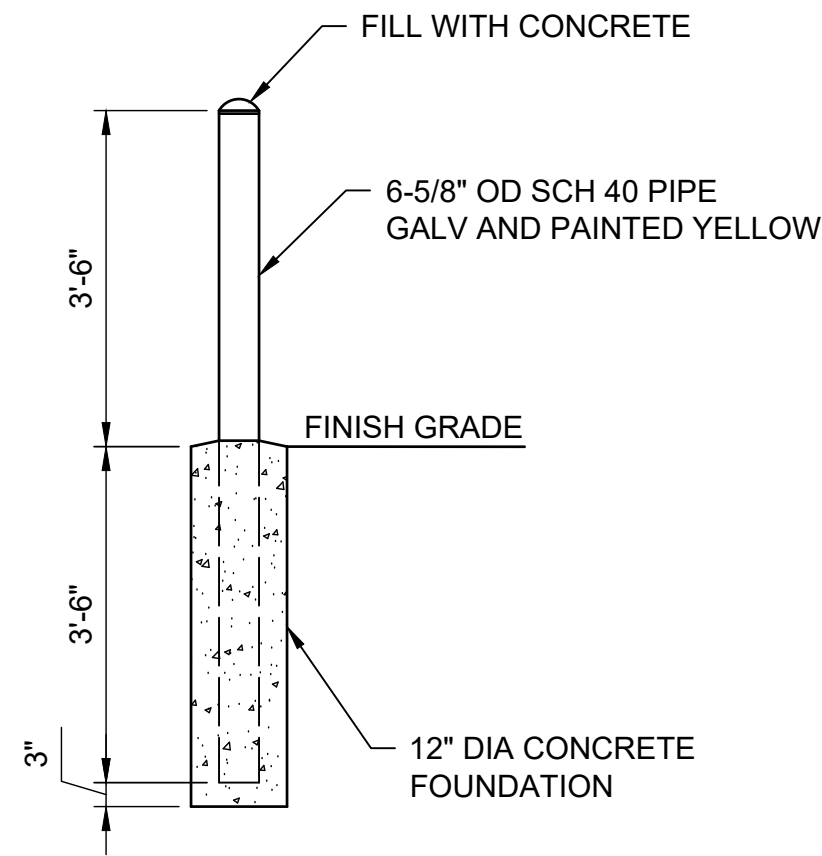


- NOTES:
1. COMPACT SUBGRADE TO AT LEAST 90% OF ASTM D-1557.

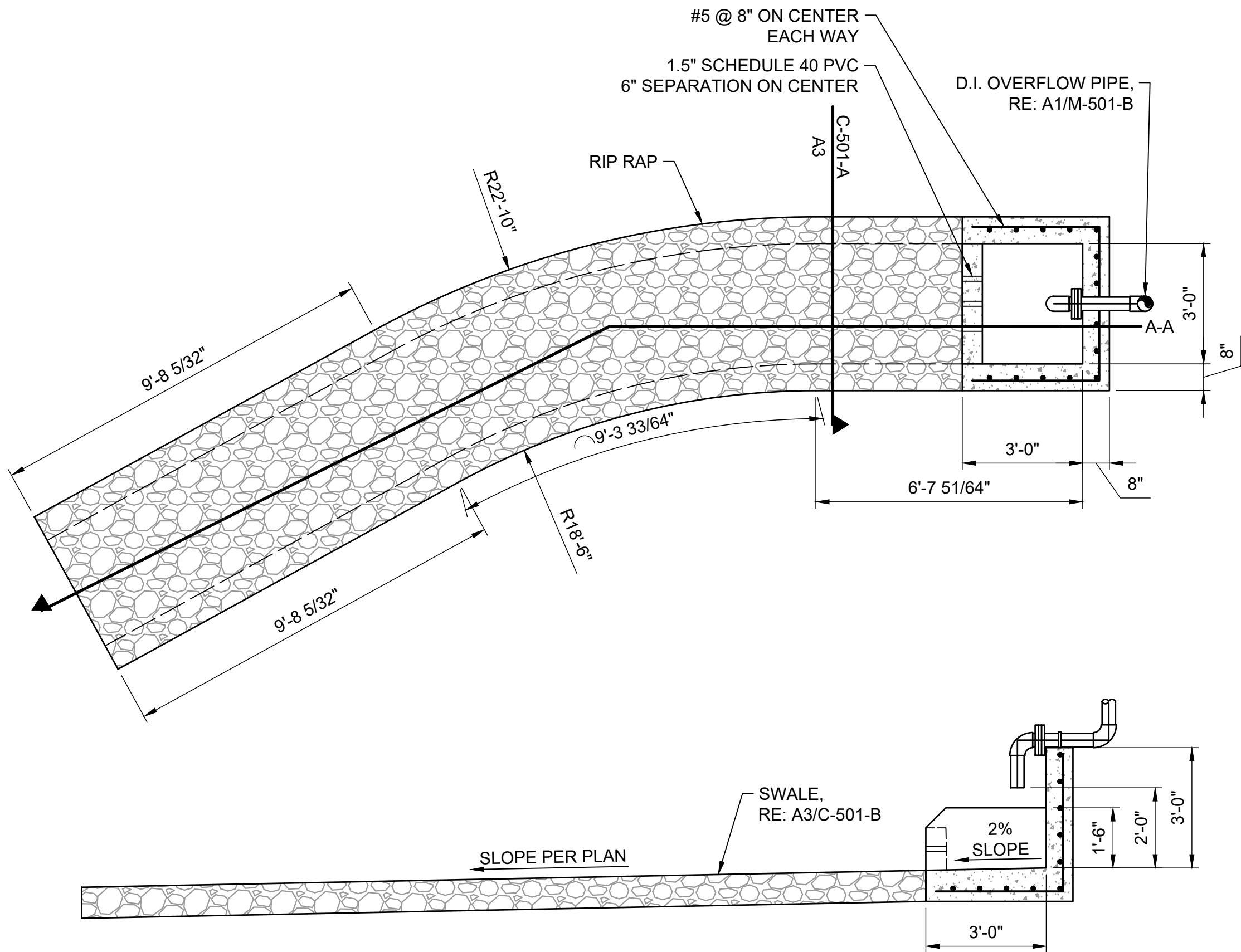
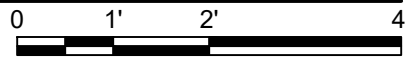
C2 RIPRAP SURFACING
N.T.S.



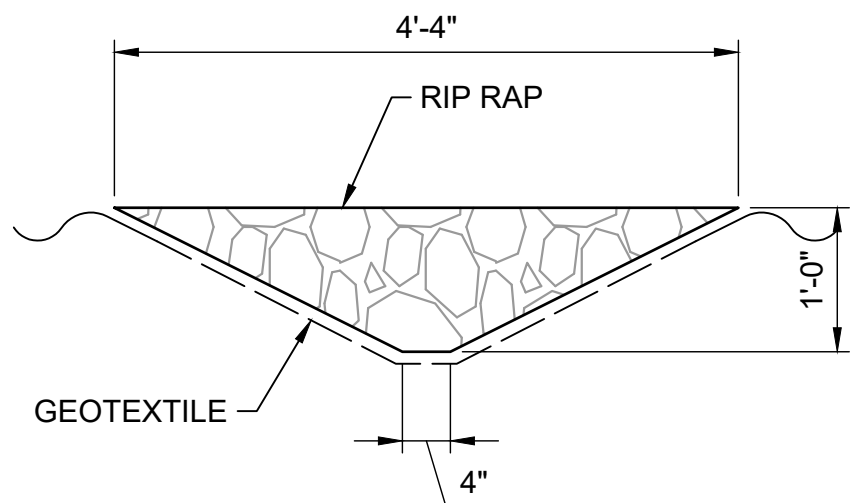
C3 HYDROSEED SECTIONS
N.T.S.



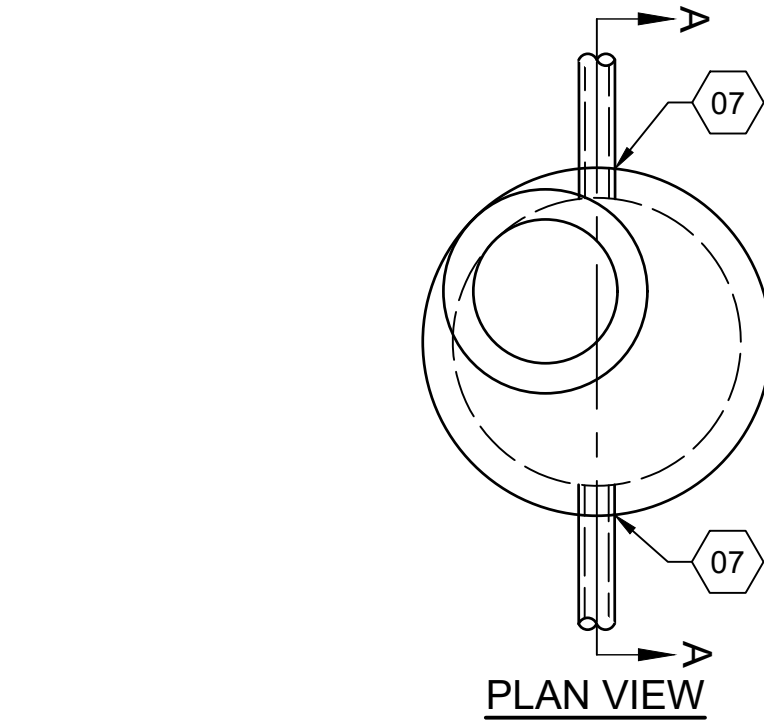
C4 BOLLARD
1/2" = 1'-0"



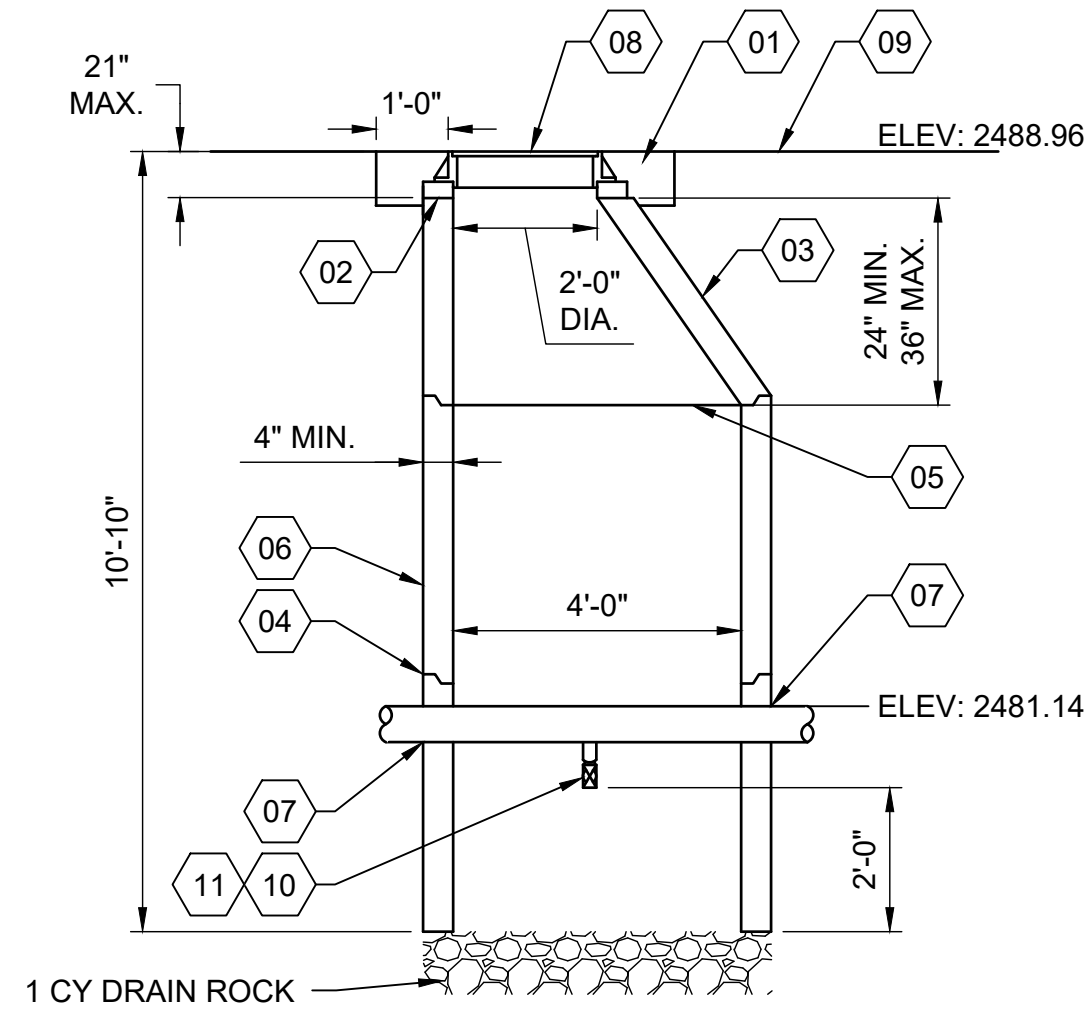
SECTION A-A



A3 OVERFLOW SWALE SECTION
N.T.S.



PLAN VIEW



SECTION A-A

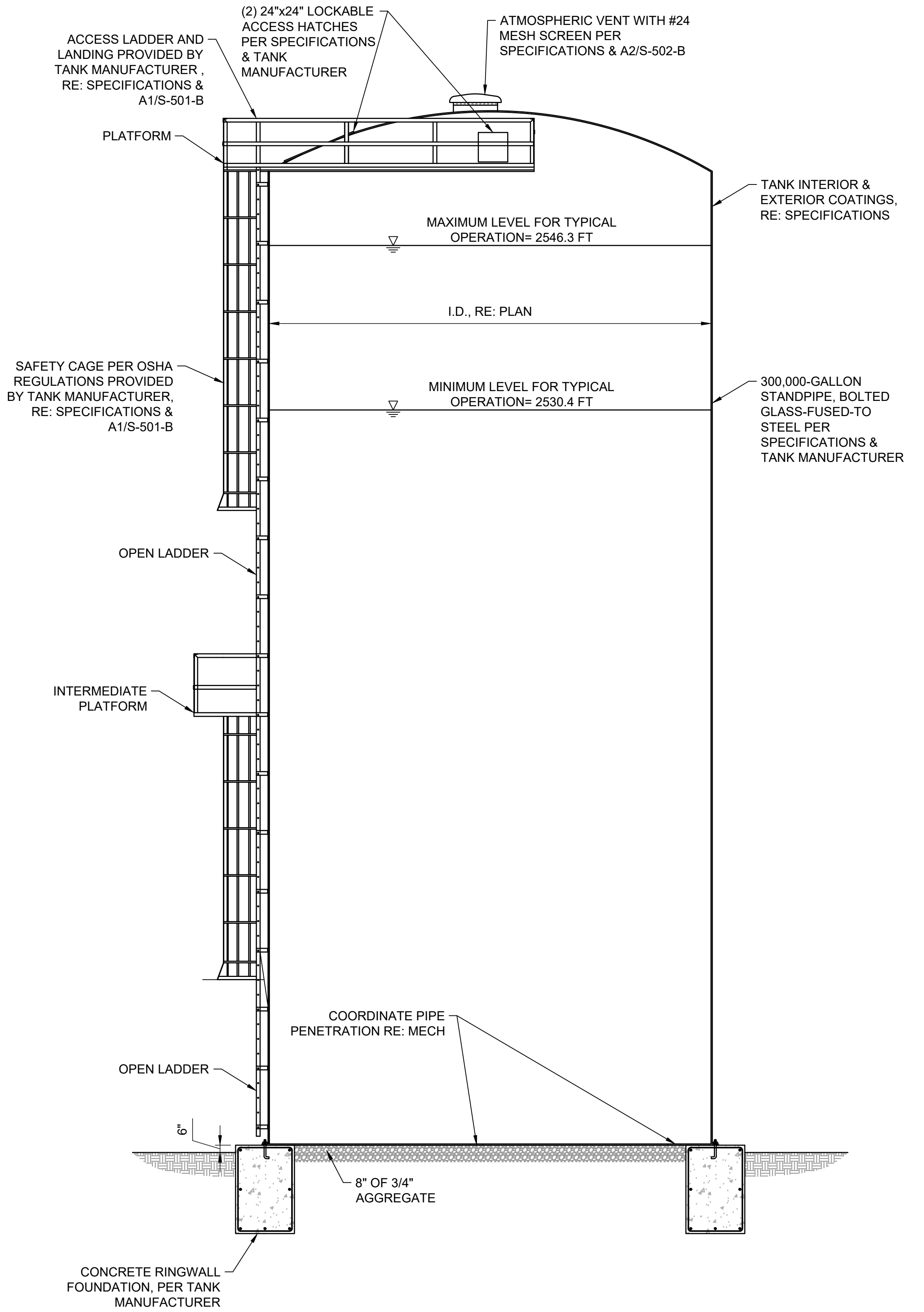
- LEGEND**
- 01 TRAFFIC RATED CONCRETE COLLAR
 - 02 GRADE RINGS GROUTED WATERTIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE
 - 03 PRECAST MONOLITHIC ECCENTRIC CONE SECTION. (REBAR NOT SHOWN)
 - 04 MANHOLE JOINT
 - 05 PROPERLY ALIGN ALL INTERIOR JOINTS
 - 06 PRECAST CONCRETE MANHOLE-BARREL SECTION & BASE
 - 07 PIPE PENETRATION, RE: STANDARD DETAIL M-227
 - 08 FRAME & COVER
 - 09 FINISH GRADE
 - 10 1" TAPPING SADDLE
 - 11 1" BALL VALVE

- NOTES:
1. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
 2. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.

A1 OVERFLOW PIPE OUTLET
3/8" = 1'-0"



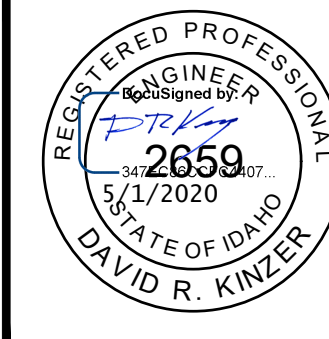
A4 OPEN BOTTOM DRAIN MANHOLE
N.T.S.



A1 **STRUCTURAL SECTION**
3/16" = 1'-0"



KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



REGISTERED PROFESSIONAL ENGINEER
No. 2659
5/1/2020
STATE OF IDAHO
DAVID R. KINZER

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

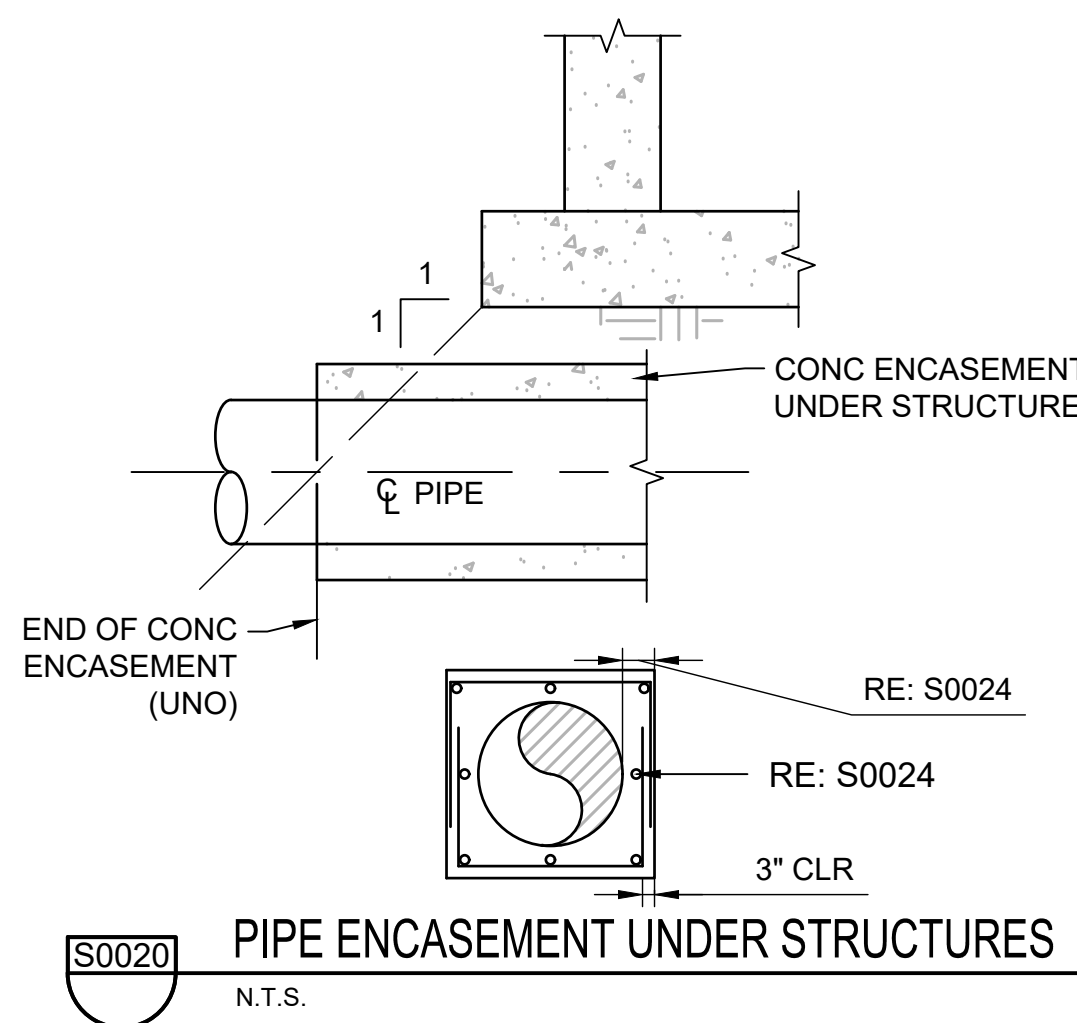


**CITY OF
ATHOL, ID**

**ATHOL WATER SYSTEM
IMPROVEMENTS**

**CEMETERY STANDPIPE - STRUCTURAL
SECTION**

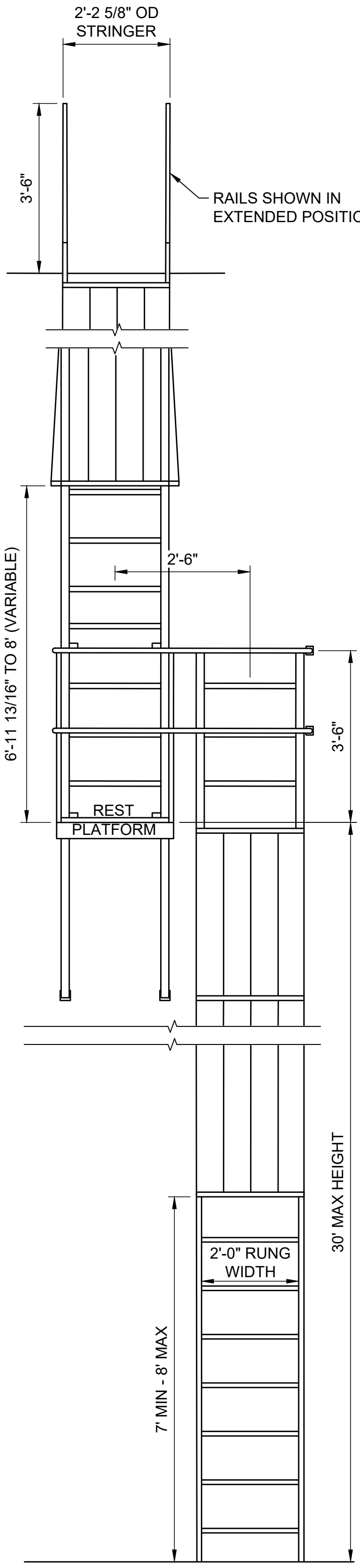
DRAWN: GAI	CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO.	
S-301-B	



10' - 16" ENCASUREMENT

6" OR 8" ENCASUREMENT

- S0024** ENCASEMENT
N.T.S.

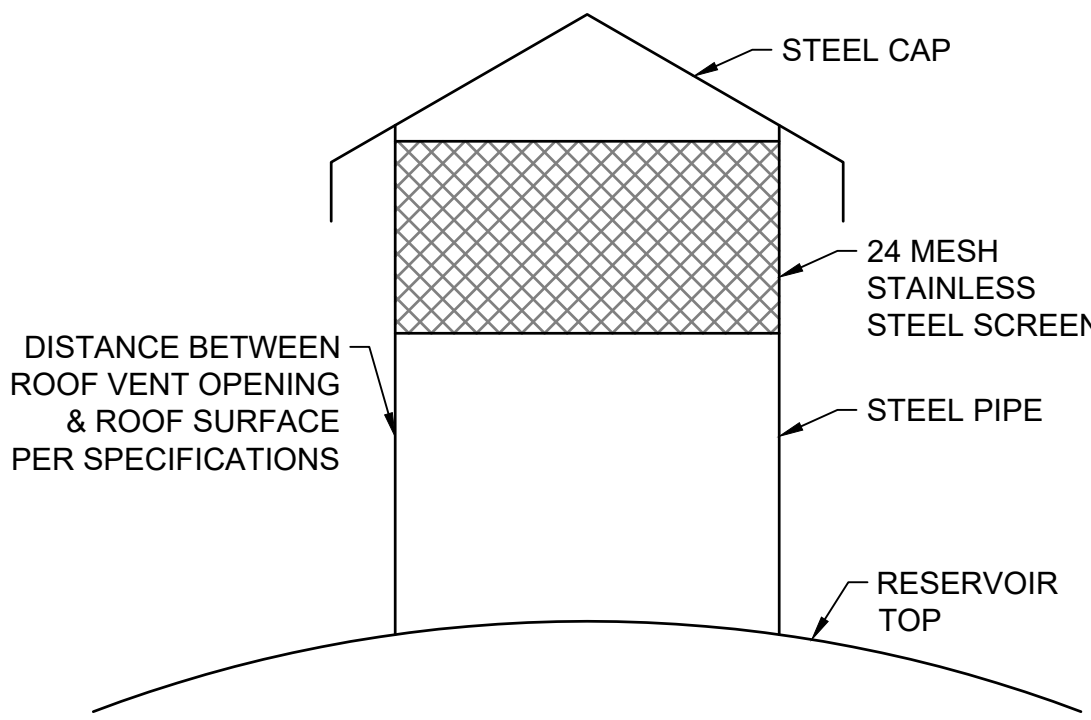


FRONT ELEVATION

A1

INTERMEDIATE LADDER PLATFORM DETAIL


N.T.S.



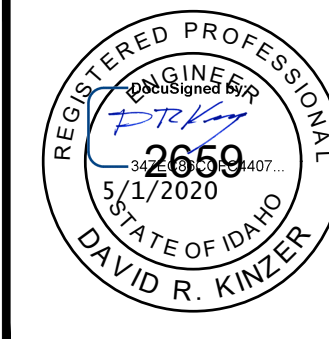
A2

ATMOSPHERIC VENT

N.T.S.




601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

CEMETERY STANDPIPE - STRUCTURAL
DETAILS

DRAWN: GAI | CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.

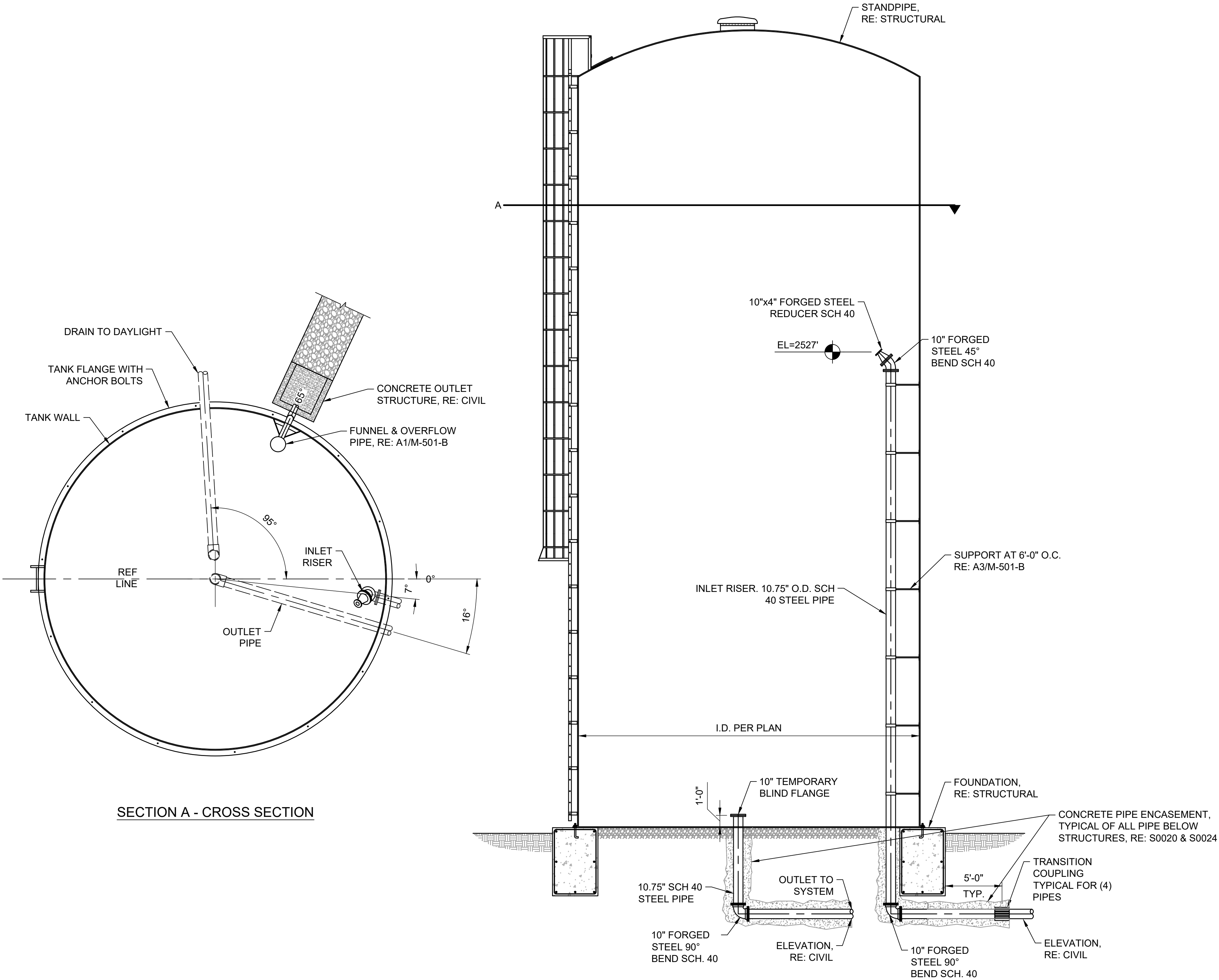
1-1/2 Inches

PROJECT NO.
216064-001

PAGE

SHEET NO.

S-502-B

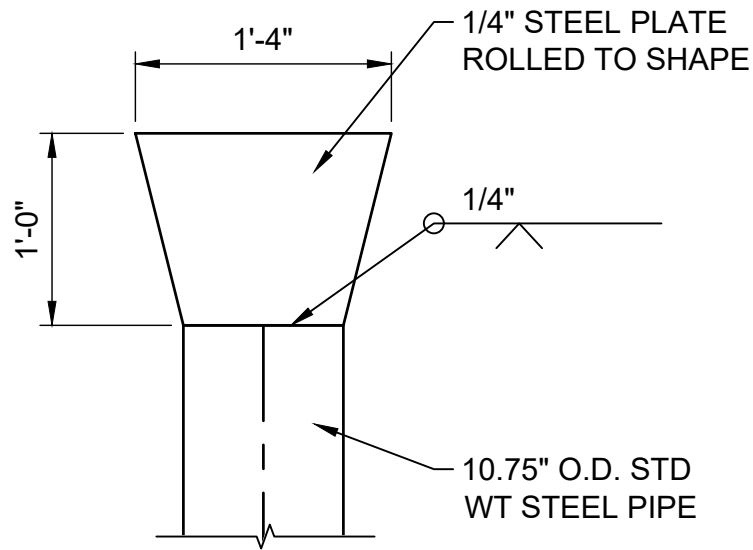


A1

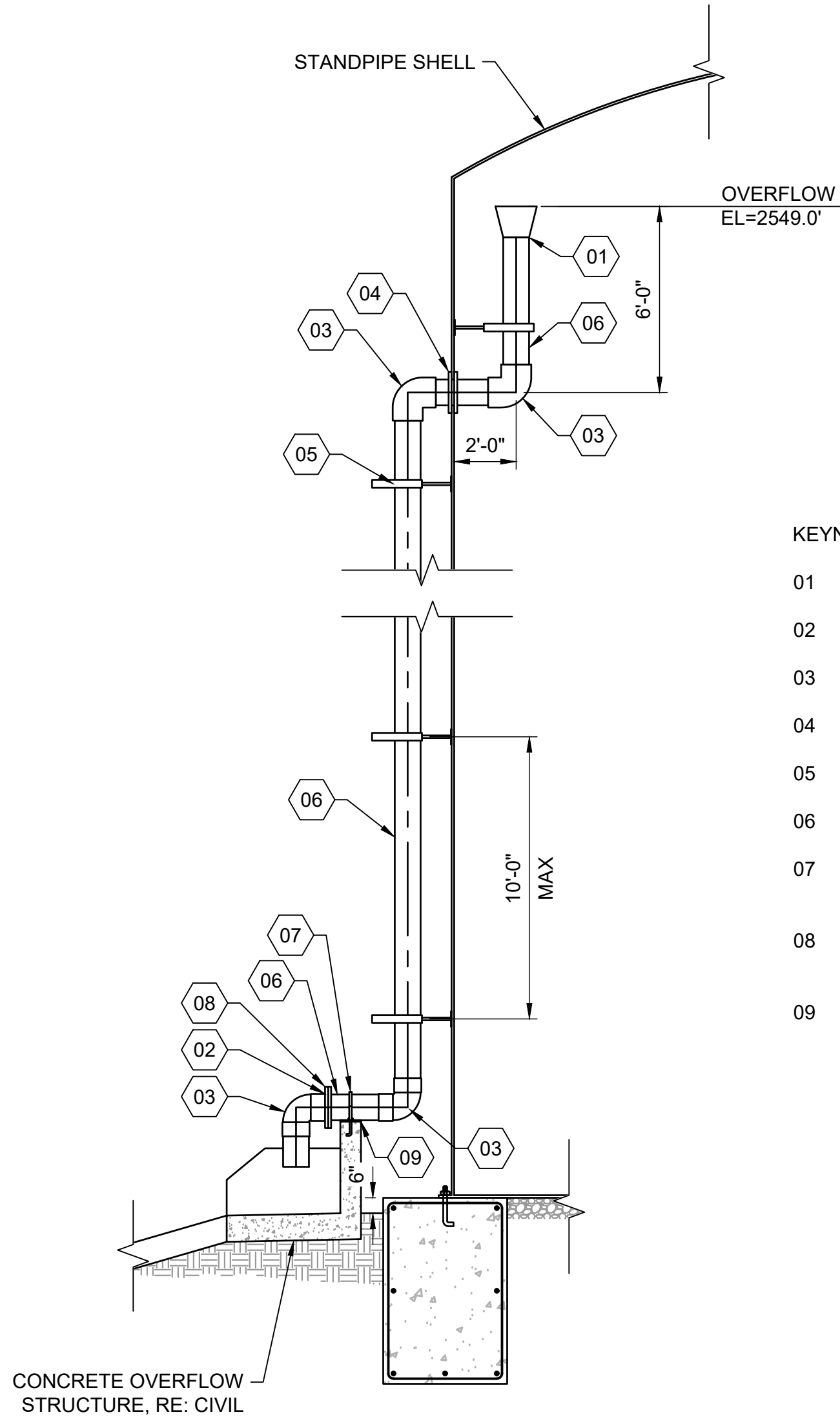
MECHANICAL SECTION (INLET & OUTLET)

3/16" = 1'-0"



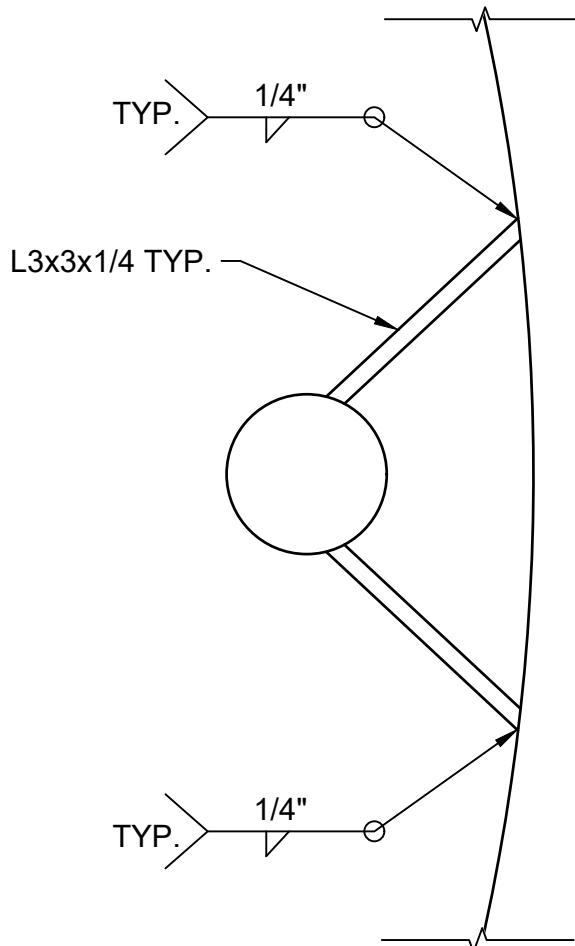


C1 OVERFLOW FLARE FITTING
N.T.S.

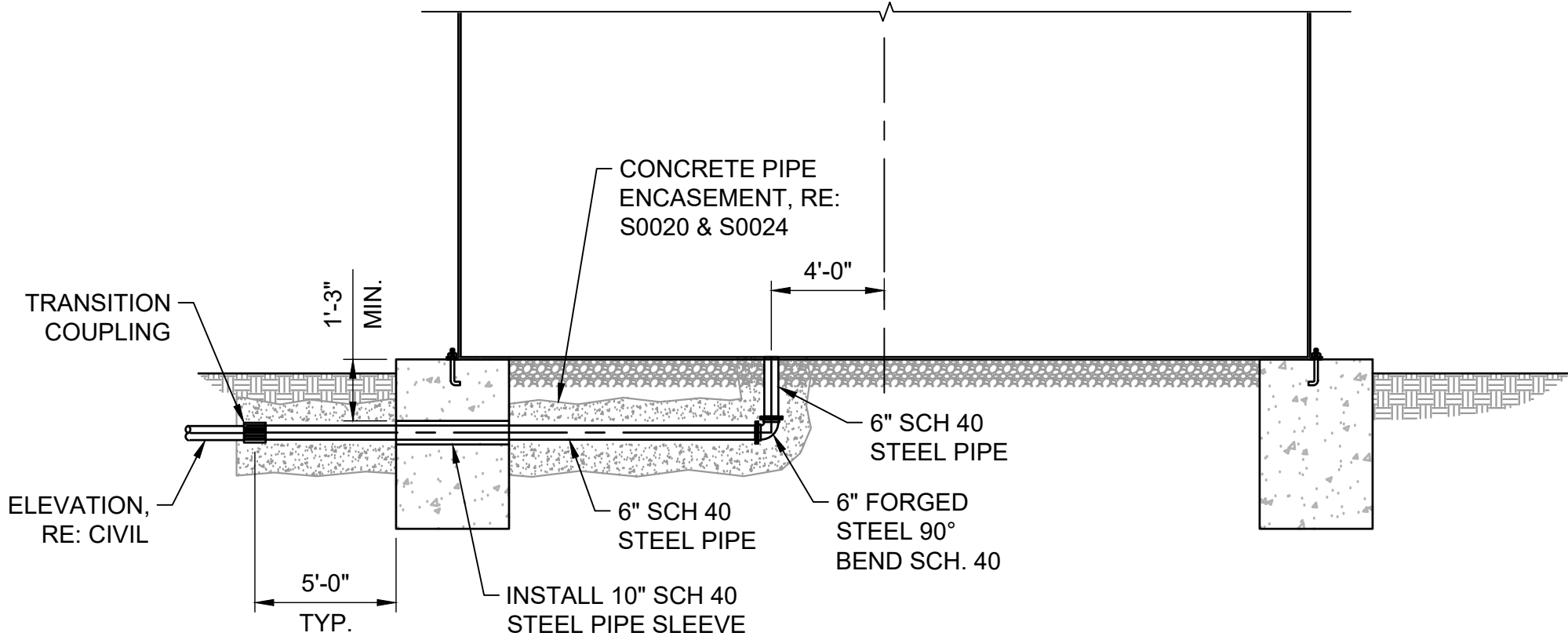


KEYNOTES

- 01 FLARE FITTING, RE: C1/M-501-B
- 02 TWO 10" SLIP ON FLANGES
- 03 10" FORGED STEEL 90° BEND
- 04 FLANGED PIPE PENETRATION PER MANUFACTURER
- 05 PIPE SUPPORTS, RE: A3/M-501-B
- 06 10.75" O.D. SCH 40 STEEL PIPE
- 07 3/8"x3" STAINLESS STEEL STRAP W/ 3/4" STAINLESS STEEL ANCHOR BOLTS (6" EMBED)
- 08 #24 MESH S.S. SCREEN MOUNTED BETWEEN FLANGES
- 09 1/2" THICK NEOPRENE PAD

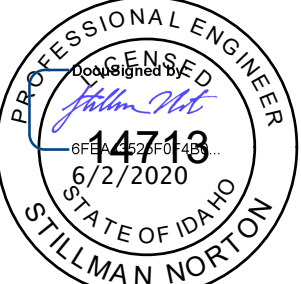
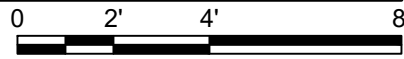


A3 SUPPORT DETAIL
N.T.S.



A4 DRAIN SECTION
3/16" = 1'-0"

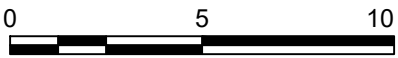
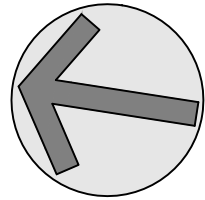
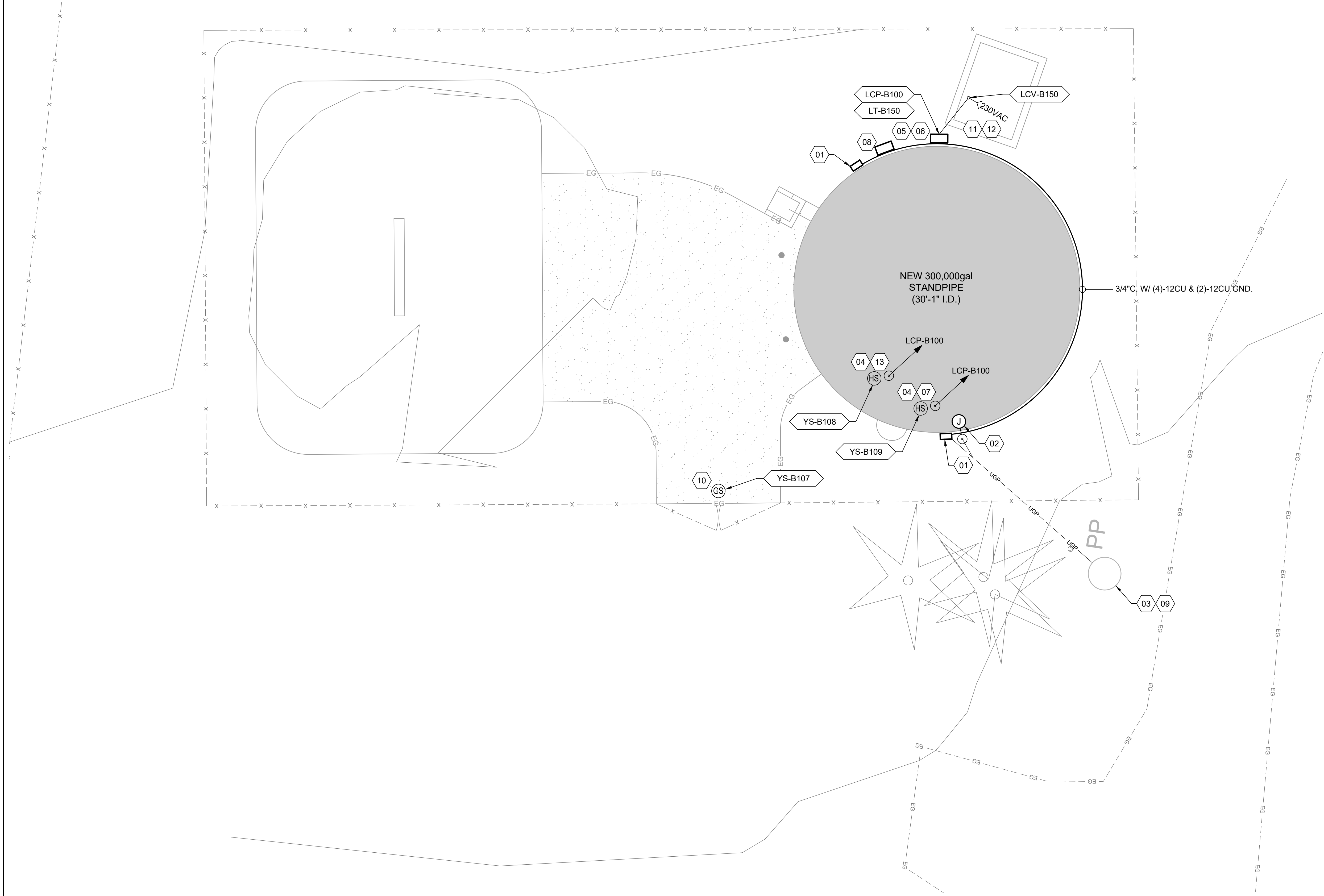
A1 OVERFLOW PIPE DETAIL
1/4" = 1'-0"



NO. REVISIONS DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM
IMPROVEMENTS
CEMETERY STANDPIPE - MECHANICAL
DETAILS



GENERAL SHEET NOTES

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER STATE OR LOCAL CODE.
- CABLE AND CONDUIT RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
- ALL OUTDOOR EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
- UNDERGROUND ELECTRICAL EQUIPMENT AND WIRING SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
- IDENTIFY EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING. ANY DISRUPTION OR DAMAGE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

SHEET KEYNOTES

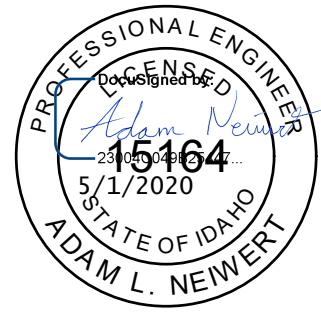
- | NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |
- SECURITY LIGHT WITH MOTION DETECTOR AND PHOTOCELL OLW 23. CONTRACTOR TO COORDINATE MOUNTING LOCATION. INSTALL (2) 12 CU, (1) 12 CU GND IN 3/4" C BACK TO NEW METER MAIN 15/1 CIRCUIT BREAKER.
 - J-BOX LOCATED AT TOP OF TANK. PROVISIONS FOR FUTURE MIXER. INSTALL 1" CONDUIT WITH PULL CORD TO METER MAIN.
 - CONTRACTOR TO DISCONNECT AND REMOVE EXISTING METER MAIN.
 - INSTALL NEW INTRUSION SWITCH BY THE ACCESS HATCH FROM LCP-B100.
 - INSTALL PANEL LCP-B100. POWER WITH 110 VAC. POWER HEAT TRACE FROM PANEL. MOUNT ANTENNA ON TOWER. MINIMUM 25' ABOVE TANK USING LMR-400 CABLE. RE: E045/E-501.
 - INSTALL PRESSURE SENSOR LT-B150 ON TANK FITTING WITH HEAT TAPE, INSULATION, PROTECTION. CONNECT LT-B150 TO LCP-B100 CABLE C-B01 USING 18 AWG TSP. RE: E-150/E-501.
 - INSTALL HATCH #2 INTRUSION SENSOR CABLE C-B02 USING 18 AWG TSP TO LCP-B100.
 - 50' SUPPORTED TOWER. TOWER TO BE ANCHORED TO THE STAND PIPE.
 - OPTION - NOT RECOMMENDED - MOUNT 2" 20+ FT PIPE TO STAND PIPE. REST PIPE ON FOUNDATION AND EXTEND 15-20 FT ABOVE AND ATTACH ANTENNA.
 - CONTRACTOR TO INSTALL NEW 100A. METER MAIN LOAD CENTER WITH (2) 1-POLE 20A AND (1) 2-POLE 15A CIRCUIT BREAKERS. INSTALL OUTLET BELOW METER MAIN LOAD CENTER. RE: E-501/E-149.
 - INSTALL GATE INTRUSION SENSOR AND PROVIDE (2) 16 CU, (1) 16 CU CABLE (C-B03) IN 3/4" CONDUIT FROM LCP-B100.
 - INSTALL 3/4" CONDUIT AND CABLE, 18 AWG TSP, FROM LCP-B100 TO CONTROL VALVE, LCV-B150, IN VALVE VAULT.
 - INSTALL 230VAC POWER CABLING ((2) 12 CU, (1) 12 CU GND) IN 3/4" C FROM NEW METER MAIN LOAD CENTER.
 - INSTALL HATCH #1 INTRUSION SENSOR CABLE C-B04 USING 18 AWG TSP TO LCP-B100.

EQUIPMENT KEYNOTES

LCV-B150	LEVEL CONTROL VALVE
LCP-B100	LOCAL CONTROL PANEL
LT-B150	PRESSURE TRANSMITTER
YS-B107	GATE INTRUSION SWITCH
YS-B108	HATCH #1 INTRUSION SWITCH
YS-B109	HATCH #2 INTRUSION SWITCH



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID



ATHOL WATER SYSTEM
IMPROVEMENTS

CEMETERY STANDPIPE - ELECTRICAL
SITE PLAN

DRAWN: TLL CHECK: ALN

VERIFY SCALE: Scales based on 22"x34" prints.

PROJECT NO. PAGE

216064-001

SHEET NO.

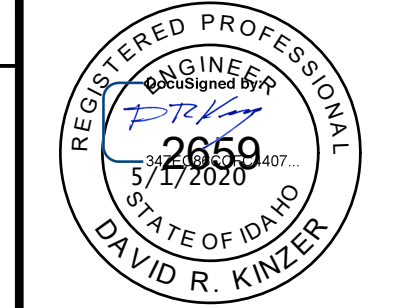
E-101-B



1. CONTRACTOR SHALL COORDINATE ALL HVAC WORK WITH STRUCTURAL AND ELECTRICAL TRADES
2. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. NOT ALL SUPPORTS ARE SHOWN
4. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO EQUIPMENT SUBMITTAL AND INSTALLATION.

01	GENERATOR TANK
02	GENERATOR SILENCER
03	STAINLESS STEEL EXHAUST PIPE, ROUTE THROUGH ROOF
04	TRANSITION DUCT TO LOUVER, RE: A1/MH-501-C
05	ENGINE EXHAUST THIMBLE
06	ENGINE RADIATOR
07	GENERATOR
08	WEATHER CAP
09	FLEX COUPLER
10	REPAIR AND PATCH EXISTING EXHAUST PENETRATION
11	WALL OPENING, TYP. RE: B1/MH-501-C


LV1	FIXED LOUVER, 5'0" x 5'0", RE: A2/MH-501-C
LV2	FIXED LOUVER, 5'0" x 5'0", RE: A2/MH-501-C

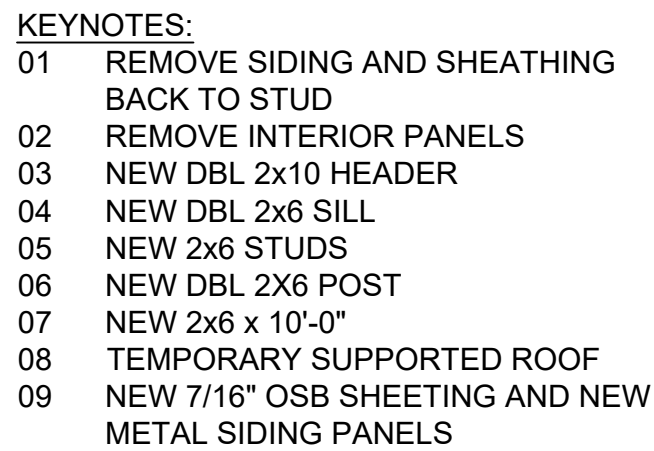


NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.		



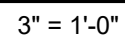
ATHOL WATER SYSTEM IMPROVEMENTS	BENNETT WELL GENERATOR
------------------------------------	------------------------

DRAWN: DAC		CHECK: ---
VERIFY SCALE: Scales based on 22"x34" prints.		
		
PROJECT NO.		PAGE
216064-001		
SHEET NO.		
MH-101-C		



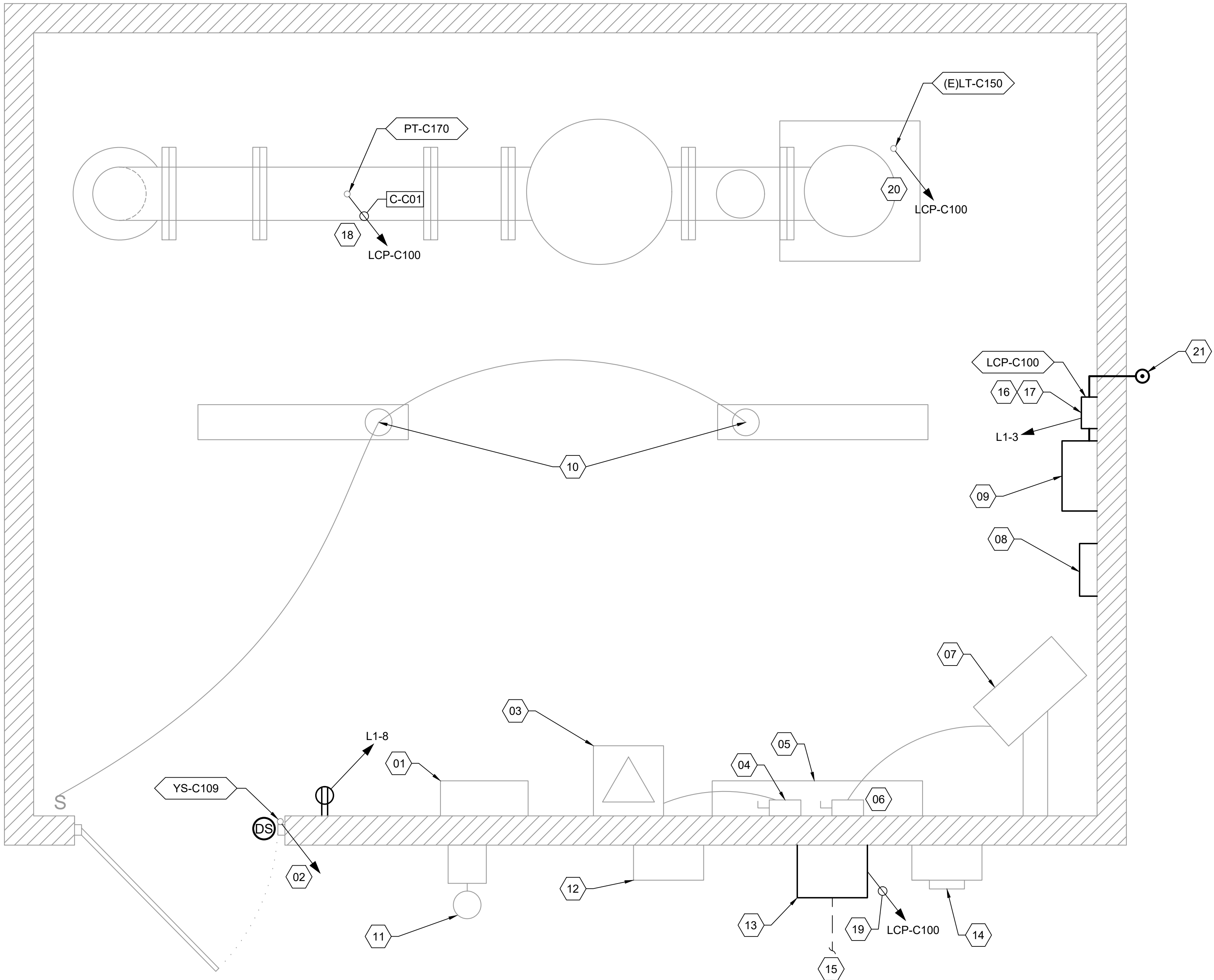
N.T.S.

MARK	MOUNTING	SIZE [W x H]	TYPE	DEPTH [IN]	BLADES	BLADE ANGLE [DEG]	MATERIAL	FINISH	MANUFACTURER OR EQUAL	MODEL
LV-1	WALL FLANGE	5'-0"x5'-0"	FIXED	4	DRAINABLE	37.5	6063T5 ALUM	KYNAR	RUSKIN	ELF375DX
LV-2	WALL FLANGE	5'-0"x5'-0"	FIXED	4	DRAINABLE	37.5	6063T5 ALUM	KYNAR	RUSKIN	ELF375DX

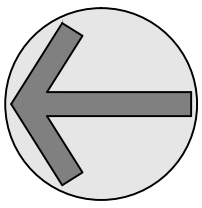


N.T.S.

$$3'' = 1'-0''$$


A1 ELECTRICAL PLAN
N.T.S.



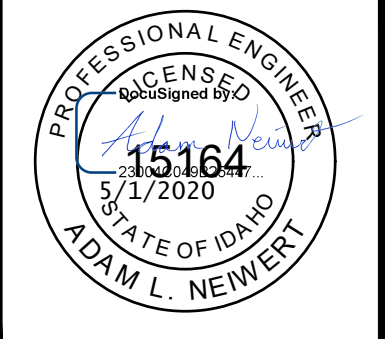
NTS

SHEET KEYNOTES	
01	RETAIN & PROTECT EXISTING PANEL L1, 120/240 VOLT, SINGLE PHASE, 3-WIRE TYPE LOAD CENTER WITH 60-AMPERE, 2-POLE MAIN CIRCUIT BREAKER, 4 EACH 20-AMPERE SINGLE POLE CIRCUIT BREAKER.
02	INSTALL DOOR INTRUSION SWITCH AND CONNECT TO LCP-C100 USING 18 AWG TSP CABLE.
03	RETAIN & PROTECT EXISTING TRANSFORMER - 480V - 120/240V 5KVA WALL MOUNT.
04	RETAIN & PROTECT EXISTING 30-AMPERE, 2-POLE, 600 VOLT FUSIBLE DISCONNECT SWITCH.
05	RETAIN & PROTECT EXISTING 36" LONG SECTION OF 6" X 6" WIRE GUTTER.
06	RETAIN & PROTECT EXISTING 30-AMPERE, 3-POLE, 600 VOLT FUSIBLE DISCONNECT SWITCH.
07	RETAIN & PROTECT EXISTING FAN HEATER RATED 400 CFM, 5KW, 480 VOLT, 3-PHASE WITH HORIZONTAL DISCHARGE LOUVERS CONTROL TRANSFORMER.
08	EXISTING TO BE REMOVED AND AND REPLACED WITH NEW PUMP STARTER.
09	EXISTING TO BE REMOVED AND AND REPLACED WITH NEW PUMP CONTROL PANEL.
10	RETAIN & PROTECT CEILING-MOUNTED FLUORESCENT LIGHT FIXTURE GASKETED FOR DAMP LOCATIONS, HI-IMPACT ACRYLIC LENS, TWO F40WW LAMPS.
11	RETAIN & PROTECT EXISTING WALL MOUNTED, HID LIGHT FIXTURE WITH 70 WATT HIGH PRESSURE SODIUM LAMP, INJECTION MOLDED POLYCARBONATE, HI-TEKCAT.
12	RETAIN & PROTECT EXISTING 30-AMPERE, 600 VOLT DISCONNECT.
13	EXISTING MANUAL TRANSFER SWITCH TO BE REMOVED AND REPLACED WITH NEW AUTOMATIC TRANSFER SWITCH.
14	RETAIN & PROTECT EXISTING POWER METER, NO. 4113185.
15	NEW UNDERGROUND CONDUIT TO GENERATOR. RE: E-102-C FOR CONNECTION AND CONDUITS SIZING.
16	INSTALL PANEL LCP-C100. POWER LCP-C100 WITH 110 VAC.
17	CONNECT LCP-C100 TO NEW PUMP PANEL USING (10) #14 CU CABLE.
18	INSTALL NEW PRESSURE SENSOR PT-C170 TO MAIN PIPE AND CONNECT SENSOR TO LCP-C100 USING 18 AWG TSP CABLE.
19	CONNECT NEW AUTOMATIC TRANSFER SWITCH TO LCP-C-100 USING (10) #14 CU CABLE.
20	CONNECT EXISTING PRESSURE TRANSMITTER TO LCP-C-100 USING 18 AWG TSP CABLE.
21	MOUNT 2" RIDGED CONDUIT TO BUILDING. REST PIPE ON FOUNDATION OR NEW SLAB, FASTEN TO BUILDING AND EXTEND 15-20 FT ABOVE BUILDING. ATTACH ANTENNA AND CONNECT TO LCP-C100 USING LMR-400 CABLE. RE:E045/E-501.
EQUIPMENT KEYNOTES	
LCP-C100	LOCAL CONTROL PANEL
LT-C150	EXISTING PRESSURE TRANSMITTER
PT-C170	PRESSURE TRANSMITTER
YS-C109	DOOR INTRUSION SWITCH

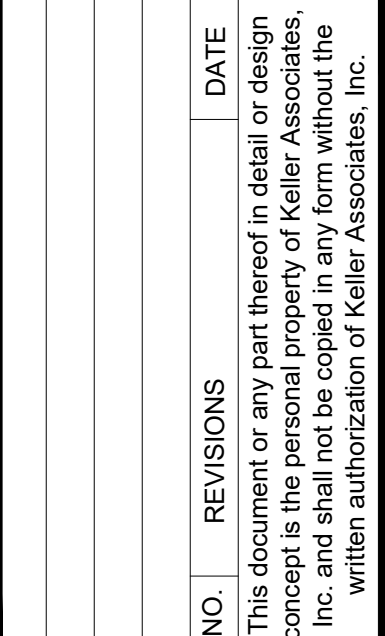
GENERAL SHEET NOTES	
1.	ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER STATE OR LOCAL CODE.
2.	CABLE AND CONDUIT RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
3.	ALL OUTDOOR EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
4.	UNDERGROUND ELECTRICAL EQUIPMENT AND WIRING SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
5.	IDENTIFY EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING. ANY DISRUPTION OR DAMAGE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.



601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



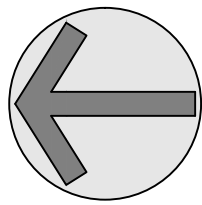
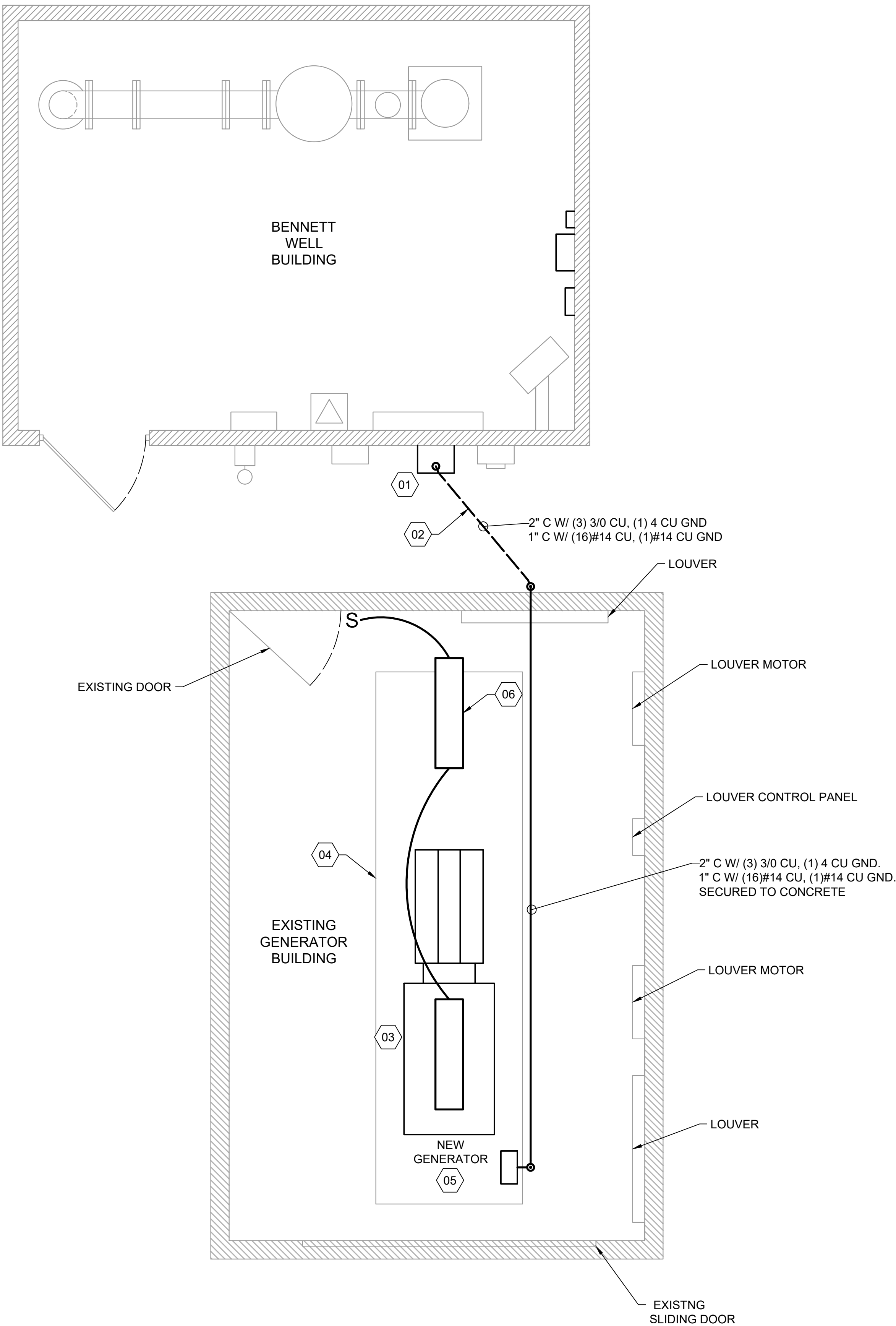
NO.	REVISIONS	DATE



ATHOL WATER SYSTEM IMPROVEMENTS

BENNETT WELL - ELECTRICAL PLAN

DRAWN: TLL	CHECK: ALN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. E-101-C	



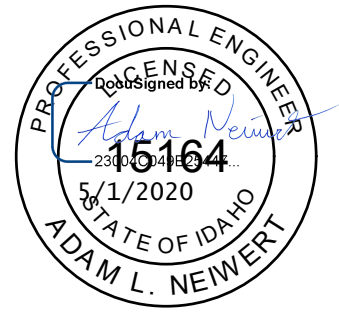
0 4 8

GENERAL SHEET NOTES

1. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER STATE OR LOCAL CODE.
2. CABLE AND CONDUIT RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
3. ALL OUTDOOR EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
4. UNDERGROUND ELECTRICAL EQUIPMENT AND WIRING SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
5. IDENTIFY EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING. ANY DISRUPTION OR DAMAGE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

SHEET KEYNOTES

- 01 SEE SHEET E-101-C FOR ATS SCOPE.
- 02 REMOVE EXISTING GENERATOR CONDUITS AND INSTALL NEW UNDERGROUND POWER AND CONTROL CONDUITS, AS SIZES SHOWN ON THE DRAWINGS.
- 03 REMOVE EXISTING GENERATOR AND RETURN TO OWNER. PROVIDE AND INSTALL NEW GENERATOR. COORDINATE FINAL LOCATION PRIOR TO ROUGH-IN. VERIFY ADEQUATE WORKING CLEARANCES ARE AVAILABLE. SUBMIT SHOP DRAWING FOR REVIEW PRIOR TO ORDER. COORDINATE FUEL CONNECTIONS WITH EXISTING CONDITIONS. PROVIDE NEW FUEL LINES AS REQUIRED.
- 04 EXISTING GENERATOR TO BE DISCONNECTED AND REPLACED WITH A NEW GENERATOR OF THE SAME SIZE.
- 05 USE EXISTING CONDUITS IF POSSIBLE.
- 06 EXISTING LIGHT BULBS SHALL BE REPLACED WITH NEW LED LINEAR LIGHT FIXTURE CLX 48-5000LM-SEF-WDL-MVOLT-40K-WH.



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



ATHOL WATER SYSTEM IMPROVEMENTS

BENNETT WELL GENERATOR

DRAWN: TLL	CHECK: ALN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. E-102-C	

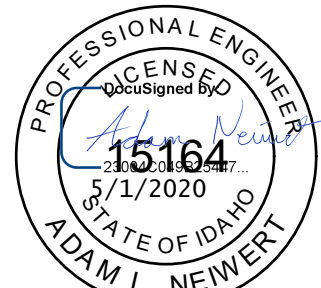


BLS

GENERAL SHEET NOTES

- ## SHEET KEYNOTES

- KELLER**
ASSOCIATES
- 601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE
	This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.	

CITY OF
ATHOL, ID




ATHOL WATER SYSTEM IMPROVEMENTS

BENNETT WELL - ONE-LINE DIAGRAM

DRAWN: TLL	CHECK: ALI
------------	------------

VERIFY SCALE: Scale based on 22"x34" prints



PROJECT NO. 216064-001	PAGE
---------------------------	------

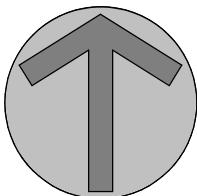
E-600-C

A1

DEMOLITION FLOOR & REFLECTED CELING PLAN

1/2" = 1'-0"

1/2" 0 1' 2' 4'

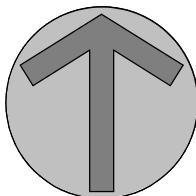


A3

DEMOLITION ROOF PLAN

1/2" = 1'-0"

1/2" 0 1' 2' 4'



GENERAL SHEET NOTES

1. DISPOSE OF DEMOLISHED MATERIALS OFFSITE AT A LOCATION DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND FEDERAL LAWS UNLESS NOTE OTHERWISE
2. CONTRACTOR TO COORDINATE DEMOLITION WITH ENGINEER AND OWNER TO ENSURE PUMP OPERATIONS ARE NOT DISRUPTED.
3. DEMOLITION AND REMOVAL AREAS SHOWN ARE APPROXIMATE. ANY REMOVAL IN EXCESS OF WHAT IS SHOWN SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
4. SEE SHEETS DM-501-D THROUGH DM-503-D FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

- 01 REMOVE EXISTING DOOR AND DOOR FRAME
- 02 REMOVE EXISTING ROOF SYSTEM, EXISTING RAFTERS AND STRUCTURAL FRAMING.
- 03 WHERE ENCOUNTERED, REMOVE DAMAGED AND/OR BROKEN CMU BLOCKS AND REPLACE WITH NEW CMU BLOCKS OF THE SAME TYPE, SIZE, AND COLOR.
- 04 RETAIN AND PROTECT EXISTING CMU AND TIMBER STRUCTURE UNO.
- 05 NOT USED
- 06 REMOVE EXISTING GABLE SIDING.
- 07 RETAIN AND PROTECT EXISTING ELECTRICAL WIRING AND EQUIPMENT.
- 08 RETAIN AND PROTECT EXISTING BEAMS
- 09 REMOVE EXISTING PLYWOOD CEILING AND CELING FRAMING.
- 10 SELECTIVE MECHANICAL DEMOLITION, RE: DM-102-D



STRUCTURE DEMOLITION & REMOVAL OR MODIFICATIONS

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

DRAWNAuthor CHECKer

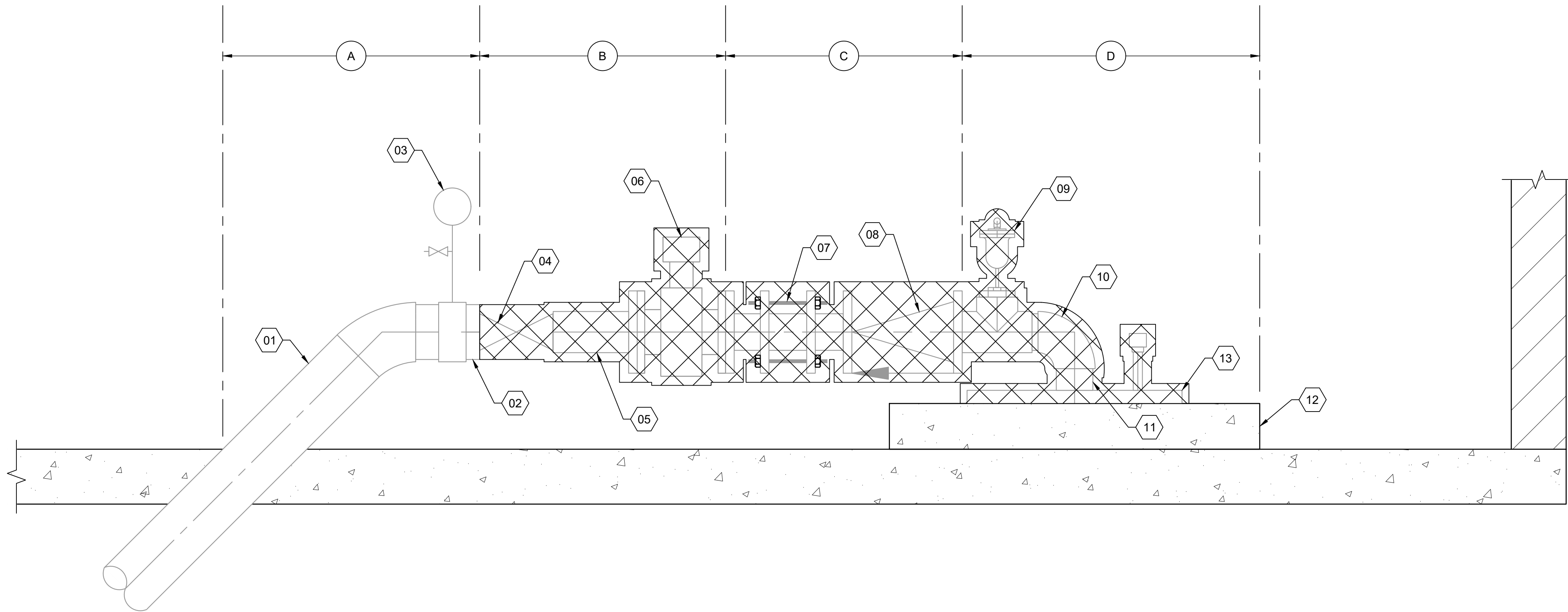
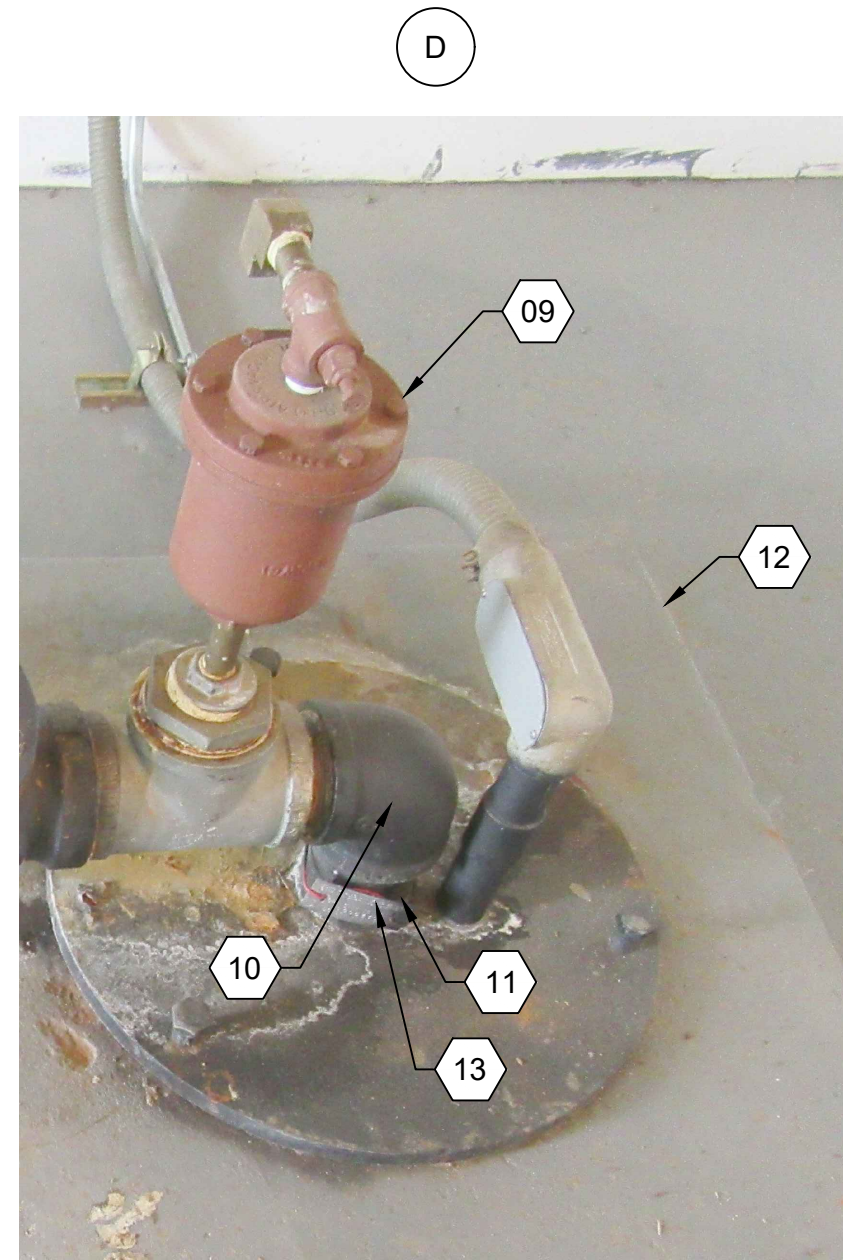
VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

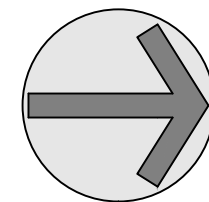
PROJECT NO.
216064-001

PAGE

SHEET NO.
DM-101-D



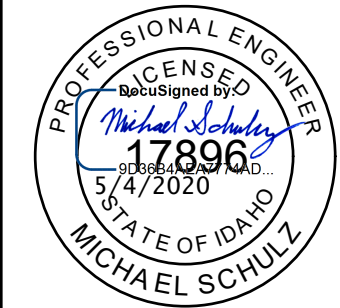
SECTION VIEW



A1 DEMOLITION - SECTION
N.T.S.

1. SEE ELECTRICAL PLANS FOR MODIFICATIONS AND UPGRADES TO EXISTING ELECTRICAL SYSTEM.
2. RETAIN AND PROTECT BUILDING AND UTILITY APPURTENANCES. COVER ROOF OPENING DURING INCLEMENT WEATHER AND WHEN NOT IN USE.
3. CONTRACTOR & OWNER TO REVIEW CONDITION OF EXISTING MATERIALS & EQUIPMENT PRIOR TO DISPOSAL OR REUSE. CONTRACTOR SHALL COMMUNICATE IN WRITING ANY CONCERNS WITH REUSE OF EXISTING MATERIALS AND EQUIPMENT.
4. DISPOSE OF ANY MATERIALS OR EQUIPMENT OFFSITE AT A LOCATION DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND FEDERAL LAWS, UNLESS NOTED OTHERWISE.

01	RETAIN AND PROTECT EXISTING 6" PIPING
02	REMOVE AND DISPOSE OF 6"x 4" REDUCER
03	RETAIN AND PROTECT EXISTING SAMPLE TAP AND PRESSURE GAUGE
04	REMOVE AND DISPOSE OF GATE VALVE
05	REMOVE AND DISPOSE OF PRESSURE TRANSMITTER
06	REMOVE AND DISPOSE OF TOTALIZING FLOW METER
07	REMOVE AND DISPOSE OF DISMANTLING JOINT
08	REMOVE AND DISPOSE OF CHECK VALVE
09	REMOVE AIR RELEASE VALVE AND FITTINGS, REUSE IN NEW PIPING ALIGNMENT, RE: M-101-D
10	REMOVE AND DISPOSE OF 90° FITTING
11	REMOVE AND DISPOSE OF WELL PUMP, COLUMN, AND MOTOR
12	RETAIN AND PROTECT EXISTING CONCRETE PAD
13	REMOVE AND DISPOSE OF STEEL BASE PLATE



NO.	REVISIONS	DATE
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the		



ATHOL WATER SYSTEM IMPROVEMENTS

GROVE WELL - DEMOLITION DETAILS

DRAWN: MPC	CHECK: SA
------------	-----------

VERIFY SCALE: Scale based on 22"x34" print

PROJECT NO. 216064-001	PAGE
---------------------------	------

SHEET NO.
DM-501



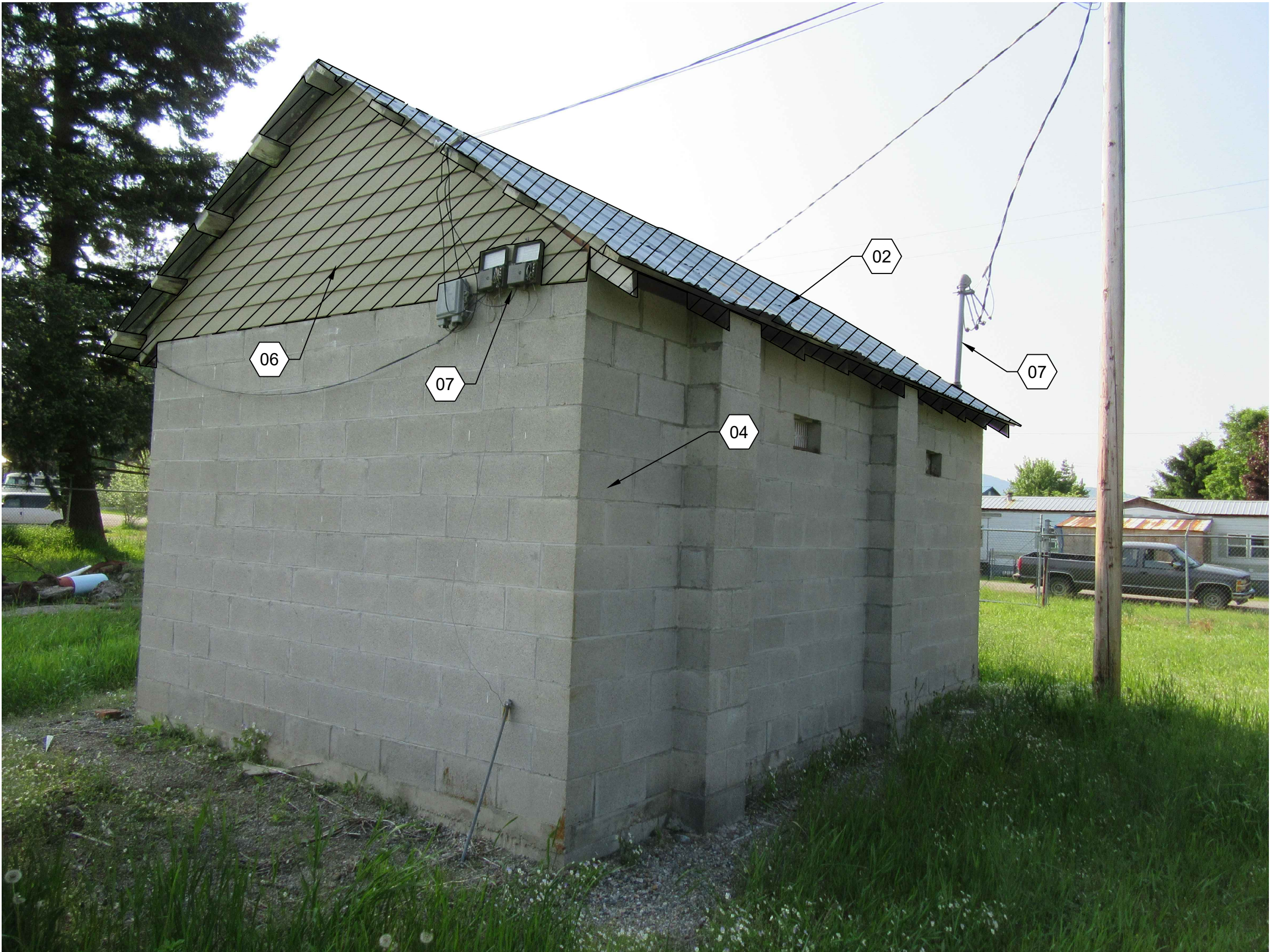
B1

GROVE WELL HOUSE - SOUTH WALL
N.T.S.



B3

GROVE WELL HOUSE - NORTHEAST CORNER
N.T.S.



A1

GROVE WELL HOUSE - NORTHWEST CORNER
N.T.S.



A3

GROVE WELL HOUSE - EAST WALL
N.T.S.

GENERAL SHEET NOTES

1.
- ALL CONSTRUCTION SHALL COMPLY WITH THE 2017 IDAHO STANDARDS FOR PUBLIC WORK CONSTRUCTION.
2.
- RETAIN AND PROTECT ALL UNDERGROUND UTILITIES, UNLESS OTHERWISE NOTED.
3.
- EXISTING UTILITIES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES.
4.
- STAGING AND STOCKPILING AREA SHALL BE RETURNED TO EXISTING GRADING PRIOR TO PROTECT COMPLETION.

SHEET KEYNOTES

- 01
- REMOVE EXISTING DOOR AND DOOR FRAME.
- 02
- REMOVE EXISTING ROOF SYSTEM. RE: DM-101-D
- 03
- WHERE ENCOUNTERED, REMOVE DAMAGED AND/OR BROKEN CMU BLOCKS AND REPLACE WITH NEW CMU BLOCKS OF THE SAME TYPE, SIZE, AND COLOR.
- 04
- RETAIN AND PROTECT EXISTING CMU AND TIMBER STRUCTURE. UNLESS NOTED OTHERWISE.
- 05
- NOT USED
- 06
- REMOVE EXISTING GABLE SIDING.
- 07
- RETAIN AND PROTECT EXISTING ELECTRICAL WIRING AND EQUIPMENT.

LEGEND

CMU = CONCRETE MASONRY UNIT

KELLERX
ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

REGISTERED PROFESSIONAL
ENGINEER
2659
5/17/2020
STATE OF IDAHO
DAVID R. KINZER

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

GROVE WELL - DEMOLITION DETAILS

DRAWN: GAI | CHECK: SAN

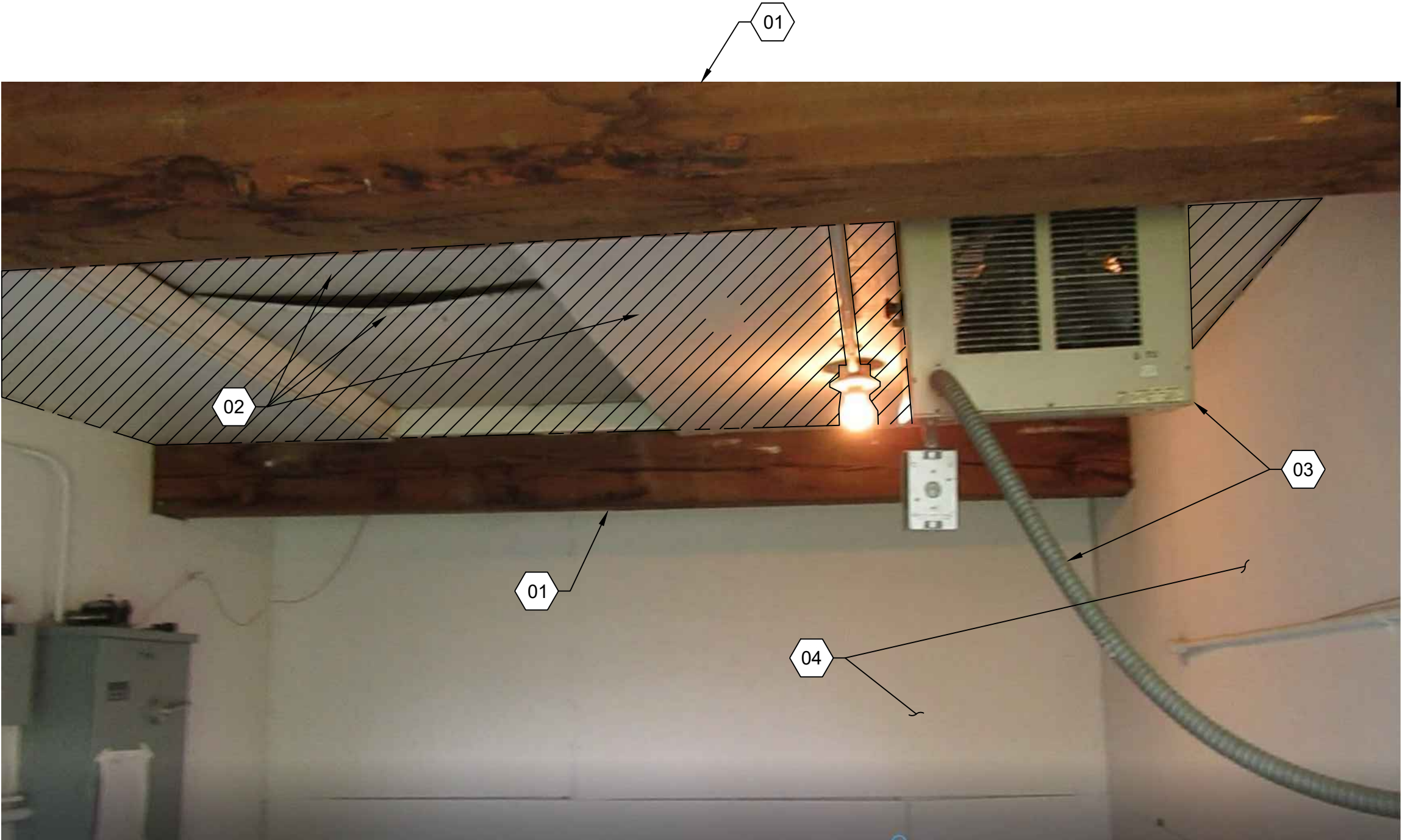
VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches

PROJECT NO.
216064-001

PAGE

SHEET NO.

DM-502



A1

GROVE WELL HOUSE - INTERIOR BEAMS

N.T.S.

GENERAL SHEET NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH THE 2017 IDAHO STANDARDS FOR PUBLIC WORK CONSTRUCTION.
2. RETAIN AND PROTECT ALL UNDERGROUND UTILITIES, UNLESS OTHERWISE NOTED.
3. EXISTING UTILITIES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES.
4. STAGING AND STOCKPILING AREA SHALL BE RETURNED TO EXISTING GRADING PRIOR TO PROTECT COMPLETION.

SHEET KEYNOTES

- 01 RETAIN AND PROTECT EXISTING BEAM.
- 02 REMOVE AND DISCARD PLYWOOD COVER & CEILING
- 03 RETAIN AND PROTECT EXISTING ELECTRICAL WIRING & EQUIPMENT
- 04 RETAIN AND PROTECT EXISTING WALL PANELS

KELLER

ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.		REVISIONS	DATE
		This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.	

CITY OF

ATHOL, ID

ATHOL WATER SYSTEM IMPROVEMENTS

GROVE WELL - DEMOLITION DETAILS

DRAWN: GAI | CHECK: SAN

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO. 216064-001 | PAGE

SHEET NO. DM-503

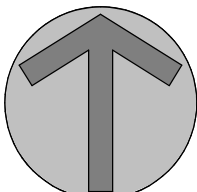
A1

SLAB & WALL PLAN

1/2" = 1'-0"

1/2"

0 1' 2' 4'



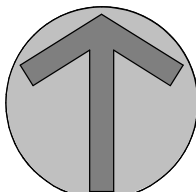
A3

ROOF PLAN

1/2" = 1'-0"

1/2"

0 1' 2' 4'



GENERAL SHEET NOTES

- SEE TYPICAL DETAILS AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
- CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. RESOLVE ANY DISCREPANCIES WITH THE ENGINEER.
- CONTRACTOR TO VERIFY LOCATION OF ALL INSERTS IN SLAB WITH APPROVED MECHANICAL, PLUMBING, ELECTRICAL, AND ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
- COORDINATE ROOF PENETRATIONS WITH MECHANICAL, HVAC, AND OTHER TRADES.
- SEE ADDITIONAL INFORMATION ON PIPE PENETRATIONS ON MECHANICAL PLANS, SECTIONS, AND DETAILS.

SHEET KEYNOTES

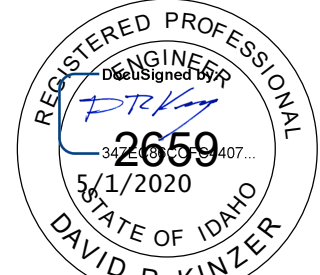
- INSTALL NEW METAL DOOR AND FRAME, RE: A-501-D
- INSTALL NEW METAL ROOF, SHEATHING, UNDERLAYMENT, FASCIA, AND INSULATION, RE: S-502-D
- WHERE BROKEN BLOCKS WERE ENCOUNTERED, INSTALL NEW CMU BLOCKS OF THE SAME TYPE, SIZE, AND COLOR.
- RETAIN AND PROTECT EXISTING CMU AND TIMBER STRUCTURE UNO.
- REPAIR CONCRETE WHERE DAMAGED AND / OR WHERE AGGREGATE IS EXPOSED.
- INSTALL WOOD GABLE SIDING. PAINT TO MATCH EXISTING.
- INSTALL GABLE END LOUVER
- NOT USED
- INSTALL 36" x 36" ROOF HATCH WITH PITCHED ROOF CURB. BILCO TYPE E OR EQUAL. RE: B3/S-502-D & SPECS
- RETAIN AND PROTECT EXISTING CONCRETE PAD
- EXISTING CONCRETE PENETRATION, RE: MECH
- CEILING, RE: A1/S-502-D
- 36" x 36" GYPSUM PANEL ATTIC HATCH (BELOW)

LEGEND

WD# WOOD DIAPHRAGM, RE: B2/S-502-D

KELLER ASSOCIATES

131 SW 5th Avenue, Suite A
Meridian, Idaho 83642
(208) 288-1992



CITY OF
ATHOL, ID



ATHOL WATER SYSTEM
IMPROVEMENTS

ADD ALT BID 4 - GROVE WELL - SLAB &
WALL PLAN AND ROOF PLAN

DRAWN BY Author CHECKED BY Checker

VERIFY SCALE: Scales based on 22"x34" prints.

PROJECT NO. 216064-001

PAGE

SHEET NO.

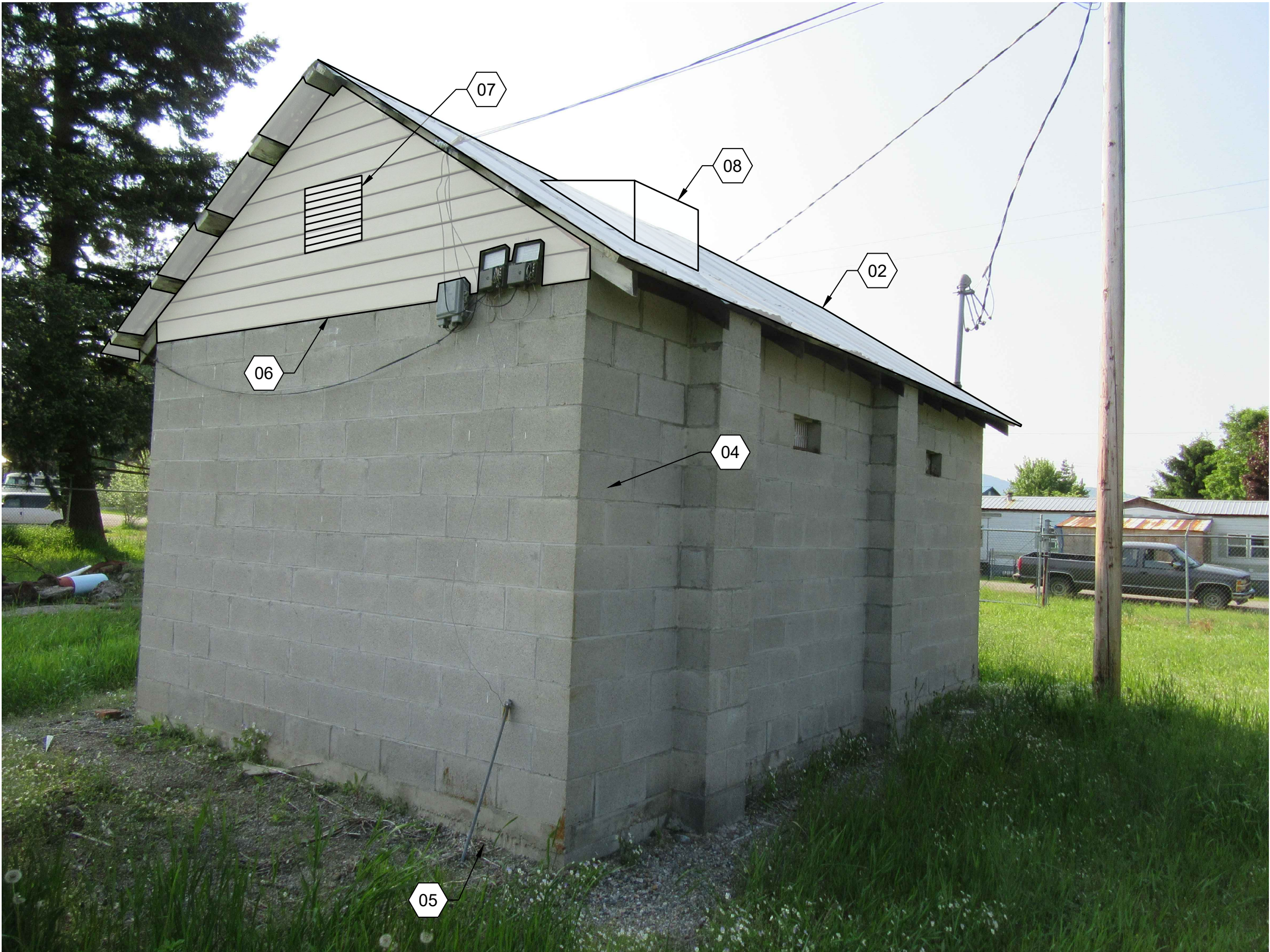
S-101-D



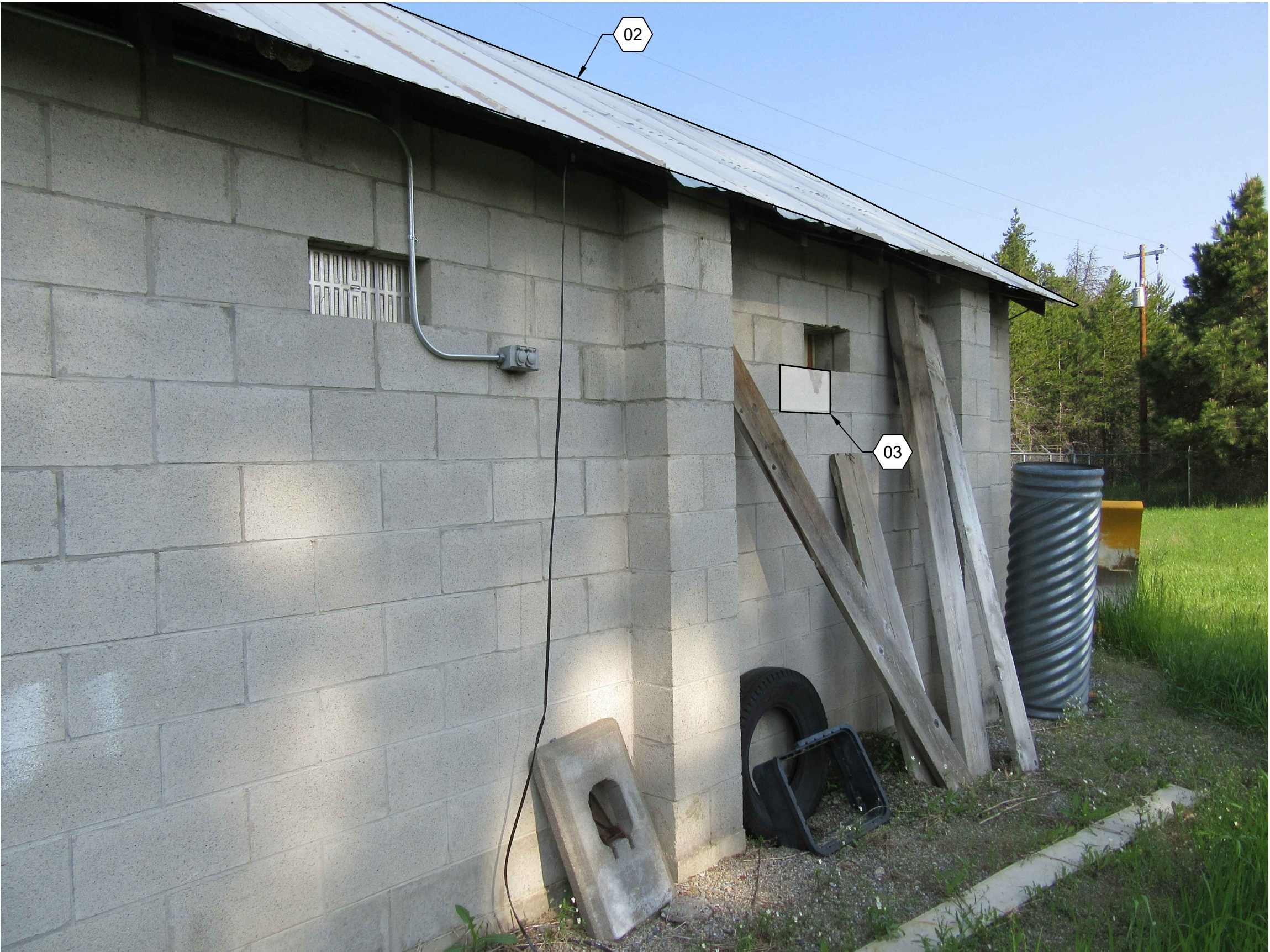
B1 GROVE WELL HOUSE - SOUTH WALL
N.T.S.



B3 GROVE WELL HOUSE - NORTHEAST CORNER
N.T.S.



A1 GROVE WELL HOUSE - NORTHWEST CORNER
N.T.S.



A3 GROVE WELL HOUSE - EAST WALL
N.T.S.

GENERAL SHEET NOTES

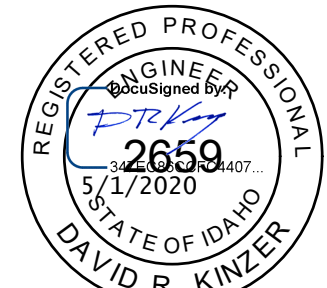
1. ALL CONSTRUCTION SHALL COMPLY WITH THE 2017 IDAHO STANDARDS FOR PUBLIC WORK CONSTRUCTION.
2. RETAIN AND PROTECT ALL UNDERGROUND UTILITIES, UNLESS OTHERWISE NOTED.
3. EXISTING UTILITIES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES.
4. STAGING AND STOCKPILING AREA SHALL BE RETURNED TO EXISTING GRADING PRIOR TO PROTECT COMPLETION.

SHEET KEYNOTES

- 01 INSTALL NEW METAL DOOR AND FRAME, RE: A-501-D
- 02 INSTALL NEW METAL ROOF, SHEATHING UNDERLAYMENT, FASCIA, AND INSULATION, RE: B1/S-502-D
- 03 WHERE BROKEN BLOCKS WERE ENCOUNTERED, INSTALL NEW CMU BLOCKS OF THE SAME TYPE, SIZE, AND COLOR.
- 04 RETAIN AND PROTECT EXISTING CMU AND TIMBER STRUCTURE. UNLESS NOTED OTHERWISE.
- 05 REPAIR CONCRETE WHERE DAMAGED AND/OR WHERE AGGREGATE IS EXPOSED.
- 06 INSTALL WOOD GABLE SIDING. PAINT TO MATCH EXISTING.
- 07 INSTALL 12"x12" GABLE END LOUVER, BOTH SIDES, RE: H014/M-501-D
- 08 INSTALL 36"x36" ROOF HATCH RE: PLANS & SPECS

KELLER
ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

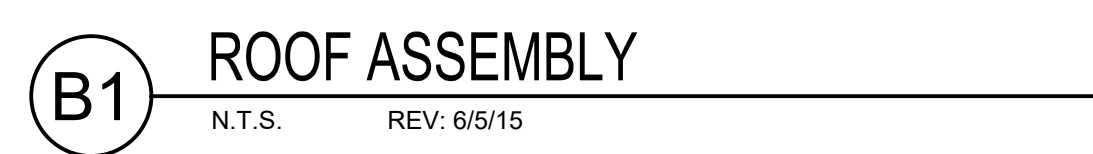
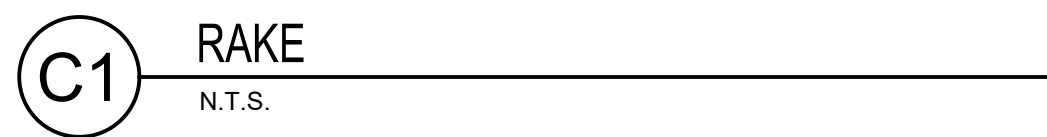
CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

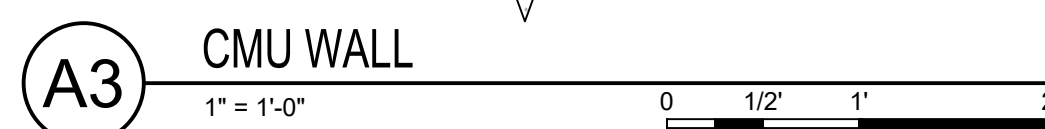
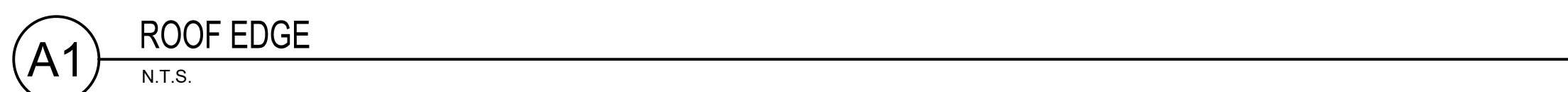
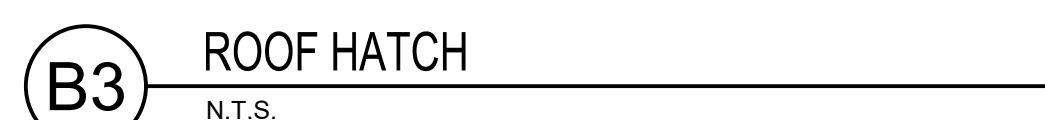
GROVE WELL - STRUCTURAL
IMPROVEMENTS

DRAWN: GAI | CHECK: SAN
VERIFY SCALE: Scales based on 22"x34" prints.
1-1/2 Inches

PROJECT NO. 216064-001	PAGE
SHEET NO.	S-501-D



WOOD DIAPHRAGM NAILING AND SHEATHING SCHEDULE



BUILDING LETTER	ROOM NO.	ROOM NAME	FLOOR	CELING	WALLS	BASE BOARD	CEILING HEIGHT	NOTES
D	101	GROVE WELL ELECTRICAL & MECHANICAL ROOM	NONE	C1,P1	NONE	NONE	8'-8"	

KEYLIST:

C1 5/8" GYPSUM WALL BOARD TAPED, TEXTURED
P1 COATING PER SPECIFICATION 09 90 00, COLOR SELECTION BY OWNER

B1 FINISH SCHEDULE

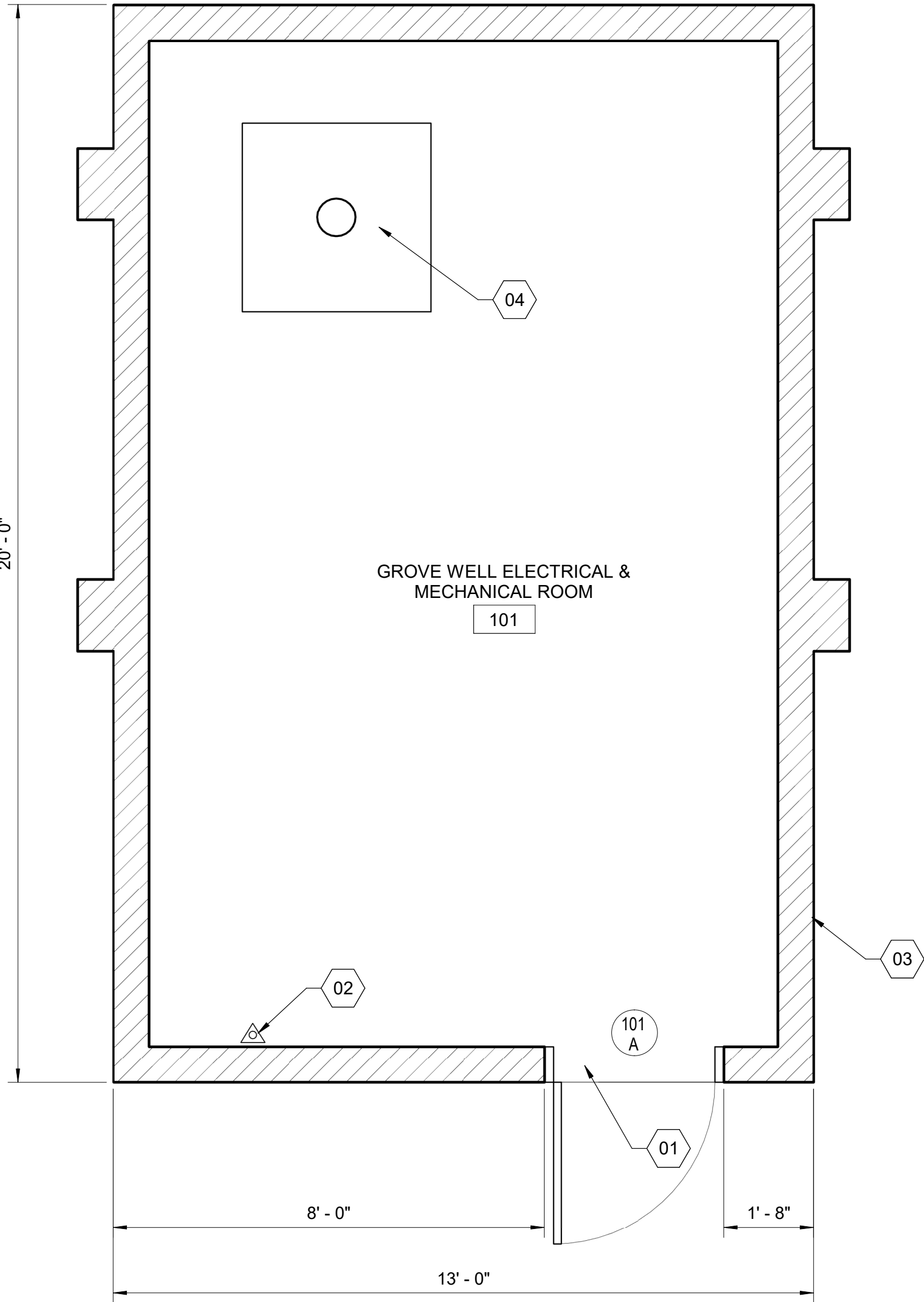
N.T.S.

DOOR NO.	DOOR TYPE	DOOR LEAF SIZE			DOOR MAT	DOOR FINISH	FIRE RATE	HARDWARE SET	FRAME MATERIAL	FRAME		FRAME FINISH	NOTES
		W	H	THK						W	H		
101	A	3'-0"	6'-8"	1 3/4"	HM	P	--	1	STEEL	3'-4"	7'-0"	COATING	

(1) SWINGING DOOR DIMENSIONS ARE LEAF DIMENSIONS
P = PAINTED
HM = HOLLOW METAL (STEEL)

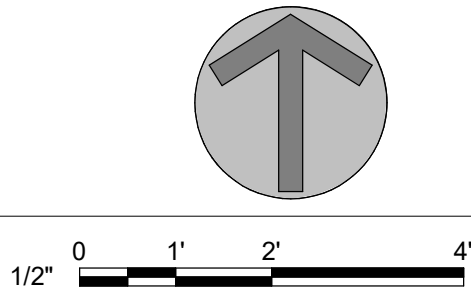
A1 DOOR SCHEDULE

N.T.S.



A3 FLOOR PLAN

1/2" = 1'-0"



GENERAL SHEET NOTES

- CONTRACTOR TO COORDINATE ARCHITECTURAL DRAWINGS, WITH PLUMBING, MECHANICAL, ELECTRICAL, STRUCTURAL, & EQUIPMENT VENDORS.
- DIMENSIONS ARE TO FACE OF CONCRETE, NOMINAL FACE OF MASONRY, OR GRIDLINES

SHEET KEYNOTES

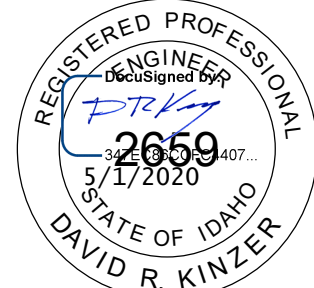
- INSTALL NEW METAL DOOR AND DOOR FRAME RE: SCHEDULE
- EXISTING FIRE EXTINGUISHER
- EXISTING CMU WALLS
- EXISTING CONCRETE PAD

LEGEND

- MASONRY WALL, RE: STRUCTURAL
- 101 A DOOR, RE: SCHEDULE
- FIRE EXTINGUISHER, EXISTING, WALL MOUNT
- # ROOM NUMBER, RE: SCHEDULE FOR FINISH SCHEDULE



131 SW 5th Avenue, Suite A
Meridian, Idaho 83642
(208) 288-1992



NO.	REVISIONS	DATE

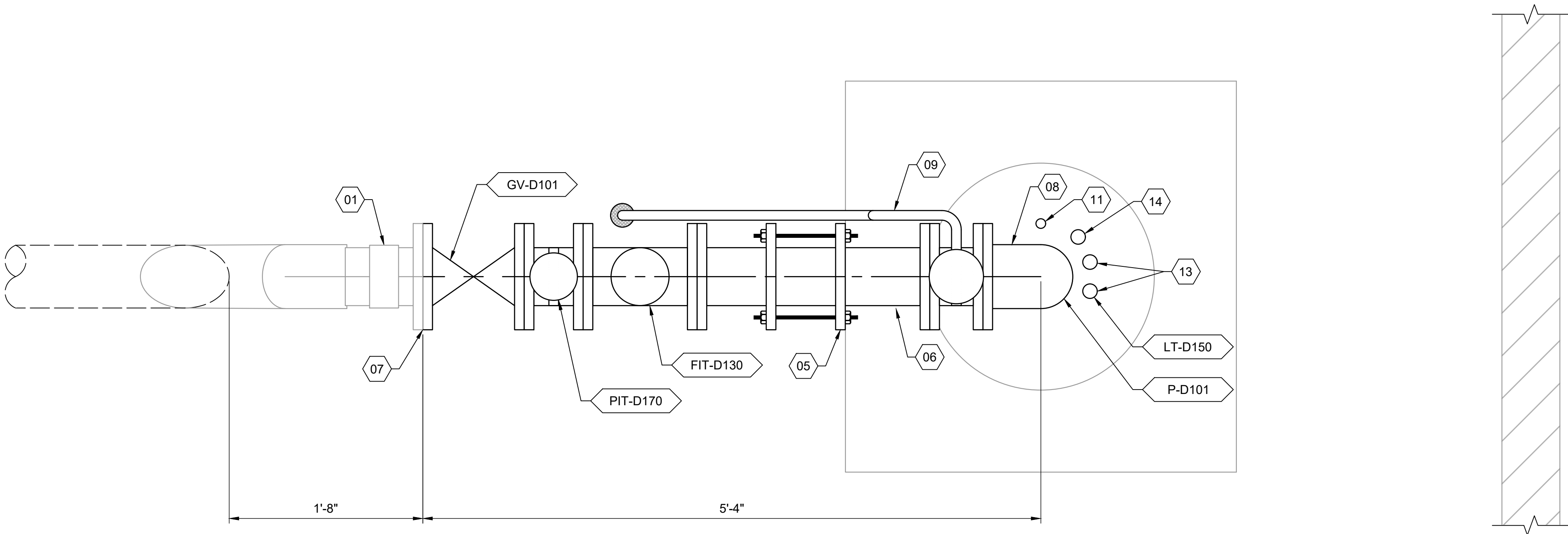
This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



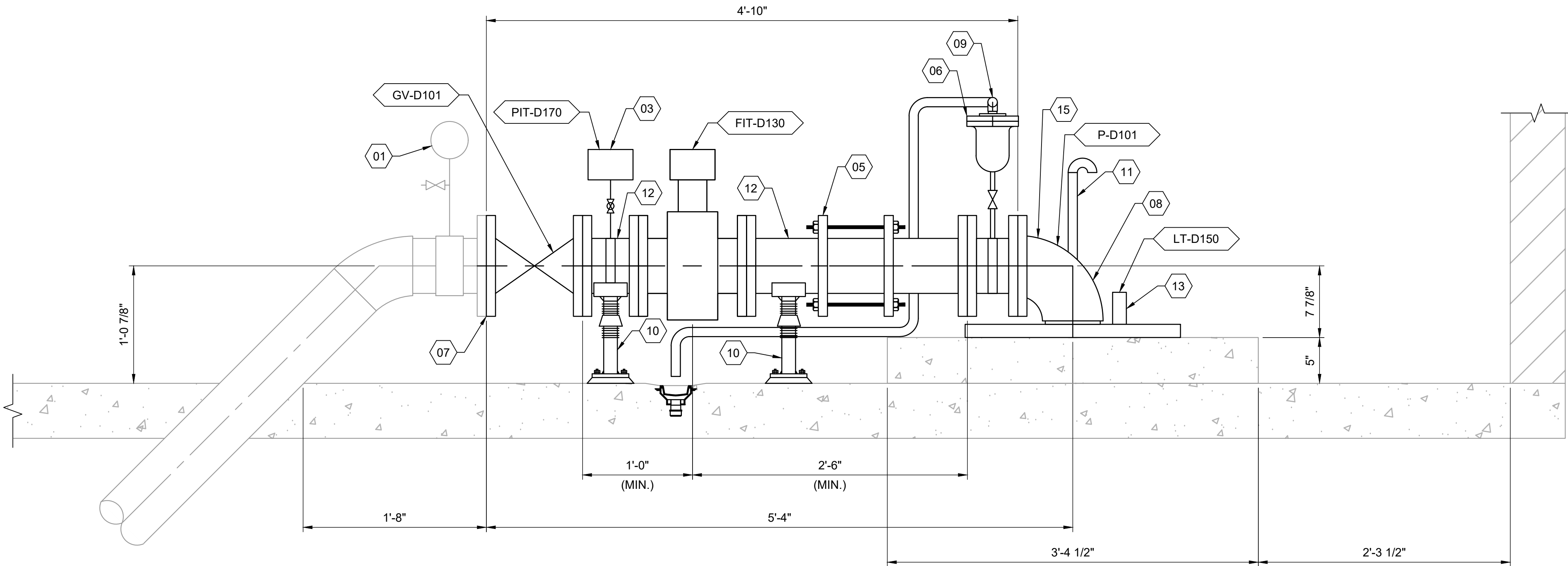
Athol Water System Improvements

ADD ALT BID 4 - GROVE WELL - CODE ANALYSIS & FLOOR PLANS

DRAWN: --	CHECK: --
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO.	A-101-D



PLAN VIEW



SECTION VIEW

GENERAL SHEET NOTES

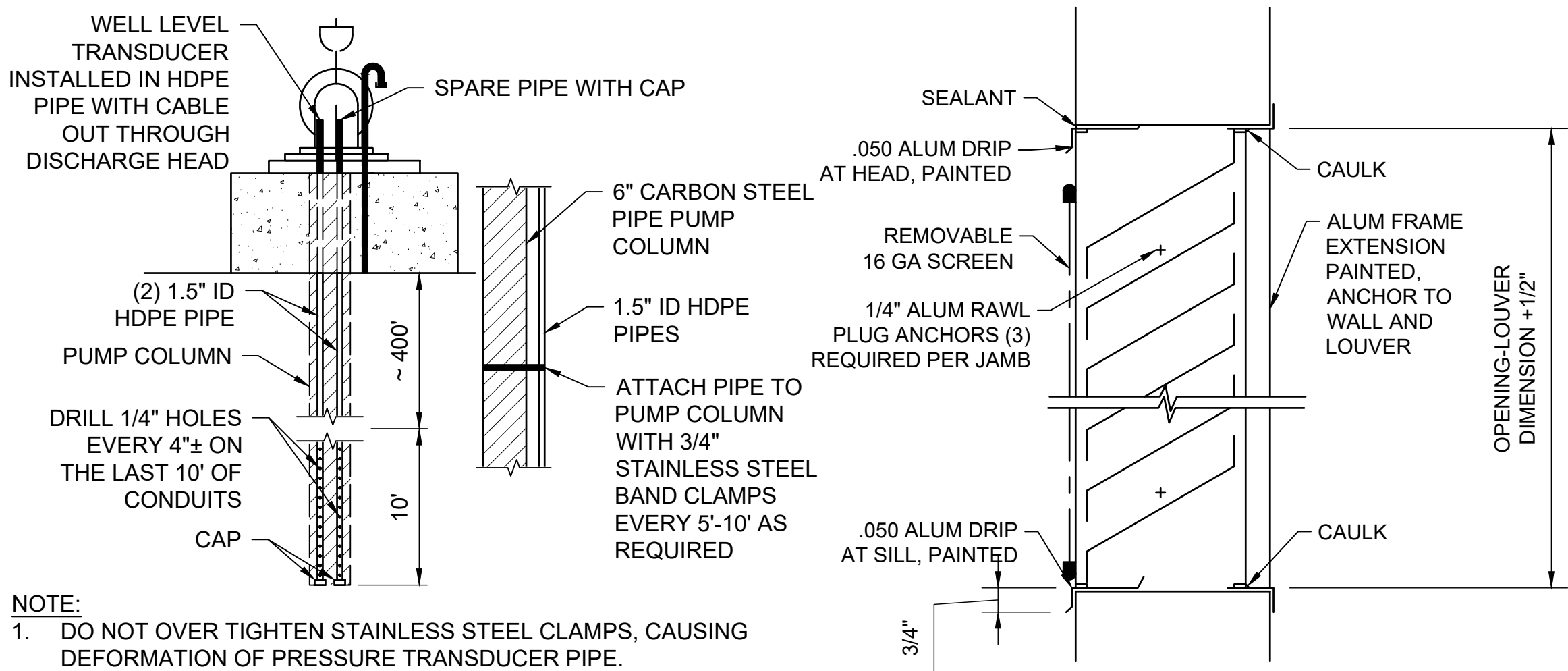
- SEE ELECTRICAL PLANS FOR MODIFICATIONS AND UPGRADES TO EXISTING ELECTRICAL SYSTEM.
- CONTRACTOR AND OWNER TO REVIEW CONDITION OF EXISTING MATERIALS AND EQUIPMENT PRIOR TO REUSE. CONTRACTOR SHALL COMMUNICATE IN WRITING AN CONCERNS WITH REUSE OF EXISTING MATERIALS AND EQUIPMENT.
- CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO MECHANICAL PIPE AND EQUIPMENT SUBMITTAL AND INSTALLATION.
- PAINT ALL PIPING AND APPURTENANCES AS NEEDED, RE: SPECIFICATIONS
- CONTRACTOR TO USE STEEL NUTS AND BOLTS AS NEEDED TO INSTALL NEW PIPING ALIGNMENT, RE: SPECIFICATIONS
- DUCTILE IRON PIPE TO COMPLY WITH THE REQUIREMENTS OF SPECIFICATION 40 05 19. USE AWWA C151 PRESSURE CLASS 250 CEMENT-MORTAR LINED DUCTILE IRON PIPE WITH FLANGED AWWA C153 CLASS 150 DUCTILE IRON FITTINGS. MATERIALS TO MEET NSF STANDARD 61. TEST PIPE TO 150 PSI FOR 2 HOURS. PIPES SHALL SHOW ZERO LEAKAGE.
- RETAIN AND PROTECT BUILDING AND UTILITY APPURTENCES. COVER ROOF OPENING DURING INCLEMENT WEATHER AND WHEN NOT IN USE.
- ALL PIPING, VALVES, AND EQUIPMENT IN CONTACT WITH POTABLE WATER MUST BE NSF61 CERTIFIED.

SHEET KEYNOTES

- | | |
|----|--|
| 01 | EXISTING SAMPLE TAP AND PRESSURE GAUGE |
| 02 | NOT USED |
| 03 | NOT USED |
| 04 | NOT USED |
| 05 | 6-IN FLEX COUPLER |
| 06 | EXISTING AIR RELEASE. CONTRACTOR TO VERIFY SIZE. PROVIDE SADDLE TAP AND ISOLATION VALVE |
| 07 | CONNECT TO EXISTING. FITTINGS AS REQUIRED |
| 08 | NEW SUBMERSIBLE WELL PUMP, COLUMN, MOTOR, AND BASE PLATE, RE: SPECIFICATION 33 11 36 AND A4/M-501-D |
| 09 | CONTRACTOR TO PROVIDE 1-IN STAINLESS STEEL PIPE AIR RELEASE DRAIN. ROUTE TO FLOOR DRAIN. SUPPORT AS REQUIRED |
| 10 | TYPE 'H' PIPE SUPPORT, RE: A2/M-501-D |
| 11 | INSTALL 1-IN WELL VENT, RE: A3/M-501-D |
| 12 | 6-IN DUCTILE IRON PIPE |
| 13 | INSTALL TWO 1.5-IN INSIDE DIAMETER HDPE CONTINUOUS PIPE SOUNDER TUBE FOR LEVEL TRANSDUCER, RE: A5/M-501-D EXTEND LENGTH OF PUMP COLUMN |
| 14 | POWER CONDUIT |
| 15 | 6-IN CARBON STEEL DISCHARGE ELBOW. PROVIDED BY PUMP SUPPLIER |

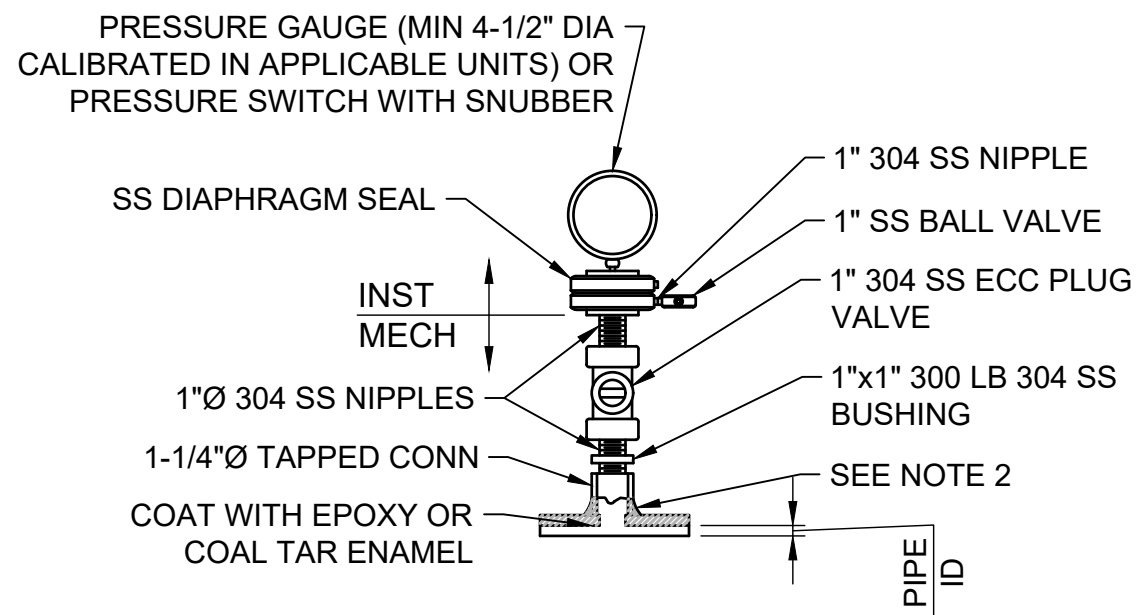
EQUIPMENT KEYNOTES

- | | |
|----------|--------------------------------------|
| P-D101 | SUBMERSIBLE CENTRIFUGAL WELL PUMP |
| FIT-D130 | 6-IN ELECTROMAGNETIC FLOWMETER |
| PIT-D170 | PRESSURE TRANSMITTER, RE: A1/M-501-D |
| LT-D150 | LEVEL TRANSMITTER |
| GV-D101 | 6-IN GATE VALVE |



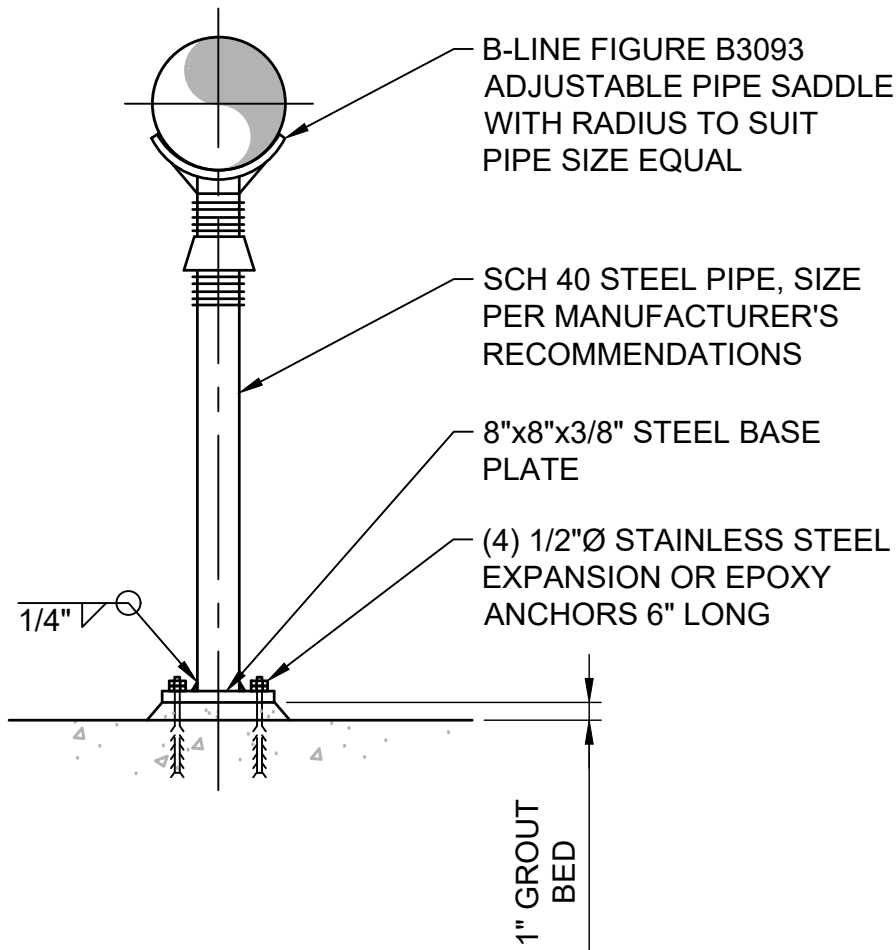
NOTE:
1. DO NOT OVER TIGHTEN STAINLESS STEEL CLAMPS, CAUSING DEFORMATION OF PRESSURE TRANSDUCER PIPE. CONTRACTOR TO SUBMIT ATTACHMENT PLAN TO ENGINEER.

A5 HDPE PIPE INSTALLATION
N.T.S.

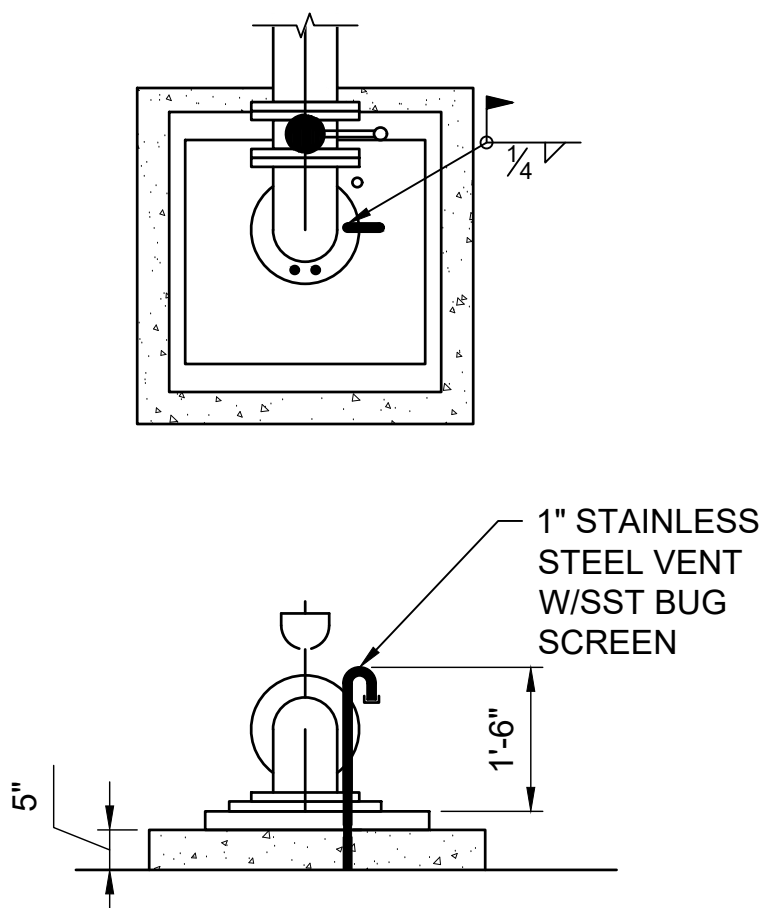


NOTES:
1. SEE SPECIFICATION SECTION 40 73 00 FOR PRESSURE GAGES, PRESSURE TRANSMITTERS, PRESSURE SWITCHES AND SEAL REQUIREMENTS.
2. USE SERVICE SADDLE FOR DUCTILE IRON AND PVC PIPE. DIRECT TAPPING IS NOT ACCEPTABLE.

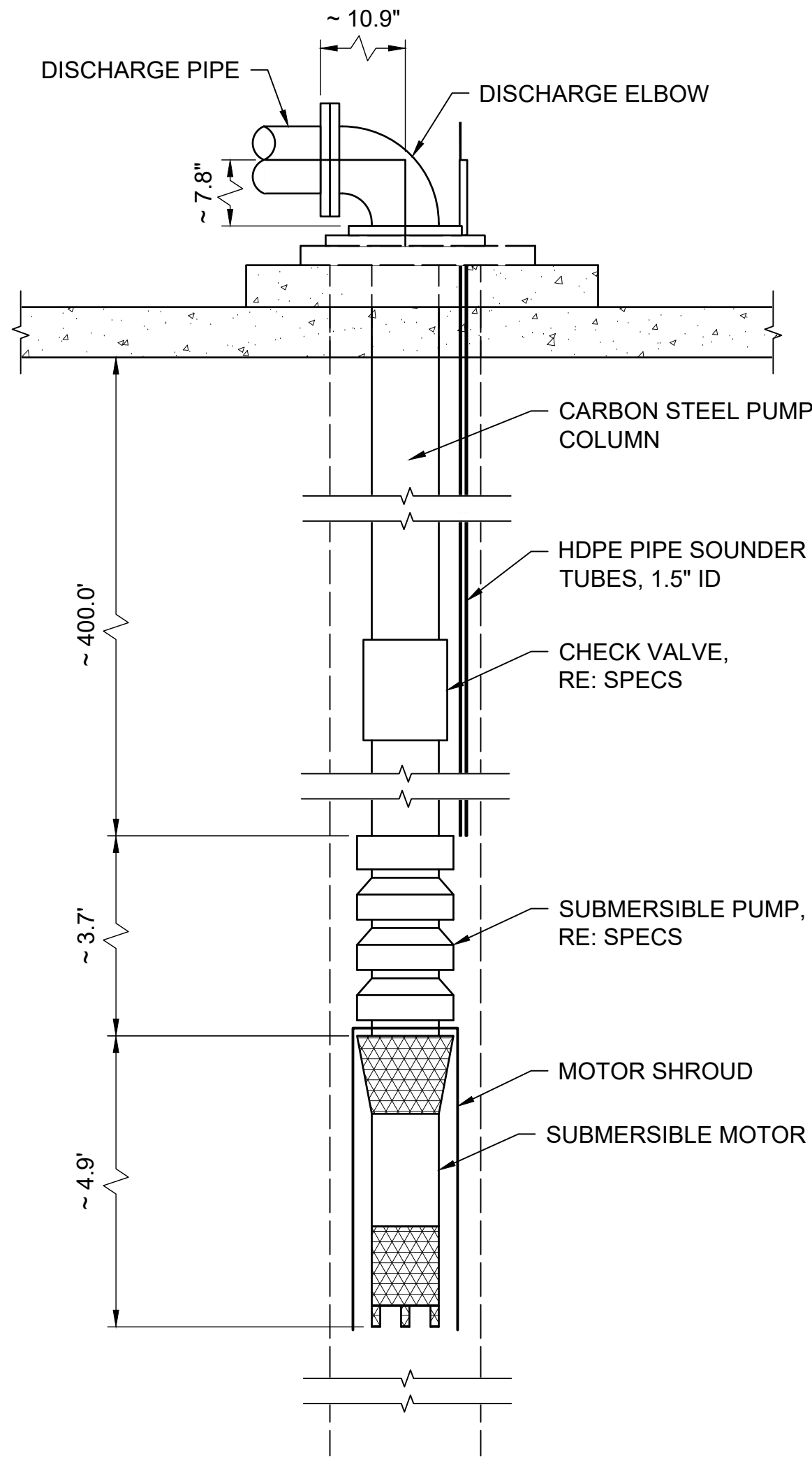
A1 PRESSURE GAUGE, SWITCH OR
TRANSMITTER MOUNTING
N.T.S.



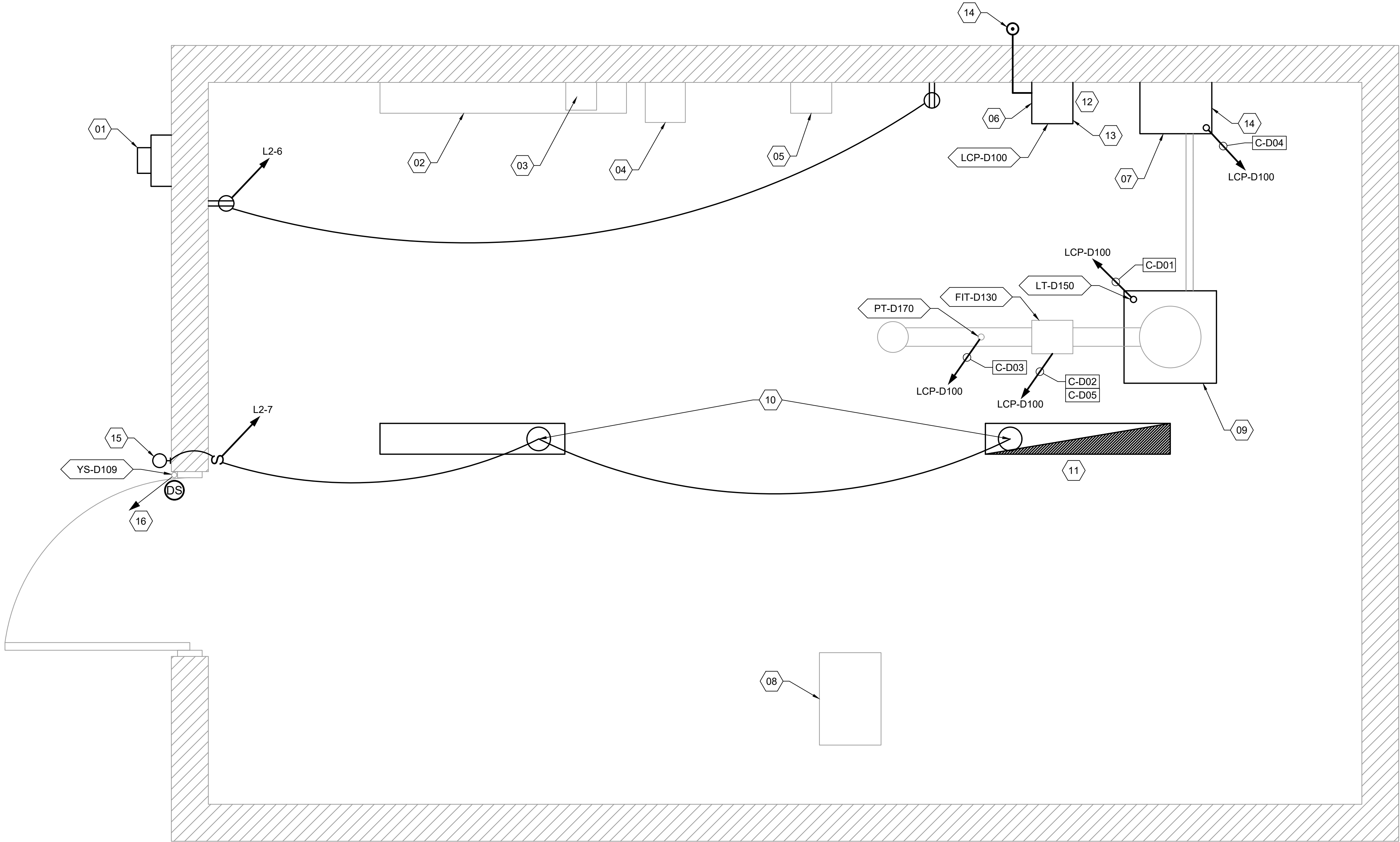
A2 PIPE SUPPORT TYPE 'H'
N.T.S.



A3 WELL VENT
N.T.S.



A4 WELL SECTION
N.T.S.



A1

ELECTRICAL PLAN

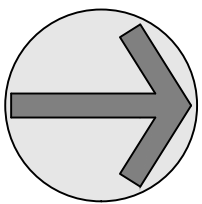
N.T.S.

PANEL L2

LOAD	POSITION	BREAKER	DESCRIPTION
--	1	60/2	MAIN
--	2	~~~	--
2500	3	40/2	UNIT
2500	4	~~~	HEATER
180	5	20/1	OUTSIDE OUTLET
360	6	20/1	RECEPTS
180	7	20/1	INTERIOR & EXTERIOR LIGHTS
180	8	20/1	CONTROL PUMP POWER

C-C04		(10) #14 & (1) #14 GND	DISCRETE
C-C05		(2) CAT5e	ETHERNET
C-C06		(10) #14 CU	DISCRETE
C-C07		(16) #14 CU, (1) #14 CU GND	DISCRETE
C-D01		(1) #18 TSP	ANALOG

1"



NTS

GENERAL SHEET NOTES

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER STATE OR LOCAL CODE.
- CABLE AND CONDUIT RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
- ALL OUTDOOR EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
- UNDERGROUND ELECTRICAL EQUIPMENT AND WIRING SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
- IDENTIFY EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING. ANY DISRUPTION OR DAMAGE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

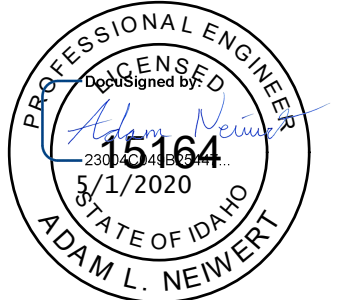
SHEET KEYNOTES

- REPLACE (E) MAIN SERVICE RATED METER, 4113179 WITH NEW. COORDINATE WITH LOCAL UTILITY.
- RETAIN & PROTECT (E) CONDUIT WIRE WAY.
- RETAIN & PROTECT (E) TRANSFORMER DISCONNECT.
- RETAIN & PROTECT (E) TRANSFORMER 10 KVA 480--120/240V.
- RETAIN & PROTECT (E) 120/240V L2 PANEL BOARD.
- (E) TO BE REMOVED AND REPLACED WITH (N) LCP-D100.
- (E) TO BE REMOVED AND REPLACED WITH (N) PUMP CONTROL PANEL.
- RETAIN & PROTECT (E) OVERHEAD HEATER UNIT 5kW.
- NEW SUBMERSIBLE 100 HP WELL PUMP.
- (E) LIGHT FIXTURE TO BE REMOVED AND REPLACED WITH NEW IEM-L48-4000LM-MD-MVOLT-40K-80CRI. WET LOCATION LINEAR VAPOR TIGHT LIGHT FIXTURE.
- EMERGENCY FIXTURE. PROVIDE WITH BATTERY BACKUP.
- INSTALL PANEL LCP-D100. POWER LCP-D100 WITH 110 VAC.
- MOUNT MAST ON ROOF AND ATTACH ANTENNA 15-20 FT ABOVE GROUND. CONNECT TO LCP-D100 USING LMR-400 CABLE. RE: E045/E-501 COORDINATE ANTENNA LOCATION PRIOR TO ROUGH-IN.
- USE EXISTING CONDUITS IF POSSIBLE.
- NEW TWS LED P1 50K MVOLT PE DDB WALL LIGHT FIXTURE.
- INSTALL DOOR INTRUSION SWITCH AND CONNECT TO LCP-D100 USING 18 AWG TSP CABLE.

EQUIPMENT KEYNOTES

LCP-D100	LOCAL CONTROL PANEL
LT-D150	(E) PRESSURE TRANSMITTER
FIT-D130	MAGNETIC FLOW METER
PT-D170	PRESSURE TRANSMITTER
YS-D109	DOOR INTRUSION SWITCH

KELLER
ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

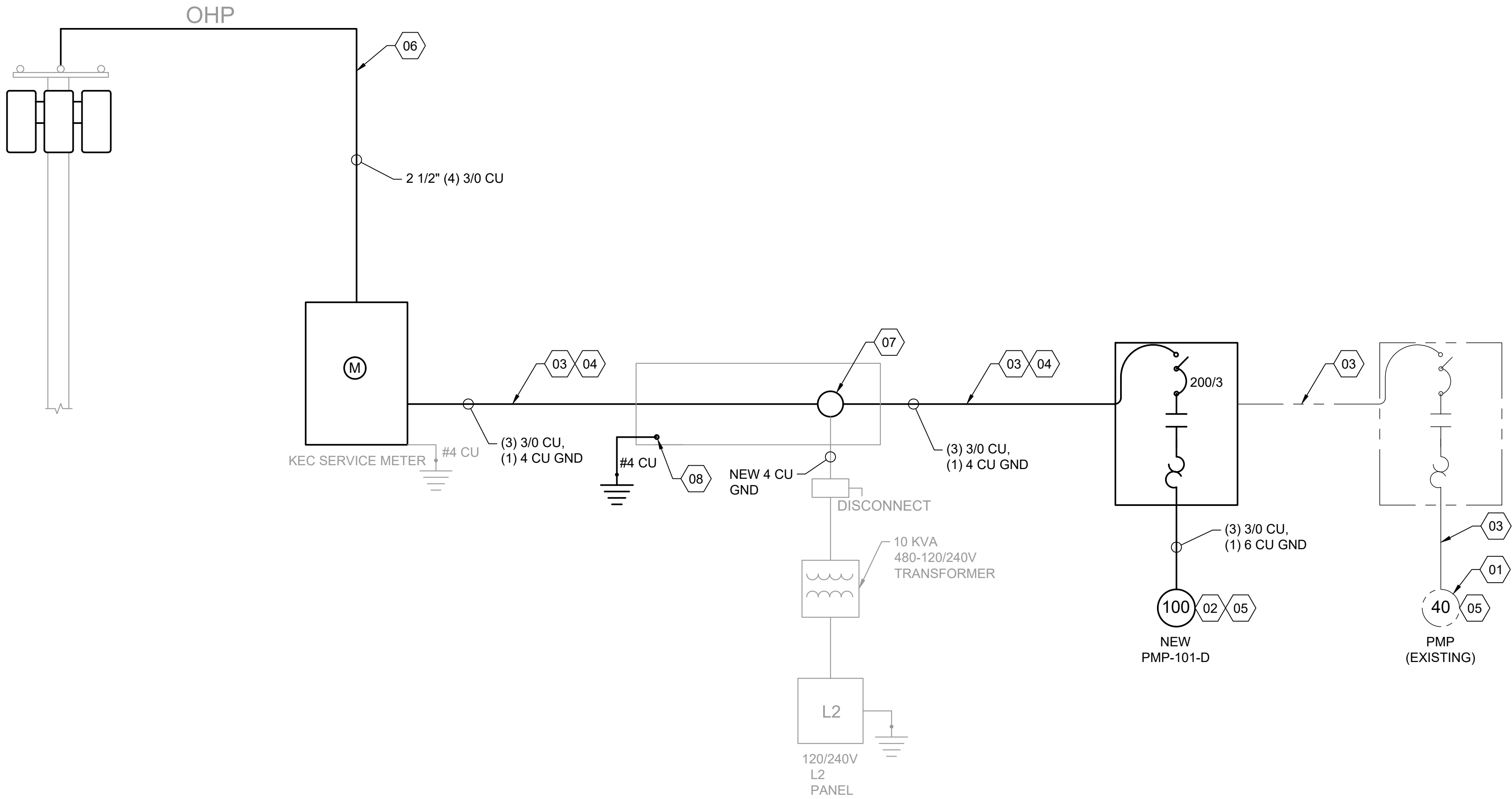


NO.	REVISIONS	DATE



ATHOL WATER SYSTEM
IMPROVEMENTS
GROVE WELL - ELECTRICAL PLAN

DRAWN: TLL	CHECK: ALN
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. E-101-D	



PANEL L2

LOAD	POSITION	BREAKER	DESCRIPTION
--	1	60/2	MAIN
--	2	~~~	--
2500	3	40/2	UNIT
2500	4	~~~	HEATER
180	5	20/1	OUTSIDE OUTLET
360	6	20/1	RECEPTS
180	7	20/1	INTERIOR & EXTERIOR LIGHTS
180	8	20/1	CONTROL PUMP POWER

NEW BLS

LOAD DESC	HP	AMPS
WELL PUMP	100 HP	124
25%		31
PANEL L2		11.92
TOTAL		166.92

EXISTING BLS

LOAD DESC	HP	AMPS
WELL PUMP	40 HP	59.3
25%		14.83
PANEL L2		11.92
TOTAL		86.05

GENERAL SHEET NOTES

- COORDINATE WORK WITH RELATED TRADES
- CONTRACTOR TO PROVIDE ALL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- CONTRACTORS SHALL PROVIDE AND LABEL CIRCUIT BREAKER POSITIONS.
- CONTRACTOR SHALL PROVIDE NEW UPDATED DIRECTORIES FOR ALL PANELS IN WHICH CIRCUITS ARE ADDED OR REMOVED. DELETED CIRCUITS SHALL BE MARKED SPARE.
- ALL ELECTRICAL EQUIPMENT SHALL BE FIELD MARKED PER THE N.E.C 110.16 "POTENTIAL ELECTRICAL ARC FLASH HAZARD".
- MOTOR FEEDERS AND OVERCURRENT PROTECTION ARE SIZED PER N.E.C 430.6.
- ALL ELECTRICAL EQUIPMENT SHALL BE MARKED PER THE N.E.C 110.16 "POTENTIAL ELECTRIC ARC FLASH HAZARD".
- ELECTRIC CONTRACTOR SHALL FURNISH THE FOLLOWING STUDIES OF THE CONSTRUCTION PACKAGE:
A) SHORT CIRCUIT STUDY
B) COORDINATE STUDIES BASED ON ELECTRICAL SWITCHGEAR PROVIDED FOR PROJECT.
C) ARC FLASH STUDY
- ELECTRICAL CONTRACTOR SHALL SET ALL CIRCUIT BREAKER TRIP DEVICES BASED ON COORDINATION STUDIES.

SHEET KEYNOTES

- DISCONNECT AND REMOVE EXISTING PUMP WITH ALL IT'S ASSOCIATED EQUIPMENT.
- INSTALL NEW 100 HP PUMP WITH ALL IT'S ASSOCIATED EQUIPMENT.
- DISCONNECT AND REMOVE EXISTING CONDUIT AND CONDUCTORS.
- INSTALL NEW CONDUITS AS SIZES SHOWN ON THE ONE LINE DIAGRAM.
- EXISTING 40 HP PUMP TO BE REPLACED WITH NEW 100 HP PUMP.
- THE CITY SHALL COORDINATE WITH THE UTILITY COMPANY FOR UPSIZING THE SERVICE.
- PROVIDE NEW TAPS TO RECONNECT EXISTING EQUIPMENT.
- USE NON-REVERSING CODE COMPLIANT SPLICE FOR NEW GROUND CONNECTION. ROUTE TO EXISTING GROUNDING SYSTEM WITH 4 CU.

LINETYPE LEGEND

- DEMO EQUIPMENT
- EXISTING EQUIPMENT
- NEW EQUIPMENT

KELLERX

ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER

ADAM L. NEUWERT

15164

5/1/2020

STATE OF IDAHO

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

GROVE WELL - ONE-LINE DIAGRAM

DRAWN: TLL

CHECK: ALN

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
216064-001

PAGE

SHEET NO.
E-601-D

<

LINETYPE LEGEND



CONDUIT CONCEALED IN WALL OR CEILING



CONDUIT CONCEALED UNDER FLOOR OR UNDERGROUND



DEMO EQUIPMENT



EXISTING EQUIPMENT



FUTURE EQUIPMENT



NEW EQUIPMENT



MODIFIED EQUIPMENT



UGP UNDERGROUND POWER - FROM PROVIDER



E UNDERGROUND POWER



FO FIBER OPTIC



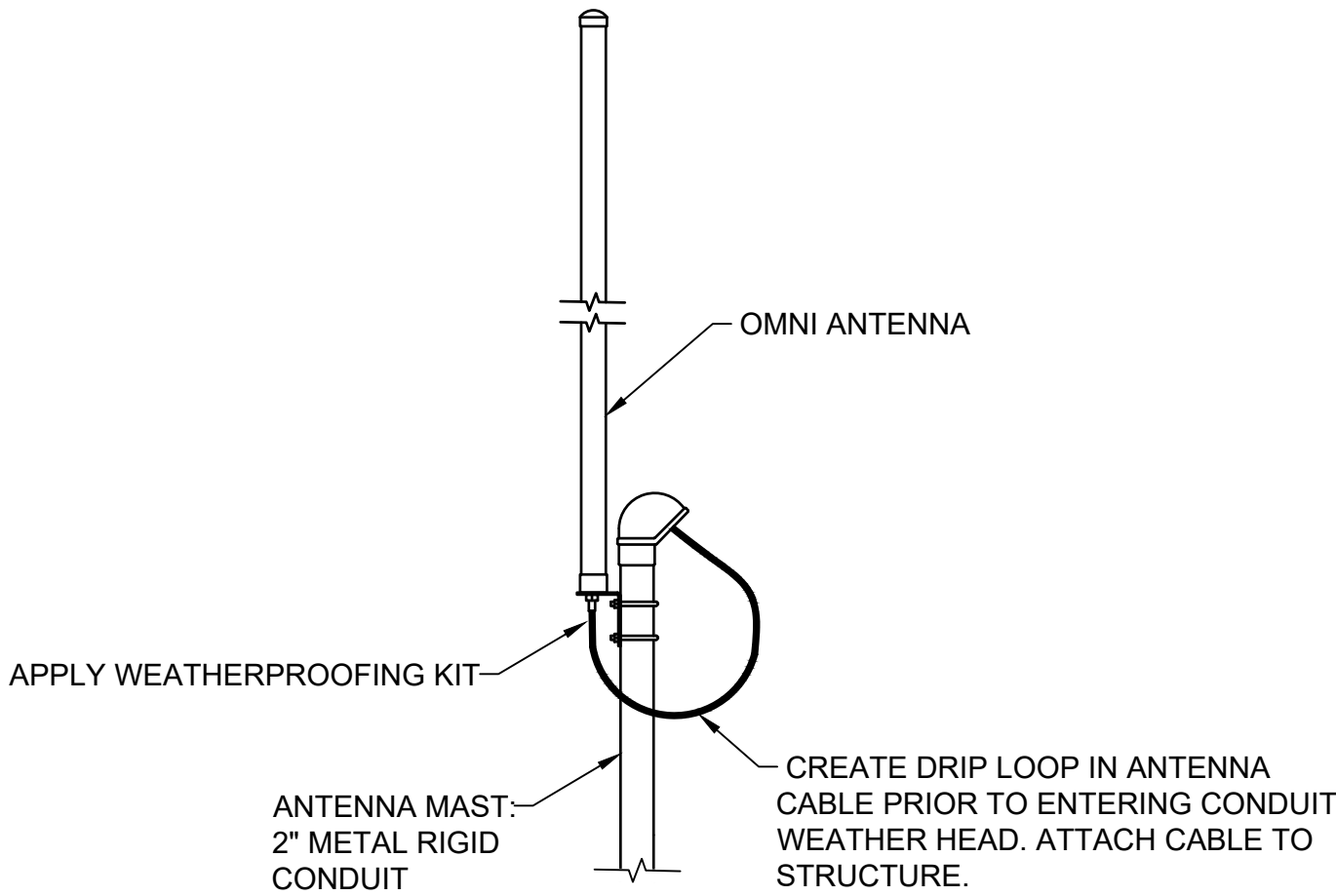
JT JOINT TRENCH

1. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE, STATE LAWS, AND ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.

22.D. NO EQUIPMENT SHALL BE ENERGIZED UNTIL ALL TESTS AND ADJUSTMENTS HAVE BEEN MADE.

22.E. THREE COPIES OF ALL TEST RESULTS SHALL BE DELIVERED TO THE OWNER.

23. ALL ELECTRICAL WORK SHALL BE COORDINATED WITH THE MECHANICAL WORK AS CALLED FOR IN MECHANICAL SPECIFICATIONS.

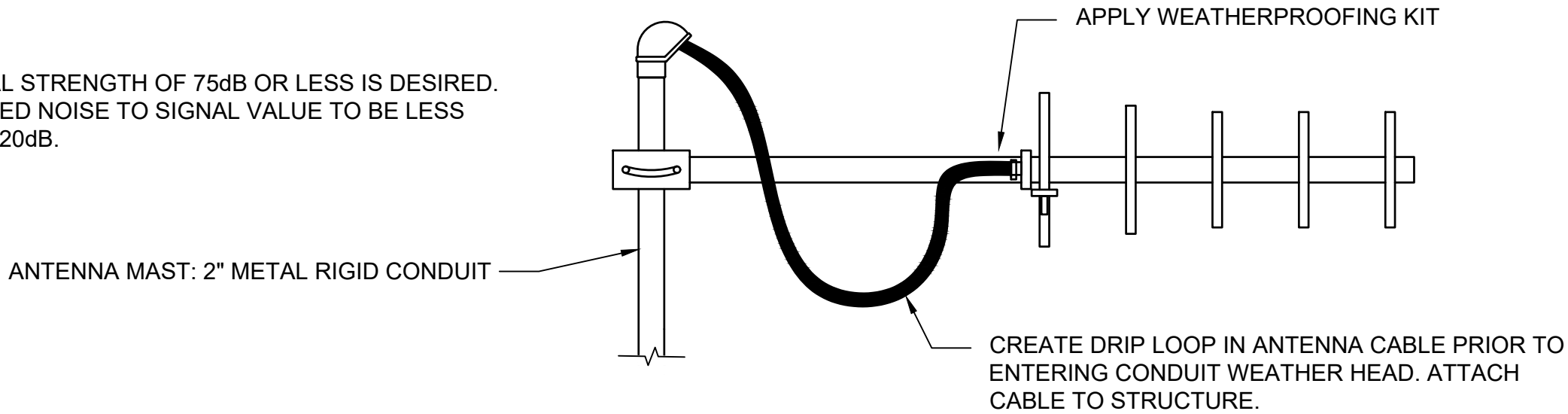


- NOTES:
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A COMMSCOPE DB589-Y ANTENNA OR EQUIVALENT AND LMR-400 OR EQUIVALENT CABLE ON 2" RIGID CONDUIT AT HEIGHT SPECIFIED BY RADIO STUDY CONTRACTOR, COMMUNICATING WITH WELL SITES. USE ANDREW KIT PART NUMBER 221213 OR EQUIVALENT TO WEATHERIZE ALL OUTDOOR ANTENNA CONNECTIONS. PROVED WATER-TIGHT SEAL WHEN PASSING THROUGH STRUCTURES AND ENCLOSURES.
 2. CONTRACTOR SHALL INSTALL ANTENNA BULKHEAD CONNECTOR PER MANUFACTURERS RECOMMENDATIONS IN THE BOTTOM OF THE RTU IN A LOCATION THAT WILL ALLOW THE ANTENNA CABLE FROM THE RADIO MODEM TO BE EASILY ATTACHED. MOUNT THE LIGHTING ARRESTOR TO EXTERNAL STRUCTURE AND NOT ON THE RTU. PROVIDE GROUND WIRE AS RECOMMENDED BY THE MANUFACTURER. ROUTE GROUND WIRE TO BOND TO ELECTRICAL GROUNDING SYSTEM.

E055
TYP OMNI ANTENNA MOUNTING

N.T.S. REV: 12/13/19

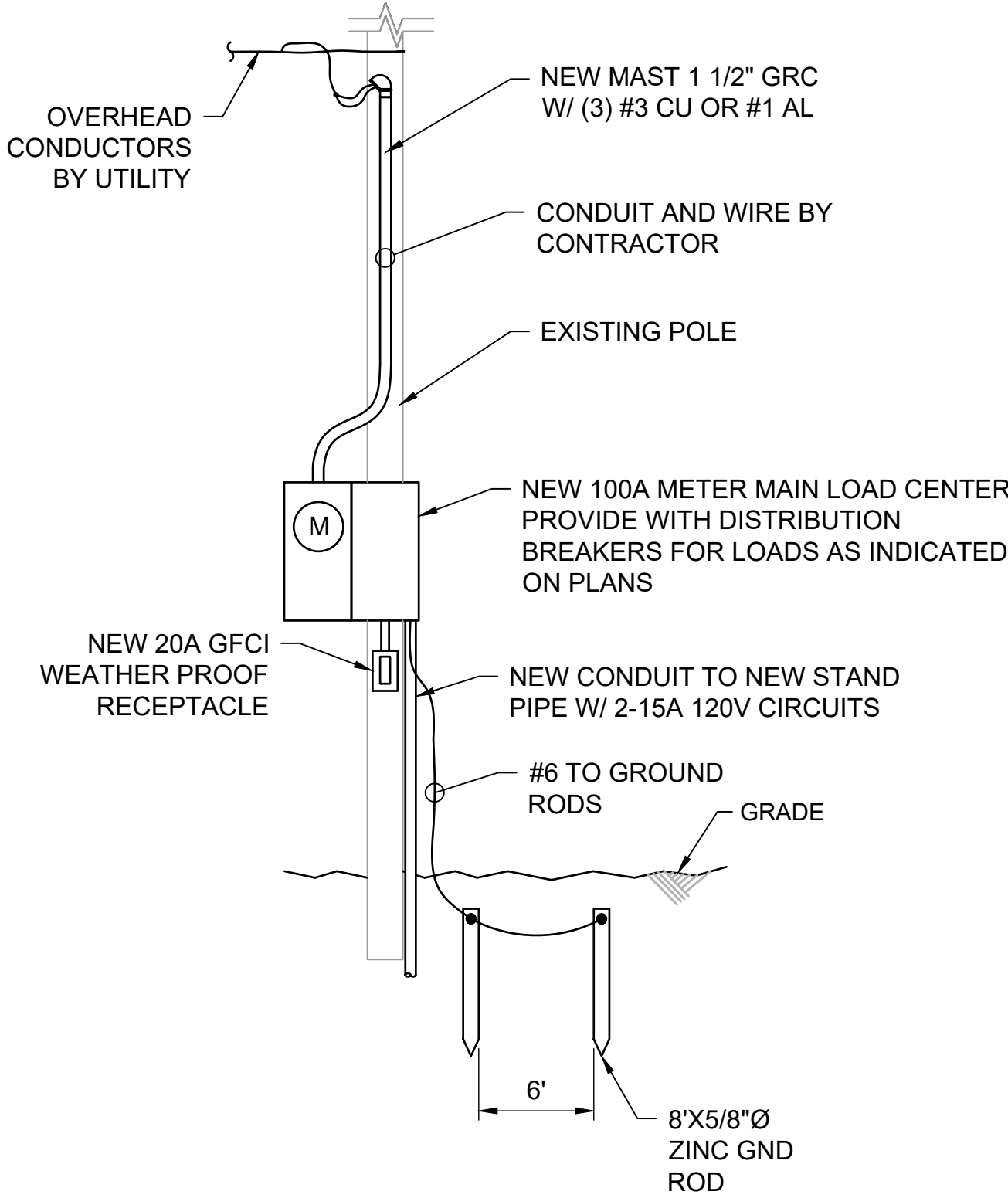
NOTE:
SIGNAL STRENGTH OF 75dB OR LESS IS DESIRED.
DESIRED NOISE TO SIGNAL VALUE TO BE LESS
THEN 20dB.



- NOTES:
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A KATHREIN TY-900 YAGI ANTENNA OR EQUIVALENT AND LMR-400 OR EQUIVALENT CABLE ON 2" RIGID CONDUIT AT HEIGHT SPECIFIED BY RADIO STUDY CONTRACTOR, POINTING TOWARDS TARGET LOCATION. USE ANDREW KIT PART NUMBER 221213 OR EQUIVALENT TO WEATHERIZE ALL OUTDOOR ANTENNA CONNECTIONS. PROVED WATER-TIGHT SEAL WHEN PASSING THROUGH STRUCTURES AND ENCLOSURES.
 2. CONTRACTOR SHALL INSTALL ANTENNA BULKHEAD CONNECTOR PER MANUFACTURERS RECOMMENDATIONS IN THE BOTTOM OF THE RTU IN A LOCATION THAT WILL ALLOW THE ANTENNA CABLE FROM THE RADIO MODEM TO BE EASILY ATTACHED. MOUNT THE LIGHTING ARRESTOR TO EXTERNAL STRUCTURE AND NOT ON THE RTU. PROVIDE GROUND WIRE AS RECOMMENDED BY THE MANUFACTURER. ROUTE GROUND WIRE TO BOND TO ELECTRICAL GROUNDING SYSTEM.

E045
TYP ANTENNA MOUNTING

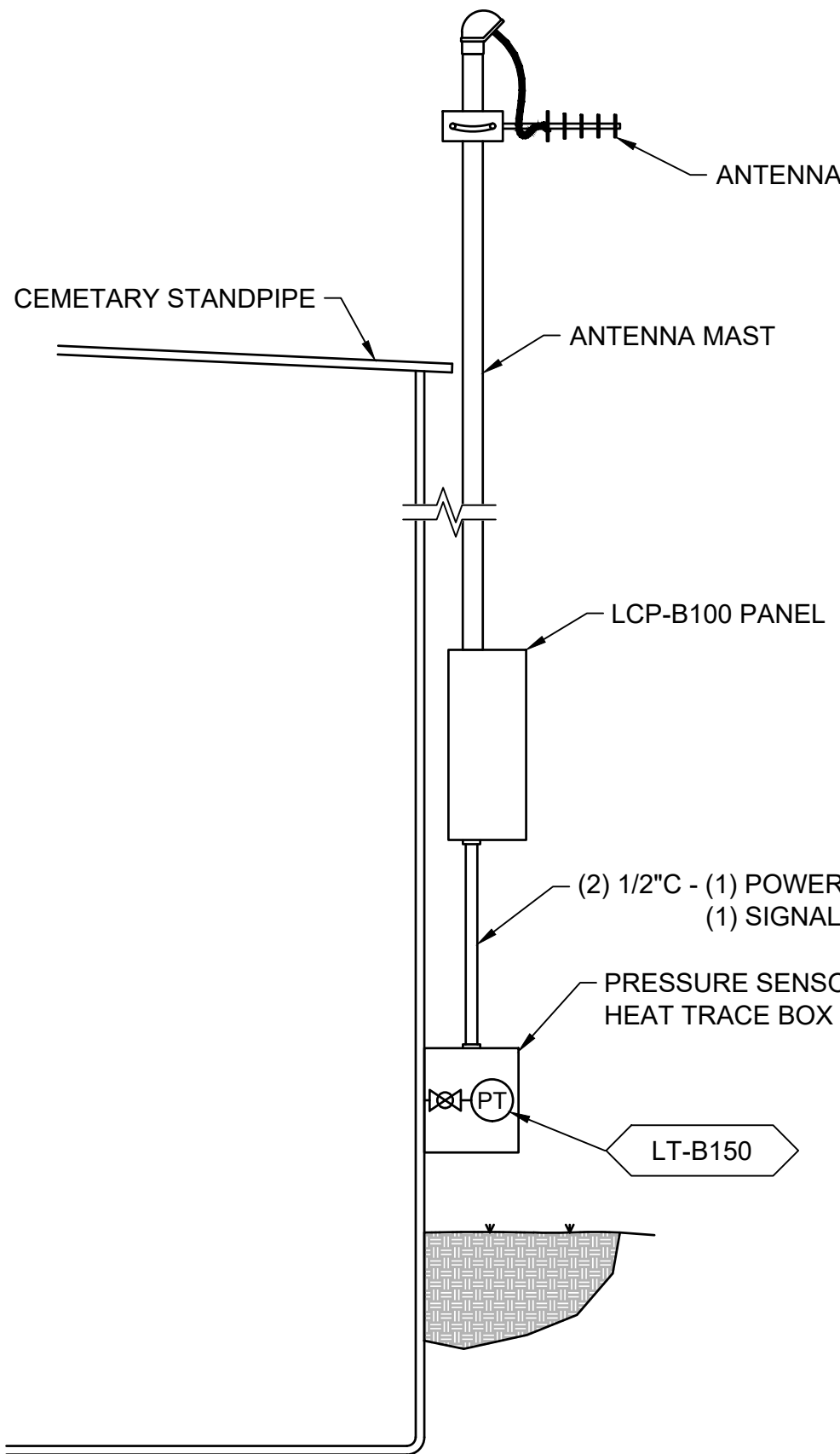
N.T.S. REV: 12/28/18



E149
TYP

POWER POLE AND METER MAIN LOAD CENTER

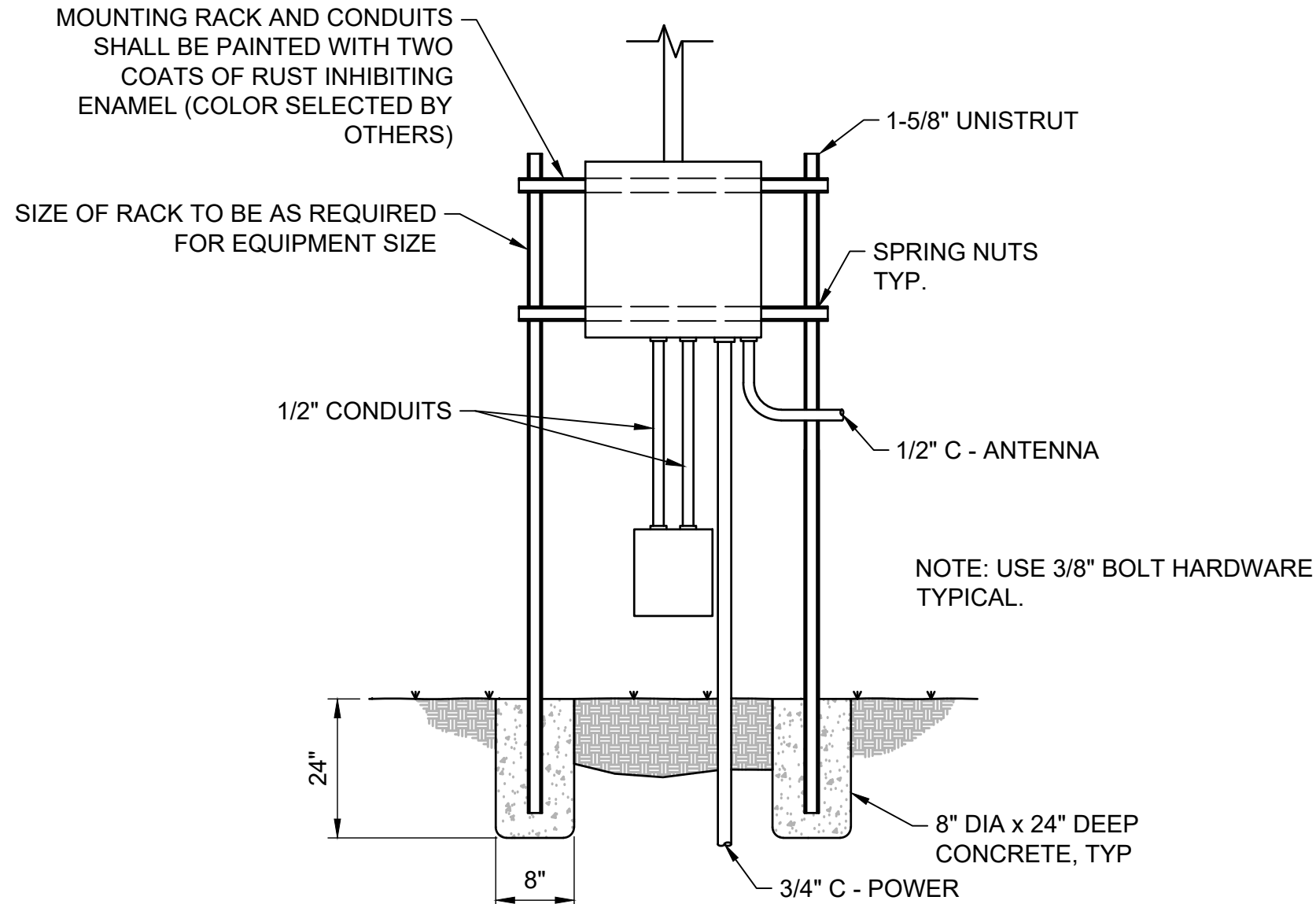
N.T.S. REV: 01/27/20



E150
TYP

ANTENNA/STANDPIPE PRESSURE BOX

N.T.S.



GENERAL INSTRUMENTATION NOTES

OR

SINGLE INSTRUMENT OR OTHER COMPONENT HAVING MULTIPLE FUNCTIONS.

NOTES:

1. DRAWINGS REFER ONLY TO CONNECTIONS FROM FIELD DEVICES TO THE PLANT PLC AND/OR SCADA SYSTEM. REFER TO THE SPECIFICATIONS FOR DETAILS ON ALL FIELD AND PACKAGED SYSTEMS.

2. ALL PANEL INSTRUMENTS SHALL BE FURNISHED UNDER THE SPECIFICATIONS.

INSTRUMENT LINE LEGEND

INSTRUMENT CONNECTION TO PROCESS

— — — —

PNEUMATIC SYMBOL

— // — // — //

ELECTRIC SYMBOL

— — — —

HYDRAULIC SYMBOL

— L — L — L —

CAPILLARY TUBE

— X — X — X —

ETHERNET

— o — o — o — o —

MAIN PROCESS

— — — — —

SECONDARY PROCESS

— — — — —

CONTROL WIRING

— — — — —

POWER WIRING

— ||| — ||| — ||| —

FIBER LINE

— F — F —

GAS LINE

— G — G —

RADIO LINE

— R — R —

SERIAL LINE

— S — S —

CONNECTING LINES

NON-CONNECTING LINES

INPUT & OUTPUT SYMBOLS

DIGITAL INPUT

DIGITAL OUTPUT

ANALOG INPUT

ANALOG OUTPUT

PULSED INPUT

CONTINUATION FROM/TO SHEET

EI-701-C

A

CONTINUATION LETTER

CONTINUATION ON DRAWING

INSTRUMENT TAG IDENTIFICATION LETTERS																										
INSTRUMENT FUNCTION	MEASURED VARIABLE																									
		ELEMENT	TRANSMITTER	INDICATING TRANSMITTER	CONVERTER TRANSDUCER RELAY, SPECIAL DEVICES	INDICATOR	RECORDER	CONTROLLER	INDICATING CONTROLLER	RECORDING CONTROLLER	SWITCH	SWITCH LOW LOW	SWITCH LOW	SWITCH HIGH	SWITCH HIGH HIGH	SWITCH COMBINATION HIGH LOW	ALARM LOW LOW	ALARM LOW	ALARM HIGH	ALARM HIGH HIGH	TOTALIZE INDICATOR TRANSMITTER	VALVE	GAUGE	LIGHT	SPEED SETTING	FAIL ALARM
A	ANALYSIS	AE	AT	AIT	AY	AI	AR	AC	AIC	ARC	AS	ASLL	ASL	ASH	ASHH	ASHL	AALL	AAL	AAH	AAHH				AL		
B	BURNER FLAME	BE	BT	BIT	BY	BI	BR	BC	BIC	BRC	BS	BSLL	BSL	BSH	BSHH		BALL	BAL	BAH	BAHH				BL		
C	CONDUCTIVITY	CE	CT	CIT	CY	CI	CR	CC	CIC	CRC	CS	CSLL	CSL	CSH	CSHH	CSHL	CALL	CAL	CAH	CAHH				CL		
D	DENSITY	DE	DT	DIT	DY	DI	DR	CD	DIC	DRC	DS	DSLL	DSL	DSH	DSHH	DSHL	DALL	DAL	DAH	DAHH				DL		
E	VOLTAGE	EE	ET	EIT	EY	EI	ER				ES	ESLL	ESL	ESH	ESHH		EALL	EAL	EAH	EAHH						
F	FLOW	FE	FT	FIT	FY	FI	FR	FC	FIC	FRC	FS	FSLL	FSL	FSH	FSHH	FSHL	FALL	FAL	FAH	FAHH	FQI	FV	FG	FL		
FF	FLOW RATIO				FFY	FFI	FFC	FFIC		FFS														FFL		
G	GAUGING (DIMENSION)																									
H	HAND (MANUAL)							HC			HS											HV		HL	HSS	
I	CURRENT		IT	IIT	IY	II	IR	IC	IIC	IRC	IS	ISLL	ISL	ISH	ISHH		IALL	IAL	IAH	IAHH				IL		
J	POWER																									
K	TIME				KY	KI	KR	KC	KIC	KRC	KS	KSLL	KSL	KSH	KSHH		KALL	KAL	KAH	KAHH		KV		KL		
L	LEVEL	LE		LIT	LY	LI	LR	LC	LIC	LRC	LS	LSLL	LSL	LSH	LSHH	LSHL	LALL	LAL	LAH	LAHH		LV	LG	LL		
M	MOISTURE OR HUMIDITY	ME	MT	MIT	MY	MI	MR	MC	MIC	MRC	MS	MSLL	MSL	MSH	MSHH		MALL	MAL	MAH	MAHH				ML		
N	EMERGENCY SHUTDOWN																									
O																										
P	PRESSURE OR VACUUM		PT	PIT	PY	PG	PR	PC	PIC	PRC	PS	PSLL	PSL	PSH	PSHH	PSHL	PALL	PAL	PAH	PAHH		PV		PL		
PD	DIFFERENTIAL PRESSURE		PDT	PDIT	PDY	PDI	PDR	PDC	PDIC	PDRC	PDS	PDSLL	PDSL	PDSH	PDSHH		PDALL	PDAL	PDAH	PDAHH		PDV		PDL		
Q	QUANTITY	QE	QT	QIT	QY	QI	QR				QS	QSLL	QSL	QSH	QSHH		QALL	QAL	QAH	QAAH						
R	RADIOACTIVITY																									
S	SPEED	SE	ST	SIT	SY	SI	SR	SC	SIC	SRC	SS	SSLL	SSL	SSH	SSHH		SALL	SAL	SAH	SAHH						
T	TEMPERATURE	TE	TT	TIT	TY	TI	TR	TC	TIC	TRC	TS	TSLL	TSL	TSH	TSHH	TSHL	TALL	TAL	TAH	TAHH		TV		TL		
TD	DIFFERENTIAL TEMPERATURE		TDI	TDIT	TDY	TDI	TDR	TDC	TDIC	TDRC	TDS	TDSLL	TDSL	TDSH	TDSHH		TDALL	TDAL	TDAH	TDAHH		TDV		TDL		
U	MULTIVARIABLE					UI	UR	UC	UIC	URC	US													UL		
V	VISCOSITY	VE	VT	VIT	VY	VI	VR	VC	VIC	VRC	VS	VSLL	VSL	VSH	VSHH		VALL	VAL	VAH	VAHH				VL		
W	WEIGHT	WE	WT	WIT	WY	WI	WR				WS	WSLL	WSL	WSH	WSHH		WALL	WAL	WAH	WAHH						
X	UNCLASSIFIED	XE	XT	XIT	XY	XI	XR	XC	XIC	XRC	XS	XSLL	XSL	XSH	XSHH		XALL	XAL	XAH	XAAH		XV	XG	XL		XA
XV	VIBRATION	XVE	XVT		XVY	XVI	XVR				XVS			XVSH	XVSHH				XVAH	XVAHH				XVL		
Y	EVENT / STATUS					YI		YC			YS													YL		YA
Z	POSITION	ZE	ZT	ZIT	ZY	ZI					ZS										ZV		ZL			

INSTRUMENT SYMBOLS

LIT

INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED IN THE FIELD

TSL

INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED INSIDE ON MCC, VFD, OR OTHER PANEL

PIR PSH

SINGLE INSTRUMENT OR OTHER COMPONENT HAVING MULTIPLE FUNCTIONS

INSTRUMENT OR OTHER COMPONENT TO BE FURNISHED AND INSTALLED BY OTHERS IN THE FUTURE

TIC

INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED ON FRONT OF LOCAL CONTROL PANEL (LCP) OR OTHER ELECTRICAL GEAR

ZAH

INDICATING LIGHT MOUNTED IN THE FIELD; MAY BE MOUNTED ON A CONTROL STATION

PAL

INDICATING LIGHT MOUNTED ON THE FRONT OF A LOCAL CONTROL PANEL (LCP) OR OTHER ELECTRICAL GEAR

1/2

PLC BASED HIM

1/2

POWER DEVICE

1/2

SCADA SYSTEM

120 VAC

PRIMARY ELECTRICAL SUPPLY FOR INSTRUMENTATION (120V/60HZ) UNLESS OTHERWISE NOTED

WATER SURFACE

NOTE

PROCESS

PROCESS TAG LEFT

NOTE

PROCESS

PROCESS TAG RIGHT

STRUCTURE

X # SHEET #

SHEET REFERENCE LEFT

STRUCTURE

SHEET # X

SHEET REFERENCE RIGHT

IB

INTRINSIC BARRIER

(3)

INDICATES QUANTITY OF SIGNALS (THREE)

(E)

EXISTING ITEM

(N)

NEW ITEM

(F)

FUTURE ITEM

(D)

DEMOLITION ITEM

(R)

RELOCATED/TO BE RELOCATED ITEM

*

INDICATES VENDOR PACKAGE

MISCELLANEOUS ABBREVIATIONS

AM

AUTO/MANUAL

CB

CIRCUIT BREAKER

DS

DOOR SWITCH

GS

GATE SWITCH

HA

HAND/AUTOMATIC

HOA

HAND/OFF/AUTOMATIC

HOR

HAND/OFF/REMOTE

HS

HATCH SWITCH

ID

INCREASE/DECREASE

I/P

CURRENT TO PNEUMATIC

KO

TIMER/OFF

LCP

LOCAL CONTROL PANEL

LOR

LOCAL/OFF/REMOTE

LOS

LOCKOUT STOP

LR

LOCAL/REMOTE

MCC

MOTOR CONTROL CENTER

HIM

HUMAN INTERFACE MODULE

N.C.

NORMALLY CLOSED

N.O.

NORMALLY OPEN

OC

OPEN/CLOSE

OIT

OPERATOR INTERFACE TERMINAL

OL

OVERLOAD

OLH

OFF/LOW/HIGH

OSC

OPEN/STOP/CLOSE

PLC

PROGRAMMABLE LOGIC CONTROLLER

POT

POTENTIOMETER

RSL

RAISE/STOP/LOWER

RTU

REMOTE TERMINAL UNIT

SEL

SELECT

SP

SET POINT

SS

START/STOP

TSP

TWISTED SHIELD PAIR

VFD

VARIABLE FREQUENCY DRIVE

KELLER ASSOCIATES

601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
REGISTERED PROFESSIONAL ENGINEER
5/4/2020
STATE OF IDAHO
KEVIN T. HENNESSY

NO.

REVISIONS

DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

CITY OF ATHOL, ID

CITY OF ATHOL

ATHOL

ATHOL WATER SYSTEM IMPROVEMENTS

P&ID LEGEND & SCHEDULE

DRAWN: TLL

CHECK: KTH

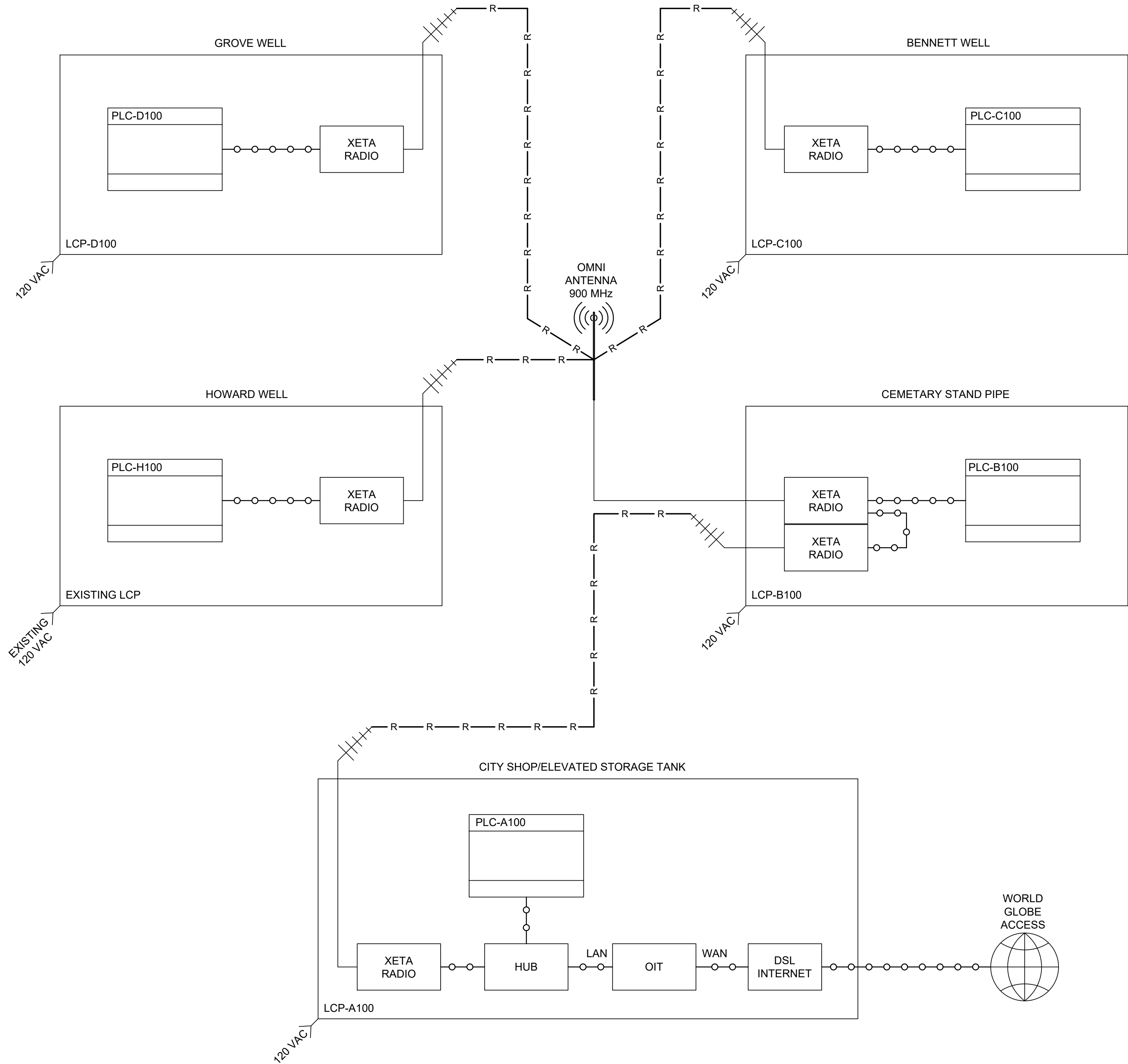
VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
216064-001

PAGE

SHEET NO.
EI-001



GENERAL SHEET NOTES

1. ---

LEGEND

- CAT6 NETWORK CABLE ETHERNET
- R — R — R — RADIO LINE

KELLER ASSOCIATES
601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603

PROFESSIONAL ENGINEER
REGISTERED
No. 9209
5/4/2020
STATE OF IDAHO
KEVIN T. HENNESSY

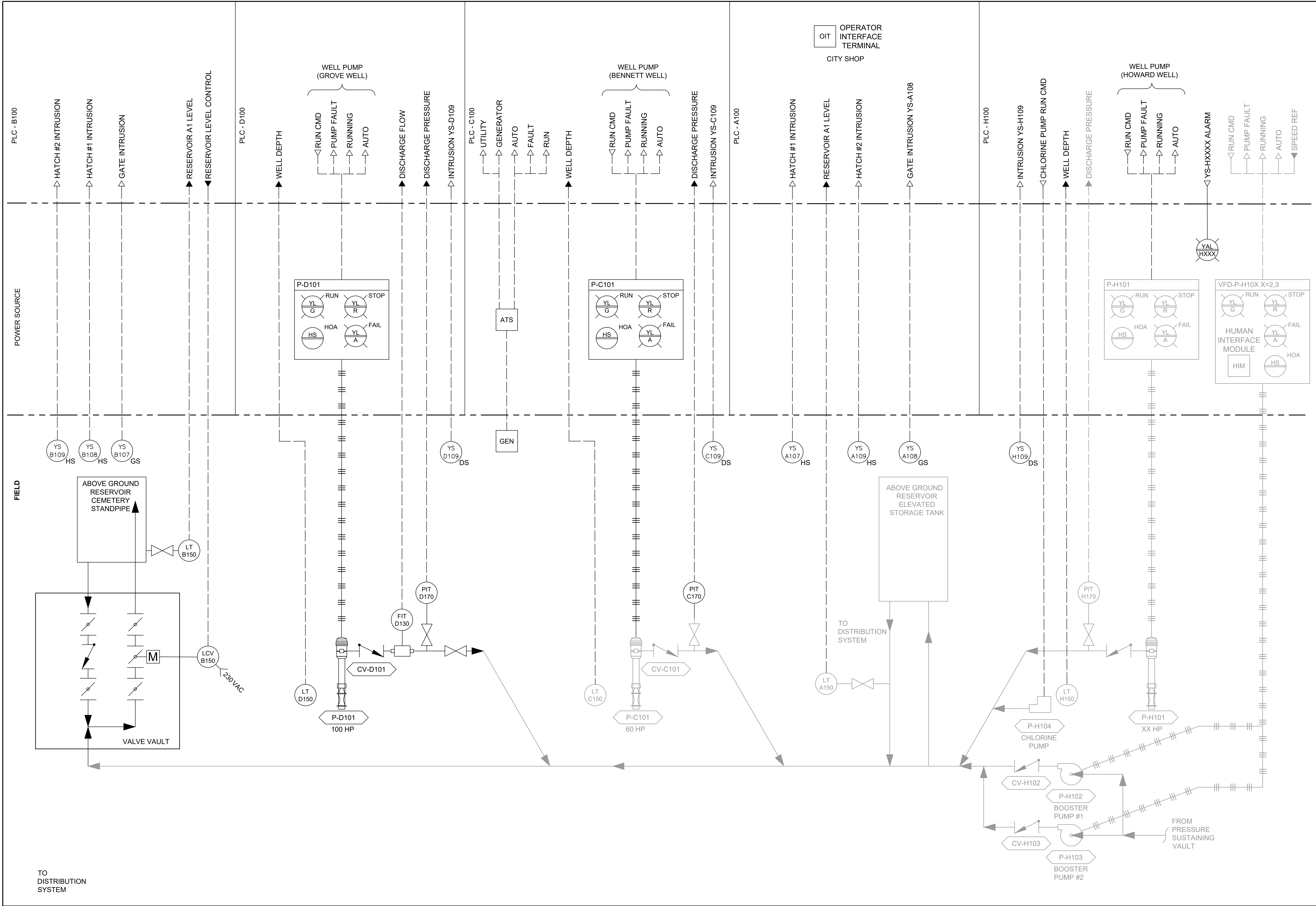
NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

ATHOL WATER SYSTEM IMPROVEMENTS

WATER SYSTEM NETWORK DIAGRAM

DRAWN: TLL	CHECK: KTH
VERIFY SCALE: Scales based on 22"x34" prints.	
1-1/2 Inches	
PROJECT NO. 216064-001	PAGE
SHEET NO. EI-700	






601 Sherman Avenue, Suite 1
Coeur d'Alene, Idaho 83814
(208) 813-7603



PROFESSIONAL ENGINEER
REGISTERED
No. 9200
5/4/2020
KEVIN T. HENNESSY

NO.	REVISIONS	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.



CITY OF
ATHOL, ID

ATHOL WATER SYSTEM
IMPROVEMENTS

P&ID

DRAWN: TLL CHECK: KTH

VERIFY SCALE: Scales based on 22"x34" prints.

1-1/2 Inches

PROJECT NO.
216064-001

SHEET NO.
EI-701

PAGE