UNION COUNTY PUBLIC SCHOOLS

307 E Jefferson St Monroe, NC 28112
Karl Todd
facilitiesbids@ucps.k12.nc.us
ucps.k12.nc.us

Purchasing and Contracts

ADDENDUM 1

BID#: 5-97648041

DUE DATE: May 15, 2025, at 10:00AM

Contractor shall fulfill all requirements listed within the bid documents, including additions and changes noted below.

Please see the attached information for addendum #1.

UH-7,6,4,3,8,9,17, AND 5 have been provided with dedicated circuits. Units will be connected to internal disconnects supplied with unit. Breaker sizes have been updated associated with dedicated circuits to units.

End of Addendum 1

EXISTING PANEL: MSB (N)

SQD MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | i-LINE TYPE
MOUNTING: SURFACE | 600 AMP | MAIN CIRCUIT BREAKER | AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
F	0.00					1	2					0.00	F
F	0.00	PANEL 93A	EX	200		3	4		150	EX	PANEL OG	0.00	F
F	0.00					5	6					0.00	F
S	0.00					7	8					0.00	S
S	0.00	HEATER ROAD	EX	100		9	10		60	EX	EXISTING	0.00	S
S	0.00					11	12					0.00	S
F	0.00					13	14					0.00	F
F	0.00	PANEL K	EX	225		15	16		100	EX	PANEL GA	0.00	F
F	0.00					17	18					0.00	F
S	0.00					19	20					***21.67***	***F***
S	0.00	HEATER COURT YARD	EX	100		21	22		***225***	***3/0***	***NEW PANEL M1A***	***21.67***	***F***
S	0.00					23	24				***(NOTE 1)***	***21.67***	***F***
S													S
S													S
S													S
S													S
S													S
S													S
S													S
S													S
S													S
	0.0	SUB-TOTALS										65.0	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	65.0	1.00	65.0	A =	21.7 KVA	180.4 A
C	COOLING	0.0	1.00	0.0	B =	21.7 KVA	180.4 A
V	VENTILATION	0.0	1.00	0.0	C =	21.7 KVA	180.4 A
M	MOTORS	0.0	1.00	0.0	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	21.7 KVA	180.4 A
R	REC. (1st 10kVA)	0.0	1.00	0.0	B =	21.7 KVA	180.4 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	21.7 KVA	180.4 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 125%		
MS	MISC.	0.0	1.00	0.0	A =	27.1 KVA	225.6 A
S	SPARE	0.0	1.00	0.0	B =	27.1 KVA	225.6 A
	TOTAL (KVA)	65.0		65.0	C =	27.1 KVA	225.6 A

NOTES:
1. PROVIDE NEW BREAKER AS SHOWN

EXISTING PANEL: 93A (N)

WESTINGHOUSE MFGR | VOLTAGE: 277 / 480 | 3 PHASE | 4 WIRE | PRL1a TYPE
MOUNTING: SURFACE | 200 AMP | MAIN LUGS ONLY | AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
F	4.54	FPE PANEL	EX	50		1	2		20	EX	HEAT PUMP	0.00	S
F	5.36		EX			3	4					0.00	S
S	0.00	REC	EX	20		5	6		20		SPARE	0.00	S
S	0.00	REC	EX	20		7	8		20		SPARE	0.00	S
S	0.00	REC	EX	20		9	10		20	EX	REC LOCKERS	0.00	S
S	0.00	LTG LOCKERS	EX	20		11	12		20	EX	REC WHIRLPOOL	0.00	S
S	0.00	LGT TOILETS	EX	20		13	14		20	EX	ICE MACHINE	0.00	S
S	0.00	LGT OFFICE	EX	20		15	16		20	EX	REC OFFICE	0.00	S
S	0.00	HOT WATER CONTROL	EX	20		17	18		20	EX	WH-1 HWRP-1	0.00	S
S	0.00	EXHAUST 13	EX	20		19	20		20	EX	DRINK MACHINE	0.00	F
S	0.00	TRAINING RM LGT	EX	20		21	22		20	EX	DRINK MACHINE	0.00	F
S	0.00	EF-118, 12	EX	20		23	24		20		SPRE	0.00	F
S	0.00	EF-13	EX	20		25	26					0.00	S
S	0.00	SPACE ONLY				27	28		15	EX	H&V-1, H&V-2, EF-14	0.00	S
S	0.00	LGT EMERGENCY	EX	20		29	30					0.00	S
S	0.00	FIRE ALARM	EX	20		31	32		20	EX	RCP-1 & 2	0.00	S
S	0.00	SPACE ONLY				33	34		20	EX	HEATER LOCKER RM	0.00	S
S	0.00	SPACE ONLY				35	36			EX		0.00	S
S	0.00	IT EQUIP	EX	20		37	38					1.66	WH
S	0.00		EX			39	40		20	EX	EWH-1	1.66	WH
S	0.00	SPACE ONLY				41	42					1.66	WH
	9.9	SUB-TOTALS										5.0	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	0.0	1.00	0.0	A =	6.2 KVA	22.4 A
C	COOLING	0.0	1.00	0.0	B =	7.0 KVA	25.3 A
V	VENTILATION	0.0	1.00	0.0	C =	1.7 KVA	6.0 A
M	MOTORS	0.0	1.00	0.0	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	6.2 KVA	22.4 A
R	REC. (1st 10kVA)	0.7	1.00	0.7	B =	7.0 KVA	25.3 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	1.7 KVA	6.0 A
WH	WATER HEATER	5.0	1.00	5.0	DEMAND @ 125%		
MS	MISC.	9.2	1.00	9.2	A =	7.8 KVA	28.0 A
S	SPARE	0.0	1.00	0.0	B =	8.8 KVA	31.7 A
	TOTAL (KVA)	14.9		14.9	C =	2.1 KVA	7.5 A

NOTES:
1. NO WORK. SHOWN FOR REFERENCE ONLY

EXISTING PANEL: SHOP2

SQD MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | NQOB TYPE
MOUNTING: SURFACE | 100 AMP | MAIN LUGS ONLY | 10,000 AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
S	0.00	PLANER	EX	20		1	2					***2.82***	F
S	0.00	REC	EX	20		3	4		30	EX	***BOILER PANEL***	***2.64***	F
S	0.00	REC	EX	20		5	6				***(NOTE 3)***	***1.66***	F
S	0.00					7	8					0.00	S
S	0.00	WALL AC UNIT	EX	20		9	10		20	EX	EXISTING	0.00	S
S	0.00					11	12					0.00	S
S	0.00					13	14		20	EX	REC	0.00	S
S	0.00	WELDER	EX	15		15	16		20	EX	REC	0.00	S
S	0.00					17	18		20	EX	REC	0.00	S
S	0.00	REC	EX	20		19	20					0.00	S
S	0.00					21	22		20	EX	BAND SAW	0.00	S
S	0.00	REC	EX	20		23	24					0.00	S
S	0.00					25	26		20	EX	REC	0.00	S
S	0.00	AIR COMPRESSOR	EX	20		27	28		30	EX	SUB FEED	0.00	S
S	0.00					29	30					0.00	S
S	0.00					31	32					0.00	S
S	0.00	LIFT STATION	EX	15	X	33	34		15	EX	SAW	0.00	S
S	0.00					35	36					0.00	S
S	0.00	REC	EX	20		37	38		20	EX	CHOP SAW	0.00	S
S	0.00	REC	EX	20		39	40					0.00	S
S	0.00	SPACE ONLY				41	42				SPACE ONLY	0.00	S
	0.0	SUB-TOTALS										7.1	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	5.0	1.00	5.0	A =	2.8 KVA	23.5 A
C	COOLING	0.0	1.00	0.0	B =	2.6 KVA	22.0 A
V	VENTILATION	0.0	1.00	0.0	C =	1.7 KVA	13.8 A
M	MOTORS	1.6	1.00	1.6	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	2.8 KVA	23.5 A
R	REC. (1st 10kVA)	0.2	1.00	0.2	B =	2.6 KVA	22.0 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	1.7 KVA	13.8 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 125%		
MS	MISC.	0.4	1.00	0.4	A =	3.5 KVA	29.4 A
S	SPARE	0.0	1.00	0.0	B =	3.3 KVA	27.5 A
	TOTAL (KVA)	7.1		7.1	C =	2.1 KVA	17.3 A

NOTES:
1. NO WORK. SHOWN FOR REFERENCE ONLY
2. ***EXISTING BREAKER TO FEED PANEL M1B.***

EXISTING PANEL: GA (N)

EATON MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | PRL1a TYPE
MOUNTING: SURFACE | 100 AMP | MAIN LUGS ONLY | AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
S	0.00	EXISTING	EX	20		1	2		20	EX	EX FANS	0.00	S
S	0.00	SPACE ONLY				3	4		20	EX	EX FANS	0.00	S
S	0.00	SPACE ONLY				5	6		20	EX	PUMP THIS ROOM	0.00	S
S	0.00	SPACE ONLY				7	8		20	EX	BATHRM REC	0.00	S
S	0.00	LGTS BOYS LOCKER	EX	20		9	10		20	EX	WATER PUMP	0.00	S
S	0.00	SPARE	EX	20		11	12		15	EX	COMPRESSOR HVAC	0.00	S
S	0.00					13	14					0.00	S
S	0.00	AUX GYM FAN	EX	20		15	16		15	EX	AIR HANDLER	0.00	S
S	0.00					17	18					0.00	S
S	0.00					19	20		20	EX	STORAGE REC	0.00	F
S	0.00	BIG GYM FAN	EX	20		21	22		20	EX		0.00	F
S	0.00					23	24		20	EX	TRAINING REC	0.00	F
S	0.00	FAN CONTROL	EX	20		25	26		20	EX	LGTS	0.00	S
S	0.00	FAN CONTROL	EX			27	28		20	EX	LGTS	0.00	S
S	0.00					29	30		20	EX		0.00	S
S	0.00	FAN CONTROL GYM	EX	20		31	32		20	EX	HEATER LOCKER RM	0.00	S
S	0.00					33	34		20	EX		0.00	S
S	0.00	EXISTING	EX	20		35	36		20	EX	SCORE BOARD	0.00	S
S	0.00	EXISTING	EX	20		37	38		20	EX		0.00	S
S	0.00		EX			39	40				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				41	42				SPACE ONLY	0.00	S
	0.0	SUB-TOTALS										0.0	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	0.0	1.00	0.0	A =	0.0 KVA	0.0 A
C	COOLING	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
V	VENTILATION	0.0	1.00	0.0	C =	0.0 KVA	0.0 A
M	MOTORS	0.0	1.00	0.0	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	0.0 KVA	0.0 A
R	REC. (1st 10kVA)	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	0.0 KVA	0.0 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 125%		
MS	MISC.	0.0	1.00	0.0	A =	0.0 KVA	0.0 A
S	SPARE	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
	TOTAL (KVA)	0.0		0.0	C =	0.0 KVA	0.0 A

NOTES:
1. NO WORK. SHOWN FOR REFERENCE ONLY

EXISTING PANEL: OG (N)

SQD MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | NF TYPE
MOUNTING: SURFACE | 100 AMP | MAIN CIRCUIT BREAKER | AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	20	EX	LOAD SERVED	LOAD KVA	LOAD TYPE
S	0.00					1	2		30	EX	GYM LIGHTS	0.00	S
S	0.00	EXISTING	EX	20		3	4					0.00	S
S	0.00					5	6		20	EX	GOALS	0.00	S
S	0.00					7	8		20	EX	UNIT HEATER?	0.00	S
S	0.00	EXISTING	EX	20		9	10		25	EX	GYM LIGHTS	0.00	S
S	0.00					11	12					0.00	S
S	0.00	OFF	EX	20		13	14		20	EX	UNIT HEATER	0.00	S
S	0.00	EXISTING	EX	20		15	16		20	EX	EXISTING	0.00	S
S	0.00	EXISTING	EX	20		17	18		20	EX	PEPSI LOBBY	0.00	S
S	0.00	CONTROLS FOR MECH CONTR	EX	20		19	20		20	EX	EXISTING	0.00	F
S	0.00	BLEACHER LGTS	EX	20		21	22		20	EX	EXISTING	0.00	F
S	0.00	EM BLEACHER LGTS (OFF)	EX	20		23	24		20	EX	EXISTING	0.00	F
S	0.00	UNIT HEATER EXHAUST FAN	EX	20		25	26		20	EX	CONCESSION REC	0.00	S
S	0.00	REC, WATER HEATER	EX	20		27	28		20	EX	UNIT HEATER	0.00	S
S	0.00	HEATER	EX	20		29	30		20	EX	EXTERIOR LIGHTS	0.00	S
S	0.00	COOR LGTS	EX	20		31	32		20	EX	EXISTING	0.00	S
S	0.00	LOBBY LGTS	EX	20		33	34		20	EX	EXISTING	0.00	S
S	0.00	EXTERIOR LGT	EX	20		35	36		20	EX	EXISTING	0.00	S
S	0.00	HEAT #3	EX	20		37	38		20	EX	EXISTING	0.00	S
S	0.00	SMALL SCOREBOARD	EX	20		39	40		20	EX	EXISTING	0.00	S
S	0.00	BLEACHERS GOALS	EX	20		41	42		20	EX	HEATER 1& 2	0.00	S
	0.0	SUB-TOTALS										0.0	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	0.0	1.00	0.0	A =	0.0 KVA	0.0 A
C	COOLING	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
V	VENTILATION	0.0	1.00	0.0	C =	0.0 KVA	0.0 A
M	MOTORS	0.0	1.00	0.0	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	0.0 KVA	0.0 A
R	REC. (1st 10kVA)	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	0.0 KVA	0.0 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 125%		
MS	MISC.	0.0	1.00	0.0	A =	0.0 KVA	0.0 A
S	SPARE	0.0	1.00	0.0	B =	0.0 KVA	0.0 A
	TOTAL (KVA)	0.0		0.0	C =	0.0 KVA	0.0 A

NOTES:
1. NO WORK. SHOWN FOR REFERENCE ONLY

NEW PANEL: M1B

MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | TYPE
MOUNTING: SURFACE | 30 AMP | MAIN LUGS ONLY | 10,000 AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
MS	0.36	REC(NOTE 7)	12	20		1	2		15	12	AIR COMPRESSOR(NOTE 7)	0.80	M
R	0.18	REC(NOTE 7)	12	20		3	4			12		0.80	M
R	0.00	SPARE		20		5	6			12		1.66	H
R	0.00	SPARE		20		7	8		20	12	UH-12	1.66	H
S	0.00	SPARE		20		9	10			12		1.66	H
S	0.00	SPACE ONLY				11	12				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				13	14				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				15	16				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				17	18				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				19	20				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				21	22				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				23	24				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				25	26				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				27	28				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				29	30				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				31	32				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				33	34				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				35	36				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				37	38				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				39	40				SPACE ONLY	0.00	S
S	0.00	SPACE ONLY				41	42				SPACE ONLY	0.00	S
	0.5	SUB-TOTALS										6.6	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	5.0	1.00	5.0	A =	2.8 KVA	23.5 A
C	COOLING	0.0	1.00	0.0	B =	2.6 KVA	22.0 A
V	VENTILATION	0.0	1.00	0.0	C =	1.7 KVA	13.8 A
M	MOTORS	1.6	1.00	1.6	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	2.8 KVA	23.5 A
R	REC. (1st 10kVA)	0.2	1.00	0.2	B =	2.6 KVA	22.0 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	1.7 KVA	13.8 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 125%		
MS	MISC.	0.4	1.00	0.4	A =	3.5 KVA	29.4 A
S	SPARE	0.0	1.00	0.0	B =	3.3 KVA	27.5 A
	TOTAL (KVA)	7.1		7.1	C =	2.1 KVA	17.3 A

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. EXISTING CIRCUIT RELOCATED FROM BOILER PANEL.

NEW PANEL: M1A

MFGR | VOLTAGE: 120 / 208 | 3 PHASE | 4 WIRE | TYPE
MOUNTING: SURFACE | 225 AMP | MAIN LUGS ONLY | 22,000 AIC

LOAD TYPE	LOAD KVA	LOAD SERVED	WIRE	TRIP	FRAME (Note 1)	CKT NO	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA	LOAD TYPE
H	1.33		12			1	2			10		2.50	H
H	1.33	UH-19, UH-20	12	15		3	4		30	10	UH-11	2.50	H
H	1.33		12			5	6			10		2.50	H
H	2.70		10			7	8			12		1.60	H
H	2.70	UH-16, UH-18	10	30		9	10		20	12	UH-3	1.60	H
H	2.70		10			11	12			12		1.60	H
H	3.64		8			13	14			12		1.30	H
H	3.64	UH-15, UH-14, UH-13, UH-10	8	40		15	16		15	12	UH-1, UH-2,	1.30	H
H	3.64		8			17	18			12		1.30	H
H	1.10		12			19	20			12		1.10	H
H	1.10	UH-9	12	15		21	22		15	12	UH-4	1.10	H
H	1.10		12			23	24			12		1.10	H
H	1.60		12			25	26			12		1.00	H
H	1.60	UH-17	12	20		27	28		15	12	UH-5	1.00	H
H	1.60		12			29	30			12		1.00	H
H	1.60		12			31	32			12		1.10	H
H	1.60	UH-8	12	20		33	34		15	12	UH-6	1.10	H
H	1.60		12			35	36			12		1.10	H
S	0.00	SPACE ONLY				37	38			12		1.10	H
S	0.00	SPACE ONLY				39	40		15	12	UH-7	1.10	H
S	0.00	SPACE ONLY				41	42			12		1.10	H
	35.9	SUB-TOTALS										29.1	

	LOAD (KVA)	Conn.	D.F.	Dmd	TOTAL LOAD PER PHASE:		
L	LIGHTS	0.0	1.25	0.0	CONNECTED		
H	HEATING	65.0	1.00	65.0	A =	21.7 KVA	180.4 A
C	COOLING	0.0	1.00	0.0	B =	21.7 KVA	180.4 A
V	VENTILATION	0.0	1.00	0.0	C =	21.7 KVA	180.4 A
M	MOTORS	0.0	1.00	0.0	DEMAND		
K	KITCHEN	0.0	0.65	0.0	A =	21.7 KVA	180.4 A
R	REC. (1st 10kVA)	0.0	1.00	0.0	B =	21.7 KVA	180.4 A
R	REC. (>10kVA)	0.0	0.50	0.0	C =	21.7 KVA	180.4 A
WH	WATER HEATER	0.0	1.00	0.0	DEMAND @ 100%		
MS	MISC.	0.0	1.00	0.0	A =	21.7 KVA	180.4 A
S	SPARE	0.0	1.00	0.0	B =	21.7 KVA	180.4 A
	TOTAL (KVA)	65.0		65.0	C =	21.7 KVA	180.4 A

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.

1

Mechanical • Electrical • Plumbing
Fire Protection • Techology Design

optima engineering

1927 S. Tryon St., Suite 300, Charlotte NC 28203
150 Fayetteville St., Suite 520, Raleigh, NC 27601
Phone: 704-338-1292 www.optimaengineering.com
North Carolina License Number C-0914

SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23434 BRIAN E. THOMPSON
5-08-25

sun valley high school and middle school hvac renovations

high school
5211 old charlotte hwy
monroe, nc 28110

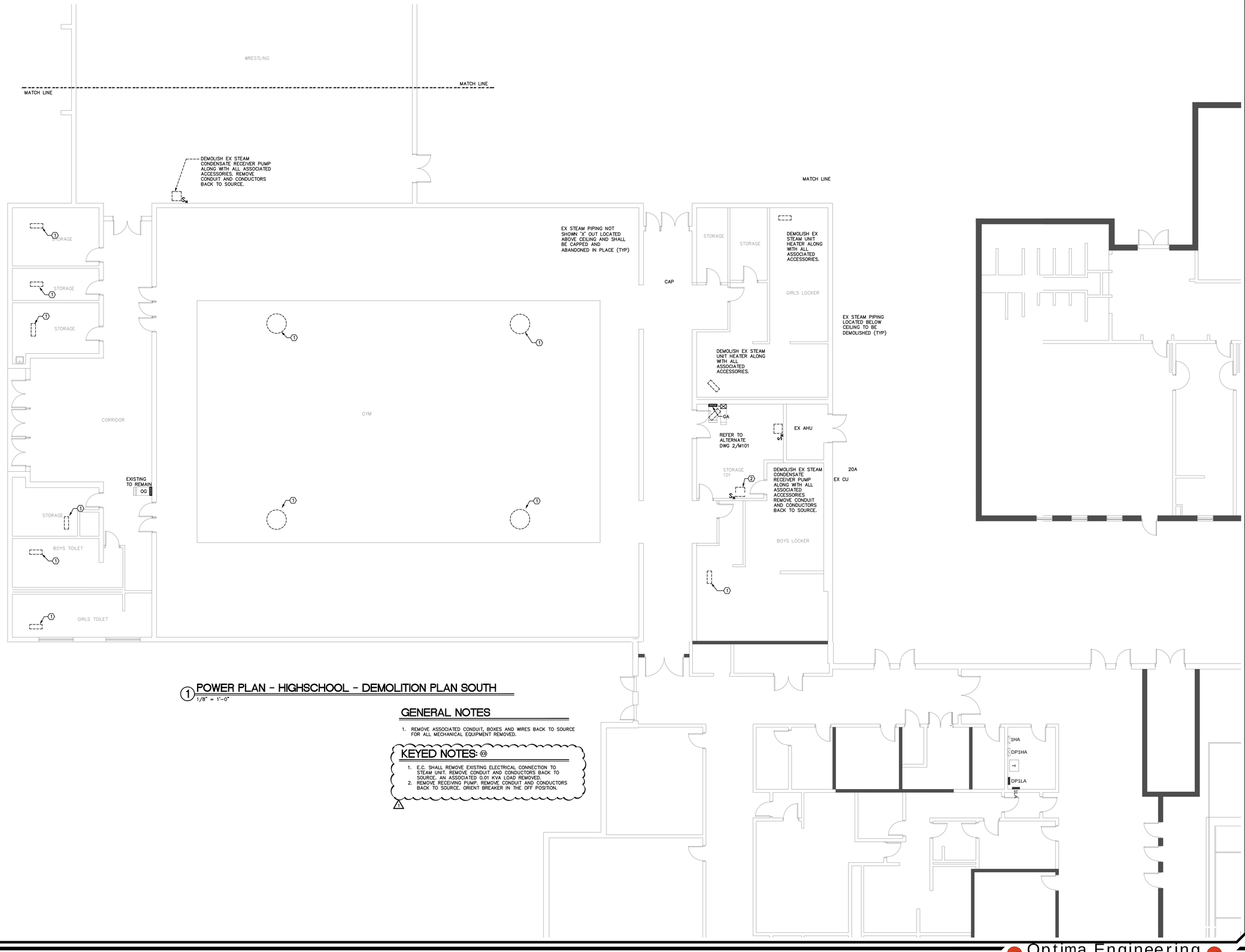
middle school
1409 wesley chapel rd
indian trail, nc 28079

REV #	DATE	DESCRIPTION
1	5/8/2025	ADDENDUM #1

DATE: 02-25-2025
PROJECT #: 24-0219
DRAWN BY: wd
DESIGNED BY: wd
CHECKED BY: mam

SHEET TITLE:
HIGH SCHOOL PANEL SCHEDULES

DWG #: E004
SHEET NO: 4 of 8



1 POWER PLAN - HIGHSCHOOL - DEMOLITION PLAN SOUTH

1/8" = 1'-0"

GENERAL NOTES

1. REMOVE ASSOCIATED CONDUIT, BOXES AND WIRES BACK TO SOURCE FOR ALL MECHANICAL EQUIPMENT REMOVED.

KEYED NOTES:

1. E.C. SHALL REMOVE EXISTING ELECTRICAL CONNECTION TO STEAM UNIT. REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE. AN ASSOCIATED 0.01 KVA LOAD REMOVED.
2. REMOVE RECEIVING PUMP. REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE. ORIENT BREAKER IN THE OFF POSITION.

Mechanical • Electrical • Plumbing
Fire Protection • Techology Design

1927 S. Tryon St., Suite 300, Charlotte NC 28203
150 Fayetteville St., Suite 520, Raleigh, NC 27601
Phone: (704) 716-1313 www.optimaeng.com
North Carolina License Number C-0914

optima engineering

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 043147 ENGINEER BRIAN E. THOMPSON
5-08-25

sun valley high school and middle school hvac renovations

high school
5211 old charlotte hwy
monroe, nc 28110

middle school
1409 wesley chapel rd
indian trail, nc 28079

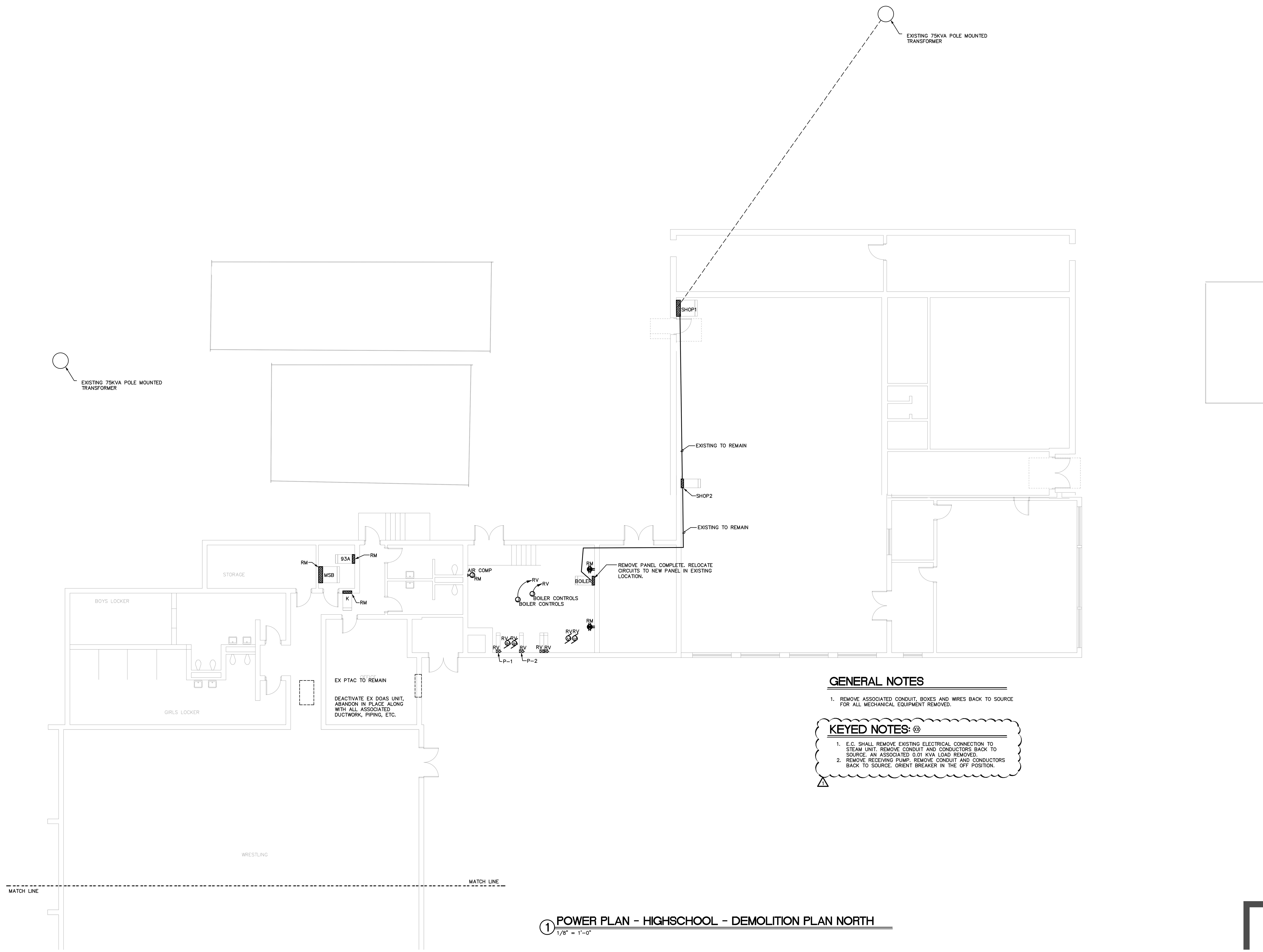
REV #	DATE	DESCRIPTION
1	5/8/2025	ADDENDUM #1

DATE: 02-25-2025
PROJECT #: 24-0219
DRAWN BY: WD
DESIGNED BY: WD
CHECKED BY: MAM

SHEET TITLE:
HIGH SCHOOL ELECTRICAL WORK - DEMOLITION PLAN SOUTH

DWG #:
E202

SHEET NO: 6 of 8



GENERAL NOTES

1. REMOVE ASSOCIATED CONDUIT, BOXES AND WIRES BACK TO SOURCE FOR ALL MECHANICAL EQUIPMENT REMOVED.

KEYED NOTES: (XX)

1. E.C. SHALL REMOVE EXISTING ELECTRICAL CONNECTION TO STEAM UNIT. REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE. AN ASSOCIATED 0.01 KVA LOAD REMOVED.
2. REMOVE RECEIVING PUMP. REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE. ORIENT BREAKER IN THE OFF POSITION.

(1)

(1) POWER PLAN - HIGHSCHOOL - DEMOLITION PLAN NORTH

1/8" = 1'-0"

optima engineering
Mechanical · Electrical · Plumbing
Fire Protection · Techology Design
1927 S. Tryon St., Suite 300, Charlotte NC 28203
150 Fayetteville St., Suite 520, Raleigh, NC 27601
Phone: 704-338-1292 www.optimaengineering.com
North Carolina License Number C-0914

SEAL:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL BRIAN E. THOMPSON

5-08-25

sun valley high school and middle school hvac renovations

high school
5211 old charlotte hwy
monroe, nc 28110

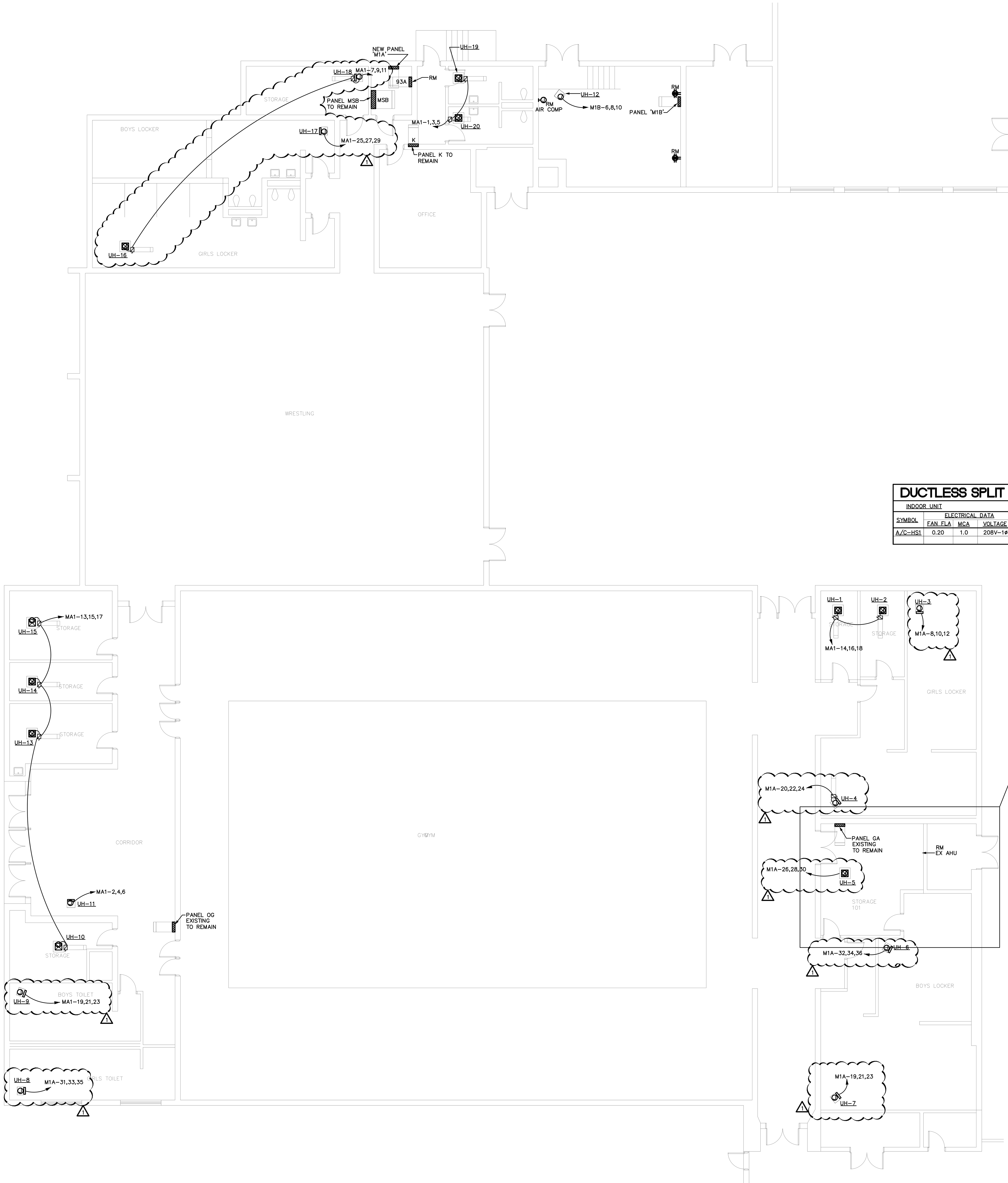
middle school
1409 wesley chapel rd
indian trail, nc 28079

REV #	DATE	DESCRIPTION
1	5/8/2025	ADDENDUM #1

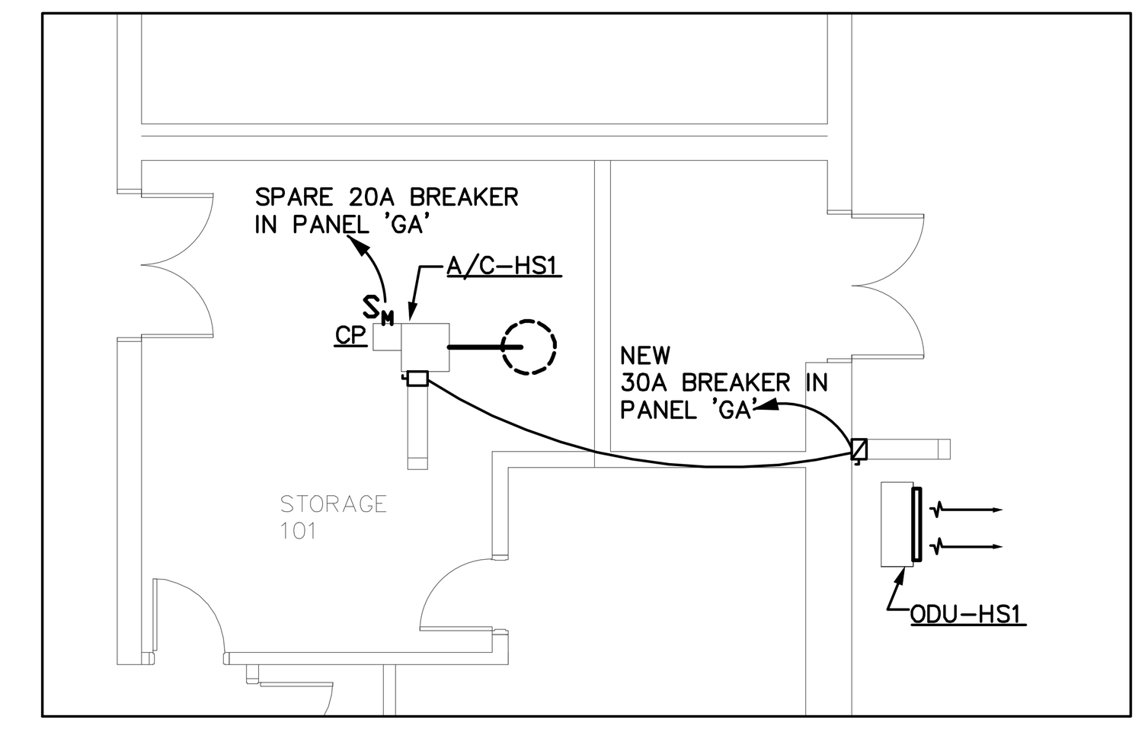
DATE:	02-25-2025
PROJECT #:	24-0219
DRAWN BY:	WD
DESIGNED BY:	WD
CHECKED BY:	MAM

SHEET TITLE:
HIGH SCHOOL ELECTRICAL WORK - DEMOLITION PLAN NORTH

DWG #: E203



① POWER PLAN - HIGHSCHOOL - NEW WORK
1/8" = 1'-0"



② FLOOR PLAN -
1/8" = 1'-0"

DUCTLESS SPLIT SYSTEMS (DX COOLING AND HEATING) - ALTERNATE #HS1

INDOOR UNIT						OUTDOOR UNIT									
SYMBOL	ELECTRICAL DATA					SYMBOL	COMPRESSOR		FAN	ELECTRICAL DATA					
	FAN FLA	MCA	VOLTAGE	WIRING	DISCONNECT		LRA	RLA	FLA	MCA	FUSE	VOLTAGE	WIRING	DISCONNECT
A/C-HS1	0.20	1.0	208V-1ø	3#14,3/4"C.	30/3P-NF	ODU-HS1	12	7	0.50	11	28	208V-1ø	3#12,1#12G.,3/4"C.	30/3P-3R-FPN

CONDENSATE PUMP SCHEDULE ALTERNATIVE #HS1

CONDENSATE PUMP (CP) LITTLE GIANT (LOW PROFILE) VCC-20ULS
45 GPH @ 10' HEAD; 2 QUART TANK; MOTOR – 1/30 H.P., 120V-1ø;
FURNISH WITH: BUILT-IN CHECK VALVE.

ELEC HEATER SCHEDULE

		CIRCUIT	DISCONNECT	WIRE
(T-BAR CEILING MOUNTED)				
UH-1	2.0 KW; 208V-3ø	MA1-14,16,18	30/3P-F15	3#10,1#10G.,1"C.
UH-2	2.0 KW; 208V-3ø	MA1-14,16,18	30/3P-F15	3#10,1#10G.,1"C.
UH-5	3.0 KW; 208V-3ø	MA1-26,28,30	INTERNAL DISC.	3#12,1#12G.,3/4"C.
UH-10	3.0 KW; 208V-3ø	MA1-13,15,17	30/3P-F15	3#8,1#10G.,1"C.
UH-13	3.0 KW; 208V-3ø	MA1-13,15,17	30/3P-F15	3#8,1#10G.,1"C.
UH-14	2.0 KW; 208V-3ø	MA1-13,15,17	30/3P-F15	3#8,1#10G.,1"C.
UH-15	3.0 KW; 208V-3ø	MA1-13,15,17	30/3P-F15	3#8,1#10G.,1"C.
UH-16	5.0 KW; 208V-3ø	MA1-7,9,11	30/3P-F15	3#10,1#10G.,1"C.
UH-19	2.0 KW; 208V-3ø	MA1-1,3,5	30/3P-F15	3#12,1#12G.,3/4"C.
UH-20	2.0 KW; 208V-3ø	MA1-1,3,5	30/3P-F15	3#12,1#12G.,3/4"C.
(HORIZONTAL CEILING SUSPENDED)				
UH-3	5.0 KW; 208V-3ø	MA1-8,10,12	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-4	3.3 KW; 208V-3ø	MA1-20,22,24	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-6	3.3 KW; 208V-3ø	MA1-32,34,36	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-7	3.3 KW; 208V-3ø	MA1-19,21,23	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-8	5.0 KW; 208V-3ø	MA1-31,33,35	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-9	3.3 KW; 208V-3ø	MA1-19,21,23	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-11	7.5 KW; 208V-3ø	MA1-2,4,6	INTERNAL DISC	3#10,1#10G.,1"C.
UH-12	5.0 KW; 208V-3ø	MB1-6,8,10	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-17	5.0 KW; 208V-3ø	MA1-25,27,29	INTERNAL DISC	3#12,1#12G.,3/4"C.
UH-18	3.3 KW; 208V-3ø	MA1-7,9,11	30/3P-F15	3#10,1#10G.,1"C.

Mechanical · Electrical · Plumbing
Fire Protection · Techology Design
1927 S. Tryon St., Suite 300, Charlotte NC 28203
150 Fayetteville St., Suite 520, Raleigh, NC 27601
Phone: 704-338-1292 www.optimaengineering.com
North Carolina License Number C-0914
optima engineering

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER BRIAN E. THOMPSON
5-08-25

sun valley high school and middle school hvac renovations

high school
5211 old charlotte hwy
monroe, nc 28110

middle school
1409 wesley chapel rd
indian trail, nc 28079

REV #	DATE	DESCRIPTION
1	5/8/2025	ADDENDUM #1

DATE: 02-25-2025
PROJECT #: 24-0219
DRAWN BY: WD
DESIGNED BY: WD
CHECKED BY: MAM

SHEET TITLE:
HIGH SCHOOL ELECTRICAL WORK - NEW WORK

DWG #:
E204