WASHWATER RECLAIM PUMP STATION #2 HVAC UPGRADES

AT

JORDAN VALLEY WATER TREATMENT PLANT

15305 SOUTH 3200 WEST HERRIMAN, UT 84065

JVWCD PROJECT NO. 4387

PREPARED BY:



Tel: (801) 322-0487 Fax: (801) 322-0490

November 19, 2025 Construction Documents

DRAWING INDEX

MECHANICAL

MECHANICAL SYMBOL LEGEND AND SCHEDULES

WASHWATER RECLAIM PUMP #2 HVAC DEMOLITION PLAN WASHWATER RECLAIM PUMP #2 HVAC REMODEL PLAN

MECHANICAL DETAILS

CONTROLS DIAGRAMS

WASHWATER RECLAIM PUMP #2 ELECTRICAL DEMO \$ REMODEL PLAN

1		'
		SYMBOL LEGEND
	SYMBOL	DESCRIPTION
		SUPPLY DUCT (CROSS SECTION)
		RETURN AIR OR EXHAUST DUCT (CROSS SECTION)
	•	ROUND DUCT (CROSS SECTION)
)		RISE OR DROP IN ROUND OVAL DUCT
	24"x 2"	DUCT SIZE, INSIDE CLEAR DIMENSION IN INCHES
	RISE	DUCT RISE
	A	DROP OR RISE IN SUPPLY DUCT
	- Interior	TURNING VANES IN DUCT
	H.D.	HAND DAMPER
		SUPPLY AIR DIRECTION OR OUTSIDE AIR
	─	RETURN AIR OR EXHAUST DIRECTION
	$-\boxtimes -$	SUPPLY DIFFUSER
		RETURN AIR GRILLE
		EXHAUST GRILLE
		BRANCH DUCT TAKE-OFF
	<i>f</i> \ <i>f</i> \ <i>f</i> \	OPPOSED BLADE DAMPER
	}\\}\\ }}\!	PARALLEL BLADE DAMPER
	\bigcirc	THERMOSTAT
	S	TEMPERATURE SENSOR
	NK.	DIFFUSER OR GRILLE NECK
	R.A.	RETURN AIR
	S.A.	SUPPLY AIR
		NEW CONNECTION
	(E)	EXISTING
	1 9	DROP IN PIPE
	—ю	RISE IN PIPE
		VALVE IN RISE
	— —	UNION
	√√	GAS SHUT OFF VALVE (GAS COCK)

ROOFTOP PACKAGED AIR CONDITIONING UNIT

							KOOI	10117			CONL		111110	CITI						
		COOLING	3						HEATING			ELECTRICAL								
			ENT. AIR	LVG. AIR			N ALN LIN AL IN A		ENT. AIR	LVG. AIR										
SYMBOL	ALTITUDE RATING GROSS TOT. MBH	ALTITUDE RATING GROSS SENS. MBH	°F db/wb	°F db/wb	ACFM	ESP IN. W.C.	MINIMUM OUTSIDE AIR CFM	HEATER KW	°F	°F	VOLTS	PHASE	HERTZ	SUPPLY FAN BHP	MCA	MOCP	MINIMUM ARI SEER2	APPROX WEIGHT LBS	CARRIER MODEL NO.	REMARKS
AC-WW	56	45	80 / 64	56 / 54	2,000	0.5	420	12.9	57	80	460	3	60	0.8	24	25	13.4	700	50FE-A06	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
NOTES:																				

I. FACTORY ECONOMIZER WITH BAROMETRIC RELIEF.

- 2. 14" HIGH MINIMUM FACTORY ROOF CURB AS REQUIRED. 3. 96°F AMBIENT AIR TEMPERATURE.
- 4. FURNISH UNIT WITH DISCONNECT.
- 5. DIRECT DRIVE EC FAN MOTORS.
- 6. HINGED AND LOCKING ACCESS DOORS.
- 7. R-454B REFRIGERANT.

SEE SPECIFICATION SECTION 236100

- 8. PROVIDE SMOKE DETECTOR IN S.A. AND R.A. DUCT. 9. FACTORY-INSTALLED ELECTRIC RESISTANCE HEATER. IO. PROVIDE WITH 2" MERV 8 AIR FILTERS AND DIRTY FILTER ALARM.
 - I I . PROVIDE WITH TEMPERATURE SENSOR AND SYSTEMVU (OR EQUAL) BACNET CONTROLLER CAPABLE OF INTEGRATING INTO THE EXISTING ALERTON BMS.

REFERENCE PROJECT CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS.

HEATH Engineering Compan



'	REVISI	ONS:	
	Λ	-	-
J			



| PROJECT INFO:

I PUMP STATION #2 RADES ONSERVANCY DISTRICT 15305 SOUTH 3200 WEST HERRIMAN, UTAH 84065 WASHWATER RECLAIM PU HVAC UPGRA JORDAN VALLEY WATER CONS

	ISSUE TYPE:	
	CONSTR	UCTION DOCUMENTS
•	HEATH PROJECT No:	25076
	CHECKED BY:	KDH
	DRAWN BY:	GWM
	DATE:	NOVEMBER 19, 2025

SHEET DESCRIPTION

MECHANICAL SYMBOL LEGEND AND SCHEDULES

3200 W WASHWATER RECLAIM
PUMP STATION #2
REFERENCE DRAWINGS HD | 0 | \$ H- | 0 | S 32000 W JVWTP 15305 SOUTH 3200 WEST HERRIMAN, UT 84065 Jordan Valley Water Treatment Plant 3200 W





	REVISI	ONS:	
	\triangle	-	-
ij.			



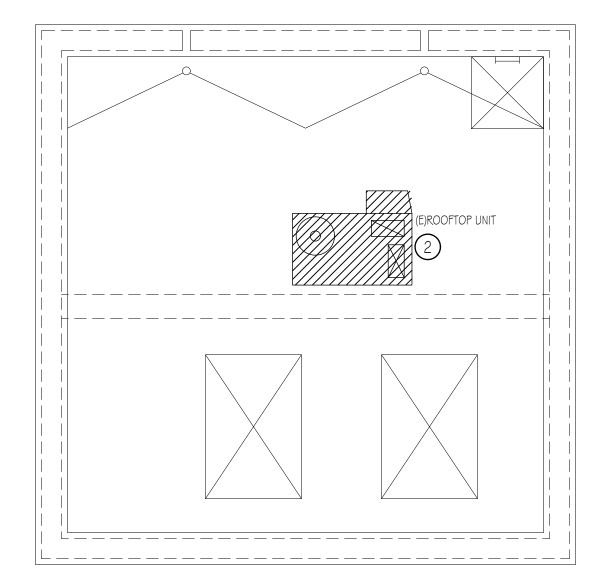
15305 SOUTH 3200 WEST HERRIMAN, UTAH 84065

360	DATE:	NOVEMBER 19, 2025
	DRAWN BY:	GWM
1	CHECKED BY:	KDH
	HEATH PROJECT No:	25076

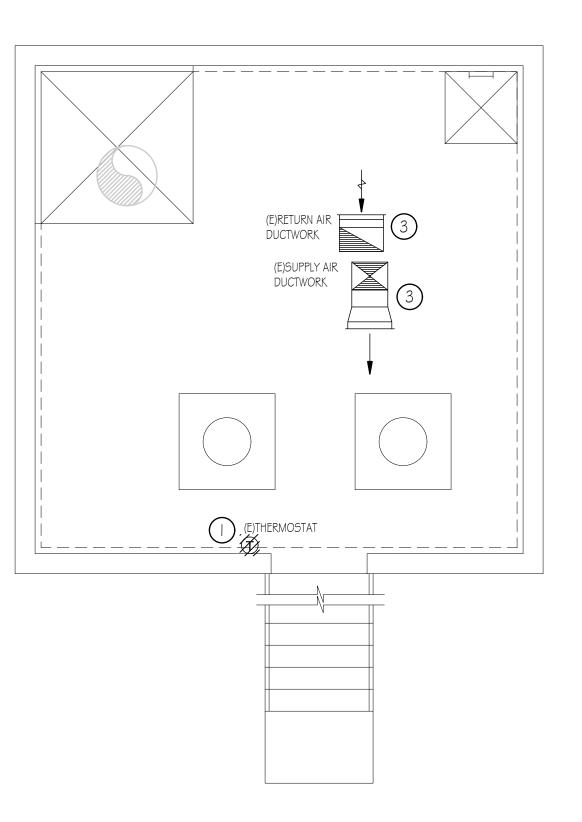
VICINITY PLAN











WASHWATER RECLAIM PUMP STATION #2 HVAC DEMOLITION PLAN SCALE: 1/4"= 1'-0" SCALE: 1/4"= 1'-0"

DRAWING NOTES

REMOVE EXISTING THERMOSTAT.

REMOVE EXISTING ROOFTOP UNIT AND ALL ASSOCIATED CONTROLS COMPLETE PREPARATORY FOR NEW. FIELD VERIFY WHETHER THE EXISTING CURB IS SUITABLE FOR REUSE; REMOVE AND REPLACE ONLY IF REQUIRED TO ACCOMMODATE THE NEW UNIT. COORDINATE WITH OWNER AND ROOF MEMBRANE MANUFACTURER REGARDING ANY MODIFICATIONS TO THE ROOF SYSTEM TO ENSURE PRESERVATION OF EXISTING ROOF WARRANTY. APPROVED ROOFING CONTRACTORS: Olympus Roofing Joe Fackrell (801)413-9851
S\$\$ Roofing

Blake Mash (801)694-3476

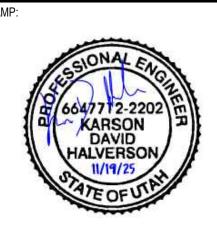
3 EXISTING SUPPLY AND RETURN AIR DUCTWORK AND ASSOCIATED GRILLES TO REMAIN, PROTECT DURING CONSTRUCTION.

GENERAL NOTES

- A. FIELD VERIFY EXACT LOCATIONS OF EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC.
- B. DEMOLITION FLOOR PLANS HAVE BEEN CREATED USING AVAILABLE RECORD DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT ROUTING OF ALL PIPING, DUCTWORK, ETC. DURING CONSTRUCTION.
- C. DEMOLITION OF EXISTING MECHANICAL AND PLUMBING CONSTRUCTION SHALL BE TO THE EXTENT REQUIRED TO ACCOMMODATE THE RENOVATION AND THE ADDITION OF NEW WORK.
- D. ALL PIPING, DUCTWORK, ETC. TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD.
- E. PROVIDE AND INSTALL CAPS ON EXISTING MAIN DUCTWORK AND / OR PIPING BRANCH BEING REMOVED.
- F. INDICATED DEMOLITION OF PIPING AND DUCTWORK INCLUDES, BUT IS NOT LIMITED TO, THE REMOVAL OF DUCTWORK, PIPING, FITTINGS, VALVES, HANGERS, SUPPORTS, INSULATION, ETC. UNLESS NOTED OTHERWISE.
- G. FIELD VERIFY EXACT LOCATIONS OF THERMOSTATS, SENSOR AND CONTROLLING UNITS.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ANY DAMAGE CAUSED BY HIS / HER PERSONNEL TO EXISTING THAT IS TO REMAIN OR TO NEWLY INSTALLED BUILDING COMPONENTS.
- I. CONTRACTOR SHALL REPLACE ANY INSULATION THAT IS DAMAGED DURING CONSTRUCTION ON PIPE OR DUCTWORK THAT IS TO REMAIN.
- J. PRIOR TO DEMOLITION OF ANY EQUIPMENT, WORK WITH ELECTRICAL CONTRACTOR AND CONTROLS CONTRACTOR TO MAKE CERTAIN POWER AND CONTROLS ARE PROPERLY DISCONNECTED AND TERMINATED.
- K. PATCH AND SEAL ALL ABANDONED OPENINGS IN THE WALLS AND FLOORS. MATCH EXISTING SURROUNDING FINISH.



STAMP:



REVISI	ONS:	
Λ	-	-

OWNER:



PROJECT INFO:

WASHWATER RECLAIM PUMP STATION #2
HVAC UPGRADES
JORDAN VALLEY WATER CONSERVANCY DISTRICT
15305 SOUTH 3200 WEST
HERRIMAN, UTAH 84065

ISSUE TYPE:

CONSTRUCTION DOCUMENTS

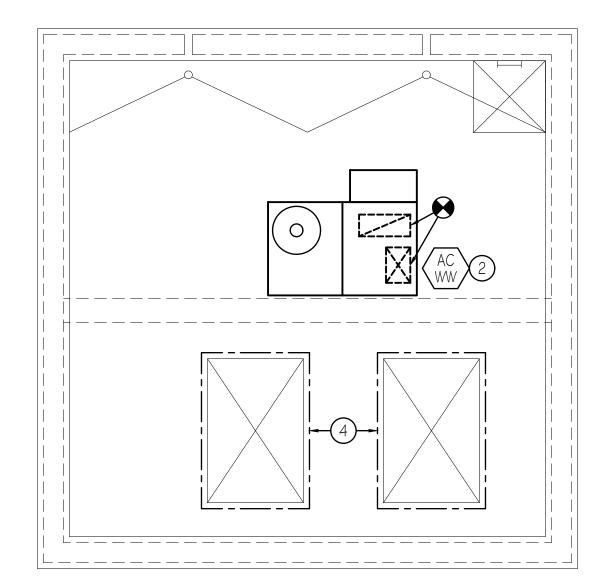
HEATH PROJECT No:	25076
CHECKED BY:	KDH
DRAWN BY:	GWM
DATE:	NOVEMBER 19, 2025

SHEET DESCRIPTION

WASHWATER
RECLAIM PUMP #2
HVAC DEMOLITION
PLAN

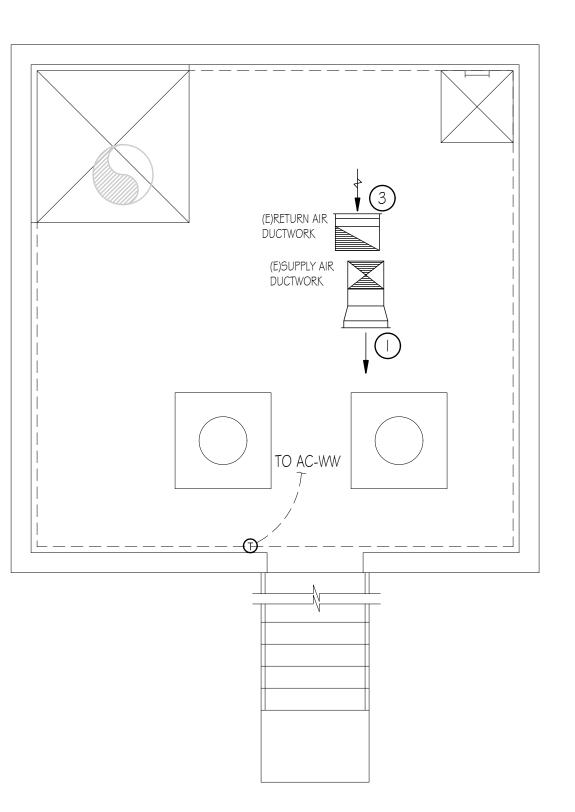
HEET NUMBER

HD101









WASHWATER RECLAIM PUMP STATION #2 HVAC REMODEL PLAN SCALE: 1/4"=1'-0"

DRAWING NOTES

- FIELD VERIFY THAT THE EXISTING SUPPLY AIR DIFFUSER IS ABLE TO PROVIDE APPROXIMATELY 2,000 CFM. NOTIFY THE OWNER AND ENGINEER IF PRESSURE DROP IS TOO HIGH.
- INSTALL NEW ROOFTOP UNIT AC-WW PER MANUFACTURER'S REQUIREMENTS. TRANSITION AS REQUIRED AND CONNECT NEW SUPPLY AND RETURN OPENINGS TO THE EXISTING DUCTWORK PENETRATIONS THROUGH THE ROOF. IF A NEW CURB OR ROOF MEMBRANE MODIFICATIONS ARE REQUIRED, COORDINATE WITH THE OWNER AND ROOF MEMBRANE MANUFACTURER TO ENSURE THAT EXISTING ROOF WARRANTY IS PRESERVED. APPROVED ROOFING CONTRACTORS:

 Olympus Roofing
 Joe Fackrell (801)413-9851
 S\$\$ Roofing
 Blake Mash (801)694-3476
- 3) FIELD VERIFY THAT THE EXISTING RETURN AIR GRILLE IS ABLE TO RETURN APPROXIMATELY 2,000 CFM. NOTIFY THE OWNER AND ENGINEER IF PRESSURE DROP IS TOO HIGH.
- (A) INSTALL NEW TREMSAFE (OR EQUAL) REMOVABLE SKYLIGHT SAFETY GUARD. FIELD VERIFY EXACT SKYLIGHT DIMENSIONS. COORDINATE GUARD TYPE WITH THE OWNER. INSTALL GUARD PER MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE INSTALLATION PROCEDURE WITH THE OWNER PRIOR TO INSTALLATION.

GENERAL NOTES

A. FIELD VERIFY THE CONDITION OF ALL EXISTING-TO-REMAIN EQUIPMENT, DUCTWORK, PIPING, ETC. NOTIFY THE OWNER AND OF ANYTHING THAT SHOULD BE REPAIRED OR REPLACED.





REVISI	ONS:	
Λ	-	-

OWNER:



PROJECT INFO:

WASHWATER RECLAIM PUMP STATION #2
HVAC UPGRADES
JORDAN VALLEY WATER CONSERVANCY DISTRICT
15305 SOUTH 3200 WEST
HFRIMAN LITAH 84065

ISSUE TYPE

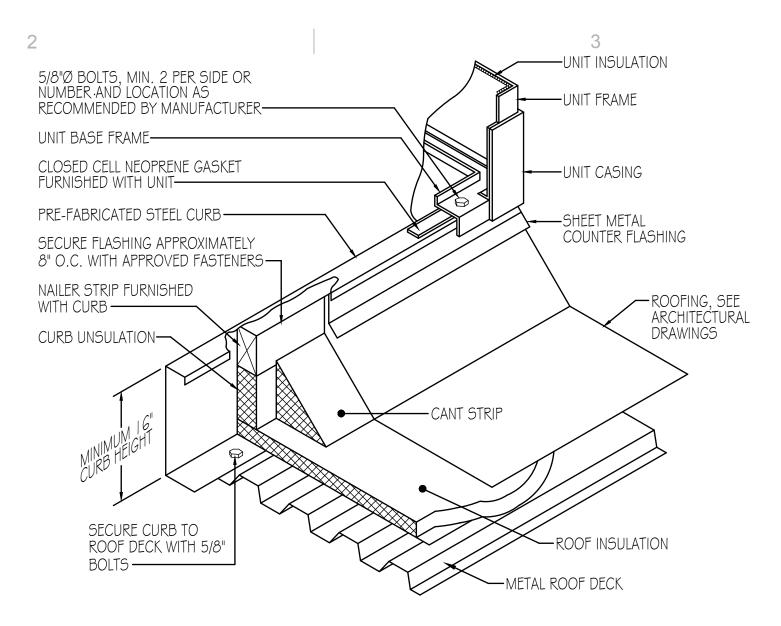
CONSTRUCTION DOCUMENTS

HEATH PROJECT No:	25076
CHECKED BY:	KDH
DRAWN BY:	GWM
DATE:	NOVEMBER 19, 2025

SHEET DESCRIPTION

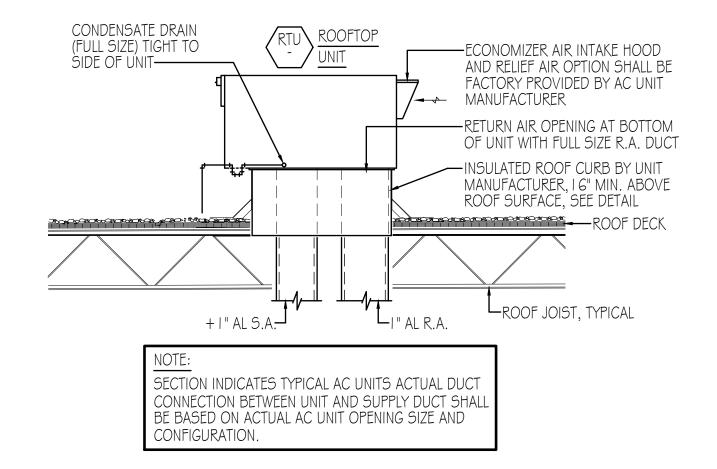
WASHWATER
RECLAIM PUMP #2
HVAC REMODEL
PLAN

HEET NUMBER



ROOFTOP EQUIPMENT FLASHING DETAIL

SCALE: NONE

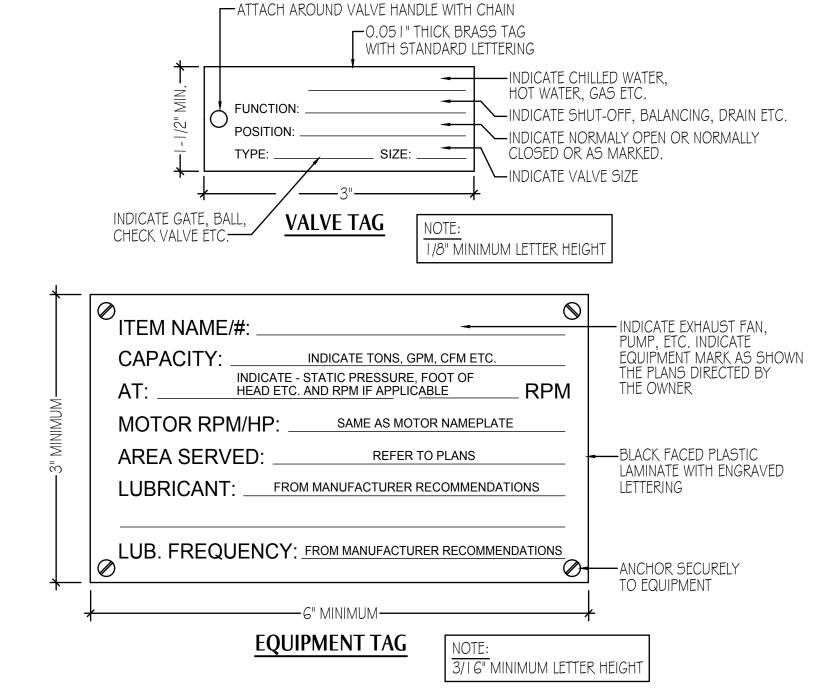




						*	TRANSVERSE	E REINFORC	CING			
								AT JC	DINTS			
DIMENSION OF	OF GAGE LONGITUDINAL			DRIVE SLIP		L H		÷	BAR SLIP	STD. SEAM	?	DCKET LOCK
SIDE, (INCHES)	(ALL FOUR SIDES)	SPACING SPACING BETWEEN TRANSVERSE JOINTS AND / OR INTERMEDIATE REINFORCING	MIN H	PLAIN 5 SLIP	HEMMED 5 SLIP	ALT. BAR SLIP	REIN- FORCED BAR SLIP	÷	ANGLE SLIP	ANGLE REINFORCED STD. SEAM		E REINFORCED CKET LOCK
		IZEINI OIZOINO		RECOM- MENDED GAGE	RECOM- MENDED GAGE	RECOM- MENDED GAGE	RECOM- MENDED GAGE	RECOM- MENDED GAGE	REINFORCED ANGLE SIZE	REINFORCED ANGLE SIZE	RECOM- MENDED GAGE	REINFORCED ANGLE SIZE
UP THRU 12	24	NONE REQUIRED	"	26	26	24	24	24	NOT REQUIRED	NOT REQUIRED	24	NOT REQUIRED
13-18	24	NONE REQUIRED	"	24	24	24	24	24	NOT REQUIRED	NOT REQUIRED	24	NOT REQUIRED
19-30	24	x x /8 @60"	"	-	24	24	24	24	NOT REQUIRED	NOT REQUIRED	24	NOT REQUIRED
31-42	22	x x /8 @60"	"	-	-	22	22	22	NOT REQUIRED	NOT REQUIRED	22	NOT REQUIRED
43-54	22	- /2 x - /2 x /8 @60"	1-1/2"	-	-	22	22	22	- /2 x - /2 x /8	NOT REQUIRED	22	NOT REQUIRED
55-60	20	- /2 x - /2 x /8 @60"	1-1/2"	-	-	-	22	22	- /2 x - /2 x /8	NOT REQUIRED	22	NOT REQUIRED
61-84	20	- /2 x - /2 x /8 @60"	1-1/2"	1	-	-	22	22		- /2 x - /2 x /8	22	1-1/2 x 1-1/2 x 1/8

* TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.









STAMP:

REVISIONS:							
Λ	-	-					

WNER:



PROJECT INFO:

WASHWATER RECLAIM PUMP STATION #2
HVAC UPGRADES
JORDAN VALLEY WATER CONSERVANCY DISTRICT
15305 SOUTH 3200 WEST
HERRIMAN, UTAH 84065

ISSUE TYPE:

CONSTRUCTION DOCUMENTS

HEATH PROJECT No: 25076

CHECKED BY: KDH

DRAWN BY: GWM

DATE: NOVEMBER 19, 2025

SHEET DESCRIPTION

MECHANICAL DETAILS

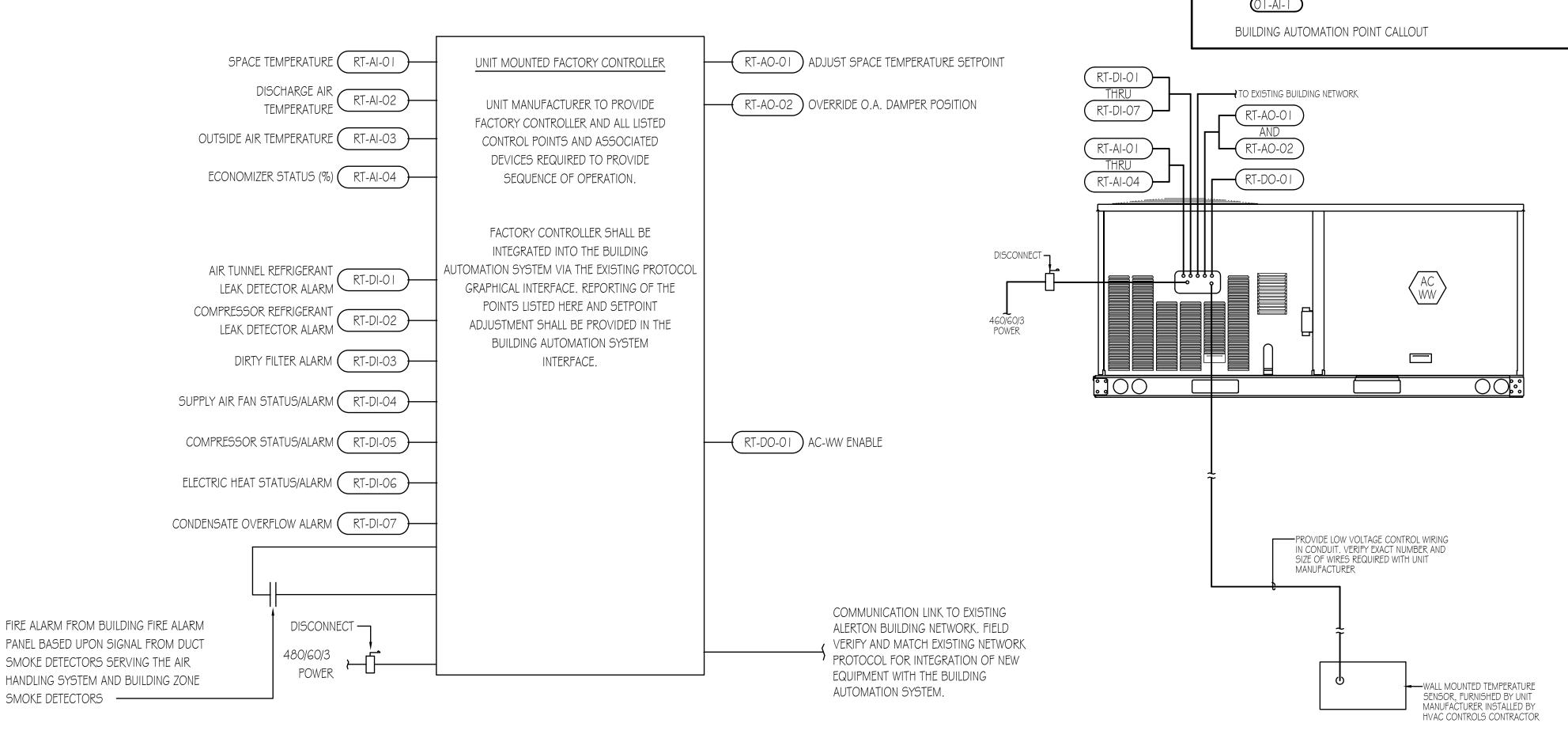
SHEET NUMBER

SMOKE DETECTORS

DRAWING NOTES

- (I) TIE NEW ROOFTOP UNIT CONTROLLER INTO THE OWNER-PROVIDED BMS COMMUNICATION LINK. INTEGRATE NEW EQUIPMENT INTO EXISTING BMS. PROVIDE NEW SUPERVISOR PARTITION AND DEDICATED GRAPHICAL PACKAGE. COORDINATE WITH OWNER IT FOR NETWORK INTEGRATION.
- (2) FACTORY-MOUNTED UNIT CONTROLLER WITH INTERFACE TO SUPERVISORY SOFTWARE. REFERENCE DIAGRAM 2/H-60 I FOR REQUIRED INTEGRATION POINTS.

EXISTING BUILDING HVAC CONTROL **SYSTEMS ONE- LINE DIAGRAM**



GENERAL NOTES FOR MECHANICAL CONTROLS

SYMBOL LEGEND

SYMBOL

AO

DO

 $\boxtimes_{}$

H.O.A.

DESCRIPTION

ANALOG INPUT

DIGITAL INPUT

DIGITAL OUTPUT

JUNCTION BOX

FLOW SWITCH

PILOT LIGHT

FLOAT SWITCH

HUMIDITY SENSOR

SOLENOID VALVE

HAND / OFF / AUTO

DUCT SMOKE DETECTOR

DIFFERENTIAL PRESSURE

CURRENT TRANSDUCER

CONDUIT WITH WIRING

LOW VOLTAGE TRANSFORMER PANE

INPUT OR OUTPUT TYPE (ANALOG/DIGITAL, INPUT/OUTPUT)

ATC PANEL NUMBER

POINT NUMBER

DM OR AD//// DAMPER ACTUATOR

FLOW CONDUCTIVITY SENSOR

PRESSURE SENSOR/SWITCH

DIFFERENTIAL FILTER GAUGE

HUMIDITY SENSOR OR STAT

3-WAY OR 2-WAY CONTROL VALVE

STARTER OR HAND-OFF-AUTO SWITCH

SENSOR

ANALOG OUTPUT

ALL ELECTRICAL INSTALLATION, BE IT POWER DISTRIBUTION OR SPECIAL SYSTEMS, IS INCLUDED IN THE SCOPE OF THE GENERAL CONTRACT. OF SPECIFIC CONCERN ARE THE CONTROL SYSTEMS RELATED TO MECHANICAL EQUIPMENT. RESPONSIBILITY FOR THE CONTROL WORK IS DIVIDED BETWEEN THE PROJECT ELECTRICIAN (DIV. 26) AND A SPECIALTY CONTROLS CONTRACTOR (DIV 23).

ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH DIVISION 26 AND TO THE FULLEST EXTENT POSSIBLE, PRODUCTS AND PRACTICES SHALL BE SIMILAR FOR ALL INSTALLATIONS.

- THE ELECTRICIAN SHALL PROVIDE ALL POWER TO ALL SYSTEMS DESIGNATED TO THE
- THE ELECTRICIAN SHALL RUN AND CONNECT ALL WIRING AND DEVICES 120 VOLTS AND ABOVE WHICH POWER MOTORS AND OTHER MECHANICAL DEVICES. WHERE CONTROL DEVICES ARE LOCATED IN POWER CIRCUIT, THE CONTROLS CONTRACTOR SHALL INTERRUPT THE CIRCUIT IN THE MECHANICAL EQUIPMENT JUNCTION BOX, WIRE THROUGH THE CONTROL DEVICE AND BACK TO THE JUNCTION BOX.
- THE CONTROLS CONTRACTOR SHALL ROUTE ALL CONDUIT FOR MECHANICAL CONTROLS, PULL WIRING REQUIRED FOR MECHANICAL CONTROLS THROUGH THE CONDUITS AND MAKE CONNECTIONS TO MECHANICAL EQUIPMENT, ATC PANELS, SENSORS, ETC, AS INDICATED ON THE PLANS ALL IN ACCORDANCE WITH DIVISION 26.
- THE CONTROLS CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR CONTROL SYSTEMS CIRCUITS.
- BREAKERS AND DISCONNECTS, AUXILIARY CONTACTS, STANDARD PILOT LIGHTS AND MAGNETIC STARTERS ARE THE RESPONSIBILITY OF DIVISION 26.
- AUXILIARY RELAYS, LOW VOLTAGE TRANSFORMERS, CONTROL PANEL SWITCHES AND DEVICES, THERMOSTATS, PRESSURE SWITCHES, ELECTRIC OPERATED VALVES, ETC. ARE THE RESPONSIBILITY OF DIVISION 23.
- ANY QUESTION OF RESPONSIBILITY SHALL BE CLARIFIED BY THE GENERAL CONTRACTOR
- 10. ALL WIRING SHALL TERMINATE AT LABELED TERMINAL STRIPS.
- APPROVED CONTROLS CONTRACTOR: ATC CONTRACTORS, CONTACT BROCK JACOBSON 801-486-9364.

HEATH Engineering Compan



REVISIONS:			
	1	-	-



PROJECT INFO:

DISTRICT STATION 15305 SOUTH 32 HERRIMAN, UTA WASHWATER RECLAIM I HVAC UPGR JORDAN VALLEY WATER COI

CONSTRUCTION DOCUMENTS

,	HEATH PROJECT No:	25076
	CHECKED BY:	KDH
	DRAWN BY:	GWM
	DATE:	NOVEMBER 19, 2025

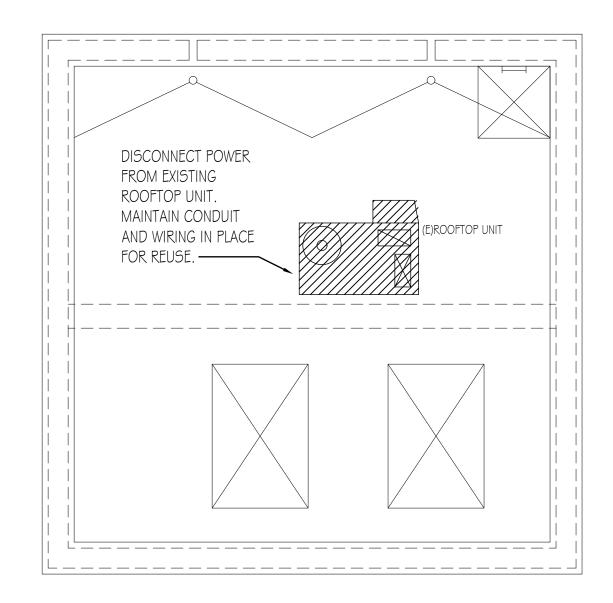
SHEET DESCRIPTION

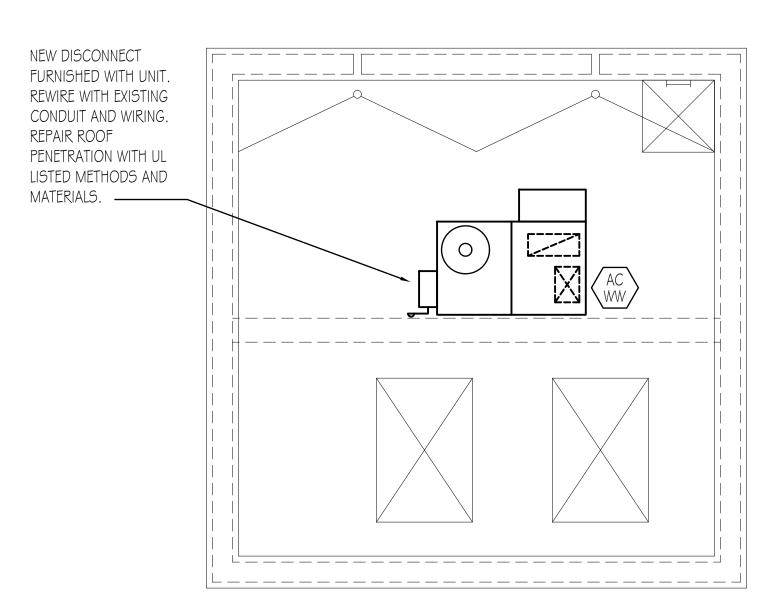
CONTROL DIAGRAMS

SHEET NUMBER

H-601

PACKAGED ROOFTOP UNIT AC-WW CONTROL DIAGRAM

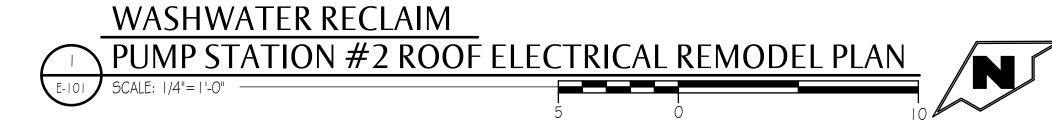




GENERAL NOTES

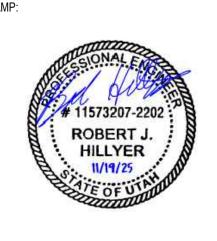
- A. FIELD VERIFY EXACT LOCATIONS OF EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC.
- B. DEMOLITION FLOOR PLANS HAVE BEEN CREATED USING AVAILABLE RECORD DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT ROUTING OF ALL PIPING, DUCTWORK, ETC. DURING CONSTRUCTION.
- C. DEMOLITION OF EXISTING CONSTRUCTION SHALL BE TO THE EXTENT REQUIRED TO ACCOMMODATE THE RENOVATION AND THE ADDITION OF NEW WORK.
- D. ALL MATERIALS TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD.
- E. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ANY DAMAGE CAUSED BY HIS / HER PERSONNEL TO EXISTING THAT IS TO REMAIN OR TO NEWLY INSTALLED BUILDING COMPONENTS.
- F. CONTRACTOR SHALL REPLACE ANY INSULATION THAT IS DAMAGED DURING CONSTRUCTION
- G. PRIOR TO DEMOLITION OF ANY EQUIPMENT WORK WITH ELECTRICAL CONTRACTOR AND CONTROLS CONTRACTOR TO MAKE CERTAIN POWER AND CONTROLS ARE PROPERLY DISCONNECTED AND TERMINATED.
- H. PATCH AND SEAL ALL ABANDONED OPENINGS IN THE WALLS AND FLOORS. MATCH EXISTING SURROUNDING FINISH.
- I. FIELD VERIFY THE CONDITION OF ALL EXISTING-TO-REMAIN EQUIPMENT, DUCTWORK, PIPING, ETC. NOTIFY THE OWNER AND ENGINEER OF ANYTHING THAT SHOULD BE REPAIRED OR REPLACED.







STAMP:



REVISIONS:					
Λ	-	-			

OWNER:



PROJECT INFO:

WASHWATER RECLAIM PUMP STATION #2
HVAC UPGRADES
JORDAN VALLEY WATER CONSERVANCY DISTRICT
15305 SOUTH 3200 WEST
HERRIMAN, UTAH 84065

ISSUE TYPE:

CONSTRUCTION DOCUMENTS

'	HEATH PROJECT No:	25076
	CHECKED BY:	RJH
	DRAWN BY:	BRB
	DATE:	NOVEMBER 19, 2025

SHEET DESCRIPTION

WASHWATER
RECLAIM PUMP #2
ELECTRICAL DEMO
& REMODEL PLAN

SHEET NUMBER

E-101