R.E. Dimond and Associates, Inc.
Consulting Engineers

ADDENDUM NO.2.R1

Brownsburg Community School Corporation
White Lick ES Central Plant Equipment Installation

DATE: March 24, 2023

Daniel J Ulrich, PE

This Addendum issued prior to bidding, alters, amends, corrects or clarifies the Proposal Documents to the extent stated herein and does hereby become a part of the Proposal Documents, and will become a part of the Contract Documents of the successful bidder.

GENERAL

A. GENERAL

1. Electrical Drawing ED301 was accidentally omitted from Addendum 2. Addendum 2 can be removed and replaced with Addendum 2.R1 in its entirety.
2. Pre-Bid Agenda
3. Pre-Bid Sign-in Sheet

MECHANICAL

A. SPECIFICATIONS (N/A)

B. DRAWINGS

1. Drawing MD301 – Enlarged Plan – Mechanical Demolition
   a. Revise note (4).

ELECTRICAL

A. SPECIFICATIONS (N/A)

B. DRAWINGS

1. Drawing ED301 – Mechanical Room Plan – Electrical Demolition
   a. Revise note (17) and show Motor Control Center 'MCC' to be removed.

2. Drawing E601 – Schedules and One-Line Diagram – Electrical

a. Add note (4) to reflect Motor Control Center ‘MCC’ to be removed.

END OF ADDENDUM

RE: Pre-Bid Meeting

Meeting Date: March 19, 2025 10:00 AM

Project: 2025 White Lick Elementary School Central Plant Upgrades

INTRODUCTIONS

Owner: **Brownsburg Community School Corporation**
Kenney McKinney – Energy Management Supervisor
Bret Daghe – Project Manager
Regan Huff –Operations Coordinator

Engineer: **Dan Ulrich, R.E. Dimond**

DESCRIPTION OF PROJECT

1. Demolition:
    a. Remove heat exchanger pumps, plate and frame heat exchanger, cooling towers, expansion tanks, air separators, all related piping within boiler room as noted from demolition. Honeywell central plant controls shall remain and be re-used.
    b. Remove water cooled chiller, chilled water primary and secondary pumps, cooling tower, condenser water pumps, all related piping back to locations shown mechanical room and mechanical yard, expansion tank, air separator, chemical treatment and chilled water plant controls complete. Indoor sump tank shall be abandoned in place. Seal access hatch as required. Honeywell central plant controller shall remain and be re-used.
    c. Remove water treatment system for each hydronic system as shown.
    d. Remove water softeners and associated piping back to locations shown.
2. New work:
    a. Install new boiler primary and secondary loop pumps, associated piping, and controls.
    b. Install new air separator, expansion tank, associated piping and controls for all systems as shown.
    c. Install new primary chiller pumps, associated piping and controls.
    d. Install new heat pump pumps, associated piping and controls.
    e. Install building water softener system and reconnect to building water distribution system, re-connect existing hydronic make-up water stations for hydronic hot water, and chilled water, condenser water, and heat pump water.
    f. Install new air-cooled chiller with remote evaporator. Replace sensors for refrigerant monitoring system for new refrigerant.
    g. Install chiller support structure above roof and connect to existing structure as shown.
    h. Install new water treatment system for each hydronic system as shown.

i. Install new glycol makeup unit for condenser water system.
j. Provide electrical service for all new equipment.

ALTERNATES

1. None.

CONTINGENCY ALLOWANCE

1. A Contingency Allowance of $75,000. Refer to 01 21 10 Allowances**.**

BID DUE DATE

1. Bids will be due at **10:00 a.m**. local time on **Thursday, April 3, 2025** at the **offices of the Brownsburg Community School Corporation, Entry 7, 310 Stadium Drive.**
2. The bids will be **publicly** opened and taken under advisement for review and recommendation by the **Owner.**

INSTRUCTION TO BIDDERS

1. Take note of the public bidding requirements in the Instructions to Bidders and in the Supplementary Conditions to the General Conditions.
2. It is asked that all questions and /or requests be addressed directly to the Project Engineer in writing, by e-mail. The answers, qualifications, or information noted during this meeting or during phone conversations that differ from the bidding documents are not to be considered official unless noted in an Addendum.
3. Questions and clarifications must be submitted in writing to Dan Ulrich (dan.ulrich@redimond.com) no later than **3:00 p.m. on Friday, March 28, 2025.**
4. A Bid Security of **5%** or a certified check made out to **Brownsburg Community School Corporation** for **5%** of the bid amount is required with the bid.
5. Items bidders must consider when preparing their bid.
   a. A Performance and Payment Bond of **100% included in** the contractor's bid is required.
   b. The successful bidder must provide a Certificate of Insurance with BCSC listed as the additional insured.
   c. Other paperwork required by the successful bidder includes, a signed e-verify form (provided by BCSC), W-9, Escrow Agreement (provided by BCSC), contractor's contact list, schedule of values and a project schedule.
   d. All contractors and sub-contractors for IDOA Public Works projects valued at over $150,000 MUST be pre-qualified through the Public Works Certification Board. Please go to http://www.in.gov/idoa/2486.htm for applications or to see a list of pre-qualified contractors.
   e. The school corporation's tax-exempt number **will be provided to the successful bidders.**
6. For consideration, a Bid Form must be submitted in duplicate, sealed in an envelope, and delivered to **the BCSC Central Administration Building by the designated time. The clock in the board room will be used as the "official" clock for determining when receipt of bids will be closed. Email submissions are not permitted.**
7. Bids must be submitted on the State Board of Accounts Form 96-Revised and Supplementary Bid Form provided in the project manual. Bids must be provided in duplicate, placed in a sealed envelope with the title of the project clearly written on the front.
8. Bids shall be guaranteed for **60** days.

CONTRACT INFORMATION

1. The Owner/Contractor Agreement will be **AIA document A101 2017 Edition.**

PROJECT SCHEDULE:

1. Mobilization, early demolition(respective pumps and piping), shop drawings, heating water temporary isolation valves for heat pump loop: Summer 2025.
2. **Start of School**: Thursday, July 30, 2025.
3. **Fall Break:** Monday October 13 – Friday October 24, 2025.
4. **Heating Water System Substantial Completion**: Monday, October 20, 2025.
5. **Chiller Water Shutdown**: November 1, 2024.
6. **Thanksgiving Break:** Wednesday, November 26 – Friday November 28, 2025.
7. **Winter Break**: Monday December 22, 2025 – Monday January 5, 2026.
8. **Domestic water softener system Substantial Completion**: January 30, 2026
9. **Spring Break**: Monday, March 23 – Friday, April 3, 2026.
10. **Chilled Water System Substantial Completion**: Friday March 27, 2026

B. Phasing

1. Work is to be executed selectively in the boiler room so that the chilled water system remains operational through the heating water system renovation scope.
2. The work scope is to be divided according to the following guideline. See paragraph C above for specific dates.

    1) Heating water system shall be operational by beginning of heating season, 2025.
    2) Water softener operational at end of January 2026.
    3) Chilled water system operational beginning of cooling season, 2026.

1. Contractor will be able to begin preparation of submittals and project planning i**mmediately** upon receiving the "Notice to Proceed". A pre-construction meeting will be required with the Owner and Engineer before construction work can begin.
2. **Project Substantial Completion date shall be on or before March 27, 2026.**
3. BCSC will provide Contractor with school hours, and schedule of breaks and holidays, as soon as they are available.
4. Contractors will have access to the building during the school day provided that work is not being done within the classrooms, preventing students from freely moving through the building, or nor disrupting teacher instruction.

SPECIAL NOTES

1. **Brownsburg Community School Corporation facilities are TOBACCO FREE SITES. This means that the use of any tobacco products, including vaping, on the school property is prohibited.**
2. **Building will be occupied during the school days, and this work area is interior to the building. Loud noises will not be tolerated during the school day.**
3. **No restrooms will be made available. Shirts identifying company name are required at all times.**
4. **Contractors wishing to make follow-up visits to the building must contact Kenney McKinney at (317) 435-6389 to set up a time. Do not attempt to visit the site or**

building without prior arrangements. Site visits will only be scheduled between 9:00am and 2:00pm Monday-Friday

CONTRACTOR / ENGINEER / OWNER NOTES

_____
_____
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2025 WLE Central Plant Project Pre-Bid

Wednesday, March 19, 2025

	Company Name	Name of Representative	Contact Phone #	Contact Email
1	BCSC	Kenney McKinney	317 435 6389	KMcKinney@brownsburg.k12.in.us
2	E-Solutions	Justin Duke	317-918-5077	duke;@e-solutions-inc.com
3	IRISH Mechanical	Jeremey Boner	317-294-9785	jboner@irishmechanicalservices.com
4	Indiana Electrical Serv.	Dave Moran	317313 6450	dmoran@indyelectric.net
5	IRISH	GARY HARDWICK	317-313-0203	GHARDWICK@IRISHMECHANICALSERVICES.COM
6	Leach & Russell	Dustin Drollinger	463-239-8336	ddrollinger@leach-russellmech.com
7	CEC	Kenny Thurman	317-679-4820	Kenny@cecinc.biz
8	Ellis Mech	Don L. Bertore	312-781-8414	donaellismechanical.com
9	ERMCO	Danny Brewer	317-503-8957	DBrewer@ERMCO.com
10	Miller Eads	Jason Bichelmann	317-496-4651	JBockelmann@miller-Eads.com
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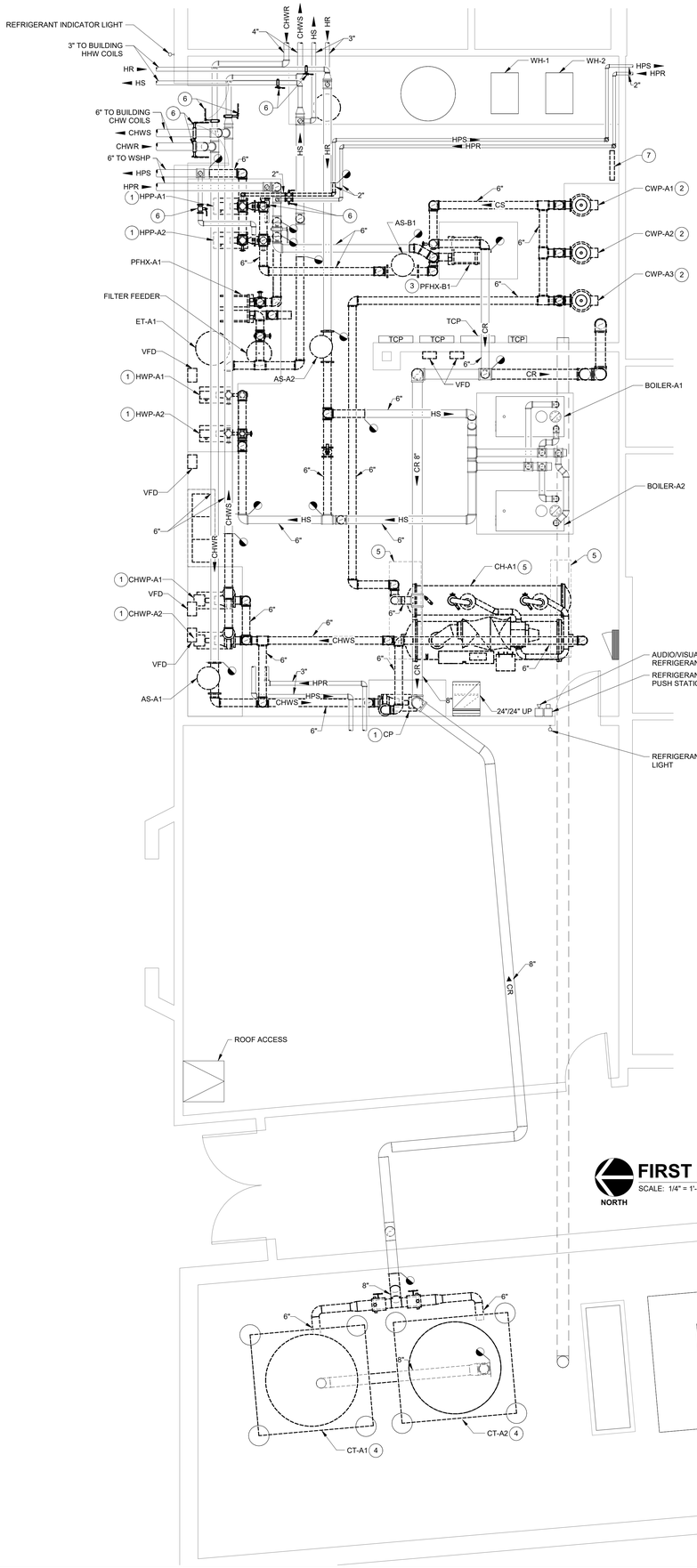

FIRST LEVEL - MECHANICAL DEMOLITION

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

NORTH

DEMOLITION LEGEND:

- WORK TO BE REMOVED
- WORK TO REMAIN

GENERAL NOTES - DEMOLITION:

1. THESE NOTES APPLY TO ALL PLUMBING AND MECHANICAL DEMOLITION DRAWINGS.
2. REMOVE ALL PIPING, EQUIPMENT, VALVES, ETC., DRAWN DARK DASHED, AND LABELED. ALL PIPING, EQUIPMENT, VALVES, ETC., DRAWING LIGHT SHALL REMAIN.
3. ALL PIPING, DUCTWORK AND EQUIPMENT ABANDONED BY NATURE OF NEW CONSTRUCTION SHALL BE REMOVED IN THIS CONTRACT.
4. THOROUGHLY REVIEW ALL DRAWINGS PRIOR TO ANY DEMOLITION WORK. ANY DEVICES REMOVED ACCIDENTALLY WILL BE REPLACED AT NO ADDITIONAL COST TO OWNER.
5. INSTALL CAPS ON ALL PIPING AND DUCTWORK WHERE THEY ARE LEFT OPEN ENDED BY DEMOLITION. PROVIDE TAGS FOR ALL ABANDONED OR CAPPED PIPING LISTING OLD SERVICE.
6. DISPOSAL OF DEMOLISHED MATERIALS SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
7. FIELD VERIFY ALL EXISTING CONDITIONS AS TO EXACT SERVICE, LOCATION, TYPE OF MATERIAL, ETC. BEFORE BIDDING AND BEFORE BEGINNING ANY DEMOLITION.
8. REMOVE ALL HANGERS, STRAPS, BRACKETS, PIPE SUPPORTS, ANCHORS, EXPANSION JOINTS, ETC. ASSOCIATED WITH DUCTWORK AND/OR PIPING TO BE REMOVED.
9. REPAIR OR REPLACE PIPE AND DUCT INSULATION DAMAGED DURING DEMOLITION OR RENOVATION TO MATCH ORIGINAL CONDITION.
10. MECHANICAL CONTRACTOR SHALL PATCH ALL OPENINGS LEFT BY REMOVAL OF MECHANICAL OR PLUMBING PIPE, DUCTWORK, ETC. IN EXISTING WALLS AND FLOORS, UNLESS SPECIFICALLY NOTED TO BE PERFORMED BY OTHERS. WORK BY OTHERS INDICATED ON 'A' AND 'S'-SERIES DRAWINGS. REPAIR SURFACES TO MATCH EXISTING SURFACES.
11. ALL EXISTING WALLS GO TO DECK.
12. ALL EXISTING EQUIPMENT IN MECHANICAL ROOMS ARE ON CONCRETE EQUIPMENT PADS. REMOVE ALL PADS SHALL REMAIN UNLESS NOTED FOR REMOVAL.
13. OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL DEMOLISHED EQUIPMENT.
14. ADDITIONAL GENERAL DEMOLITION NOTES SPECIFIC TO A PARTICULAR DEMOLITION DRAWING ARE NOTED ON THOSE DRAWINGS.
15. REMOVE REFRIGERANT MONITOR SYSTEM AND TURN OVER TO OWNER. INDICATOR LIGHT, ALARM, ETC. SHALL BE REMAIN AND BE RE-USED.
16. SEE SHEET PM001 FOR ADDITIONAL DEMOLITION NOTES.

PLAN NOTES:

1. REMOVE PUMP, ASSOCIATED PIPING, HANGERS, COMPLETE BACK TO LOCATIONS SHOWN AND INCLUDING SHUT-OFF VALVES.
2. REMOVE VERTICAL TURBINE PUMP AND RESPECTIVE PIPING BACK TO LOCATIONS SHOWN. INSTALL AND ANCHOR STEEL CHECKPLATE OVER OPENING.
3. REMOVE PLATE FRAME HEAT EXCHANGER, PIPING, HANGERS, AND CONTROLS COMPLETE.
4. REMOVE COOLING TOWER, SUPPORT PIERS, AND PIPING COMPLETE. CONCRETE WITHIN FOOTPRINT OF NEW COOLING TOWER SHALL ALSO BE REMOVED TO ACCOMMODATE NEW EQUIPMENT PAD, REFER TO NEW WORK.
5. REMOVE WATER-COOLED CHILLER, ASSOCIATED PIPING, HANGERS, AND CONTROLS COMPLETE BACK TO LOCATIONS SHOWN. CONTRACTOR TO RECLAIM R-134A REFRIGERANT AND TURN OVER TO OWNER. STORAGE CONTAINERS SHALL BE PROVIDED BY CONTRACTOR AND DELIVERD TO OWNER'S DESIGNATED LOCATION WITHIN THE DISTRICT.
6. REMOVE ISOLATION VALVES FOR REPLACEMENT.
7. COORDINATE CHEMICAL TREATMENT DEMOLITION WITH WATER TREATMENT CONTRACTOR.

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Brownsburg Community School Corporation
Higher Achievement • Together

D&A #24128

R.E. Dimond and Associates, Inc.
Consulting Engineers

732 North Capitol Avenue
Indianapolis, IN 46204
Phone: (317) 634-4672
Fax: (317) 638-8725

CERTIFIED BY:

DANIEL JOSEPH ULRICH
REGISTERED
No. 12100624
STATE OF INDIANA
PROFESSIONAL ENGINEER

03/06/2025

REVISIONS:

NO.	DESCRIPTION	DATE
2	Addendum 02..R1	03/24/2025

PROJECT DESCRIPTION:

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION
1400 S ODELL STREET, BROWNSBURG, IN 46112

KEYPLAN

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DRAWN BY: DJU	DESIGNED BY: DJU
SCALE: REFER TO DRAWING	CHECKED BY: DJU
DATE: 03/06/2025	JOB NO.: 24128

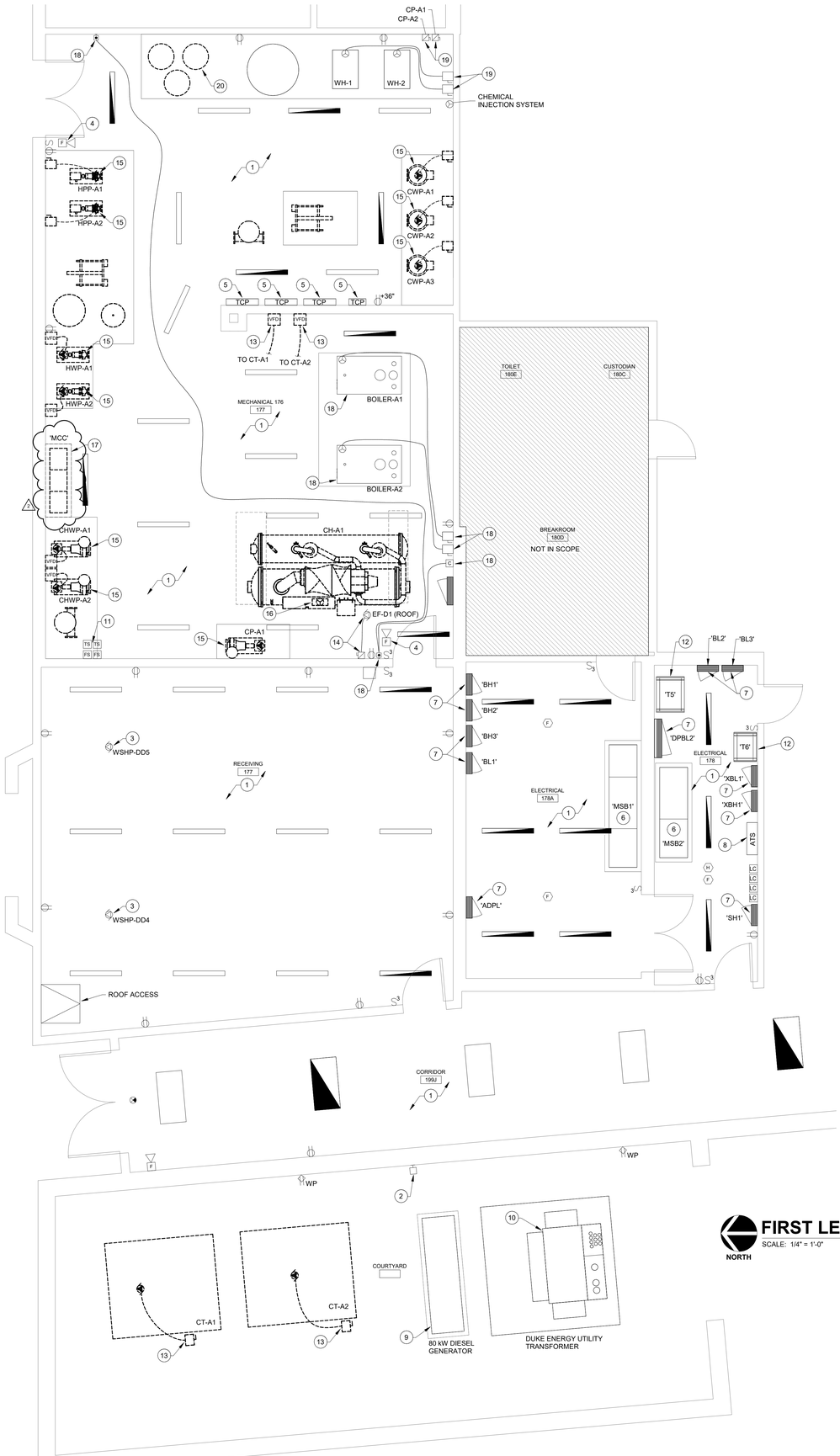
SHEET DESCRIPTION:

ENLARGED PLAN - MECHANICAL DEMOLITION

SHEET NUMBER:

MD301

PRINTED ON: 3/24/2025 1:18:35 PM



FIRST LEVEL - ELECTRICAL DEMOLITION

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

NORTH

0 2 4 6 8 16 24 32

1 2 3 4

DEMOLITION LEGEND:

- WORK TO BE REMOVED
- WORK TO REMAIN

GENERAL NOTES:

1. SEE E001 FOR GENERAL NOTES.

PLAN NOTES:

1. LIGHT FIXTURES IN THIS AREA TO REMAIN.
2. EXTERIOR WALL PACK TO REMAIN.
3. WATER SOURCE HEAT PUMP TO REMAIN.
4. FIRE ALARM DEVICE TO REMAIN.
5. TEMPERATURE CONTROL PANEL TO REMAIN.
6. MAIN SWITCHBOARD TO REMAIN.
7. PANELBOARD TO REMAIN.
8. AUTOMATIC TRANSFER SWITCH TO REMAIN.
9. 80 kW DIESEL GENERATOR TO REMAIN.
10. DUKE ENERGY TRANSFORMER TO REMAIN.
11. FIRE ALARM FLOW AND TAMPER SWITCHES TO REMAIN.
12. TRANSFORMER TO REMAIN.
13. COOLING TOWER TO BE REMOVED. REMOVE ALL ASSOCIATED DISCONNECTS, VFDS, WIRING, AND CONDUIT BACK TO SOURCE, MOTOR CONTROL CENTER 'MCC'.
14. EXHAUST FAN AND MOTOR STARTER TO REMAIN.
15. PUMP TO BE REMOVED. REMOVE ALL ASSOCIATED DISCONNECTS, WIRING, AND CONDUIT BACK TO SOURCE, MOTOR CONTROL CENTER 'MCC'.
16. CHILLER TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE, SWITCHBOARD 'MSB2'.
17. MOTOR CONTROL CENTER AND FEEDER TO SWITCHBOARD TO BE REMOVED WHEN ALL EQUIPMENT SERVED BY MCC HAS BEEN DISCONNECTED. COORDINATE REMOVAL WITH PROJECT PHASING.
18. BOILER AND ASSOCIATED SHUT-OFF SYSTEM TO REMAIN.
19. WATER HEATER AND CIRCULATION PUMPS TO REMAIN.
20. WATER SOFTENER TO BE REMOVED. REMOVE DUPLEX RECEPTACLE AND ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.

Brownsburg Community School Corporation
Higher Achievement • Together

D&A #24128

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732 North Capitol Avenue
Indianapolis, IN 46204
Phone: (317) 634-4672
Fax: (317) 638-8725

CERTIFIED BY:

JOSEPH PAUL SIVITA REGISTERED No. 12200363 STATE OF INDIANA PROFESSIONAL ENGINEER

03/06/2025

REVISIONS:

NO.	DESCRIPTION	DATE
2	Addendum 02.R1	03/24/2025

PROJECT DESCRIPTION:

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION
1400 S ODELL STREET, BROWNSBURG, IN 46112

KEYPLAN

N

DRAWN BY: JPS	DESIGNED BY: JPS
SCALE: REFER TO DRAWING	CHECKED BY: JPS
DATE: 03/06/2025	JOB NO.: 24128

SHEET DESCRIPTION:

MECHANICAL ROOM PLAN - ELECTRICAL DEMOLITION

SHEET NUMBER:

ED301

PRINTED ON: 3/24/2025 11:21:49 AM

BH5 — PANELBOARD SCHEDULE

LOCATION : Room 5 | **SCCR (AMPS RMS SYMM):** 35,000 | **SERVICE :** 480Y/277V 3Ø 4-Wire+Ground | **AMP :** 400 A | **MAIN :** MLO | **NEMA:** NEMA 1 | **MOUNTING :** SURFACE

CKT	DESCRIPTION	NOTE	AMP	POLE	A	B	C	POLE	AMP	NOTE	DESCRIPTION	CKT
1	PROVISION		--	1	0 / 0			1	--		PROVISION	2
3	PROVISION		--	1		0 / 0		1	--		PROVISION	4
5	PROVISION		--	1			0 / 0	1	--		PROVISION	6
7	HEAT PUMP (HPP-A1) 480V, 20HP		60 A	3	7479 / 3878							8
9						7479 / 3878		3	25 A		CONDENSER WATER PUMPS (CWP-A1) 480V, 10HP	10
11							7479 / 3878					12
13	HEAT PUMP (HPP-A2) 480V, 20HP		60 A	3	7479 / 3878							14
15						7479 / 3878		3	25 A		CONDENSER WATER PUMPS (CWP-A2) 480V, 10HP	16
17							7479 / 3878					18
19	SECONDARY HEATING WATER PUMP (SHWP-A1) 480V, 10HP		25 A	3	3878 / 8000							20
21						3878 / 8000		3	40 A		COOLING TOWER BASIN HEATER 480V, 24 kW	22
23							3878 / 8000					24
25	SECONDARY HEATING WATER PUMP (SHWP-A2) 480V, 10HP		25 A	3	3878 / 3878							26
27						3878 / 3878		3	25 A		COOLING TOWER FAN #1 480V, 10HP	28
29							3878 / 3878					30
31	PRIMARY HEAT WATER PUMP (PHWP-A1) 480V, 3HP		20 A	3	1330 / 7479							32
33						1330 / 7479		3	60 A		COOLING TOWER FAN #2 480V, 20HP	34
35							1330 / 7479					36
37	PRIMARY HEAT WATER PUMP (PHWP-A1) 480V, 3HP		20 A	3	1330 / 3878							38
39						1330 / 3878		3	25 A		CENTRAL STATION AIR CONDITIONER (CSAC-D) 480V, 10HP	40
41							1330 / 3878					42
43	CHILLED WATER PUMP (CHWP-A1) 480V, 25HP		70 A	3	9418 / 3878							44
45						9418 / 3878		3	25 A		CENTRAL STATION AIR CONDITIONER (CSAC-E) 480V, 10HP	46
47							9418 / 3878					48
49	CHILLED WATER PUMP (CHWP-A2) 480V, 25HP		70 A	3	9418 / 0							50
51						9418 / 0		3	30 A		SURGE PROTECTION DEVICE (SPD)	52
53							9418 / 0					54
	TOTALS :				79078 VA	79078 VA	79078 VA					

TOTAL CONNECTED LOAD (VA) : 237235 VA | **TOTAL CONNECTED LOAD (AMPS) :** 285 A

REMARKS:

NOTES:

MOTOR STARTER & DISCONNECT SCHEDULE

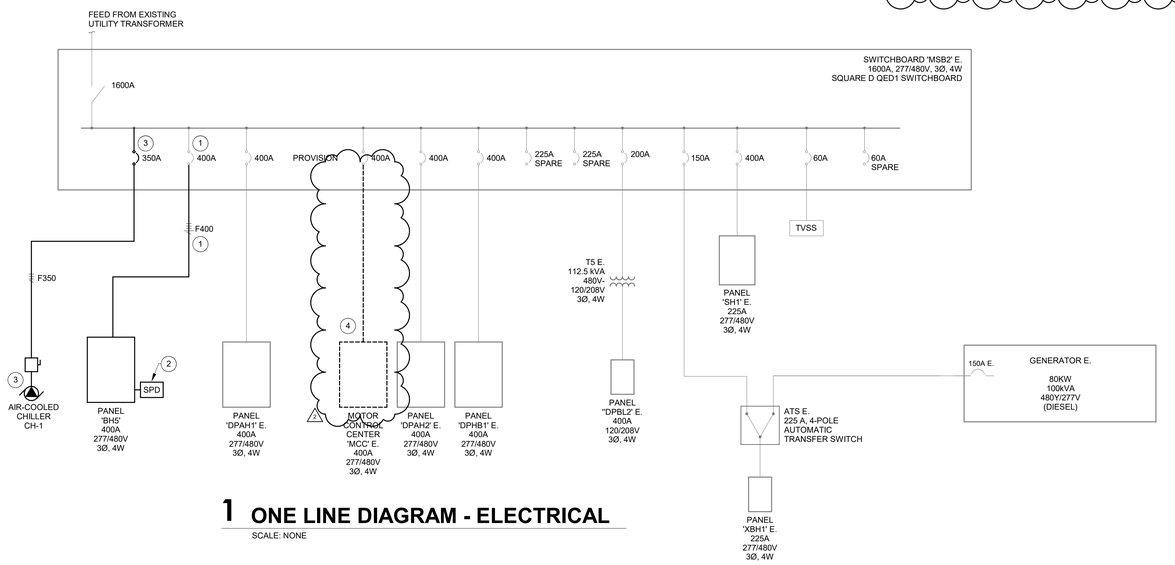
STARTER	LOAD	WIRING	DISCONNECT	ENCLOSURE	PANEL	CIRCUIT
DS-M1	COOLING TOWER - BASIN HEATER	3 #8, 1 #10 GND, 3/4" C.	480V, 3-PHASE, 60A, HD NF DISCONNECT	NEMA 3R	BH5	20,22,24
DS-M2	COOLING TOWER FAN #1	3 #10, 1 #10 GND, 3/4" C.	480V, 3-PHASE, 30A, HD NF DISCONNECT WITH AUXILIARY CONTACT.	NEMA 4X	BH5	26,28,30
DS-M3	COOLING TOWER FAN #2	3 #6, 1 #10 GND, 1" C.	480V, 3-PHASE, 60A, HD NF DISCONNECT WITH AUXILIARY CONTACT.	NEMA 4X	BH5	32,34,36
MS-M1	HEAT PUMP (HPP-A1)	3 #6, 1 #10 GND, 1" C.	20 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	7,9,11
MS-M2	HEAT PUMP (HPP-A2)	3 #6, 1 #10 GND, 1" C.	20 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	13,15,17
MS-M3	SECONDARY HEATING WATER PUMP (SHWP-A1)	3 #10, 1 #10 GND, 3/4" C.	10 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	19,21,23
MS-M4	SECONDARY HEATING WATER PUMP (SHWP-A2)	3 #10, 1 #10 GND, 3/4" C.	10 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	25,27,29
MS-M5	PRIMARY HEATING WATER PUMP (PHWP-A1)	3 #12, 1 #12 GND, 3/4" C.	3 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	31,33,35
MS-M6	PRIMARY HEATING WATER PUMP (PHWP-A2)	3 #12, 1 #12 GND, 3/4" C.	3 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	37,39,41
MS-M7	CHILLED WATER PUMP (CHWP-A1)	3 #4, 1 #8 GND, 1" C.	25 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	43,45,47
MS-M8	CHILLED WATER PUMP (CHWP-A2)	3 #4, 1 #8 GND, 1" C.	25 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	49,51,53
MS-M9	CONDENSER WATER PUMP (CWP-A1)	3 #10, 1 #10 GND, 3/4" C.	10 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	8,10,12
MS-M10	CONDENSER WATER PUMP (CWP-A2)	3 #10, 1 #10 GND, 3/4" C.	10 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	14,16,18
MS-M11	GLYCOL MAKEUP UNIT (GMU-CW)	2 #12, 1 #12 GND, 3/4" C.	1/2 HP, 120V, 1P, MANUAL MOTOR STARTER WITH PILOT LIGHT	NEMA 1	BL3	38
MS-M12	COOLING TOWER FAN #1	3 #10, 1 #10 GND, 3/4" C.	10 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	26,28,30
MS-M13	COOLING TOWER FAN #2	3 #6, 1 #10 GND, 1" C.	20 HP, 480V, 3-PHASE VARIABLE FREQUENCY DRIVE	NEMA 1	BH5	32,34,36

GENERAL NOTES:

1. SEE E001 FOR GENERAL NOTES.
2. ALL EQUIPMENT AND PANELBOARDS INDICATED ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.

(#) PLAN NOTES:

1. PROVIDE FEEDER FOR NEW PANELBOARD. CONNECT TO EXISTING SPARE BREAKER. SEE E301 FOR PANELBOARD AND SWITCHBOARD LOCATIONS.
2. PROVIDE SURGE PROTECTION DEVICE. SEE SPECIFICATIONS FOR REQUIREMENTS. SEE PANELBOARD SCHEDULES FOR APPLICABLE BREAKER.
3. PROVIDE 350-AMP, 3-POLE BREAKER IN EXISTING SPACE. PROVIDE FEEDER TO ROOFTOP AIR-COOLED CHILLER. SEE E301 FOR LOCATIONS.
4. MOTOR CONTROL CENTER AND FEEDER TO SWITCHBOARD TO BE REMOVED WHEN ALL EQUIPMENT SERVED BY MCC HAS BEEN DISCONNECTED. COORDINATE REMOVAL WITH PROJECT PHASING. (4)



1 ONE LINE DIAGRAM - ELECTRICAL

SCALE: NONE

COPPER FEEDER AND BRANCH CIRCUIT SCHEDULE

FEEDER/BRANCH CIRCUIT DESIGNATION	CONDUCTOR SIZE PER CONDUIT		CONDUIT SIZE AND QUANTITY					
	PHASE & NEUTRAL	EQUIPMENT GROUND	1P, 1N, 1G, 2P, 1G	2P, 1N, 1G, 3P, 1G	3P, 1N, 1G	3P, 2N, 1G	3P, 3N, 1G	3P, 1N, 2G
F20	12	12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
F30	10	10	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
F40-F50	8	10	3/4"	3/4"	3/4"	1"	1"	3/4"
F60	6	10	3/4"	3/4"	1"	1"	1"	1"
F70-F80	4	8	3/4"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
F90-F100	3	8	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"
F110	2	6	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"
F125	1	6	1 1/4"	1 1/4"	1 1/2"	2"	2"	1 1/2"
F150	1/0	6	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"
F175	2/0	6	1 1/4"	1 1/2"	2"	2"	2 1/2"	2"
F200	3/0	6	1 1/2"	2"	2"	2 1/2"	2 1/2"	2"
F225	4/0	4	1 1/2"	2"	2 1/2"	2 1/2"	3"	2 1/2"
F250	250	4	2"	2"	2 1/2"	3"	3"	2 1/2"
F300	350	4	2"	2 1/2"	3"	3"	3 1/2"	3"
F350	500	3	2 1/2"	3"	3 1/2"	3 1/2"	4"	3 1/2"
F400	3/0	3	(2) 1 1/2"	(2) 2"	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 2"

NOTES:

1. CONDUCTOR SIZES ARE BASED UPON 75°C AMPACITY, NO DERATING AND NO ADJUSTMENTS FOR VOLTAGE DROP. ADJUST AS REQUIRED BY EACH FIELD CONDITION IN ORDER TO COMPLY WITH UL AND NEC.

Brownsburg Community School Corporation
Higher Achievement • Together

D&A #24128

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Indianapolis, IN 46204
Phone: (317) 634-4672
Fax: (317) 638-8725

CERTIFIED BY:

JOSEPH PAUL SIOTA REGISTERED No. 12200363 STATE OF INDIANA PROFESSIONAL ENGINEER

03/06/2025

REVISIONS:

NO.	DESCRIPTION	DATE
2	Addendum 02.R1	03/24/2025

PROJECT DESCRIPTION:

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION
1400 S ODELL STREET, BROWNSBURG, IN 46112

KEYPLAN

DRAWN BY: JPS	DESIGNED BY: JPS
SCALE: REFER TO DRAWING	CHECKED BY: JPS
DATE: 03/06/2025	JOB NO.: 24128

SHEET DESCRIPTION:

SCHEDULES & ONE-LINE DIAGRAM - ELECTRICAL

SHEET NUMBER:

E601

PRINTED ON: 3/24/2025 11:21:48 AM