

MECHANICAL GENERAL NOTES:

- IT IS NOT THE INTENT OF THESE DRAWINGS TO PORTRAY EVERY DETAIL OF THE REQUIRED WORK. THE CONTRACTOR SHALL PROVIDE COMPLETE AND FUNCTIONAL SYSTEM AS SHOWN ON THE DRAWINGS AND OUTLINED IN THE SPECIFICATIONS.
- SMALL DIAMETER PIPING IS SHOWN SCHEMATICALLY. CONTRACTOR SHALL PROVIDE ALL COUPLINGS AND MISCELLANEOUS FITTINGS REQUIRED TO COMPLETE THE WORK WHETHER SHOWN ON THE DRAWING OR NOT.
- ALL PIPING SYSTEMS AND EQUIPMENT SHALL BE ADEQUATELY AND SAFELY SUPPORTED. CONTRACTOR SHALL DESIGN, PROVIDE AND INSTALL ALL SUPPORTS AS REQUIRED BY THE PIPING AND EQUIPMENT PROVIDED. AT A MINIMUM, ALL PIPING SYSTEMS SHALL BE SUPPORTED PER THE REQUIREMENTS OF THE MANUFACTURER'S STANDARDIZATION SOCIETY (MSS) SP-58 AND SP-69. SUPPORTS SHALL BE IN ADDITION TO THOSE SHOWN ON THE DRAWINGS.
- THE FINAL WORK SHALL INCLUDE ANY ADJUSTMENTS THAT MAY BE REQUIRED BY THE APPROVED EQUIPMENT FURNISHED, WITH MODIFICATIONS MADE TO CONCRETE SHAPES AND TO DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS AS MAY BE REQUIRED TO SUIT THE DETAILS OF THE APPROVED EQUIPMENT FURNISHED, ALL AT NO ADDITIONAL COST TO THE AUTHORITY. SUBMIT TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

PUMP DESIGN CRITERIA:

	LOW-LIFT	HIGH-LIFT
QUANTITY	2	3
MANUFACTURER/MODEL, OR APPROVED EQUAL	FAIRBANKS NIJHUIS 10" 2825C	FAIRBANKS NIJHUIS 6" 2824C
MINIMUM HORSEPOWER	250	150
MINIMUM SHUTOFF HEAD	251 FEET	255 FEET
MINIMUM SUCTION SIZE	12 INCHES	10 INCHES
MINIMUM DISCHARGE SIZE	10 INCHES	6 INCHES
PRIMARY DESIGN POINT FLOW	3,472.2 GPM	2,000 GPM
PRIMARY DESIGN POINT HEAD	203 FEET	214 FEET
PRIMARY DESIGN POINT EFFICIENCY	81%	81%
PRIMARY DESIGN POINT NPSHR	13 FEET	12.95 FEET
PRIMARY DESIGN POINT SPEED	1,785	1,785

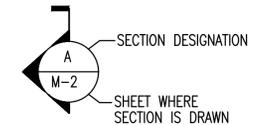
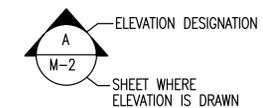
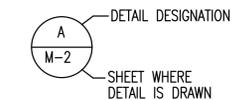
SCHEMATIC SYMBOLS

	FLANGED CONNECTION
	MECHANICAL JOINT CONNECTION
	CHECK VALVE
	BALL VALVE
	GATE VALVE
	PIPE UP
	PIPE DOWN
	UNION
	KEYNOTE

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	LL	LOW LIFT
CL	CENTERLINE	LR	LONG RADIUS
CLR	CLEAR	MJ	MECHANICAL JOINT
CONC	CONCRETE	MM	MILLIMETER
CW	CLOCKWISE	NPT	NOMINAL PIPE THREAD
DES	DESIGNED	OAE	OR APPROVED EQUAL
DI	DUCTILE IRON	PE	PLAIN END
DIA OR Ø	DIAMETER	PSI	POUND PER SQUARE INCH
DIAG	DIAGONAL	PVC	POLYVINYL CHLORIDE
EF	EACH FACE	SCH	SCHEDULE
EL	ELEVATION	REINF	REINFORCEMENT
FLG OR FL	FLANGE	SF	SQUARE FEET
FF	FINISHED FLOOR	SS	STAINLESS STEEL
GALV	GALVANIZED	STL	STEEL
HL	HIGH LIFT	TYP	TYPICAL
LF	LINEAR FEET	UON	UNLESS OTHERWISE NOTED
		W/	WITH

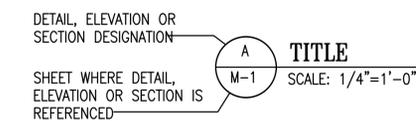
KEY FOR DETAIL, ELEVATION AND SECTIONAL SYMBOLS



DETAIL REFERENCE

ELEVATION REFERENCE

SECTION REFERENCE



DETAIL, ELEVATION OR SECTION DRAWING

REV	DATE	DESCRIPTION



WESTERN VIRGINIA WATER AUTHORITY
 601 South Jefferson Street, Suite 300
 Roanoke, Virginia 24011

DES: KNA	SCALE: NOT TO SCALE
DRAWN: GSL	HORIZ: N/A
CHECK: JWA	VERT: N/A
DATE: 1/24/20	

**CRYSTAL SPRING
 PUMP STATION RELOCATION**

**MECHANICAL NOTES,
 LEGENDS & ABBREVIATIONS**

DRAWING
M0.01
 SHEET
40