

ADDENDUM NO. CC-1

ELKHORN PUBLIC SCHOOLS
BLUE SAGE ELEMENTARY SCHOOL EARLY EDUCATION ADDITION
ELKHORN, NEBRASKA
DLR GROUP PROJECT NO. 10-17116-40

6457 Frances Street
Suite 200
Omaha, NE 68106

o: 402/393-4100
f: 402/393-8747

COMBINED CONTRACT

APRIL10, 2019

NOTICE TO BIDDERS: Amend the Project Manuals and Drawings to the above referenced project as follows:

PROJECT MANUAL

- ITEM NO. 1. DOCUMENT 000010 – TABLE OF CONTENTS
- A. DIVISION 07 THERMAL AND MOISTURE PROTECTION
 - 1. Add Section 072100 – THERMAL INSULATION.
- ITEM NO. 2. SECTION 033000 – CAST-IN-PLACE CONCRETE
- A. Subparagraph 2.5.E.1, add the following:
 - “d. ISE LOGIK Industries; MVRA 900.”
 - B. Subparagraph 2.8.A.1, add the following:
 - “d. Inteplast Group; Barrier-Bac VB-350, 16 mil Vapor Barrier.”
- ITEM NO. 3. SECTION 072100 – THERMAL INSULATION
- A. Add Section 072100, as shown on Attachment No. 1.
- ITEM NO. 4. SECTION 087100 – DOOR HARDWARE
- A. Delete Article 3.7 in its entirety and substitute the following:

“LIST OF MANUFACTURERS

	SPECIFIED	APPROVED
HINGES	MCKINNEY	STANLEY
CONTINUOUS HINGES	PEMKO	NO SUB.
LOCKS	CORBIN RUSSWIN	NO SUB.
EXIT DEVICES / MULLIONS	CORBIN RUSSWIN	NO SUB.
CLOSERS	NORTON	NO SUB.

FLAT GOODS & STOPS	ROCKWOOD	TRIMCO
WEATHERPROOFING / SEALS	PEMKO	NATIONAL GUARD
WALL MAGNETS	RIXSON	ABH
WIRE HARNESS	MCKINNEY	NO SUB.
DOOR POSITION SWITCH	SECURITRON	NO SUB.
POWER SUPPLIES	SECURITRON	NO SUB.
POWER TRANSFERS	SECURITRON	NO SUB."

B. Delete Article 3.8 in its entirety and substitute the following:

"3.8 HARDWARE SETS

HARDWARE SET NO. 1
(DOOR NO. A130)

2	Each	Continuous Hinges	KCFM_HD1-PT	
1	Each	Keyed Mullion	910KM 6P VKC2 M57 M96	
1	Each	Exit Device	ED5200EO M52 6P VKC2 M92 D200	630
1	Each	Exit Device	MELR ED5200 K157 C6 M52 6P M92 VKC2 D200 (RHRA)	630
2	Each	Pulls	BF157 1HD x 2" Thick	US32D
1	Each	ADA Operator	By Section 087113 (RHRA)	
1	Each	Closer	CPS7500 6890 x 6891	689
1	Each	Mullion Gasket	5110BL120	
1	Set	Weatherstrip	By Door Supplier	
1	Each	Threshold	By Door Supplier	
2	Each	Door Position Switch	DPS-M-GY	
2	Each	Power Transfers	EL-CEPT	
2	Each	Wire Harness	QC-C006	
2	Each	Wire Harness	QC-C1500P	
2	Each	ADA Actuator	By Section 087113	
1	Each	Card Reader	By Owner	

Operational Description: Doors are normally closed and secure. Free egress at all times. Active leaf latchbolt retracted by key override from the outside, via valid card read applying power to electric latch retraction, or inside keyed cylinder dogging. Inactive leaf retracted by inside keyed cylinder dogging. Internal request to exit switch on exit devices will shunt door position switch. Door position switch to monitor doors being held open for extended time period (time to be determined by owner) and for intrusion detection. Upon loss of power opening will fail secure.

Electrical Note: Power supplies referenced in hardware set PS are to be located in A139 Electrical Room.

Electrical Monitoring Note: Door position switches / request to exit switches wired to access control system by owner provided security.

HARDWARE SET NO. 2
(DOOR NO. A130B)

1	Each	Continuous Hinge	KCFM_HD1	
1	Each	Continuous Hinge	KCFM_HD1-PT (RHRA)	
1	Each	Keyed Mullion	910KM 6P VKC2 M57 M96	
1	Each	Exit Device	ED5200EO M52 6P VKC2	630
1	Each	Exit Device	MELR ED5200 K157 C6 M52 6P VKC2 (RHRA)	630
2	Each	Pulls	BF157 1HD	US32D
1	Each	ADA Operator	By Section 087113 (RHRA)	
1	Each	Closer	CLP7500 6890 x 6891	689
1	Each	Mullion Gasket	5110BL120	
1	Each	Power Transfers	EL-CEPT (RHRA)	
1	Each	Wire Harness	QC-C006 (RHRA)	
1	Each	Wire Harness	QC-C1500P (RHRA)	
2	Each	ADA Actuator	By Section 087113	
1	Each	Card Reader	By Owner	

Operational Description: Doors are normally closed and secure. Free egress at all times. Active leaf latchbolt retracted by key override from the outside, via valid card read applying power to electric latch retraction, or inside keyed cylinder dogging. Inactive leaf retracted by inside keyed cylinder dogging. No door monitoring required. Upon loss of power opening will fail secure.

Electrical Note: Power supplies referenced in hardware set PS are to be located in A139 Electrical Room.

HARDWARE SET NO. 3
(DOOR NO. A154A)

2	Each	Continuous Hinges	KCFM_HD1	
2	Each	Pulls	BF157 1HD	US32D
2	Each	Dummy Rails	ED5000DB	630
2	Each	Closers	CLP7500 6890 x 6891	689

HARDWARE SET NO. 4
(DOOR NO. A130A)

1	Each	Continuous Hinge	KCFM_HD1-PT	
1	Each	Exit Device	MELR ED5200 K157 C6 M52 6P M92 VKC2 D200	630
1	Each	Pull	BF157 1HD x 2" Thick	US32D
1	Each	Closer	CPS7500 6890 x 6891	689
1	Set	Weatherstrip	By Door Supplier	
1	Each	Threshold	By Door Supplier	
1	Each	Door Position Switch	DPS-M-GY	
1	Each	Power Transfer	EL-CEPT	
1	Each	Wire Harness	QC-C006	
1	Each	Wire Harness	QC-C1500P	
1	Each	Card Reader	By Owner	

Operational Description: Door is normally closed and secure. Free egress at all times. Latchbolt retracted by key override from the outside, via valid card read applying power to electric latch retraction, or inside keyed cylinder dogging. Internal request to exit switch on exit device will shunt door position switch. Door

position switch to monitor door being held open for extended time period (time to be determined by owner) and for intrusion detection. Upon loss of power opening will fail secure.

Electrical Note: Power supplies referenced in hardware set PS are to be located in A139 Electrical Room.

Electrical Monitoring Note: Door position switches / request to exit switch wired to access control system by owner provided security.

HARDWARE SET NO. 5
(DOOR NO. A135, A135A, A149, A149A)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Closer	7500	689
1	Each	Push Plate	70C	US32D
1	Each	Pull Plate	110 x 70B	US32D
1	Each	Kick Plate	K1050 8" x 2" LDW	US32D
1	Each	Wall Stop	409	US32D

HARDWARE SET NO. 6
(DOOR NO. A154)

2	Each	Continuous Hinges	KCFM_HD1-PT	
1	Each	Keyed Mullion	910KM 6P VKC2 M57 M96	
1	Each	Exit Device	ED5200EO M52 6P VKC2 M92 D200	630
1	Each	Exit Device	MELR ED5200 K157 C6 M52 6P M92 VKC2 D200 (RHRA)	630
2	Each	Pulls	BF157 1HD x 2" Thick	US32D
2	Each	Closers	CPS7500 6890 x 6891	689
1	Each	Mullion Gasket	5110BL120	
1	Set	Weatherstrip	By Door Supplier	
1	Each	Threshold	By Door Supplier	
2	Each	Door Position Switch	DPS-M-GY	
2	Each	Power Transfers	EL-CEPT	
2	Each	Wire Harness	QC-C006	
2	Each	Wire Harness	QC-C1500P	
1	Each	Card Reader	By Owner	

Operational Description: Doors are normally closed and secure. Free egress at all times. Active leaf latchbolt retracted by key override from the outside, via valid card read applying power to electric latch retraction, or inside keyed cylinder dogging. Inactive leaf retracted by inside keyed cylinder dogging. Internal request to exit switch on exit devices will shunt door position switch. Door position switch to monitor doors being held open for extended time period (time to be determined by owner) and for intrusion detection. Upon loss of power opening will fail secure.

Electrical Note: Power supplies referenced in hardware set PS are to be located in A139 Electrical Room.

Electrical Monitoring Note: Door position switches / request to exit switches wired to access control system by owner provided security.

HARDWARE SET NO. 7
 (DOOR NO. A151)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Indicator Lock	ML2068 NSA 6P VKC2 M19V	626
1	Each	Closer	CLP7500	689
1	Each	Kick Plate	K1050 8" x 2" LDW	US32D
1	Set	Smoke Seal	S88D	

HARDWARE SET NO. 8
 (DOOR NO. A132, A139, A143, A147, A157)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Storeroom Lockset	CL3357 NZD VKC2	626
1	Each	Closer	PR7500	689
1	Each	Kick Plate	K1050 8" x 2" LDW	US32D
1	Each	Wall Stop	409	US32D
1	Set	Smoke Seal	S88D	

Install Note: Template to 90 degree swing

HARDWARE SET NO. 8A
 (DOOR NO. A140)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Storeroom Lockset	CL3357 NZD VKC2	626
1	Each	Closer	7500	689
1	Each	Kick Plate	K1050 8" x 2" LDW	US32D
1	Each	Wall Stop	409	US32D
1	Set	Smoke Seal	S88D	

HARDWARE SET NO. 9
 (DOOR NO. A134, A145, A145A, A159)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Entry Lockset	CL3351 NZD VKC2	626
1	Each	Wall Stop	409	US32D

HARDWARE SET NO. 9A
 (DOOR NO. A133, A136, A144, A148, A152, A155, A156, A158)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Entry Lockset	CL3351 NZD VKC2	626
1	Each	Wall Stop	409	US32D
1	Set	Smoke Seal	S88D	

HARDWARE SET NO. 10
(DOOR NO. A153)

3	Each	Hinges	TA2714 4.5 x 4.5	US26D
1	Each	Timeout Lock	CL3320TO NZD	626
1	Each	Closer	CLP7500	689
1	Each	Kick Plate	K1050 8" x 2" LDW	US32D
1	Set	Smoke Seal	S88D	

Install Note: Template to 90 degree swing

HARDWARE SET NO. 11
(DOOR NO. A138)

6	Each	Hinges	T4A3786 5 x 4.5	US26D
2	Each	Exit Devices	ED5860B M55 W048 N955 6P VKC2	630
2	Each	Closers	PR7500	689
2	Each	Kick Plates	K1050 8" x 2" LDW	US32D
2	Each	Wall Magnets	998	689
1	Set	Smoke Seal	S88D	
1	Each	Smoke Astragal	S771D	

HARDWARE SET NO. PS

1	Each	Power Supply	BPS-24-4 (located at A139 for access control)"	
---	------	--------------	--	--

DRAWINGS

ITEM NO. 1. DRAWING A0.1 – SCHEDULES, NOTES, WALL TYPES, DOOR & FRAME
ELEVATIONS

A. Door and Frame Schedule.

1. Opening A133: Delete Hardware Set “HW-9” and substitute “HW-9A”.
2. Opening A136: Delete Hardware Set “HW-9” and substitute “HW-9A”.
3. Opening A144: Delete Hardware Set “HW-9” and substitute “HW-9A”.
4. Opening A148: Delete Hardware Set “HW-9” and substitute “HW-9A”.
5. Opening A152: Delete Hardware Set “HW-9” and substitute “HW-9A”.
6. Opening A155: Delete Hardware Set “HW-9” and substitute “HW-9A”.
7. Opening A156: Delete Hardware Set “HW-9” and substitute “HW-9A”.
8. Opening A158: Delete Hardware Set “HW-9” and substitute “HW-9A”.

ITEM NO. 2. DRAWING A2.1 – ROOF PLAN, DETAILS

- A. Detail 45/A2.1: Delete text “HM Frame – Grout Solid” and substitute “HM Frame – Fill with Mineral Wool Insulation”.
- B. Detail 55/A2.1: Delete text “HM Frame – Grout Solid” and substitute “HM Frame – Fill with Mineral Wool Insulation”.
- C. Detail 56/A2.1: Delete text “HM Frame – Grout Solid” and substitute “HM Frame – Grout Solid at CMU walls, Fill with Mineral Wool Insulation at Metal Stud Walls”.

ITEM NO. 3. DRAWING M4.1 – MECHANICAL DETAILS

A. Detail 45/M4.1 – RTU PIPING DETAIL.

1. Delete Detail in its entirety and substitute new Detail as shown on Attachment No. M4.1-1.

END OF ADDENDUM

SECTION 072100 - THERMAL INSULATION

Attachment No. 1 for Addendum CC-1
dated April 10, 2019.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Extruded polystyrene foam-plastic board.
2. Glass-fiber blanket.
3. Mineral-wool blanket.

B. Related Requirements:

1. Section 042000 "Unit Masonry" for insulation installed in masonry cavities.
2. Division 07 roofing sections for insulation specified as part of roofing construction.
3. Section 092900 "Gypsum Board" for sound attenuation blanket used as acoustic insulation.
4. Section 099672 "Fluid-Applied Insulative Coating" for insulating coatings applied to steel penetrating building envelope.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.

B. Protect foam-plastic board insulation as follows:

1. Do not expose to sunlight except to necessary extent for period of installation and concealment.
2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

PART 2 - PRODUCTS

2.1 EXTRUDED POLYSTYRENE FOAM-PLASTIC BOARD

- A. Extruded Polystyrene Board, Type IV: ASTM C 578, Type IV, 25-psi (173-kPa) minimum compressive strength; unfaced; maximum flame-spread and smoke-developed indexes of 25 and 450, respectively, per ASTM E 84.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. DiversiFoam Products.
 - b. Dow Chemical Company (The).
 - c. Kingspan Insulation.
 - d. Owens Corning.
 2. RIGID INSULATION: Install at roof/wall intersections and parapet walls at indicated on the Drawings. Thickness as indicated on the Drawings.
 3. PERIMETER INSULATION: Install at perimeter footing/foundation wall conditions (supporting backfill) and under slab-on-grade perimeter as indicated on the Drawings. Thickness shall be 2 inches unless indicated otherwise.

2.2 GLASS-FIBER BLANKET

- A. Insulation shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- B. Glass-Fiber Blanket, Unfaced: ASTM C 665, Type I; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively, per ASTM E 84; passing ASTM E 136 for combustion characteristics.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. CertainTeed Corporation.
 - b. Guardian Building Products, Inc.
 - c. Johns Manville; a Berkshire Hathaway company.
 - d. Knauf Insulation.
 - e. Owens Corning.

2.3 MINERAL-WOOL BLANKETS

- A. Insulation shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

- B. Mineral-Wool Blanket, Unfaced: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively, per ASTM E 84; passing ASTM E 136 for combustion characteristics.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Industrial Insulation Group, LLC (IIG-LLC).
 - b. Roxul Inc.
 - c. Thermafiber, Inc.; an Owens Corning company.

2.4 ACCESSORIES

- A. Insulation for Miscellaneous Voids:
 - 1. Glass-Fiber Insulation: ASTM C 665, Type I, loose fill; with maximum flame-spread and smoke-developed indexes of 25 and 50, per ASTM E 84.
 - 2. Spray Polyurethane Foam Insulation: Per Section 072119 'Foamed-In-Place Insulation.'.
- B. Adhesive for Bonding Insulation: Product compatible with insulation and air and water barrier materials, and with demonstrated capability to bond insulation securely to substrates without damaging insulation and substrates.
 - 1. Adhesives shall have a VOC content of 70 g/L or less.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.

3.2 INSTALLATION, GENERAL

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.
- C. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.
- D. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

3.3 INSTALLATION OF SLAB/PERIMETER INSULATION

- A. On vertical slab edge and foundation surfaces, set insulation units using manufacturer's recommended adhesive according to manufacturer's written instructions.
 - 1. If not otherwise indicated, extend insulation a minimum of 24 inches (610 mm) below exterior grade line.
- B. On horizontal surfaces, loosely lay insulation units according to manufacturer's written instructions. Stagger end joints and tightly abut insulation units.

3.4 INSTALLATION OF INSULATION IN FRAMED CONSTRUCTION

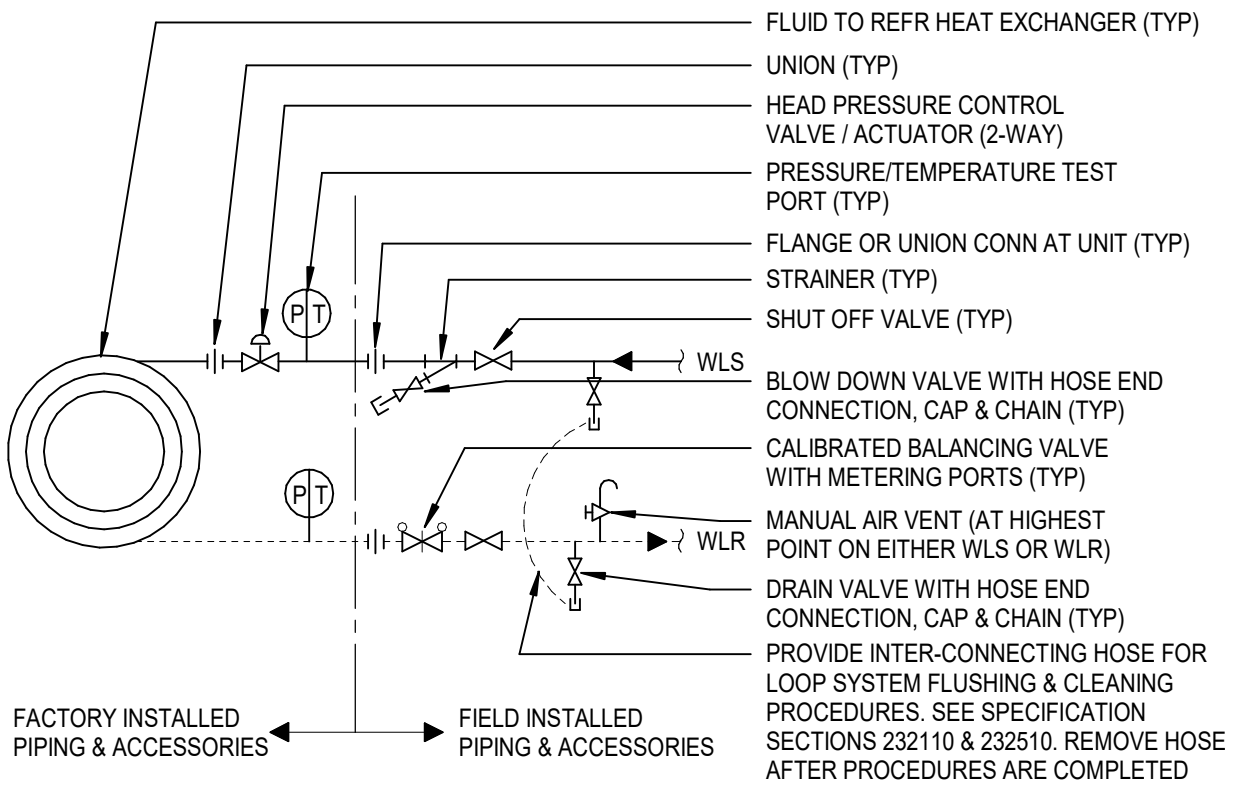
- A. Miscellaneous Voids: Install insulation in miscellaneous voids and cavity spaces where required to prevent gaps in insulation using one of the following materials at Contractor's option:
 - 1. Unfaced Glass-Fiber Insulation: Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft. (40 kg/cu. m).

3.5 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION 072100

CC-1



FACTORY INSTALLED PIPING & ACCESSORIES

FIELD INSTALLED PIPING & ACCESSORIES

- FLUID TO REFR HEAT EXCHANGER (TYP)
- UNION (TYP)
- HEAD PRESSURE CONTROL VALVE / ACTUATOR (2-WAY)
- PRESSURE/TEMPERATURE TEST PORT (TYP)
- FLANGE OR UNION CONN AT UNIT (TYP)
- STRAINER (TYP)
- SHUT OFF VALVE (TYP)
- WLS
- BLOW DOWN VALVE WITH HOSE END CONNECTION, CAP & CHAIN (TYP)
- WLR
- CALIBRATED BALANCING VALVE WITH METERING PORTS (TYP)
- MANUAL AIR VENT (AT HIGHEST POINT ON EITHER WLS OR WLR)
- DRAIN VALVE WITH HOSE END CONNECTION, CAP & CHAIN (TYP)
- PROVIDE INTER-CONNECTING HOSE FOR LOOP SYSTEM FLUSHING & CLEANING PROCEDURES. SEE SPECIFICATION SECTIONS 232110 & 232510. REMOVE HOSE AFTER PROCEDURES ARE COMPLETED

45
M4.1

HEAT PUMP AHU PIPING DETAIL

NO SCALE

Attachment No. M4.1-1
to Addendum CC-1
Dated: 04-10-19