

PUMPING OPERATION RANGES WITH RISING WATER				
FUNCTION	SCADA (BUBBLER)		FLOAT	
	ELEVATION	LEVEL ABOVE WET PIT FLOOR	ELEVATION	LEVEL ABOVE WET PIT FLOOR
	(FT)	(FT)	(FT)	(FT)
LOW FLOW PUMP START	701.50	3.0	702.5	4.0
LEAD PUMP START & LOW FLOW PUMP STOP	706.0	7.5	706.5	8.0
LAG PUMP START	706.50	8.0	707.0	8.5
STANDBY PUMP START	707.00	8.5	707.5	9.0
HIGH WATER ALARM	708.00	9.5	708.00	9.5

PUMPING OPERATION RANGES WITH FALLING WATER				
FUNCTION	SCADA (BUBBLER)		FLOAT	
	ELEVATION	LEVEL ABOVE WET PIT FLOOR	ELEVATION	LEVEL ABOVE WET PIT FLOOR
	(FT)	(FT)	(FT)	(FT)
MAIN PUMPS STOP AND LOW FLOW PUMP START	703.00	4.5	703.00	4.5
LOW FLOW PUMP STOP	701.00	2.5	701.00	2.5
LOW WATER ALARM	700.00	1.5	700.00	1.5

EQUIPMENT SCHEDULE																
ITEM	DESCRIPTION	LOCATION	ELECTRICAL MOTOR CHARACTERISTICS						PUMP		FAN				MOUNTING	REMARKS
			KW	HP	RPM	VOLTS	PHASE	HZ	CAPACITY (GPM)	HEAD (FT)	TYPE	CAPACITY (CFM)	SP (IN)	DRIVE		
MP 1	RELOCATE EXIST. MAIN PUMP #1	DRY PIT	22 *	30 *	860 *	460	3	60	2,900	30						RELOCATE EXIST. PUMP
MP 2	NEW MAIN PUMP #2	DRY PIT	22 *	30 *	860 *	460	3	60	2,900	30						SEE NOTES 1
MP 3	RELOCATE EXIST. MAIN PUMP #3	DRY PIT	22 *	30 *	860 *	460	3	60	2,900	30						RELOCATE EXIST. PUMP
LFP 4	NEW LOW FLOW PUMP #4	DRY PIT	4.8 *	7.5 *	1,750 *	460	3	60	250	33						SEE NOTES 1
SP 1	NEW SUMP PUMP	DRY PIT	0.45 *	0.5 *	3,300 *	460	3	60	20	35						SEE NOTES 1
G 1	SLIDE GATE ACTUATOR	OUTSIDE ABOVE GRADE	0.75	1		460	3	60								
G 2	SLIDE GATE ACTUATOR	OUTSIDE ABOVE GRADE	0.75	1		460	3	60								
-	TROLLEY HOIST MOTOR	PUMP ROOM	3.7	5		460	3	60								
-	ELECTRIC HOIST MOTOR	PUMP ROOM	0.45	0.5		460	3	60								

* MAXIMUM

NOTES:

1. THE DESIGN OF THE PUMP STATION HAS BEEN BASED ON A SPECIFIC PUMP. OTHER PUMPS PRODUCING THE SAME HYDRAULIC CHARACTERISTIC ARE ACCEPTABLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL ADJUSTMENTS TO THE STATION DESIGN REQUIRED TO ADOPT HIS FINAL SELECTED PUMPS AT NO ADDITIONAL COST.
2. STAND-BY PUMP STARTS ONLY WHEN MOTOR OVERLOADS OR STARTING SEQUENCE FAILS FOR ANY MAIN PUMP.
3. PROVIDE NEW MOTOR PROTECTION RELAYS (MPR) FOR EXISTING PUMPS (MP-1 AND MP-3).

M4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PUMP STATION NO. 48
REHABILITATION
EQUIPMENT SCHEDULE AND
PUMPING OPERATING ELEV.
SCALE: N/A
DATE: 03-10-11
DRAWN BY: HFF
CHECKED BY: KHC

