



KANSAS CITY KANSAS PUBLIC SCHOOLS / USD 500

PURCHASING OFFICE | 2010 N. 59TH STREET ROOM 370 \ KANSAS CITY, KS 66104

WEB SITE: WWW.KCKPS.ORG/PURCHASING

Electrical Upgrade Café 500 Cafeteria CENTRAL OFFICE

BID No: IFB 19-028 ISSUE DATE: October 8, 2019

Kansas City Kansas Public Schools (KCKPS) will receive sealed bids, on this form at the Purchasing Office, 2010 N. 59th Street, Room 370, Kansas City, KS 66104 until **2:00 PM, October 17, 2019**, at which time bids received will be publicly opened and read, all in accordance with bid instructions, specifications and/or bid conditions attached hereto or as shown below.

PRE-BID MEETING: A pre-bid meeting will be held **October 10, 2019 @ 2:00PM:**

KCKPS North Central Office
2220 N. 59th Street, Suite 229
Kansas City, Kansas 66104

A site visit will follow the pre-bid meeting. Attendance is recommended, but not mandatory.

CONTACT:

Brian Hernandez, Assistant Director of Purchasing | (913) 279-2244 | eMail: brian.hernandez@kckps.org

All work is to be completed prior to November 15, 2019

Location of the Work

Central Office
2220 N. 59th Street
Kansas City, Kansas 66104

Bid Security

Bid security shall be submitted with each bid in the amount of five percent (5%) of the bid amount. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

Prevailing Wage

Prevailing Wage IS NOT required for this project.

Time of Completion

Successful bidder shall begin the Work on receipt of the Notice to Proceed and shall complete the Work (Substantial Completion) no later than **November 15, 2019**.

Liquidated Damages

Completion of this project before November 15, 2019 is imperative. At the District's sole discretion, liquidated damages per calendar day will be assessed against the Contract if the project is not completed by the date indicated.

Clean-Up

The Contractor will keep the premises free from accumulations of debris and waste materials caused by its employees in performance of the work. At completion of the project, Contractor shall remove all crating, packaging, waste and debris from the building and the site, and all tools, scaffolding and surplus materials, and shall leave the building and site "broom clean" or its equivalent.

Permits, Codes and Ordinances

Each Contractor shall file and pay for required permits affecting its work (if applicable). Each contractor shall conform to applicable codes and ordinances, including OSHA requirements.

Damage to District Property

Contractor at its own expense shall promptly remedy and repair all damages or loss to any property caused in whole or part by its employees, subcontractor(s), supplier or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable.

No Smoking: The District adheres to the mandatory "No Smoking" policy on school premises and/or at school functions. All bidders shall comply with this "No Smoking" policy.

ATTACHMENT A – USD 500 STANDARD TERMS AND CONDITIONS

1. SCOPE: The following terms and conditions shall prevail unless otherwise modified by U.S.D. 500 within this bid document. U.S.D. 500 reserves the right to reject any bid which takes exception to these terms and conditions.
2. DEFINITIONS AS USED HEREIN:
 - a. The term "bid request" means a solicitation of a formal sealed bid.
 - b. The term "bid" means the price offered by the bidder.
 - c. The term "bidder" means the offeror or Contractor.
 - d. The term "U.S.D. 500" means Unified School District No. 500.
 - e. The term "Board of Education" or "BOE" means the governing body of Unified School District No. 500.
3. COMPLETING BID: Bids must be submitted ONLY on the form provided in this bid document. All information must be legible. Any and all corrections and /or erasures must be initialed. Each bid sheet must be signed by the authorized bidder and required information must be provided.
4. CONFIDENTIALITY OF BID INFORMATION: Each bid must be sealed and submitted in or under cover of the enclosed envelope to provide confidentiality of the bid information prior to the bid opening. Supporting documents and/or descriptive literature may be submitted with the bid or in a separate envelope marked "Literature for Bid (Number)." Do NOT indicate bid prices on literature. All bids and supporting bid documents become public information after the bid opening and are available for inspection by the general public in accordance with the Kansas Open Records Act.
5. ACCURACY OF BID: Each bid is publicly opened and is made part of the public record of U.S.D. 500. Therefore, it is necessary that any and all information presented is accurate and/or will be that by which the bidder will complete the contract. If there is a discrepancy between the unit price and extended total, the unit price will prevail.
6. SUBMISSION OF BID: Bids are to be sealed and submitted to the Purchasing Department Office, 2010 North 59th Street, Room 370, Kansas City, Kansas, 66104, prior to the date and time indicated on the coversheet.
7. ADDENDA: All changes in connection with this bid will be issued by the Purchasing Office in the form of a written addendum. Signed acknowledgement of receipt of each addendum must be submitted with the bid.
8. LATE BIDS AND MODIFICATION OR WITHDRAWALS: Bids received after the deadline designated in this bid document shall not be considered and shall be returned unopened.
9. BIDS BINDING: All bids submitted shall be binding upon the bidder if accepted by U.S.D. 500 within sixty (60) calendar days after the bid opening.
10. EQUIVALENT BIDS: When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items of substantially the same quality, style and features are invited unless items are marked "No Substitute." Equivalent bids must be accompanied by descriptive literature and/ or samples may be required and shall be supplied at no charge to the school district.
11. NEW MATERIALS, SUPPLIES AND EQUIPMENT: Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, first class in every respect, and suitable for their intended purpose. All equipment shall be assembled and fully serviced, ready for operation when delivered.
12. WARRANTY: Supplies or services furnished as a result of this bid shall be covered by the most favorable commercial warranties, expressed or implied, that the bidder and/or manufacturer gives to any customer. The rights and remedies provided herein are in addition to and do not limit any rights afforded to U.S.D. 500 by any other clause of this bid reserves the right to request from bidders a separate manufacturer certification of all statements made in the Proposal.
13. METHOD OF AWARD AND NOTIFICATION: Bids will be analyzed and the award made to the lowest and best, responsive and responsible bidder(s) whose bid conforms to the specifications and whose bid is considered to be the best value in the opinion of U.S.D. 500.
14. U.S.D. 500 reserves the right to reject any or all bids and any part of a bid: to waive informalities, technical defects, and minor irregularities in bids received: and to award the bid on an item by item basis by specified groups of items or to consider bids submitted on an "all or nothing" basis if the bid is clearly designed as such or when it is determined to be in the best interest of U.S.D. 500.
15. The signed bid shall be considered an offer on the part of the bidder: such offer shall be deemed accepted upon the issuance by U.S.D. 500 of a Purchase Order or other contractual document.
16. DELIVERY TERMS: All deliveries shall be F.O.B. Destination and all freight charges shall be included in the bid price.
17. DAMAGED AND/OR LATE SHIPMENTS: U.S.D. 500 has no obligation to accept damaged shipments and reserves the right to return at the Contractor's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of the items. The Contractor is responsible to notify U.S.D. 500 Purchasing Office of any late or delayed shipments. U.S.D. 500 reserves the right to cancel all or any part of an order if the shipment is not made as promised.
18. CREDIT TERMS: Bidder shall indicate all discounts for full and/or prompt payment. Discounts shall be considered as a cost factor in the determination of award, except discounts offered for payment within less than ten (10) calendar days. Discounts offered shall be computed from date of receipt of correct invoice or receipt and acceptance of products, whichever is later.
19. SELLER'S INVOICE: Invoices shall be prepared and submitted in duplicate to address shown on the Purchase Order. Invoices shall contain the following information: Purchase Order number, contract number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.
20. TAX EXEMPT: U.S.D. 500 is exempt from Federal, State and local taxes by KS-FZLEKBLQ. Sites of all transactions under the order(s) that shall be derived from this bid request shall be deemed to have been accomplished within the State of Kansas.

21. SAFETY: All practices, materials, supplies and equipment shall comply with the federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
22. DISCLAIMER OR LIABILITY: U.S.D. 500 will not hold harmless or indemnify any bidder for any liability whatsoever.
23. TERMINATION RIGHTS: KCKPS shall have the right to terminate/cancel the Agreement for its convenience and without penalty upon thirty (30) days prior written notice to the contractor.
24. HOLD HARMLESS: The contractor agrees to protect, defend, indemnify and hold the Board of Education, its officers, employees and agents fee and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities or every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, infringement of any patent trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her sole expense and agrees to bear all other costs and expenses related thereto, even if such claim is groundless, false or fraudulent.

NO MUTUAL INDEMNIFICATION:

K.S.A.72-8201a: Contracts; indemnification or hold harmless provisions, void.

(a) It is the public policy of the state of Kansas that all contracts entered into by the board of education of a school district, or any officers or employees thereof acting on behalf of the board, provide that the school district and board of education shall be responsible solely for the district's or board's actions or failure to act under a contract.

(b) The board of education of a school district or any officers or employees thereof acting on behalf of the board shall not have the authority to enter into a contract under which the school district or board agrees to, or is required to, indemnify or hold harmless against damages, injury or death resulting from the actions or failure to act on the part of any party to a contract other than the board or district.

(c) The provisions of any contract entered into in violation of this section shall be contrary to the public policy of the state of Kansas and shall be void and unenforceable.

25. INSURANCE: Upon receipt of award, Contractor shall provide Certificate of Insurance as required within three (3) days after notification issued by the Purchasing Department.

A. The following general insurance requirements apply to any and all work under this contract by all Contractors and subcontractors of any tier.

- (1) Any and all insurance required by this contract with each and any and all insurance required by this contract shall be maintained during the entire length of this contract, including any extensions thereto, and until all work has been completed to the satisfaction of the Kansas City Kansas Public Schools. Any and all insurance must be on an occurrence basis.
- (2) No Contractor or subcontractor shall commence work under a contract until all insurance requirements contained within the solicitation have been complied with and until evidence of all insurance requirements in each and every contract with each and every subcontractor of any tier and shall require the same to comply with all such requirements.
- (3) The Kansas City Kansas Public Schools shall be covered as an Additional Insured under any and all insurance required by this contract. Confirmation of this shall appear on all certificates of insurance and on any and all applicable policies. The title of the awarded contract shall also appear on any and all applicable policies.
- (4) The Kansas City Kansas Public Schools shall be given no less than thirty (30) days' written notice of cancellation. The Kansas City Kansas Public Schools shall be given not less than thirty (30) days' prior written notice of material changes of any insurance required under this contract. The Kansas City Kansas Public Schools shall be given written notice of renewal of coverage not less than thirty (30) days prior to the expiration of any particular policy.
- (5) Each and every agent shall warrant when signing the certificate of insurance that he is acting as an authorized representative on behalf of the companies affording insurance coverage under the contract and that he is licensed by the State of Kansas to conduct insurance business in the State of Kansas and that the companies affording insurance coverage are currently licensed by the State of Kansas and are currently in good standing with the Commissioner of Insurance for the State of Kansas.
- (6) Any and all companies providing insurance required by this contract shall meet the minimum financial security requirements as set forth below. The rating for each company must be indicated on the certificate of insurance.
For all contracts, regardless of risk, companies providing insurance under this contract must have a current:
 - (a) Best's Rating not less than A, and
 - (b) Best's Financial Size Category not less than Class VII
- (7) In the event the Contractor neglects, refuses, or fails to provide insurance required by the contract documents, or if such insurance is canceled for any reason, Kansas City Kansas Public Schools shall have the right, but not the duty, to procure the same, and the cost thereof shall be deducted from monies then due or thereafter to become due to the Contractor or Kansas City Kansas Public Schools shall have the right to cancel the contract.

B. Worker's Compensation and Employer's Liability Insurance

The Contractor shall procure and maintain Worker's Compensation and Employer's Liability Insurance in the following limits. Such insurance is to cover each and every employee who is or may be engaged in work under this contract.

Worker's Compensation.....Statutory

Employer's Liability

Bodily Injury by Accident\$1,000,000 each accident
Bodily Injury by Disease.....\$1,000,000 each employee

Bodily Injury by Disease.....\$1,000,000 policy limit

C. Comprehensive General Liability Insurance

The Contractor shall procure and maintain Comprehensive Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following specific extensions of coverage shall be provided and indicated on the certificate of insurance:

- (1) Comprehensive Form
- (2) Contractual Insurance
- (3) Personal Injury
- (4) Broad Form Property Damage
- (5) Premises – Operations
- (6) Completed Operations

This coverage shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under this contract. Policy coverage must be on an occurrence basis.

D. Automobile Liability Insurance

The Contractor shall procure and maintain Automobile Liability Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following extensions of coverage shall be provided and indicated on the certificate of insurance.

- (1) Comprehensive Form
- (2) Owned, Hired, Leased and non-owned vehicles

If the Contractor does not own any vehicles in the corporate name, non-owned vehicles coverage shall apply and must be endorsed on either the Contractor's personal automobile policy or the Comprehensive General Liability coverage required under this contract.

E. Commercial Crime insurance (when applicable)

The Contractor shall procure and maintain Commercial Crime/Fidelity insurance in an amount not less than \$1,000,000.00, including coverage for theft or loss of KCKPS property.

26. LAW GOVERNING: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.

27. ANTI-DISCRIMINATION CLAUSE: No bidder on this request shall in any way, directly or indirectly, discriminate against any person because of age, race, color handicap, sex, national origin, or religious creed.

28. BID BOND/PERFORMANCE BOND (Applicable to Construction/Remodel/Repair Projects, Unless Waived by the District)

A. Each proposal must be accompanied by a certified or cashier's check, or a bid bond in the amount of five percent (5%) of the contractor's total bid.

B. A Performance Bond and a Material and Labor Payment Bond in amounts equal to one hundred percent (100%) of the contract price shall be furnished by the successful bidder. Bonds shall be issued by a surety acceptable to the Board.

29. DISQUALIFICATION:

A. The Director of Purchasing may, at her/his sole discretion, disqualify a bidder for one or any combination of the following reasons:

- 1. Bidder's product does not meet the specifications or bid conditions of the solicitation;
- 2. Bidder's tendered bid is not received on the District's bid form;
- 3. Bidder's tendered bid is not signed;
- 4. Required bid bond is not furnished at time of bid opening;
- 5. Failure to comply with bid instructions, terms and conditions that are judged to be essential to the competitive process and in the best interests of the District.

B. Disqualification of bidders on future bids may be considered for any one or combination of the following reasons:

- 1. Refusal of the bidder to complete a contract or bid;
- 2. Bidder's past history of late deliveries or partial/incomplete shipments,
- 3. Bidder's products or services have proven unreliable, unworkable or have not accomplished the result requested in the District's specifications.

30. SUPPLIER DIVERSITY: The Kansas City Kansas Public Schools encourages supplier diversity and participation of MBE/WBE/DBE designated businesses. However, such participation will not result in any selection or scoring advantage in the bid evaluation process.

NON-DISCRIMINATION OF EMPLOYMENT

The contractor and his subcontractors will not discriminate based on affected group status with respect to sex, age, or Handicapped status such restrictions relate to the bona fide occupational qualifications. Specifically, the contractor and his subcontractor shall not discriminate.

- A. Against recipients of service on the basis of race, color, religion, national origin, handicap or age.
- B. Against any employee or applicant, for employment on the basis of race, color, religion, national origin, sex, or otherwise qualified handicapped status.
- C. Against any applicant for employment or employee on the basis of age, where such applicant or employee is between ages 40 and 70 years of age and where such contractor employs at least 20 employees.
- D. Against any applicant for employment or employee on the basis of that person's status as a disabled or Vietnam-era Veteran.

The contractor and subcontractors will take affirmative action to insure applicants are employed and employees are treated during employment without regard to the above considerations. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion and transfer, recruitment or recruitment advertising, and selection for training, including apprenticeship. The contractor and his subcontractors will give written notice of their commitments under this clause to any labor union with which they have a bargaining or other agreements. The contractor and his subcontractors shall develop, implement, maintain and submit in writing to the District an affirmative action program. For the purpose of this section, an "Affirmative Action Program" means positive action to influence all employment practices, including, but not limited to, recruiting, hiring, promoting and training to provide equal employment opportunity regardless of race, color, sex, national origin, religion, age, disabled and/or handicapped qualified status.

AGREED TO:

BY:		DATE	
TITLE:		FIRM:	

Kansas City Kansas Public Schools desires to upgrade and improve electric distribution in the Education and Training Center (“Central Office”) located at 2010 N. 59th. The intent is to increase the amount of available electric service in the “Café 500” cafeteria. The scope of work will involve the installation of a new 45KVA transformer, 200amp sub-panel, 125a breaker box and all associated EMT conduit and stranded wire per the attached PKMR plan dated September 16, 2019.

Post: Immediate

Pre-bid meeting: Thursday, 10/10, 2:00p

Bids due: Thursday, 10/17, 2:00p

BOE approval: Tuesday, 10/22

Commence work: as soon as possible

Complete work: November 15, 2019

16000 - ELECTRICAL SPECIFICATIONS

SECTION 16000 - ELECTRICAL REQUIREMENTS

- GENERAL REQUIREMENTS:**
- ALL WORK SHALL BE IN ACCORDANCE W/ LATEST EDITION OF INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE, NFPA, CODES AS ADOPTED BY CITY, COUNTY, STATE & ALL OTHER APPLICABLE CODES.
 - ALL MATERIALS & EQUIPMENT SHALL BE NEW & SHALL BEAR U.L. LABEL WHERE APPLICABLE. PROVIDE WATERPROOF EQUIPMENT ENCLOSURES WHERE REQUIRED.
 - OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THIS WORK & SHALL MAKE ARRANGEMENTS FOR MODIFICATIONS TO ELECTRICAL CONNECTIONS TO BUILDING AS REQUIRED.
 - CONTRACTOR SHALL PROVIDE ALL LABOR & MATERIALS REQUIRED TO HAVE COMPLETE FUNCTIONING ELECTRICAL LIGHTING & POWER SYSTEMS TOGETHER W/ ALL ASSOCIATED EQUIPMENT & APPARATUS AS SHOWN ON PLANS.
 - WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE PROVIDED AS THOUGH FULLY SHOWN & SPECIFIED.
 - CONTRACTOR SHALL VISIT SITE & OBSERVE CONDITIONS UNDER WHICH WORK WILL BE DONE. ANY DISCREPANCIES SHALL BE CALLED TO ARCHITECT'S ATTENTION. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION FOR ANY ERROR OR NEGLIGENCE ON CONTRACTOR'S PART.
 - FINAL ACCEPTANCE OF WORK SHALL BE SUBJECT TO CONDITION THAT ALL SYSTEMS, EQUIPMENT, APPARATUS & APPLIANCES OPERATE SATISFACTORILY AS DESIGNED & INTENDED. WORK SHALL INCLUDE REQUIRED ADJUSTMENT OF SYSTEMS & CONTROL EQUIPMENT INSTALLED UNDER THESE SPECIFICATIONS.
 - WARRANT TO OWNER QUALITY OF MATERIALS, EQUIPMENT, WORKMANSHIP & OPERATION OF EQUIPMENT PROVIDED UNDER THESE SPECIFICATIONS FOR ONE YEAR FROM & AFTER COMPLETION OF BUILDING & ACCEPTANCE OF MECHANICAL SYSTEMS BY OWNER.
 - ALL MATERIALS INSTALLED IN PLENUMS SHALL BE NONCOMBUSTIBLE OR HAVE FLAME/SMOKE INDEX OF NO MORE THAN 25/50 IN ACCORDANCE W/ ASTM E 84.

SECTION 16100 - CONDUIT & CONDUCTORS

- FOLLOW CIRCUITING SHOWN ON PLANS. USE NO CONDUIT SMALLER THAN 1/2" & NO CONDUCTORS SMALLER THAN #12 GA. UNLESS NOTED OTHERWISE.
- WIRE SHALL BE IN NON-FLEXIBLE METALLIC CONDUIT (EMT, IMC OR RMC) FOR ALL CIRCUITS AND FEEDERS GREATER THAN 30A. LIGHT SWITCH RISERS, KITCHEN CIRCUITS & HOME RUNS.
- MC CABLE ACCEPTABLE FOR BRANCH CONVENIENCE CIRCUITS AND LIGHTING CIRCUITS. DO NOT DASH CHAIN LIGHT FIXTURES.
- LIGHTING & RECEPTACLE CIRCUIT CONDUCTORS SHALL BE COPPER THHN/THWN 600 VOLT, 75 DEG C, COLOR CODED AS DESCRIBED UNDER APPLICABLE CODES. NO ROMEX, PLASTIC FLEX TUBING ETC PERMITTED. LIGHT FIXTURE WIRE INSULATION SHALL HAVE TEMP RATING NOT LESS THAN INDIVIDUAL FIXTURE MANUF RECOMMENDED RATING.
- CIRCUITS W/ NO OR LARGER CONDUCTORS, MOTOR CIRCUITS, POWER & FEEDER CIRCUITS & BUILDING SERVICE FEEDERS SHALL BE COPPER THHN/THWN 600 VOLT, 75 DEG C.
- ALL CONDUIT, JUNCTION BOXES, ETC. ABOVE CEILINGS SHALL BE SUPPORTED FROM STRUCTURE. PIPE SLEEVES, HANGERS & SUPPORTS SHALL BE FURNISHED & SET & CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER & PERMANENT LOCATIONS.

SECTION 16200 - GROUNDING

- SUPPLEMENT GROUNDED NEUTRAL OF SECONDARY DISTRIBUTION SYSTEM W/ EQUIPMENT GROUNDING SYSTEM. INSTALLED SO THAT METALLIC STRUCTURES, ENCLOSURES, RACKWAYS, JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES, PORTABLE EQUIPMENT & OTHER CONDUCTIVE ITEMS OPERATE CONTINUOUSLY AT GROUND POTENTIAL & PROVIDE LOW IMPEDANCE PATH FOR GROUND FAULT CURRENTS.
- PROVIDE EQUIPMENT GROUND BUS IN BASE OF LOW VOLTAGE, SWITCHGEAR BRAZED OR OTHERWISE ADEQUATELY CONNECTED BY AN APPROVED METHOD TO GROUND RODS.
- PROVIDE IN CONDUIT GREEN INSULATED COPPER GROUND CONDUCTOR TO MAIN METALLIC WATER SERVICE ENTRANCE & CONNECT BY MEANS OF ADEQUATE GROUND CLAMPS.
- EQUIPMENT GROUNDING CONDUCTORS FOR BRANCH CIRCUIT HOME RUNS SHOWN ON DRAWINGS SHALL INDICATE AN INDIVIDUAL & SEPARATE GROUND CONDUCTOR FOR THAT BRANCH CIRCUIT WHICH SHALL BE TERMINATED AT BRANCH CIRCUIT PANELBOARD, SWITCHBOARD, OR OTHER DISTRIBUTION EQUIPMENT.
- GROUNDING CONDUCTORS SHALL BE AS SHOWN ON PLANS OR IF NOT SPECIFICALLY SHOWN SHALL BE NO SMALLER THAN THAT REQUIRED BY NEC.

SECTION 16300 - ELECTRICAL EQUIPMENT

- PANELBOARDS**
- BRANCH CIRCUIT 208/240V PANELS SHALL BE CAPACITY SHOWN W/ TIN PLATED COPPER BUSSING & BRACED FOR MINIMUM OF 10,000 AIC OR AS OTHERWISE NOTED OR REQUIRED (SERIES RATED ACCEPTABLE). BOLT ON CIRCUIT BREAKERS. 480V PANELS SAME EXCEPT 14,000 AIC MIN. MINIMUM 20" WIDE W/ GALV STEEL ENCLOSURE W/ HINGED DOOR & KEYPAD LOCK. COORD TRIM WITH MOUNTING LOCATION. PANELS TO BE RECESSED WHENEVER POSSIBLE.
 - DISTRIBUTION PANELS SHALL BE CAPACITY SHOWN & SHALL BE SQUARE D I-LINE W/ TIN PLATED COPPER BUSSING, 65KVA MIN OR AS OTHERWISE NOTED/REQD. BOLT ON CIRCUIT BREAKERS (SERIES RATED ACCEPTABLE), GALV STEEL ENCLOSURE. EQUIVALENT BY SQUARE D, SIEMENS, CUTLER HAMMER, OR GE.
- TRANSFORMERS**
- DRY-TYPE AS SCHEDULED, SOUND LEVEL SHALL NOT EXCEED DB PER ANSI C82.2 & NEMA TR-1. (2)2-1/2" TAPS BELOW & (2)2-1/2" TAPS ABOVE PRIMARY VOLTAGE. ALUMINUM WINDINGS, 150 DEG C. MINIMUM IMPEDANCE OF 2.5%. VENTILATED ENCLOSURE. SUSPEND AS REQD.

SECTION 16350 - ELECTRICAL IDENTIFICATION

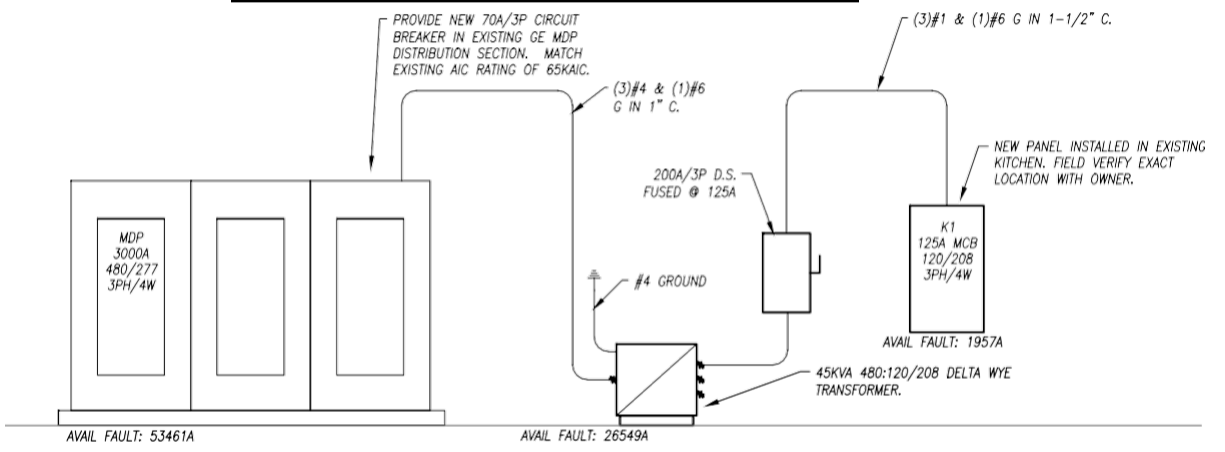
- MANUFACTURED LABELS FOR EACH PANELBOARD & TRANSFORMER, TYPEWRITTEN PANEL SCHEDULES MOUNTED IN PANELS.
- PRINTED TAPE STYLE LABEL FOR EACH RECEPTACLE INDICATING PANEL & CIRCUIT #.
- MANUFACTURED LABELS FOR ALL DISCONNECT SWITCHES INDICATING EQUIPMENT SERVED.
- BRANCH CIRCUITS - IDENTIFY EACH CIRCUIT W/ WIRE MARKERS WHEN ENCLOSURE LABEL AND WIRE COLORS DO NOT PROVIDE ENOUGH INFORMATION TO IDENTIFY EACH CIRCUIT WITHOUT TRACING. FEEDERS & BRANCH CIRCUIT HOME RUNS W/ WIRE MARKER W/ PANEL & CKT #. BOX COVERS ABOVE LAY-IN CEILING NEATLY MARKED W/ INDELIBLE MARKER.

SINGLE-SECTION PANELBOARD SCHEDULE											
PANEL DESIGNATION: K1		CIRCUIT #		MAIN LUG AMPS: 225			SCCR RATING (AIC): 10,000				
MOUNTING: RECESSED		LOCATION: KITCHEN		MAIN BREAKER: 150			VOLTAGE: 208/120				
DESCRIPTION		PHASE		TRIP		POLE		PHASEWIRE		DESCRIPTION	
	A	B	C					A	B	C	
FRYER	3600			60	3	3	4	1	#8	1000	KITCHEN EQUIPMENT/SPARE
	3600			60	3	5	6	1	20	1000	KITCHEN EQUIPMENT/SPARE
RANGE	2000		3600	25	2	9	10	1	20	1000	KITCHEN EQUIPMENT/SPARE
	2000			25	2	11	12	1	20	1000	KITCHEN EQUIPMENT/SPARE
REFRIGERATOR	1250	1250		20	2	13	14	1	20	1000	KITCHEN EQUIPMENT/SPARE
	1250			20	2	15	16	1	20	1000	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE		1000		20	1	17	18	1	20	1000	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE			1000	20	1	19	20	1	20	1000	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE	1000			20	1	21	22	1	20	--	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE		1000		20	1	23	24	1	20	--	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE			1000	20	1	25	26	1	20	--	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE	1000			20	1	27	28	1	20	--	KITCHEN EQUIPMENT/SPARE
KITCHEN EQUIPMENT/SPARE		1000		20	1	29	30	1	--	--	SPACE
KITCHEN EQUIPMENT/SPARE			1000	20	1	31	32	1	--	--	SPACE
SPACE						33	34	1	--	--	SPACE
SPACE						35	36	1	--	--	SPACE
SPACE						37	38	1	--	--	SPACE
SPACE						39	40	1	--	--	SPACE
SPACE						41	42	1	--	--	SPACE
TOTALS	10850	10600	9850						3000	3000	3000

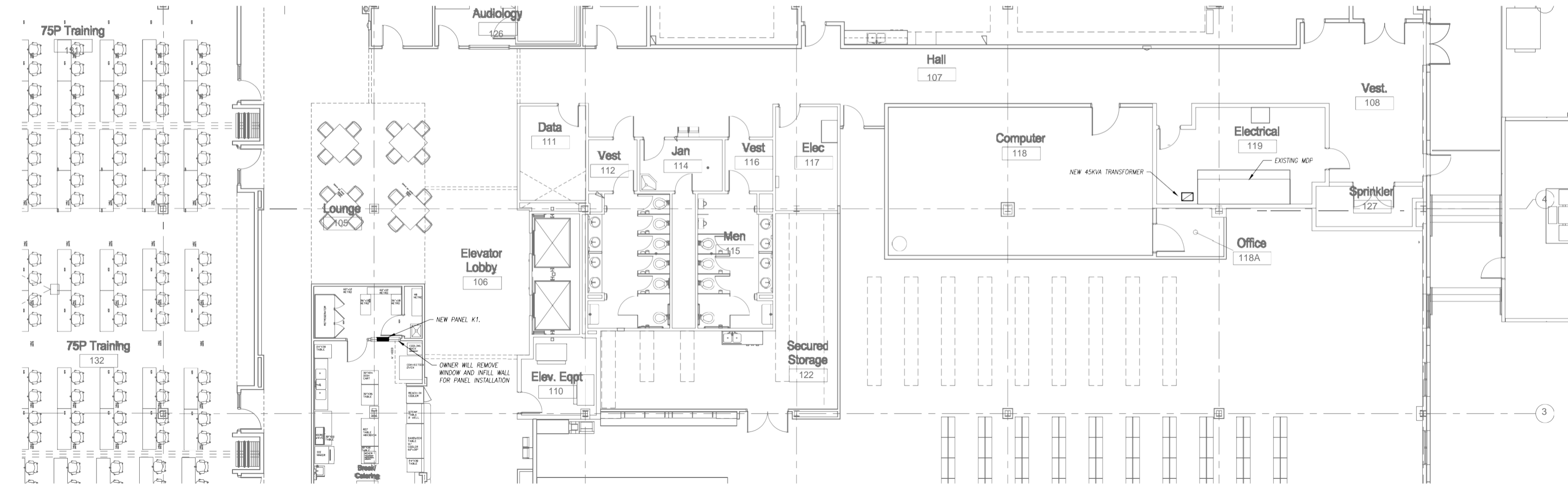
PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	0
RECEPTACLES	0	10KVIA + 50% REST	0
MOTORS	0	1.25 x LARGEST + 50% OF REST	0
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
KITCHEN EQUIPMENT	40,100	0.65	26,165
MISC. LOADS 2	20,300	1.00	20,300
	0	1.00	0
	0	1.00	0
SIZING LOAD (AMPS)			73

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	13,850	118.4
B	13,600	115.2
C	12,850	107.8
TOTALS	40,300	111.9

REMARKS:
 1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.
 x.
 y.
 z.
 5.



ELECTRICAL RISER DIAGRAM
NTS



FLOOR PLAN - ELECTRICAL
1/4" = 1'-0"



pkmr
ENGINEERS

PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
 13300 W 98TH STREET
 LENEXA, KS 66215
 913.492.2400 WWW.PKMR.ENG.COM

KCK SCHOOL DISTRICT CENTRAL OFFICE ELECTRICAL IMPROVEMENTS

2010 N 59TH STREET
 KANSAS CITY, KS 66104

ISSUED FOR:	
DESCRIPTION	DATE
1	
2	
3	

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DRAWN BY:
 CHECKED BY:

SHEET TITLE:
ELECTRICAL WORK

DATE: **09.16.19** PKMR PROJECT: **19.427**

SHEET NUMBER:
E1