

VERNON HILL SCHOOL KITCHEN RELOCATION WORCESTER PUBLIC SCHOOLS

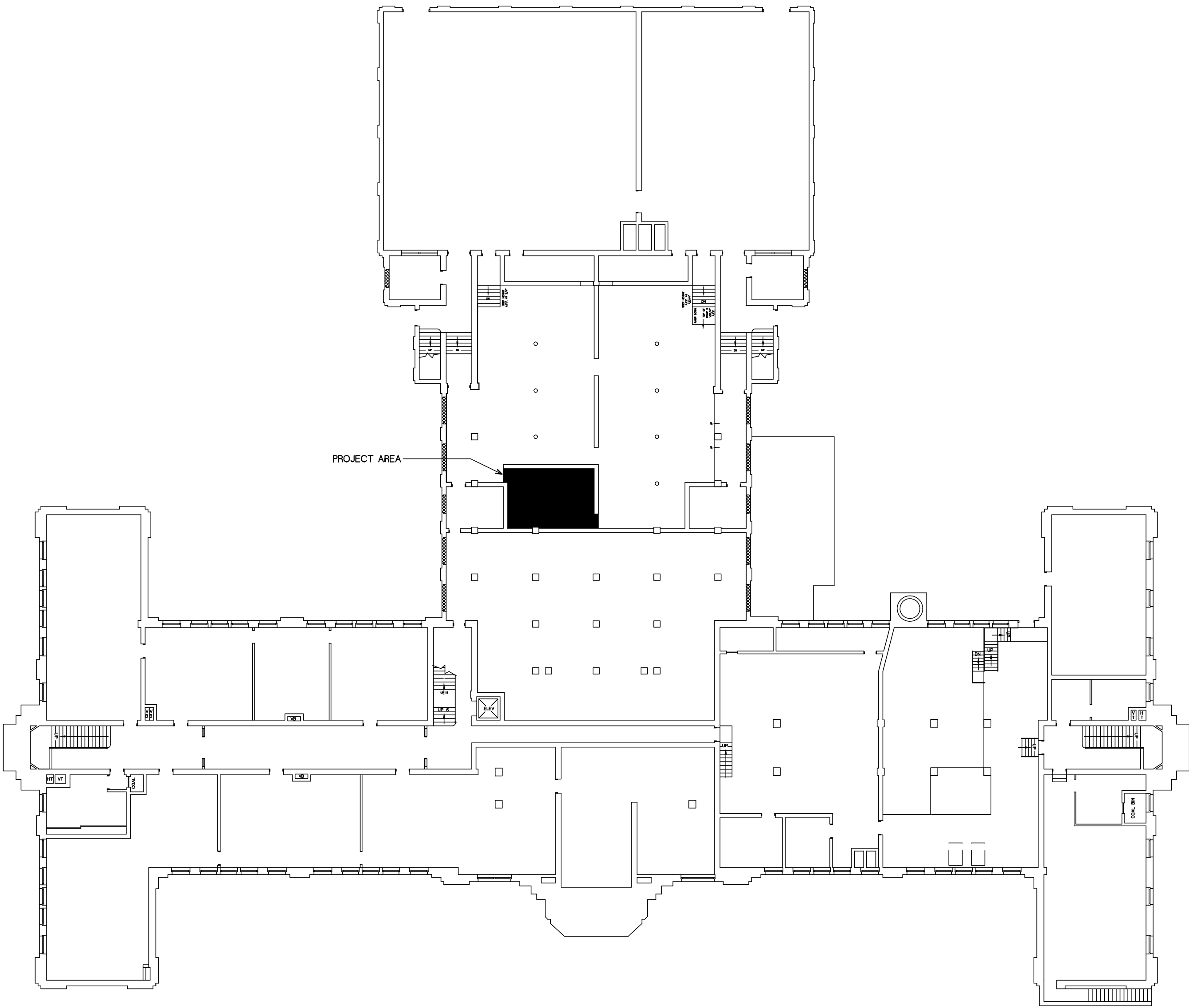
JULY 24, 2026



LOCUS PLAN
NOT TO SCALE



VERNON HILL SCHOOL



BUILDING BASEMENT PLAN
NOT TO SCALE

- LIST OF DRAWINGS:
- T1 - COVER SHEET
 - A1 - PLANS, SECTIONS & DETAILS
 - P1 - PARTIAL BASEMENT PLANS
 - DH1 - PARTIAL BASEMENT HVAC DEMOLITION PLAN
 - H1 - PARTIAL BASEMENT HVAC PLAN
 - H2 - HVAC DETAILS, NOTES & SCHEDULES

KEY PLAN

DRAWING TITLE

COVER SHEET

JOB NUMBER: 1904
JOB TITLE

VERNON HILL SCHOOL
KITCHEN RELOCATION

CONSULTANT

ARCHITECT

NAULT ARCHITECTS, INC.
71 HOPE AVENUE TEL: 508.755.6134
WORCESTER, MA 01603 ADMIN@NAULTARCHITECTS.COM

DRAWING NO.

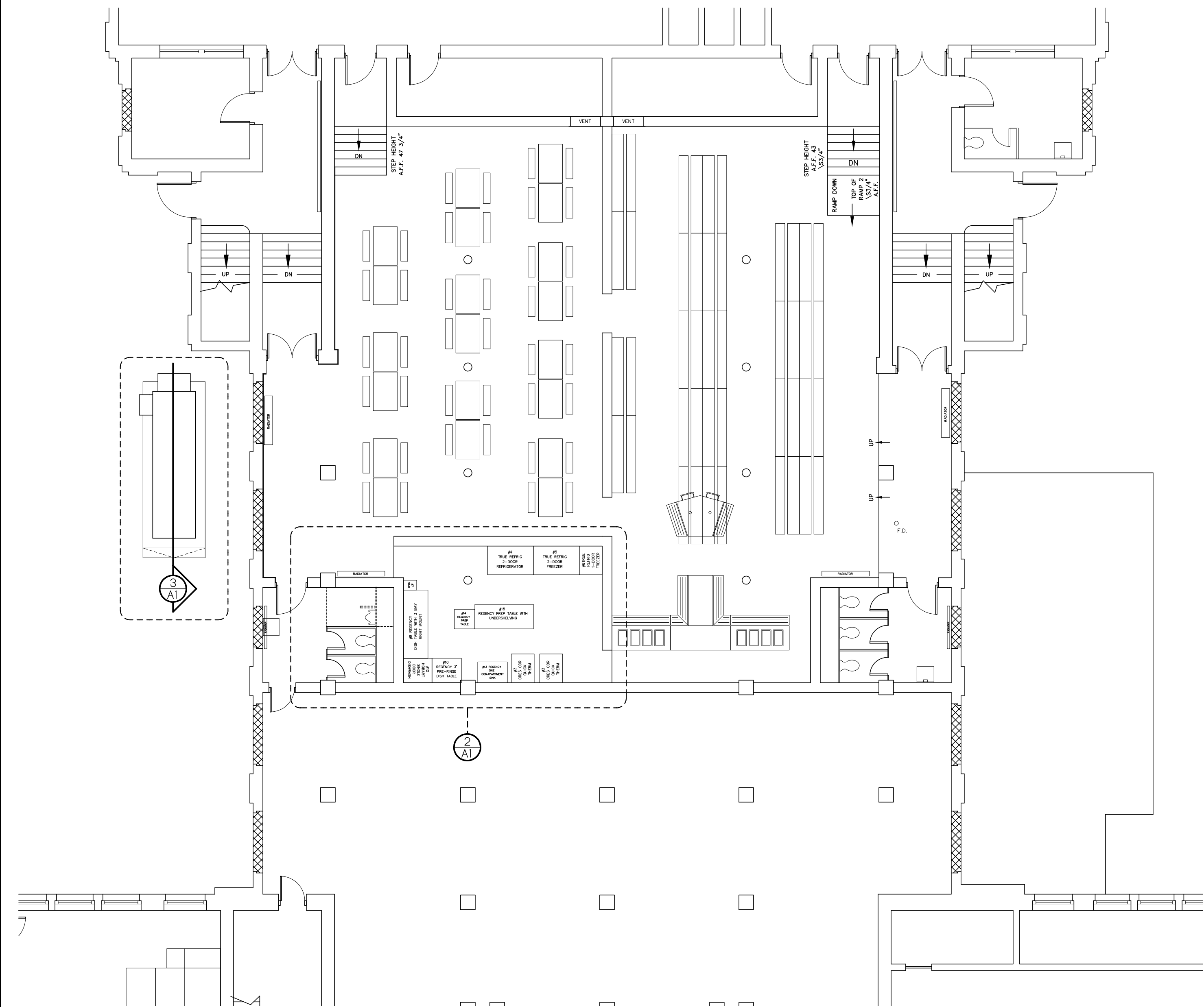
T1

SCALE
AS NOTED

DATE
JULY 24, 2026

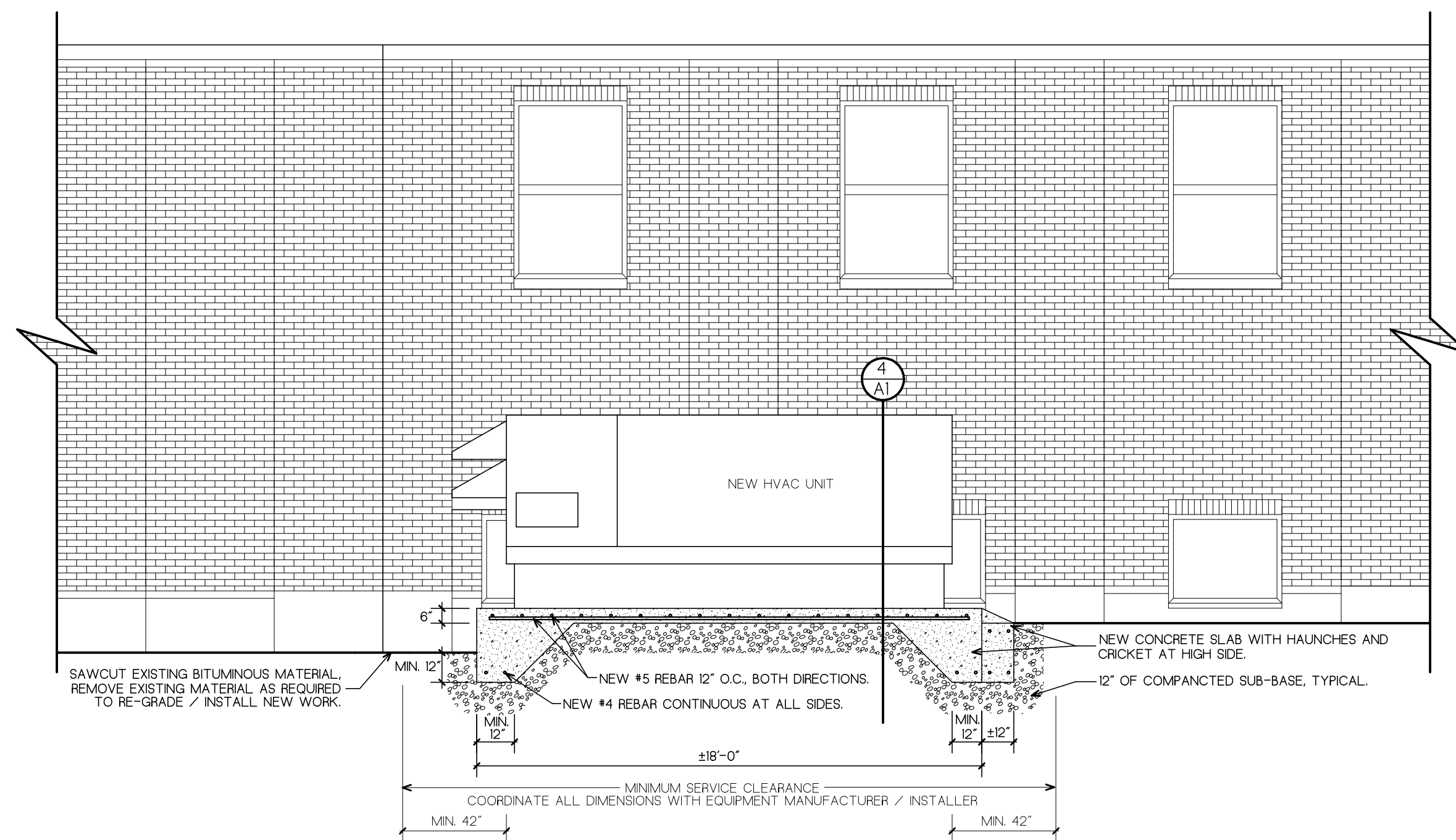
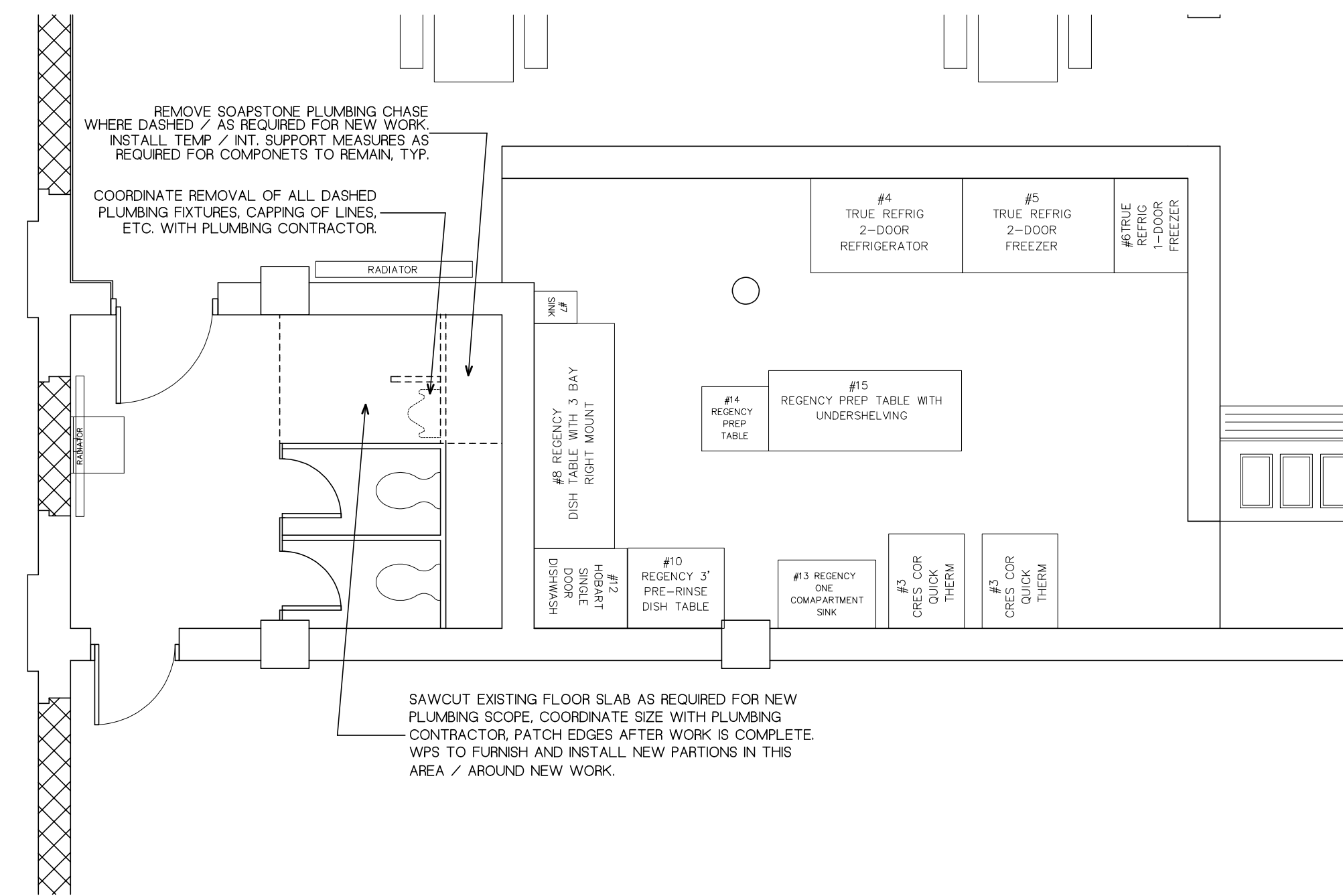
ARCHITECT:

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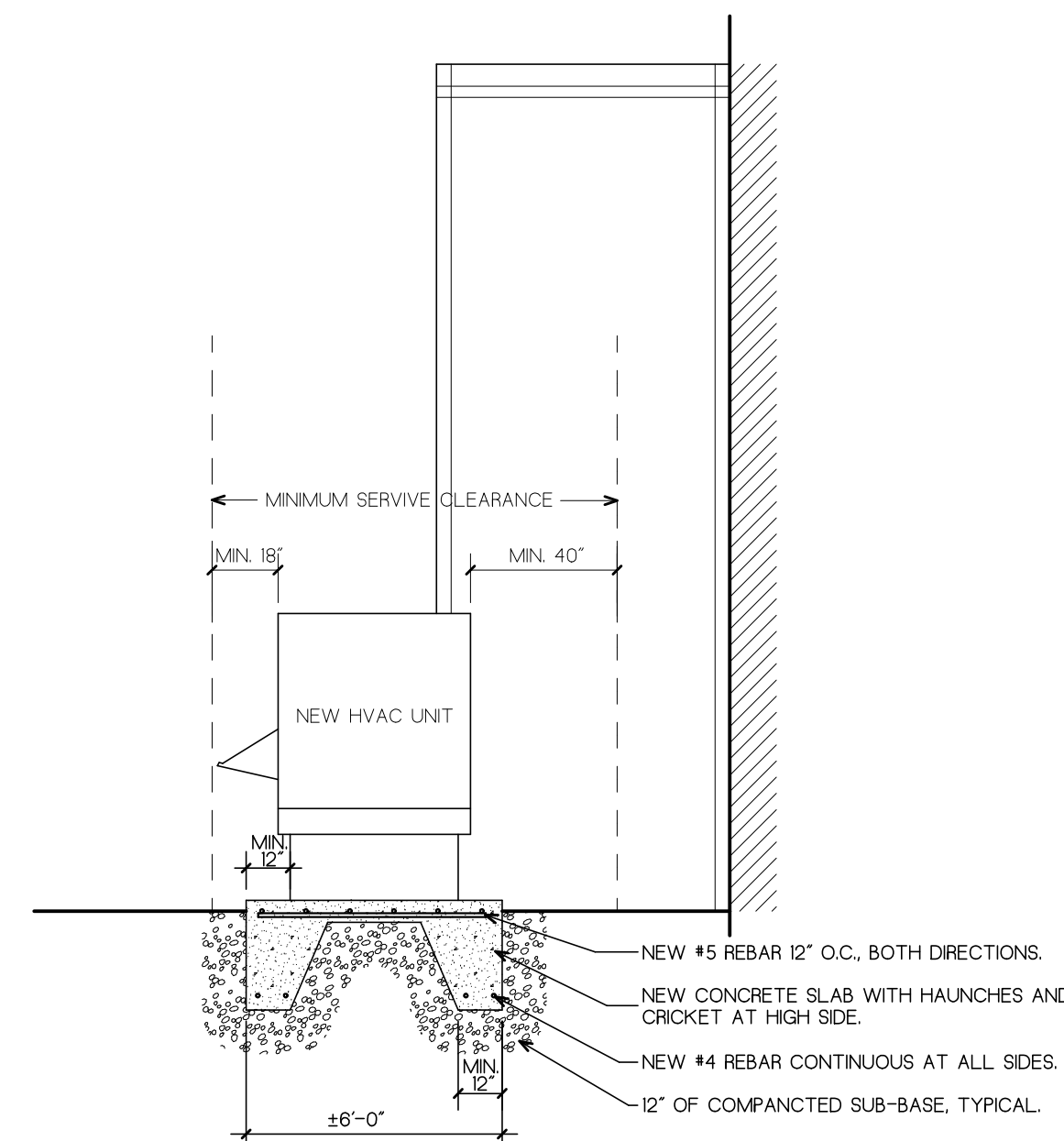


1 BASEMENT PLAN
1/8" = 1'-0"

2 PROPOSED KITCHEN PLAN
1/4" = 1'-0"



3 SECTION / ELEVATION
1/4" = 1'-0"



4 DETAIL SECTION
1/4" = 1'-0"

GENERAL NOTES:

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE OF WORK.
2. THE GENERAL CONTRACTOR SHALL COORDAINTE ALL TEMPORARY HVAC MEASURES AS REQUIRED, SEE SPECIFICATIONS FOR REQUIREMENTS.
3. WPS TO COORDINATE ALL ELECTITCAL SCOPE WITH THEIR ELECTRICAL VENDORS / IN-HOUSE STAFF. WPS TO SCHEDULED THIS SCOPE WITH THE CONTRACTORS IN THIS PROJECT.

KEY PLAN

DRAWING TITLE

PLANS, SECTIONS & DETAILS

JOB NUMBER: 1904
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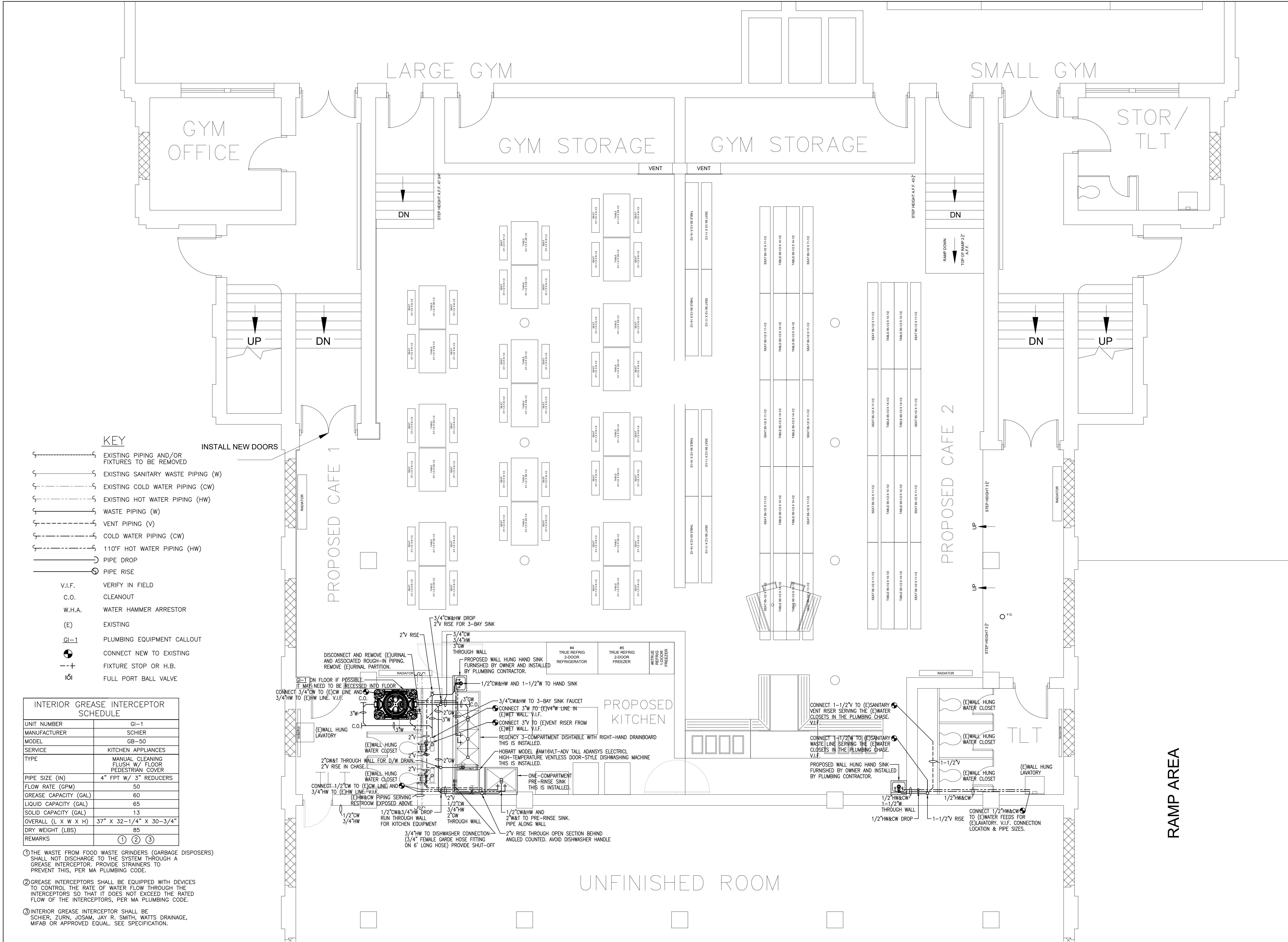
NAULT ARCHITECTS, INC.
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SCALE
AS NOTED

DATE
JUNE 24, 2026

DRAWING NO.

A1



GENERAL NOTES

KEY PLAN

DRAWING TITLE

PARTIAL BASEMENT PLUMBING PLAN

JOB NUMBER: 1904

JOB TITLE

VERNON HILL SCHOOL KITCHEN RELOCATION

CONSULTANT

SEAMAN

ENGINEERING CORPORATION

ARCHITECT

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Millsbury, MA 01527

ph:508-865-1400
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NAULT ARCHITECTS, INC.

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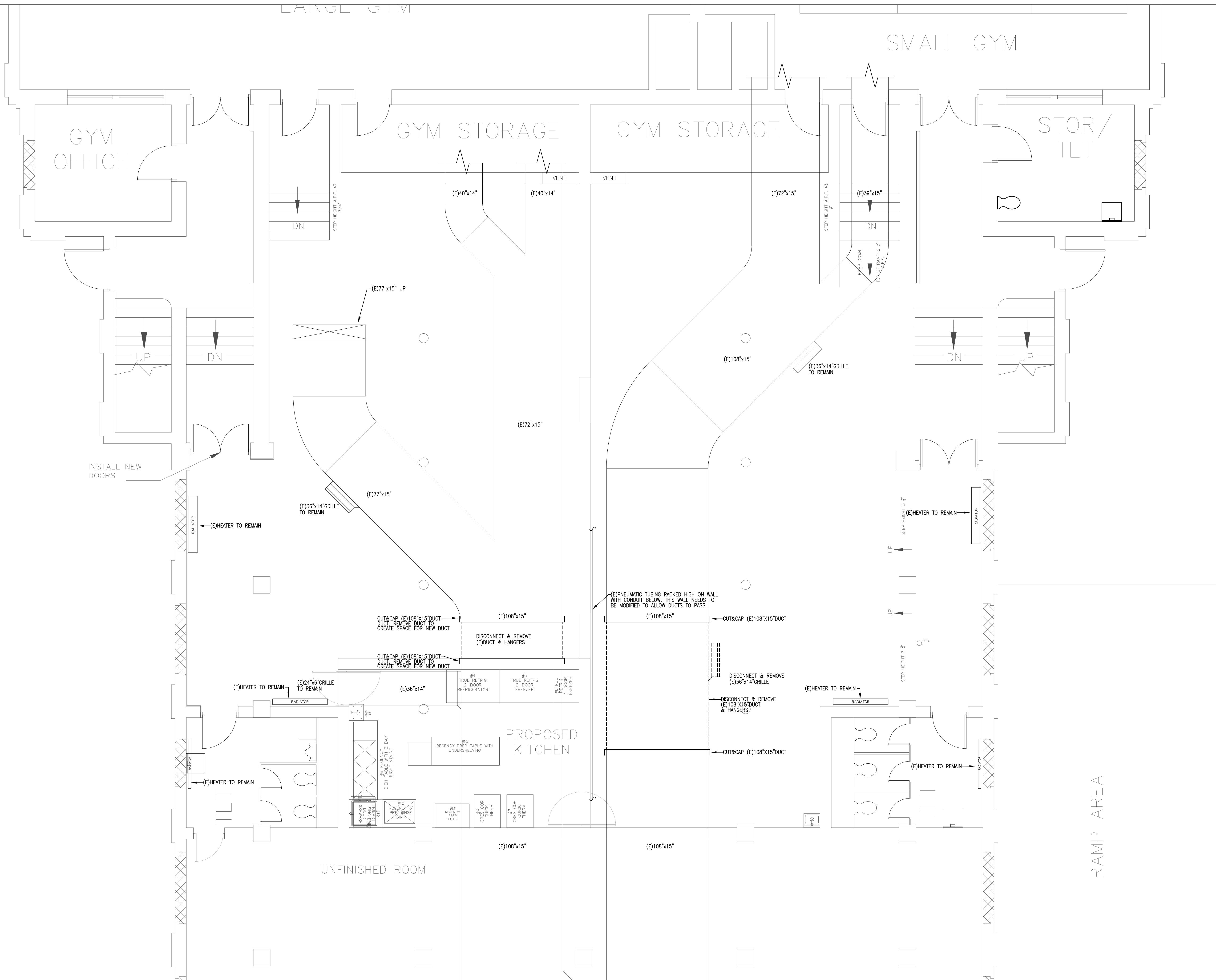
P-1

SCALE

1/4" = 1'-0"

DATE

JULY 24, 2026



PARTIAL BASEMENT HVAC PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

KEY PLAN

DRAWING TITLE

PARTIAL
BASEMENT HVAC
DEMOLITION PLAN

JOB NUMBER: 1904
JOB TITLE

VERNON HILL SCHOOL
KITCHEN RELOCATION

CONSULTANT

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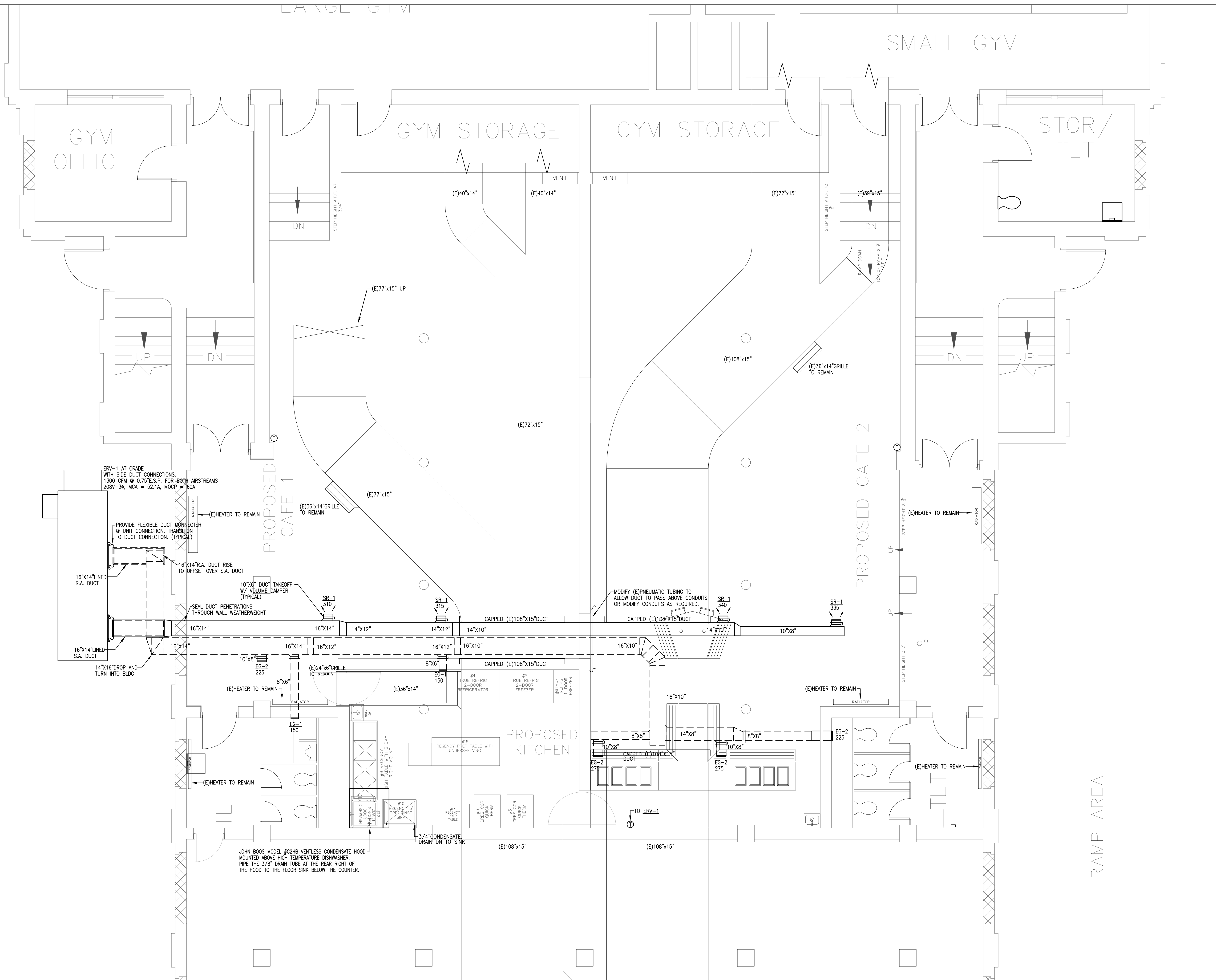
NAULT ARCHITECTS, INC.
37 HOPE AVENUE
WORCESTER, MA 01603
TEL: (508) 756-6134
FAX: (508) 754-4661

DRAWING NO.

DH-1

SCALE
1/4" = 1'-0"

DATE
JULY 24, 2026



PARTIAL BASEMENT HVAC PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

KEY PLAN

DRAWING TITLE

PARTIAL
BASEMENT HVAC PLAN

JOB NUMBER: 1904
JOB TITLE

VERNON HILL SCHOOL
KITCHEN RELOCATION

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DRAWING NO.

H-1

SCALE
1/4" = 1'-0"

DATE
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HEAT-ONLY ENERGY RECOVERY VENTILATOR SCHEDULE

FAN DATA	UNIT NUMBER	ERV-1	
	SERVICE	KITCHEN & CAFETERIA VENTILATION	
	MANUFACTURER	GREENHECK	
	MODEL #	RVE-30-300	
	EER/IEER	-/-	
	FILTERS: FACE AREA / EFFICIENCY	- / MERV13	
	MAX C.F.M., SUPPLY/EXHAUST	1,300 / 1,300	
	OUTDOOR AIR	100%	
	SUPPLY TOTAL STATIC PRESS./E.S.P. (N WG)	0.75" / 0.75"	
	EXHAUST TOTAL STATIC PRESS./E.S.P. (N WG)	1.403" / 1.574"	
ENERGY RECOVERY	SUPPLY/EXHAUST FAN RPM	1,153 / 1,261	
	SUPPLY/EXHAUST FAN BHP	0.48 / 0.6	
	SUPPLY/EXHAUST FAN HP	1.0 / 1.0	
	SUPPLY/EXHAUST FAN ENCLOSURE	ODP / ODP	
	SUPPLY/EXHAUST FAN SONES	11.1 / 8.2	
	SEASON	SUMMER	WINTER
	AMBIENT AIR TEMP. DB/WB (°F)	91.0/73.0	0.0/-1.7
	RETURN AIR TEMP. DB/WB (°F)	75.0/62.5	72.0/55.8
	WHEEL LAT DB/WB (°F)	79.0/65.6	52.4/43.7
	TOTAL EFFECTIVENESS, TOTAL/SENSIBLE (%)	72.1/74.5	72.5/73.7
HEAT	WHEEL PRESSURE DROP (IN H2O)	SUPPLY = 0.534"	EXHAUST = 0.802"
	RECOVERED CAPACITY (BTUH)	36,123.1	73,531.4
	ENTHALPY RECOVERY (%)	73.2	71.3
	SECONDARY ELECTRIC HEAT CAPACITY/T.L.A. (kW/A)	15.5 / 43.0	
	SECONDARY ENTERING/LEAVING DB (°F)	52.4/90	
	CAPACITY CONTROL	MODULATING (SCR)	
	Y-PH-HZ	208-3-60	
	MCA / F.L.A.	63.2 / 50.5	
	MOCP	70	
	STARTER	TYPE	INTEGRAL
ELECTRICAL		NEMA SIZE	INTEGRAL
		CONTROL	INTEGRAL
		AUX. CONTACTS	INTEGRAL
	ACCESSORIES	①②③④⑤⑥⑦⑧⑨	

- ① PROVIDE FOUR (4) 2" MERV-8 & MERV-13 FILTERS FOR SUPPLY AIR, (4) 1: MERV-8 FOR EXHAUST AIR. SPARE SETS OF FILTERS, IN ADDITION TO THOSE SUPPLIED IN THE UNIT
- ② PROVIDE PREMIUM EFFICIENCY O.D.P. MOTORS, PROVIDE V-F-D ON SUPPLY AND EXHAUST FAN
- ③ PROVIDE INTERNAL SPRING VIBRATION ISOLATION, DOUBLE WALL CONSTRUCTION & IAQ DRAIN PAN.
- ④ MANUFACTURER TO PROVIDE FLOW STATIONS ON OUTDOOR, RETURN AND SUPPLY AIR.
- ⑤ PROVIDE FACTORY INSTALLED BACKNET/MSTP CARD BMS INTERFACE KIT
- ⑥ PROVIDE NEMA 3R NON-FUSED DISCONNECT SWITCH.
- ⑦ CONSTRUCTION FEATURES FOR THE UNIT:
OUTDOOR: DOUBLE WALL; 2" 24# R16 FOAM INSULATION; CORROSION RESISTANT FASTENERS;
HINGED ACCESS; FACTORY WIRE NON-FUSED DISCONNECT SWITCH; DIRECT DRIVE PLENUM BLOWER & MOTOR ASSEMBLIES; FACTORY WIRE VFD'S; SHORT CIRCUIT CURRENT - 5A; POLYMER WHEEL WITH SILICA GEL DESICCANT ENERGY RECOVERY WHEEL; FULL FACTORY CONTROLS; INTERNALLY MOUNTED CONTROL CENTER; WEB-BASED USER INTERFACE; ENERGY WHEEL ROTATION SENSOR, PHASE/BROWNOUT PROTECTION, UNIT WARRANTY = 18 MONTHS; ENERGY WHEEL WARRANTY = 5 YEARS LESS MOTOR.
- ⑧ INCLUDED FEATURES FOR THE UNIT:
BMS PROTOCA - BACnet MSTP; CONSTANT VOLUME SUPPLY FAN CONTROL; CONSTANT VOLUME EXHAUST FAN CONTROL; ECONOMIZER CONTROL - TEMPERATURE; ENERGY WHEEL ECONOMIZER CONTROL; 100%OA DAMPER CONTROL (NO RECIRCULATION); LOW LEAKAGE O.A. DAMPER; ROOF CURB FOR GRADE MOUNTED UNIT; EXHAUST DISCHARGE GRAVITY BACKDRAFT DAMPER.

REGISTER AND GRILLE SCHEDULE			
KEY	SR-1	EG-1	EG-2
MANUFACTURER	PRICE	PRICE	PRICE
MODEL	5200	530	530
NECK SIZE	10"x6"	8"x6"	10"x8"
MODULE SIZE	-	-	-
BORDER	SURFACE	SURFACE	SURFACE
FINISH	SEE NOTE 2	SEE NOTE 2	SEE NOTE 2
THROW PATTERN	DBL. DEFL.	45° FIXED	45° FIXED
DAMPER	ODB	-	-
NOTES			

- ① ALTERNATE MANUFACTURERS ARE TITUS, METAL-AIRE OR KRUEGER
- ② SUBMIT COLOR CHART TO ARCHITECT FOR COLOR SELECTION.

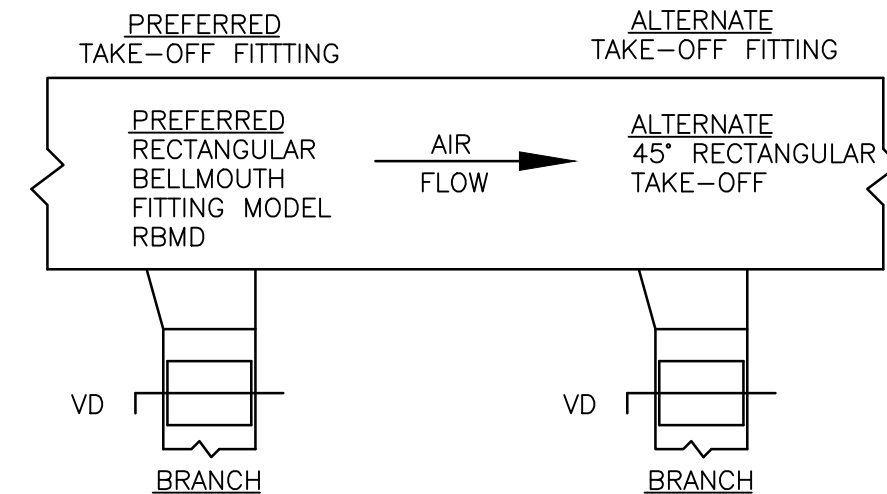
DUCT SIZE	HOLE SIZE	MINIMUM DUCT HEIGHT
6x4	7.5x5.5	7.5
10x4	11.5x5.5	7.5
16x4	17.5x5.5	7.5
24x4	25.5x5.5	7.5
6x5	7.5x6.5	8.5
10x5	11.5x6.5	8.5
16x5	17.5x6.5	8.5
24x5	25.5x6.5	8.5
6x6	7.5x7.5	9.5
10x6	11.5x7.5	9.5
16x6	17.5x7.5	9.5
24x6	25.5x7.5	9.5
8x8	9.5x9.5	11.5
16x8	17.5x9.5	11.5
24x8	25.5x9.5	11.5
10x10	11.5x11.5	13.5
16x10	17.5x11.5	13.5
24x10	25.5x11.5	13.5

NOTES:

ALL ROUND AND RECTANGULAR BELLMOUTH FITTINGS SHALL BE INCLUDED WITH THE FOLLOWING STANDARD FEATURES:

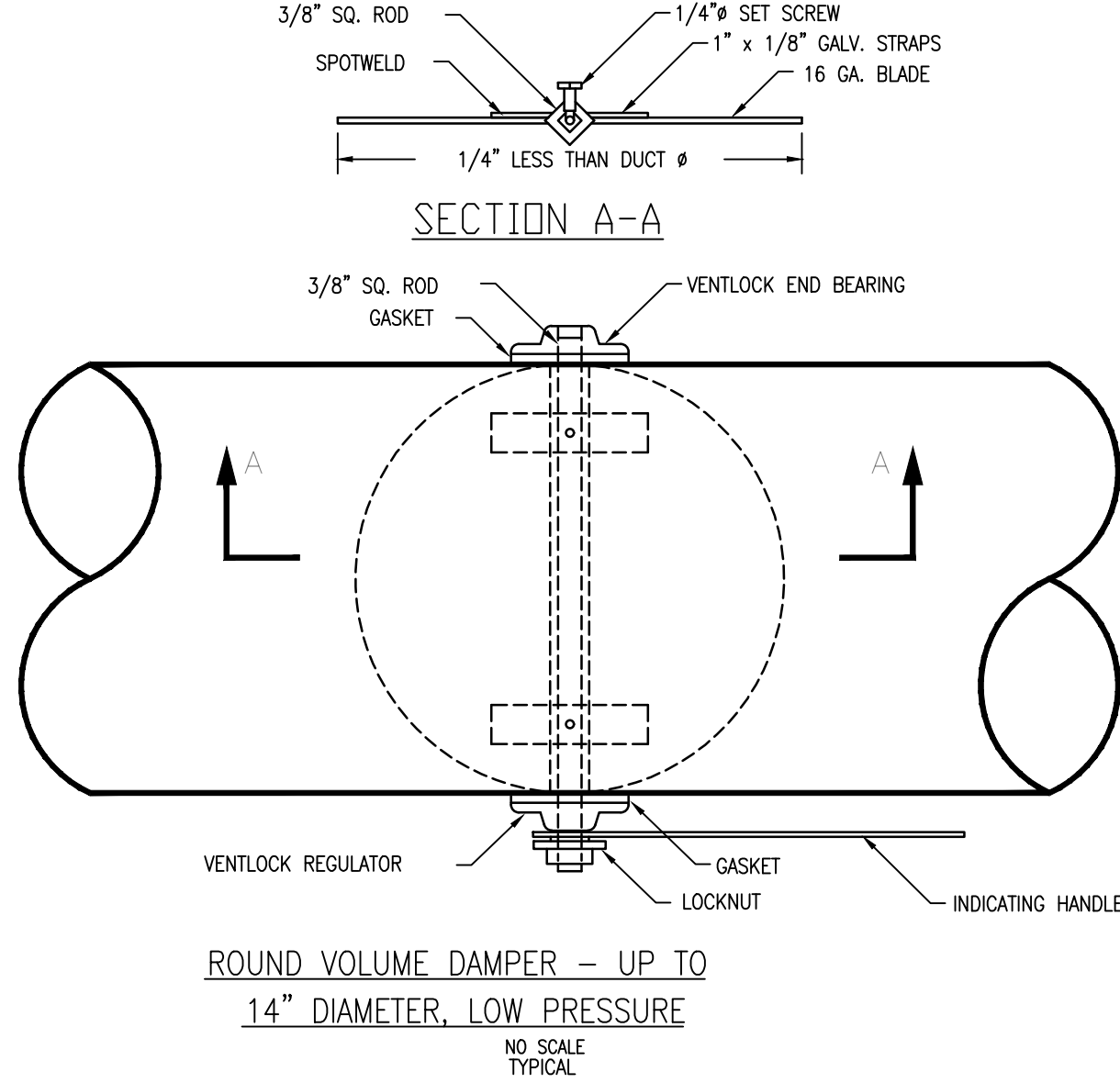
- NEOPRENE GASKET TO MINIMIZE AIR LEAKAGE.
- PRE-DRILLED HOLES FOR QUICK MOUNTING.
- CONSTRUCTED OF HEAVY DUTY GALVANIZED STEEL

- OPTIONAL FEATURES SHALL INCLUDE THE FOLLOWING:
- 26 GAUGE GALVANIZED QUADRANT VOLUME DAMPER WITH TIGHT FITTING GASKETING TO MINIMIZE LEAKAGE AT DAMPER PIVOT POINTS.
 - HEAVY DUTY HARDWARE IS AVAILABLE FOR APPLICATIONS WITH INCREASED STATIC PRESSURE.



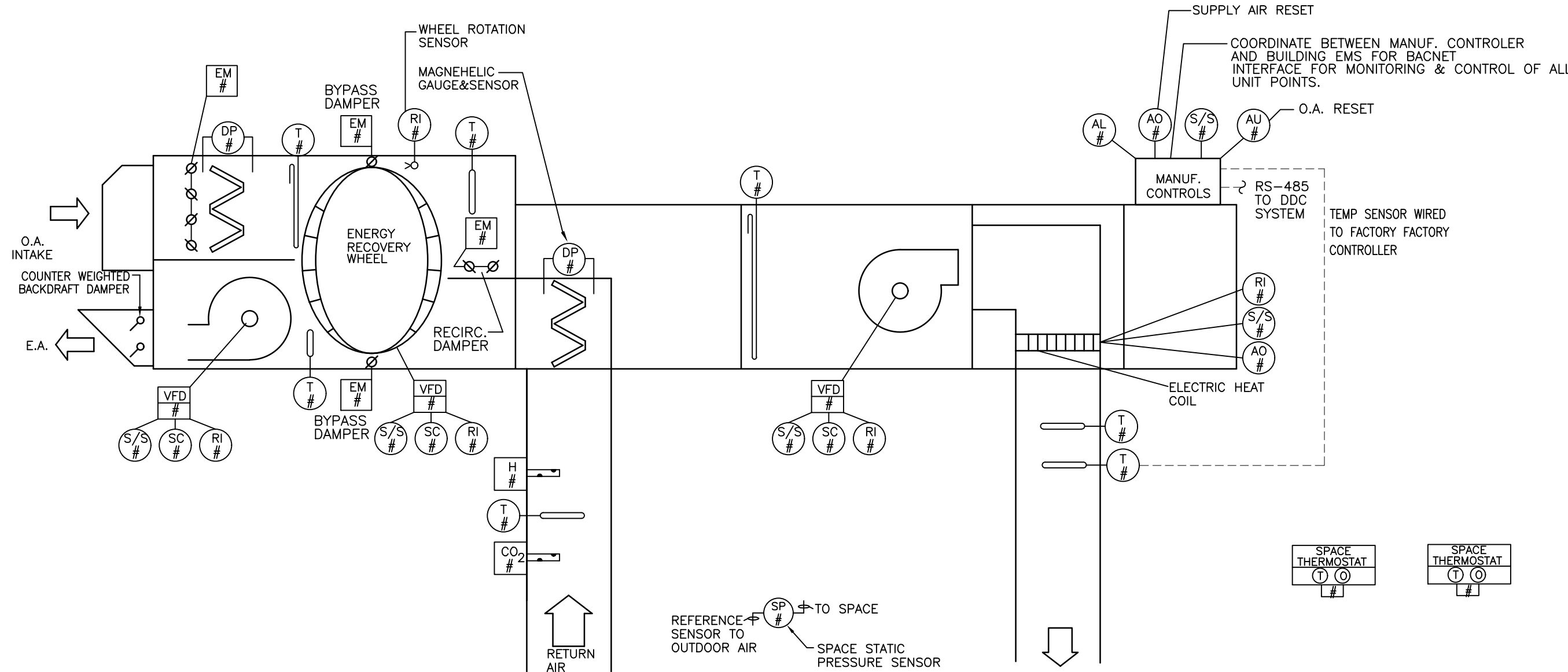
ALTERNATE RECTANGULAR BRANCH DUCT TAKE-OFF

NTS



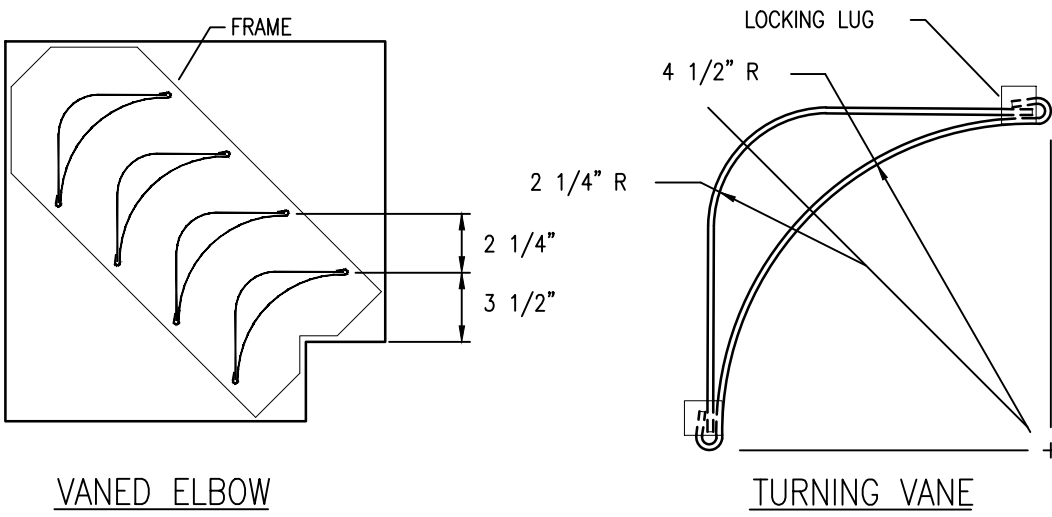
ROUND VOLUME DAMPER - UP TO 14" DIAMETER, LOW PRESSURE

NO SCALE TYPICAL



ERV-1 SYSTEM CONTROL DIAGRAM

NOT TO SCALE

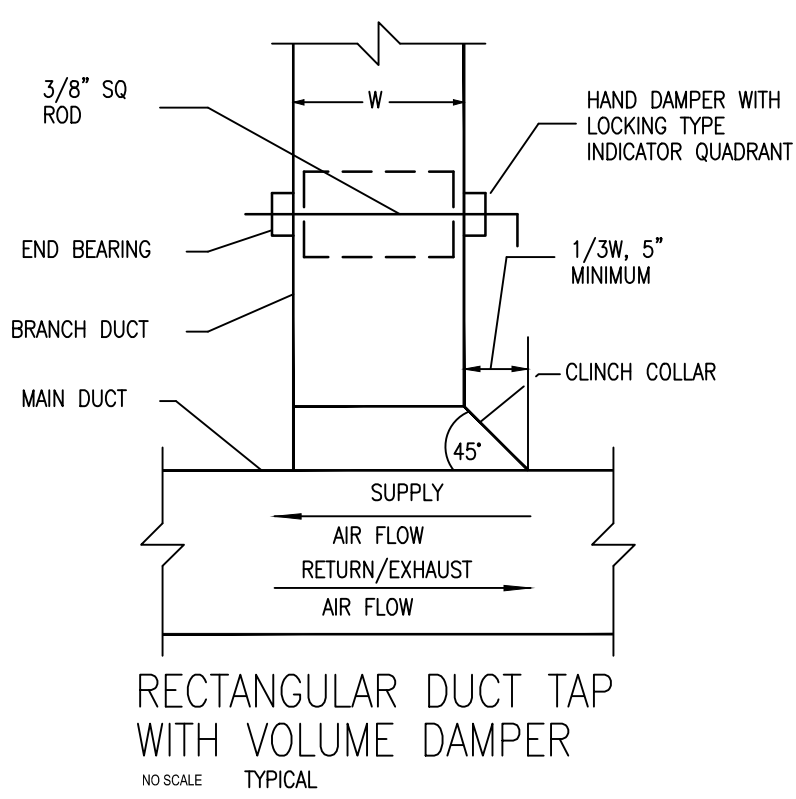


NOTES:

- LOCKING LUGS INTEGRAL WITH VANE
- MAXIMUM UNSUPPORTED VANE LENGTH 48"
- FRAMES-BOLTED OR RIVETED TO ELBOW
- VANES AND FRAMES-SAME GAUGE AS ELBOW

DOUBLE THICKNESS TURNING VANES FOR SQUARE ELBOW

NO SCALE TYPICAL



NO SCALE TYPICAL

SYMBOLS LEGEND

- DEMOLISH AND REMOVE (E)DUCTWORK
- DIRECTION OF AIRFLOW
- SUPPLY AIR DUCTWORK (S.A.)
- EXHAUST AIR DUCTWORK (E.A.)
- INTERNALLY LINED DUCTWORK
- VOLUME DAMPER
- FLEXIBLE FABRIC DUCT CONNECTOR
- SUPPLY AIR REGISTER (SR)
- EXHAUST AIR GRILLE (EG)
- EQUIPMENT CALLOUT
- PROGRAMMABLE THERMOSTAT
- SUPPLY AIR REGISTER CALLOUT AIRFLOW (CFM)

CONTROLS LEGEND

- WALL MOUNTED SPACE TEMPERATURE THERMOSTAT AND/OR OCCUPANCY OVER-RIDE BUTTON
- DIFFERENTIAL PRESSURE FLOW SENSOR (AIR) PADDLE FLOW SENSOR (WATER)
- FILTER DIFFERENTIAL PRESSURE SENSOR
- VELOCITY TRANSDUCER
- ANALOG OUTPUT FROM EMS
- CARBON DIOXIDE SENSOR
- ELECTRONIC DAMPER MOTOR ACTUATOR
- DUCT MOUNTED RELATIVE HUMIDITY SENSOR
- DUCT MOUNTED LOW TEMP. FREEZE THERMOSTAT
- DUCT MOUNTED AVERAGING TEMPERATURE SENSOR/THERMOSTAT
- ALARM
- DUCT MOUNTED TEMPERATURE SENSOR
- ENABLE/DISABLE
- RUN INDICATOR
- SPEED CONTROL
- RELAY STARTER AUTO ON-OFF
- STATIC PRESSURE SENSOR

GENERAL NOTES

KEY PLAN

DRAWING TITLE

HVAC DETAILS,
NOTES & SCHEDULES

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DRAWING NO.

H-2

SCALE
AS NOTED

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