

**PROJECT #1822
Gym Remodel
Brooks Middle School
WICHITA, KANSAS**

FEBRUARY 2018

**UNIFIED SCHOOL DISTRICT #259
SEDGWICK COUNTY
WICHITA, KANSAS**

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THE WICHITA PUBLIC SCHOOLS DOES NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, ANCESTRY, NATIONAL ORIGIN, RELIGION, SEX, DISABILITY, AGE, VETERAN STATUS, OR ANY OTHER LEGALLY PROTECTED CLASSIFICATION. PERSONS HAVING INQUIRIES MAY CONTACT THE SCHOOL DISTRICT'S TITLE IX DIRECTOR/ADA/SECTION 504 COORDINATOR FOR ADULTS AT (316) 973-4420, OR SECTION 504 COORDINATOR FOR STUDENTS AT (316) 973-4650, 903 S. EDGEMOOR, WICHITA, KS 67218.

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SECTION 00020
INVITATION TO BID

Bid #18-42-1089

Notice is given hereby that the
BOARD OF EDUCATION
UNIFIED SCHOOL DISTRICT NO. 259
WICHITA, KANSAS

will accept proposals for

GYM REMODEL
BROOKS MIDDLE SCHOOL

According to Drawings and Specifications prepared by USD #259.

Bid Opening: March 13, 2018 2:30 p.m.

Sealed bids will be received on E-Bid by the Owner at the USD 259 Service Center, 3850 North Hydraulic, Wichita, KS 67219, on or before the date and time specified above or as directed by an authorized USD 259 addendum. The time of receipt shall be determined by the time clock stamp on E-Bid. Bids received after that time will not be accepted. Bids will be opened and read aloud at the Alvin E. Morris Administrative Center, Purchasing Conference Room 204, 903 S Edgemoor Wichita, KS 67218. Interested parties are invited to attend.

Proposed Contract Documents are available to be examined at: **Owner's Office, School Service Center, 3850 North Hydraulic, Wichita, KS 67219.**

Proposed Contract Documents may be available to be examined at:

ARC Document Solutions
518 W. Douglas
Wichita, KS 67203

KCNR, LLC
230 Laura Ste. 101 & 105
Wichita, KS 67211

CMD
30 Technology Parkway South, #500
Norcross, GA 30092

Builder's Association
720 Oak Street
Kansas City, MO 64106

McGraw Hill Construction/Dodge
3316 Central Avenue
Hot Springs, AR 71913

ePlan
4115 S. Providence, Suite 105
Columbia, MO 65203

Construct Connect
3825 Edwards Rd
Cincinnati, OH 45209

Bid security in the amount of 5% of the base bid will be required to accompany bids. These will need to be scanned into the E-Bid System prior to bid closing. The original bid bond must be received by Director of Design and Construction at 3850 N Hydraulic Wichita, KS 67219 before contract will be signed and sent to successful bidder. Proposal bonds/bid or cashiers/certified checks will be acceptable. Personal checks or business checks will NOT be accepted.

The Prime Contractor can submit a bid for this project. For purposes herein the Prime Contractor means: a district Pre-Approved General Contractor. The subcontractors will need to be a district Pre-Approved Asbestos Contractor and a district Pre-Approved Electrical Contractor. See specifications INSTRUCTIONS TO BIDDERS – Section 00100 , SUBCONTRACTORS 1.16 for subcontractor pre-approval requirements.

All bid specification and drawing questions must be submitted by email, by the date and time specified on E-Bid, enabling the Project Representative to provide a well-researched answer to all bidding parties and issue a response by addendum.

The owner reserves the right to reject any or all proposals and to waive irregularity in the bidding process.

USD 259 desires to allow as many vendors as possible the opportunity to participate, including DBE (Disadvantaged Business Enterprise), MBE (Minority Business Enterprise) and WBE (Women's Business Enterprise) businesses, in the roles of providing goods and services to the District. If your company is not a DBE, MBE or WBE, your efforts to contract with vendors who are DBE's, MBE's or WBE's, will be appreciated.

Any visitor entering any USD 259 school – who will have the opportunity to interact with students during bell hours – will be required to sign in using this system. *Bell hours are 10 minutes before and 10 minutes after the period of a normal school day (ex: 7:50 a.m. to 3:20 p.m. for an 8 a.m. start school).*

Visitors who will be required to use this system include:

- *Parents, guardians and other visitors who will volunteer in or observe classrooms or student activity areas.*
- *Parents, guardians or other appropriate visitors who eat lunch with their student, who may be at school for a birthday celebration or classroom activity, or who may drive for a field trip.*
- *Vendors and other community partners who have access to our building's hallways to execute their work duties.*

Driver's license or government-issued ID card will be used to check you in to the building. Name and birthdate will be instantly captured, and within seconds, you will receive a date-specific visitors ID badge to wear in school. Visitor IDs will be scanned against national sexual offender data bases to ensure the safety and security of our school environment. This will occur in a matter of seconds. Should a non-authorized visitor attempt to enter a school, both school leaders and our district's safety personnel will be alerted.

Each time a visitor checks in, a custom ID badge will be provided.

WHENEVER vendors are at a District site, they must have a photo ID badge with their company name, and sign in at the office immediately upon arrival if the office is open.

SECTION 00100
INSTRUCTIONS TO BIDDERS

1.01 THE WORK:

GYM REMODEL
BROOKS MIDDLE SCHOOL

1.02 SECURING DOCUMENTS

- A. Copies of the proposed Contract Documents may be obtained from: USD# 259 via E-Bid at <https://259ebid.ionwave.net/Login.aspx>

1.03 BID

- A. In order to receive consideration, make proposals in strict accordance with the following.
 1. Make proposals using the E-Bid System with all items filled out. Unauthorized conditions, limitations, or provisions listed on the proposal will be cause for rejection of the bid. If authorized explanations are made for any reason, explain with a signed statement from the bidder.
 2. No telegraphic/faxed proposal will be considered. No proposals received after the time fixed for receiving them will be considered. Late proposals will not be accepted by the E-Bid System. It is the sole responsibility of the bidder to see that his proposal or modification is received on time.

1.04 BONDS

- A. Bid security in the amount stated in the invitation to bid must accompany each bid as a scanned document. The successful bidder's security will be retained until he has signed the Contract and has furnished the required Bonds and Certificates of Insurance.
- B. The Owner reserves the right to retain the security of all bidders until the successful bidder enters into the Contract or until 30 days after bid opening, whichever is sooner. Other bid security will be returned as soon as practicable. If any bidder refuses to enter into a Contract, the Owner may retain his bid security as liquidated damages but not as a penalty.
- C. Prior to signing the Contract, the Owner will require the successful bidder to secure and post a Kansas Statutory Payment Bond and an AIA A-312 Performance Bond and Payment Bond in full amount of the Contract Sum to cover faithful performance of the contract and payment of all obligations arising thereunder. Such bonds shall be issued by Surety approved by the Owner and authorized to transact business in Kansas. Costs of such bonds will be included in the proposed bid.

1.05 EXAMINATION OF DOCUMENTS AND SITES OF WORK

- A. Before submitting a proposal, each bidder shall examine carefully all Contract Documents and must visit the sites of the Work. Each bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which the work is to be performed, and shall include in his bid a sum to cover the cost of items necessary to perform the Work as set forth in the Contract Documents. No allowance will be made to a bidder because of lack of such examination or knowledge. The submission of a proposal will be considered as conclusive evidence that the bidder has made such examination.
- B. All bid specification and drawing questions must be submitted by email, prior to bid date, enabling the Project Representative to provide a well-researched answer to all bidding parties and issue a response by addendum.

1.06 QUALITY ASSURANCE

- A. All designs, clearances, workmanship and material, unless specifically accepted, shall be in accordance with all codes having legal jurisdiction.
- B. Any and all applicable standards and/or referenced regulatory requirements for this project shall comply with the latest federal, state, county, and local rules and regulations.
- C. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- D. Should any work indicated be substandard to any ordinances, laws, codes, rules or regulations bearing on work, the Contractor shall execute work accordingly, without increased cost to the Owner, but not until he has referred such variances for Owner approval.

1.07 PROOF OF COMPETENCY OF BIDDER

- A. The bidder will be required to complete and file with the Owner a contractor's qualification form A.I.A. #A305 prior to requesting permission to bid the project. A bidder may be required to furnish further evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience in the types of work called for, to assure completion of the contract in a satisfactory manner.

1.08 WITHDRAWAL OF BIDS

- A. Bidder may withdraw his proposal, using the E-Bid System at any point prior to the scheduled date and time that the bid is to close.

- B. No bidder may withdraw his proposal for a period of ninety calendar days after the date set for opening thereof, and bids shall be subject to acceptance by the owner during this period.

1.09 AWARD OR REJECTION OF BIDS

- A. The Contract, if awarded, will be awarded to the responsible bidder who has proposed the lowest base bid, subject to the Owner's right to reject any or all bids and to waive informality and irregularity in the bids and in the bidding. The Owner reserves the right to award a contract to one or more responsible bidders if more than one contract is deemed advantageous to the District. If more than one bidder is selected, each bidder will be awarded a contract for their bid for that site. Owner reserves the right to award a contract(s) for some of the schools, but not all of them.

1.10 EXECUTION OF AGREEMENT

- A. The form of agreement which the successful bidder will be required to execute is included in the Project Manual.
- B. The bidder to whom the Contract is awarded shall, within five calendar days after notice of award and receipt of Agreement forms from the Owner, sign and deliver required copies to the Owner.
- C. At or prior to delivery of the signed Agreement, the bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Contract Documents, Certification Regarding Debarment and Suspension statement and such Bonds as are required by the Owner.
- D. Bonds and certificates of Insurance shall be approved by the Owner before the successful bidder may proceed with the Work. Delay in providing Bonds or certificates of Insurance in a form satisfactory to the Owner shall not extend contract completion time.
- E. In scheduling, allow at least ten working days for obtaining signatures from owner on contracts.
- F. The successful bidder must have on file with the owner a Taxpayer Identification Number Form (substitute W-9 form). A copy of this form is included on E-Bid. This form is not required at the bid opening but should be completed and returned to Purchasing Department, 903 S. Edgemoor Wichita, KS 67219.
- G. Upon receipt of the signed Agreement, contractor shall provide list of sub-contractors complete with contact name, address and phone number, their ethnicity and indicating whether they are MBE (Minority Business Enterprise) or WBE (Woman's Business Enterprise), etc. and the cost for their portion of the work. A form for that purpose is on E-Bid.

- H. Failure to sign and submit Certification Regarding Debarment and Suspension statement with the bid (on E-Bid) may be cause for rejection of bid.

1.11 CONSTRUCTION TIME AND LIQUIDATED DAMAGES

- A. The agreement will include a stipulation that the work will be completed on or before August 10, 2018 following receipt of the Owner's Notice to Proceed.

NIGHTS AND WEEKEND WORK WILL BE ALLOWED BUT NOT REQUIRED.

- B. Time is of the essence of this Agreement and Owner will suffer financial loss if the Work is not completed within the time specified in A above plus any extensions granted in accordance with 4.3.7 of AIA Document A201-2007. The amount of actual damages the Owner will incur from a delay of completion of the Work is not easily and readily determinable. Accordingly, instead of requiring proof, Contractor shall pay to Owner liquidated damages for delay (but not as a penalty) the sum of Two Hundred Dollars (\$200.00) per calendar day, after the agreed Substantial Completion Date that the Work is not certified by the Owner as being substantially complete.

1.12 EQUAL EMPLOYMENT OPPORTUNITY

- A. Each Bidder is required to submit with his proposal, (unless he has on file with the Owner his firm's Equal Employment Opportunities Plan), a written statement as to what affirmative action has been or will be taken which will result in Equal Employment Opportunity. The statement should not be limited to minority races but should include economically disadvantaged.
- B. The successful bidder hereby agrees that as the Contractor, he shall observe the provisions of the Kansas Act Against Discrimination and shall not discriminate against any person in the performance of work under the contract because of race, religion, color, sex, national origin, ancestry or handicap.
- C. In all solicitations or advertisements for employees, he shall include the phrase "equal opportunity employer," or a similar phrase to be approved by the Kansas Commission on Civil Rights.

- D. If the Contractor fails to comply with the manner in which he reports to the Kansas Commission on Civil Rights in accordance with the provisions of the Kansas Act Against Discrimination, he shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the Board of Education.
- E. If the Contractor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the Kansas Commission of Civil Rights which has become final, he shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the Board of Education.
- F. The contractor shall include all the above provisions in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.

1.13 PLAN REVIEW AND PERMIT FEE

- A. Plan Review and Permit fees, shall be included in the base bid and are the responsibility of the Contractor.
- B. The contractor shall secure an additional set of approved prints from the approving authority and forward to the Owner when approval has been granted.

1.14 MATERIAL SUBSTITUTIONS

- A. Bidders, manufacturers, supply companies, etc., who desire to propose a product or material or equipment that is equal to or exceeds that specified, shall submit to the Owner at 3850 N. Hydraulic, Wichita, KS 67219 complete information and data verifying that the material meets or exceeds the Owner's specifications 10 business days prior to the letting date to allow time for a fair evaluation of the request for substitution, as well as time to notify all bidders of the decision concerning that product. **NO SUBSTITUTIONS WITHOUT APPROVAL PRIOR TO BIDDING.**
- B. Submit three paper copies (e-mails are acceptable) of each request for consideration. Identify product or fabrication or installation method to be replaced. Include specification page number and Section number and title and Drawing numbers and titles.
 - 1. Submit the substitution request form: CSI Form 13.1A
 - 2. Documentation: Show compliance with requirements for substitutions and the following:
 - a. A detailed comparison (possible spreadsheet) of the specified product and the proposed substitution. Examples could be weight, size, durability, visual effect, sustainable design characteristics and/or warranties.
 - b. Product Data, including drawings, descriptions of products, fabrication and installation procedures and certified test results attesting to the proposed product equivalence. **BURDEN OF PROOF IS ON PROPOSER.**
 - c. Samples (when requested).

- d. List of similar installations for completed projects with project names and addresses and names and addresses of owners.
- e. Identify and explain all interface ramifications of the proposed substitution.
- 3. Owner's Action: If necessary, Owner will request additional information or documentation for evaluation. Owner will notify Contractor of acceptance or rejection of proposed substitution.

1.15 FORMS INCLUDED ON E-BID

- A. Samples of forms to be used in the course of this contract are included on E-Bid for clarification purposes only. It is the responsibility of the contractor to use AIA forms in conformance with copyright laws.

1.16 SUBCONTRACTORS

- A. If major subcontractors are required on the project, the proposed subcontractors shall be listed on the bid form on E-Bid in the area provided. Only Subcontractors that have been approved by the owner prior to the bid letting shall be proposed. Proposing Subcontractors not approved by owner may be cause for rejection of bid. Proposed Subcontractors shall not be changed after the awarding of the contract. The Approved Contractors List can be found on our website at <http://www.usd259.org> on the Design and Constructions Department page.
- B. The following Contractors require Approval:
 - a. General Contractors
 - b. Asbestos Contractors
 - c. Mechanical Contractors
 - d. Electrical Contractors
 - e. Data Communication/Leviton
 - f. Turf Field System Contractors
 - g. Tennis Court Installation Contractors
 - h. Swimming Pool Installation Contractors
 - i. Track Installation Contractors
 - j. Davis-Bacon General Contractors

SECTION 00700
AIA GENERAL CONDITIONS

DISTRICT MODIFIED AIA DOCUMENT A 201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", 2007 EDITION, HEREINAFTER REFERRED TO AS "AIA GENERAL CONDITIONS", IS HEREBY MADE A PART OF THIS SPECIFICATION, AS IF HERETO ATTACHED OR HEREIN REPEATED. THE CONTRACTOR SHALL CONSULT THIS DOCUMENT AND BECOME INTIMATELY FAMILIAR WITH ITS CONTENTS BEFORE SUBMITTING HIS BID. COPIES ARE AVAILABLE AND ATTACHED IN THE E-BID SYSTEM. THE AIA ADDITIONS AND DELTIONS REPORT IS AVAILABLE UPON REQUEST.

SECTION 00800
SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.01 GENERAL CONDITIONS

- A. The General Conditions of the Contract for Construction No. A-201, latest edition, as published by the American Institute of Architects, except as the same may be modified herewith, is hereby made a part of the Contract Documents.

1.02 WARRANTY

- A. One-year warranty is required on this project.
- B. Costs of repair or replacement shall not accrue to the owner including repair or replacement of other work disturbed by or because of repair or replacement.
- C. Guarantees which are standard guarantees provided by a manufacturer for this product shall be received by the contractor filled out completely and filed with the company for the owner. Certificates or registration stubs shall be included with the as built drawings submitted for the owner upon completion of the work.
- D. When written guarantee is required the document shall include the following information:
 - 1.
 - a. Name and address of project and owner
 - b. Article, and material or system covered,
 - c. Name and address of installing contractor,
 - d. Name and address of prime contractor,
 - e. Signature of individual authorized to sign contracts for the company issuing the guarantee.
 - 2. The following terms (minimum) shall be incorporated: One year or as specified from "date of substantial completion". The article, material or system is free from defective materials or workmanship.

1.03 TAXES IN LIEU OF GENERAL CONDITION

- A. Materials and equipment incorporated into this project are exempt from the payment of sales tax under the laws of the State of Kansas, and such sales tax shall not be included in the proposal of the Bidder. Excise tax or hidden tax shall be paid by the Contractor and be included in the proposal of the Bidder.
- B. The Owner will provide the Contractor with an exemption number within ten days of the contract date. Should the Owner fail to provide an exemption certificate to the contractor, the Contractor shall immediately notify the Owner in writing.

- C. Upon issuance of a proper exemption certificate to the Contractor, the contractor shall assume full responsibility for his own proper use of the certificate, and shall pay all the cost of any legally assessed penalties relating to the Contractor's improper use of the exemption certificate. The contractor shall comply with all statutes of the State of Kansas related to sales tax exemption.
- D. A State of Kansas project completion certificate shall be presented to the owner upon completion of the job.

1.04 SAFETY OF PERSONS AND PROPERTY

- A. The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:
 - 1. All employees on the Work and all other persons who may be affected thereby.
 - 2. All the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site.
- B. The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property, to protect them from damage, injury or loss. He shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

1.05 INSURANCE

If at any time during the term of this contract or any extension thereof, any required policies of insurance should expire, or are canceled, it will be the responsibility of the contractor to furnish USD 259 a Certificate of Insurance indicating renewal or an acceptable replacement of the expiring policy prior to the expiration or cancellation date so that there will be no lapse in any coverage. USD 259 shall be named as an additional insured. The following minimum coverage is generally required of vendors providing services:

Contractor shall provide the following minimum insurance coverage.

The requirements set forth below are based on insurance provisions and requirements set for in Article 11 of AIA Document A201, General conditions of the contract for Construction, and the completion of these instructions is presumed to be based thereon.

A. CONTRACTOR’S LIABILITY INSURANCE

Concerning the insurance described in Paragraph 11.1 of AIA Document A201, 2007 Edition, specify the following limits:

1. Worker’s Compensation and Employers Liability: Statutory

Bodily Injury by Accident	\$100,000 Each Accident
Bodily Injury by Disease	\$500,000 Policy Limit
Bodily Injury by Disease	\$100,000 Each Employee

Officers who will be on the job site SHALL be included.

2. Commercial General Liability (including Premises-Operations; Products and Completed Operations, XCU cannot be excluded)

Each Occurrence Limit	\$1,000,000
General Aggregate Limit	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal and Advertising Injury Limit	\$1,000,000

The General Liability policy shall include a General Aggregate. Such General Aggregate shall be not less than \$2,000,000. Policy shall be endorsed to have a per project aggregate.

3. Umbrella Excess Liability:

Each Occurrence Limit	\$2,000,000
Aggregate	\$2,000,000

4. Automobile Liability (owned, non-owned, hired):

Bodily Injury:	
\$ Each Person	\$ 250,000
\$ Each Accident	\$ 500,000
Property Damage:	
\$ Each Occurrence	\$ 250,000
or	\$1,000,000 combined single limit

B. PROPERTY INSURANCE

Concerning the insurance described in Paragraphs 11.2 and 11.4 of AIA Document A201, 2007 Edition, Owner will purchase the insurance in the amounts deemed to be in the public interest that is described in Paragraphs 11.2 and 11.4 of AIA Document A201, 2007 Edition.

EXCEPTION: On contracts under \$500,000, the contractor shall provide Builder’s Risk coverage or an Installation policy, which ever is applicable.

C. PROFESSIONAL LIABILITY INSURANCE

The insurance requirements have been specified at 3.12.10 of the General Conditions (AIA A201).

D. BONDS

(a) A Performance Bond, Payment Bond and Statutory Bond as described in Paragraph 11.5 of AIA Document A201, 2007 Edition, and in the Additional Documents as that term is defined in Paragraph 1.1.1 of AIA Document A201, 2007 Edition, shall be provided in the following amounts:

Performance Bond	100% of Contract Sum
Payment Bond	100% of Contract Sum
Statutory Bond	100% of Contract Sum

(b) The Performance and Payment Bond shall be in the form set forth in AIA Document A312 as attached hereto as Attachment “A”, and the Statutory Bond shall be in the form attached hereto as Attachment “B”.

1. DEDUCTIBLE

Deductibles shall not exceed \$5,000. Deductibles are the responsibility of the Contractor.

Liability Insurance coverage shall be considered as Primary and not as excess insurance. The Carrier(s) shall provide thirty (30) days written notice to USD 259 by Registered Mail prior to any modification, cancellation, non-renewal or other change in coverage. The policies must be effective prior to the commencement of work and must remain in force until termination of work under this contract. In the event of interruption of coverage for any reason, all work under the contract shall cease and shall not resume until coverage has been restored.

1.06 BONDS

A. Performance Bond and Labor and Material Payment Bond

1. On Contracts exceeding \$100,000, the Contractor shall pay premium for and furnish an AIA Payment and Performance Bond and a Kansas Statutory (Labor and Material Payment) Bond, in full amount of the Contract Sum to cover faithful performance of the Contract and payment of all obligations arising thereunder, within ten calendar days after award of the contract. Furnish bonds and with sureties approved by the Owner and authorized to transact business in Kansas. Furnish evidence showing a Kansas Statutory Bond has been filed with the clerk of the District Court in the County in which the project is to be constructed. Provide two (2) original copies of each of the required bonds to the staff Owner or the Project Representative.

1.07 OWNER'S PROJECT REPRESENTATIVE

- A. The Owner as referred to in this specification and as defined in 4.1 of the general conditions means the Owner or the Owners authorized representative. This person is identified by the Owner on the cover sheet of this document. Communications/requests from any other USD #259 personnel shall be discussed with the Owner or the Owners designated representative for a final decision.

1.08 SEXUAL HARASSMENT

- A. The contractor shall comply with all City, State and Federal laws, rules, regulations and ordinances pertaining to sexual harassment in regard to USD 259 employees, USD 259 pupils or other individuals on USD 259 property.
- B. If an employee of a contractor or subcontractor is suspected of sexual harassment on USD 259 property, the individual will be reported to the contracting entity. In addition, the suspected individual will be reported to the contracting entity. In addition, the suspected individual/s may not be allowed to continue to work at the site.
- C. Failure on the part of the contracting entity to insure employee/sub-contractor compliance with the applicable regulations may result in:
1. Revocation of current contracts.
 2. Elimination of the contractor from the approved bidders list.

- D. Sexual harassment may include, but is not limited to:
1. Sexually oriented communication, including sexually oriented verbal “kidding” or harassment or abuse.
 2. Subtle pressure or requests for sexual activity.
 3. Unwelcome attempts to change a professional relationship into a personal, social-sexual relationship.
 4. Creating a hostile work or learning environment, including the use of innuendoes or overt or implied threats.
 5. Unnecessary touching of individual, e.g., patting, pinching, hugging, repeated brushing against another person’s body.
 6. Requesting or demanding sexual favors accompanied by implied or overt threats concerning an individual’s employment.
 7. Requesting or demanding sexual favors accompanied by an implied or overt promise of preferential treatment with regard to an individual’s employment.
 8. Sexual assault or battery as defined by law.

1.09 IMMIGRATION AND NATIONALITY ACT

- A. Unified School District 259 actively supports the Immigration & Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The contractor shall establish appropriate procedures and controls so no services or products in response to this Request for Bid/Proposal will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

1.10 HAZARDOUS MATERIALS

- A. Contact Environmental Services Department at 973-2006 for required procedures regarding handling, disposal and documentation of asbestos-containing building materials (ACBM) or other hazardous materials.

1.11 CLAIMS FOR ADDITIONAL TIME

- A. Prior to start of the work, the manufacturer's recommended weather conditions shall be presented to the Owner. Any actual conditions that do not allow work per the manufacturer's recommendations shall be presented to the Owner on a daily basis. If adverse weather conditions are the basis for a claim for additional time, such claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonable anticipated and had an adverse effect on the scheduled construction.
- B. Typically it is not advised to continue work during rain or snow. Thus, actual average number of rain days each month are as follows and these days are to be included in all schedules:
January (10), February (5), March (4), April (5), May (8), June (8), July (6), August (5), September (6), October (5), November (3), December (8).
- C. Only bad weather days beyond these provisions will be allowed as a basis for a request for additional time on a contract.
- D. Bad weather days must be approved by the Owner on a daily basis.
- E. Bad weather days not approved by the Owner will not be the basis for an extension of contract time.

SECTION 01010
GENERAL REQUIREMENTS

SUMMARY OF WORK

1.01 SCHEDULE

- A. A written Project schedule shall be prepared and submitted to the Project Representative for approval.

1.02 ACCESS TO BUILDING

- A. The Contractor shall cooperate with the administration at the site of the work and the Project Representative. The Contractor shall sign in if required by the building administration or shall use other means as required for communicating their presence at the site.
- B. The contractor shall cooperate with the administration on working hours. If extended work hours are needed to complete the work, the contractor shall notify the Project Representative 48 hours in advance of the need for access to the building.

1.03 NO TOBACCO

- A. There is absolutely no tobacco use on any USD 259 property.

1.04 BEHAVIOR STANDARDS

- A. The contractor and employees shall exercise discretion in language, behavior, etc. when working on school properties.

1.05 IDENTIFICATION

- A. **Contractor must wear a photo ID while working at school sites.**

1.06 KEYS

- A. Keys to U.S.D. #259 property will be loaned to persons not employed by U.S.D. #259 under the conditions as listed below. Keys will be loaned as a supplemental condition of the contract for construction. The keys will be issued to the General contractor only. The General Contractor will be totally responsible for proper use of the key and for maintaining security at the building site.
- B. When borrowing a key(s), and by signing below, we agree that;
 1. Keys are the property of U.S.D. #259.
 2. Keys will **NOT** be duplicated when loaned.
 3. Additional keys will **NOT** be borrowed from site personnel.
 4. All keys will be returned at one time upon completion of the project.

5. Final payment will be made only after return of all keys and/or payment of all fines related to key use.
6. Lost keys will be reported immediately to the project representative.
7. The project representative will at all times know the location of and be responsible for all key(s) loaned to the contractor.
8. Persons entering the building with loaned keys will:
 - a. Contact security dispatch (973-2100) immediately prior to entering the building. Give security your name, your company name, your cell phone number and your proposed schedule for occupying the building.
 - b. Disengage the alarm upon entering the building.
 - c. Keep the entrances monitored or locked when using the building.
 - d. Verify windows and doors are closed and securely locked when leaving the building.
 - e. Re-activate the alarm when leaving the building.
 - f. Contact security dispatch immediately upon departure of the building.
9. If keys are lost the following charges will be incurred:
 - a. High School Keys \$1,200.00 per site
 - b. Middle School Keys \$800.00 per site
 - c. Elementary School Keys \$500.00 per site
10. If it is feasible at a site for the contractor to have access at only one exterior door and the District can install a contractor cylinder, the charge for a lost "contractor key" shall be \$100.00.
11. If the contractor fails to notify security prior to building entry, it will trigger a false alarm and U.S.D. #259 security and/or Wichita Police will be contacted and dispatched. The contractor will be charged for false alarms at a rate of \$50 for the first alarm, and \$75 each alarm thereafter.
12. Any failure on the part of the contractor to abide by any or all of these procedures and/or repeated loss of keys or false alarms may be cause for the loss of the privilege of a loaned key.

1.07 RESTROOM ACCOMODATIONS

- A. Restroom accommodations for contractor employees must be provided by Contractor in a separate structure.

SECTION 01152
APPLICATION FOR PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work included: Comply with procedures described in this Section when applying for progress payment and final payment under the Contract.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. The Contract Sum and the schedule for payments are described in the form of Agreement.
 - 3. Payments upon Substantial Completion and Completion of the Work are described in the General Conditions.

1.02 QUALITY ASSURANCE

- A. Provide a schedule of values as required to be submitted under Paragraph 9.2 of the General Conditions to the Owner for approval.
- B. Base requests for payment on the portions of the work completed as described on the schedule of values.
- C. A retainage of 5% of completed and stored will be withheld from each payment until final payment.

1.03 SUBMITTALS

- A. Informal submittal: (Unless otherwise directed by the Owner:)
 - 1. Make an informal submittal of request for payment to the Owner by filling in, with erasable pencil, pertinent portions of USD 259 Application and Certificate for Payment plus continuation sheet or sheets.
 - 2. Make this preliminary submittal to the Owner between 15th/20th of the month.
 - 3. Revise the informal submittal of request for payment as agreed.

- B. Formal submittal: (Unless otherwise directed by the Owner)
1. Make formal submittal of request for payment by filling in the agreed data, by typewriter or neat lettering in ink, on USD 259 Application and Certificate for Payment plus continuation sheet or sheets.
 2. Submit two original copies of the application and Certificate for Payment, to the Owner on or before the 20th of each month.
 3. Sign and notarize both original copies of the application and Certificate for payment.
 4. The Owner, when submittal is approved, will sign the application and Certificate for Payment, and will distribute.
 - a. One copy to Accounts Payable.
 - b. One copy to the Owner's file.

SECTION 01153
CHANGE ORDER PROCEDURE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work included: Make such changes in the work, in the Contract Sum, in the Contract Time of completion, or any combination thereof, as are described in written Change Orders signed by the Owner and issued after execution of the Contract, in accordance with the provisions of this Section.

1.02 QUALITY ASSURANCE

- A. Include within the contractor's quality assurance program such measures as are needed to assure familiarity of the contractor's staff and employees with these procedures for processing Change Order data.

1.03 SUBMITTALS

- A. Make submittals directly to the Project Representative at the address shown on the Project Directory in the Project Manual.

1.04 PRODUCT HANDLING

- A. Maintain a Register of Change Orders, accurately reflecting current status of all pertinent data.
- B. Make the Register available to the Project Representative for review at his request.

1.05 PROCESSING CHANGES INITIATED BY THE OWNER

- A. Should the Owner contemplate making a change in the Work, the Project Representative will request a price from the contractor for the change in work. The contractor shall promptly advise the Project Representative as to credit or cost proposed for the described change and if additional time is needed in the contract. This is not an authorization to proceed with the change.
- B. If the Contractor has been directed by the Project Representative to promptly advise him as to credit or cost proposed for the described change, the contractor shall:
 1. Analyze the described change and its impact on costs and time;
 2. Secure the required information as given in "C" and forward it to the Project Representative for review;
 3. Meet with the Project Representative if required to explain costs and, when appropriate, determine other acceptable ways to achieve the desired objective;

4. Alert pertinent personnel and subcontractors as to the impending change and, to the maximum extent possible, avoid such work as would increase the Owner's cost for making the change, advising the Owner in writing when such avoidance no longer is practicable.
- C. Make reply to the Project Representative in response to each request.
 1. State proposed change in the Contract Sum, if any (including overhead and profit markups, bonds and insurances).
 2. State proposed change in the Contract Time of completion, if any.
 3. Clearly describe other changes in the Work required by the proposed change, or desirable therewith, if any.
 4. Include full backup data such as subcontractor's letter of proposal or similar information.
 5. Submit this response in single copy.
- D. If the project representative directs the contractor to proceed with the change at the cost presented by the contractor, the project representative will inform the contractor and will issue a change order as soon as practicable.
- E. If the Contractor has been directed by the project representative to make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of completion, but the Contractor wishes to make a claim for one or both of such changes, the Contractor shall proceed with the change and shall notify the project representative as provided for under Paragraph 4.3 (1987) of the General conditions.

1.06 CHANGES INITIATED BY THE CONTRACTOR

- A. Should the Contractor discover a discrepancy among the Contract Documents, as concealed condition as described in Paragraph 4.3.6 of the General Conditions, or other cause for suggesting a change in the Work, a change in the contract Sum, or a change in the contract Time of completion, he shall notify the Owner as required by pertinent provisions of the Contract Documents.
- B. Upon agreement by the project representative that there is reasonable cause to consider the Contractor's proposed change, the project representative will issue a change order in accordance with the provisions described in Article 1.05 above.

1.07 PROCESSING CHANGE ORDERS

- A. Change Orders will be dated and will be numbered in sequence.
- B. The Change Order will describe the change or changes.
- C. The Owner will issue two copies of each Change Order to the Contractor.
 - 1. The Contractor promptly shall sign all copies and return one copy to the Project Representative and shall retain one copy for his files.

SECTION 01340
SUBMITTALS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work included: Make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.02 QUALITY ASSURANCE

- A. Coordination of submittals:
 - 1. Prior to each submittal, contractor shall carefully review and coordinate all aspects of each item being submitted.
 - 2. Verify that each item and the submittal for it conform in all respects with the specified requirements.
 - 3. By affixing the Contractor's signature to each submittal, certify that this coordination has been performed.
 - 4. Unapproved submittals shall be returned to contractor.
- B. "Or equal":
 - 1. Where the phrase "or equal" or "or equal as approved by the Owner," occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically so approved by the Owner.
 - 2. All substitution approvals must be made PRIOR TO BIDDING as addressed in Section 00100 INSTRUCTIONS TO BIDDERS, ¶1.14 MATERIAL SUBSTITUTIONS.
 - 3. The decision of the Owner shall be final.

1.03 SUBMITTALS

- A. Make submittals of Shop Drawings, samples, substitution requests, and other items in accordance with the provisions of this Section.

PART 2 - PRODUCTS

2.01 SHOP DRAWINGS

- A. Scale and measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work.

- B. Types of prints required:
 - 1. Submit shop Drawings in the form of blueline or blackline prints of each sheet.
 - 2. Blueprints will not be acceptable.
- C. Review comments of the Owner will be shown on the prints when returned to the Contractor. The Contractor may make and distribute such copies as are required for his purposes.
- D. One set of approved shop drawings shall be maintained at the site at all times. Shop drawings without approved stamp shall not be used in the field.

2.02 MANUFACTURERS' LITERATURE

- A. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents is being submitted for review.
- B. Submit the number of copies which are required to be returned, plus two copies which will be retained by the Owner.

2.03 SAMPLES

- A. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under "identification of submittals" below:
- B. Number of Samples required:
 - 1. Unless otherwise specified, submit Samples including the quantity which is required to be returned, plus two which will be retained by the Owner.
 - 2. By pre-arrangement in specific cases, a single Sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Owner.

PART 3 - EXECUTION

3.01 IDENTIFICATION OF SUBMITTALS

- A. Consecutively number all submittals.
 - 1. When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new transmittal number.
- B. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.
- C. Maintain an accurate submittal log for the duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Owner for his review upon request.

3.02 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
- B. In scheduling, allow at least ten working days for review by the Project Representative following his receipt of the submittal.

3.03 PROJECT REPRESENTATIVE'S REVIEW

- A. Review by the Project Representative does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
- B. Revisions:
 - 1. Make revision required by the Project Representative.
 - 2. If the Contractor considers any required revision to be a change, he shall so notify the Project Representative as provided for in Section 3.2 of the General Conditions.
 - 3. Make only those revisions directed or approved by the Owner.

3.04 VERIFICATION OF SPECIFIED ITEMS

- A. When items are provided exactly as specified, samples or literature submittal requirements may be waived by owner. However, if submittals of samples or literature are waived, a letter must be provided by the contractor indicating that the items have been provided exactly as specified in the contract documents. Items should be called out by Section number, product name and a brief description.

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities: Electricity, lighting, telephone service, water, and sanitary facilities.
- B. Temporary Controls: protection of the Work.
- C. Construction Facilities: progress cleaning, and temporary buildings.

1.02 TEMPORARY ELECTRICITY

- A. Connect to existing power service. Power consumption shall not disrupt Owner's need for continuous service.

1.03 TEMPORARY LIGHTING

- A. Permanent building lighting may be utilized during construction.

1.04 TELEPHONE SERVICE

- A. Permanent building telephone may be utilized at construction site during work hours for local calls only.

1.05 TEMPORARY WATER SERVICE

- A. Connect to existing water source and provide temporary water meter for construction operations. Water use shall not disrupt Owners need for continuous service. Contractor shall be responsible for all construction related water consumption costs.

1.06 TEMPORARY SANITARY FACILITIES

- A. Existing Permanent facilities may not be used during construction operations. Contractor shall provide for temporary sanitary facilities.

1.07 PROTECTION OF INSTALLED & EXISTING WORK

- A. Protect installed & existing work and provide special protection as required in individual specification Sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.

- C. Provide protective coverings at walls, projections, jambs, sills, soffits, etc. as required.
- D. Protect finished floors, stairs, and other surfaces from traffic as required.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, protect roofing materials as required.
- F. Prohibit traffic from landscaped areas.

1.08 PROTECTION OF UNDERGROUND UTILITIES

- A. Contractor is responsible for notifying KS-ONE CALL prior to ALL digs.
- B. Any damage to marked utilities shall be the responsibility of the contractor and shall make any repairs at no cost to the owner.
- C. If contractor during course of construction encounters any utilities, contact the Owner immediately.

1.09 SECURITY

- A. Provide security and facilities to protect Work, and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.10 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Upon completion of the work, the construction area shall be thoroughly cleaned and the areas of work left in a neat and presentable manner.
- C. Areas not a part of the construction area, but areas provided by owner for contractors use shall be left neat and presentable following contractors use.

SECTION 01700
CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Closeout Procedures.
- B. Final Cleaning & Adjustments

1.02 CLOSEOUT PROCEDURES

- A. It is the contractor's responsibility to inform the owner when the work is complete in accordance with Contract Documents and ready for Project Representative's inspection by scheduling a final walk thru.
- B. If an occupancy permit is required, secure it prior to calling for final walk-thru. Present a signed inspection card to project representative for owner's files.
- C. Following completion of all punch items identified by project representative, the contractor shall inform the project representative that the work has been inspected and is complete in accordance with the contract documents and shall submit final Application for Payment.
- D. Provide closeout submittals to project representative that are required by governing or other authorities, including AIA Document G706A and State of Kansas Project Completion Certificate.

1.03 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean equipment and fixtures to a sanitary condition.
- C. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.04 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain one set of the following record documents;
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail
 - 2. Details not on original Contract Drawings.
- F. Submit documents to Owner with claim for final Application for Payment.

1.06 OPERATION AND MAINTENANCE DATA

- A. Submit two sets prior to final inspection, bound in 8-1/2 x 11-inch text pages (Digital Copies are acceptable.)
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified, typed.

- E. Part 1: Directory, listing names, addresses, and telephone numbers of Owner, Contractor, Subcontractors, and major equipment suppliers.
- F. Part 2: Operation and maintenance instructions arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Significant design criteria.
 - 2. List of equipment.
 - 3. Parts list for each component.
 - 4. Operating instructions.
 - 5. Maintenance instructions for equipment and systems.
 - 6. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
- G. Part 3: Project documents and certificates including the following:
 - 1. Shop drawings and product data.
 - 2. Air and water balance reports.
 - 3. Certificates.
 - 4. Photocopies of warranties.
- H. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned (after final inspection), with Owner comments. Revise content of documents as required prior to final submittal.
- I. Submit final revised volumes within ten days after final inspection.

1.07 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three ring binder with durable plastic cover.
- D. Submit prior to final Application for Payment.
- E. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

SECTION 02200
SITE PREPARATION

PART 1 - GENERAL

1.01 DESCRIPTION

WORK INCLUDED:

- A. Dispose of removed elements off site. Trash dumpster at school site is not for contractor's use. Also refer to Section 02340 DEMOLITION.

1.02 EXISTING CONDITIONS

- A. Conduct demolition to minimize interference with adjacent building areas. Maintain protected egress and access at all times.

PART 2 – EXECUTION

2.01 PREPARATION

- A. Protect existing items which are not indicated to be altered.

SECTION 02340
DEMOLITION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Remove all waste materials, including all unacceptable and excess demolished materials, trash and debris and legally dispose of it off the Owner's property. Do not allow demolished materials to accumulate on-site.
- B. Plaster and ceiling tile ceiling is to be completely removed to expose steel roof trusses. All ACBM and other construction related debris must be disposed of in accordance with EPA and KDHE regulations.

1.02 PROJECT CONDITIONS

- A. Existing Utilities: do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Project Representative and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Project Representative not less than two days in advance of proposed utility interruptions
 - 2. Do not proceed with utility interruptions without Project Representative's written permission.
 - 3. Maintain and replace existing floor electronics and power.
- B. Removal of Debris
 - 1. Promptly remove cleared debris from the site.
 - 2. Burning of debris on-site is not permitted.
 - 3. Obtain permission from applicable regulatory authority for disposal of debris at waste disposal site.
 - 4. Costs of all removals shall be included in the contractor's bid price.
 - 5. **Owner's dumpsters on-site are not to be used by Contractor.**

1.03 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse. Include fasteners or brackets needed for reattachment elsewhere.

1.04 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

PART 2 – EXECUTION

2.01 PREPARATION AND EXECUTION

- A. Contractor shall be required to provide notice to Kansas One Call at 687-2470 a minimum of (3) working days prior to any digging or underground activity.
- B. Contractor to protect all existing items which are not shown to be altered.
- C. Demolish in an orderly and careful manner. Protect adjacent areas against damage, debris and/or dust. Promptly repair any and all areas or items damaged. All repairs must match all existing materials and finishes.
- D. Maintain exits from existing buildings, and ensure safe passage of people around selective demolition area. The Contractor shall take all necessary precautions to protect the general public during the construction and demolition process. This may include the use of fences and signage.
- E. Traffic affected by demolition on this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- F. Use methods required to complete the work within the limitations of governing regulations.
- G. Explosives shall not be used.
- H. Conduct demolition operations to prevent injury to people and damage to adjacent building and facilities to remain.

2.02 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Upon completion of work, leave areas of work in clean condition.
- B. Patch areas of removed materials to match adjacent areas.
- C. Clean adjacent areas and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before demolition operations began, including but not limited to light fixtures, walls, ceilings, sound panels, exposed structure and bleachers, etc.
 - 1. Clean roadways of debris caused by debris transport.
- D. Contractor shall protect all “dust sensitive” electronics and/or other items which might be damaged by the removal and re-installation work. If items are not protected properly and damage occurs, USD 259 may, at its discretion, require replacement.

- E. If painting is necessary for repair, Benjamin Moore High Speed Semi-Gloss color matched to existing adjacent walls shall be applied corner to corner and ceiling to floor in affected areas. Spot or touch-up painting is not permitted.

2.03 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and legally dispose of them in an EPA-approved landfill acceptable to authorities having jurisdiction.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Do not burn demolished materials.

2.04 REPAIRS

- A. Contractor shall promptly repair any damage to adjacent areas caused by demolition/construction operations and return items to original or better condition to the Owner's satisfaction at no additional cost to the Owner.
- B. All finish grades shall be within ¼" of adjacent elevations.
- C. TOP SOIL – Topsoil shall be free of rock or gravel larger than ½" in any dimension, debris, waste, vegetation matter and other deleterious matter
- D. SEEDING -The contractor shall be required to restore all areas disturbed by construction activities. Sodding is not required. Permanent seeding shall be done using Bermuda seed of the same variety as the grass found at the rate of 3 lbs./1000 sq. ft., placed ¼" below the surface of the dirt, and when temperatures are at 65° F and rising. Straw mulch shall be placed after seeding to retain moisture and prevent erosion. Temporary seeding using annual rye grass shall be required if the seeding must be done outside the seeding season for Bermuda grass. Sprigging the Bermuda may be done within the appropriate sprigging season, with written permission of the USD 259 Project Representative. Temporary seeding, permanent seeding, or Bermuda sprigging shall be considered subsidiary to the project and not bid or paid for separately. Contractor shall water the seed as required for the seed to germinate. The contractor shall be responsible for keeping the area watered until the grass takes hold. Contractor shall supply water. DISTRICT WILL NOT PROVIDE WATER.

SECTION 02752
CONCRETE PAVEMENT

PART 1 – GENERAL

1.01 WORK INCLUDED:

- C. Provide concrete as required for proper installation of new wood athletic flooring.

1.02 STANDARDS

- A. Comply with ACI 301, "Specification for Structural Concrete".

PART 2 - PRODUCTS

2.01 FORMS

- A. Form materials: wood, metal to provide full-depth, continuous, straight, smooth exposed surfaces.
- B. Use flexible or curved forms for curves of a radius 100 feet or less.

2.02 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Fabric ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- B. Reinforcement Bars ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- C. Plain steel joint dowel bars, ASTM A 615/A 615M, Grade 60 (Grade 420). Cut bars true to length with ends square and free of burrs.
- D. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting and fastening reinforcement bars, welded wire fabric, and dowels in place.

2.03 CONCRETE MATERIALS

- A. Use the same brand and type of cementitious material from the same manufacturer throughout the project.
- B. Portland Cement: ASTM C 150, Type I or II.
- C. Aggregate: ASTM C 33, uniformly graded, from a single source.
- D. Water: ASTM C 94, fresh, clean potable.

- E. Air-Entraining Admixture: ASTM C 260.

2.04 CONCRETE MIXES

- A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301 for each type and strength of normal weight concrete determined by either laboratory trial mixes or field experience.
- B. Compressive Strength (28 days): 4000 psi.
- C. Slump Limit: 4 inches.
- D. Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.
- E. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94 and ASTM C 1116.

2.05 GENERAL REQUIREMENTS

- A. Proof-roll prepared sub base surface to check for unstable areas and verify need for additional compaction. Proceed with pavement only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
- B. Set, brace, and secure edge forms, bulkheads and intermediate screed guides for pavement to required lines, grades and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- C. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

2.06 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- C. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

- D. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities or replace units as required before placement. Set mats for a minimum 2 inch overlap to adjacent mats.

2.08 JOINTS

- A. Construct construction, isolation and contraction joints and tool edgings true to line with face perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated. Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour, unless pavement terminates at isolation joints.
- B. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness.

PART 3 - EXECUTION

3.01 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, reinforcement steel, and items to be embedded or cast in.
- B. Moisten sub base to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- C. Comply with requirements and with recommendations in ACI 304R for measuring, mixing, transporting and placing concrete.
- D. Screed pavement surfaces with a straightedge and strike off. Commence initial floating using a bull float or a darby to form an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading dry-shake surface treatments.
- E. Tool edges of pavement, gutter, curbs and joints in concrete after initial floating with a ½" radius edging tool. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.
- F. Do not operate equipment on concrete until pavement has attained 85 percent of its 28 day compressive strength.
- G. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.

- H. Maintain concrete pavement free of stains, discoloration, dirt and other foreign material.
- I. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement unless otherwise specified by city code.

1. Do not use frozen materials or materials containing ice or snow.
2. Do not use calcium chloride, salt or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

3.02 CONCRETE FINISHING

- A. Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.
- B. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
- C. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with stiff-bristled broom, perpendicular to line of traffic.

3.03 CONCRETE PROTECTION AND CURING

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and follow recommendations in ACI 350 R for hot-weather protection during curing.

3.04 PAVEMENT TOLERANCES

- A. Elevation: 1/4 inch.
- B. Thickness: Plus 3/8 inch, minus 1/4 inch.
- C. Surface: Gap below 10 foot long, unlevelled straightedge not to exceed 1/4 inch.

SECTION 03200
CONCRETE REINFORCEMENT

PART 1 – GENERAL

- 1.01 All work included under this Section shall be subject to the General Conditions of the entire operation. The Contractor for this portion of the work is required to refer thereto.

PART 2 - PRODUCTS

2.01 REINFORCING BARS

- A. ASTM A 615/A 615M, Grade 60 (Grade 420), deformed unless shown otherwise on drawings.

2.02 WELDED WIRE FABRIC

- A. ASTM A-185, 6 x 6 W1.4 x W1.4 at all interior & exterior concrete slabs on grade unless otherwise noted.

2.03 ACCESSORIES

- A. Supports, spacers, chairs, bolsters, ties, and other devices for proper placing, spacing, support, and fastening of reinforcement; shall conform to CRSI "Manual of Standard Practice for Reinforced Concrete Construction."
- B. All accessories to be galvanized. All exposed concrete accessories, chairs or other items in contact with form shall be plastic coated.

2.04 FABRICATION - BENDING

- A. Bend cold, conforming to ACI-315.

PART 3 - EXECUTION

3.01 PROTECTION

- A. Reinforcing shall be kept clean, free of flaky or loose rust, oil, paint, or other foreign coatings.
- B. Store in manner to prevent excessive rusting and accumulation of dirt, grease, and other bond-breaking coatings.

3.02 PLACEMENT

- A. Lap and adequately secure reinforcing to prevent movement.
- B. Clearances shall conform to ACI-318.
- C. All exposed concrete clearances shall be measured from face of reveal, not face of wall.

3.03 WELDED WIRE FABRIC

- A. Structural slabs: Lap at least 1-1/2 meshes plus end extension of the wires, but not less than 12". Slabs-on-grade: Lap at least 1 mesh plus end extension of the wires, but not less than 8".

SECTION 06100
ROUGH CARPENTRY

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Wood blocking, cants, and nailers.

1.03 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise indicated.
- B. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. NLGA – National Lumber Grades Authority
 - 2. WCLIB – West Coast Lumber Inspection Bureau
 - 3. WWPA – Western Wood Products Association

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 – PRODUCTS

2.01 WOOD PRODUCTS, GENERAL

- A. Lumber: COD PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. Where nominal sizes are indicated, provide actual sizes required by DOC OS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
 - 3. Provide dressed lumber, S4S, unless otherwise indicated.
 - 4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

2.02 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWWA C2 (lumber), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWWA C31 with inorganic boron (SBX).
- B. Kiln-dry material after treatment to maximum moisture content of 19 percent for lumber. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark each treated item with the treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
- D. Application: Treat the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - 2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.

2.03 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
 - 1. Blocking
 - 2. Cants
 - 3. Nailers
- B. For items of dimension lumber size, provide No. 2 grade lumber with 19 percent maximum moisture content and the following species:
 - 1. Hem-fir or Hem-fir (north); NLGA, WCLIB, or WWPA
- C. For concealed boards, provide lumber with 19 percent maximum moisture content and the following species and grades:
 - 1. Hem-fir or Hem-fir (north). Construction or 2 Common grade; NLGA, WCLIB, or WWPA.

2.04 FASTENERS

- A. General: provide fasteners of size and type indicated that comply with requirements specified in the Article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.

- C. Power-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1
- E. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.
- F. Lag Bolts: ASME B18.2.1. (ASME B18.2.3.8M).
- G. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.
- H. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
 - 1. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.
 - 2. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2 9ASTM F 738M and ASTM F 836M, Grade A1 or A4).

PART 3 – EXECUTION

3.01 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking and similar supports to comply with requirements for attaching other construction.
- B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- C. Apply field treatment complying with AWWPA M4 to cut surfaces of preservative-treated lumber and plywood.

- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. CABO NER-272 for power-driven fasteners.
Table 2304.9.1 “Fastening Schedule” – “Wood structural panels and particleboard subfloor, roof and wall sheathing (to framing)” in the current International Building Code or current adopted building code.
- E. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; pre-drill as required.

3.02 WOOD SLEEPER, BLOCKING, AND NAILER INSTALLATION

- A. Install where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated. Build anchor bolts into masonry during installation of masonry work. Where possible, secure anchor bolts to formwork before concrete placement.

SECTION 07620
METAL FLASHING AND TRIM

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide metal trim as needed around new hollow metal door jambs in areas indicated in the drawings.

1.02 QUALITY ASSURANCE

- A. Standards-The applicable portions of the listed documents establish minimum requirements and shall be followed.
 - 1. Sheet Metal and Air Condition Contractors National Assoc., Inc. "Architectural Sheet Metal Manual," 1972 Edition.
 - 2. American Society for Testing and Materials Standards listed in section.

1.03 PROTECTION

- A. Clean and prime sheet materials, all surfaces, before installation.

1.04 WARRANTY

- A. Include a 5 year warranty for all metal flashing and trim installed.

PART 2 – PRODUCTS

2.01 PREFINISHED SHEET STEEL

- A. Hot dip galvanized sheet steel meeting ASTM A446 Structural Quality with G90 (1-1/4 oz. per s.f.) coating and factory finished with finished fluoropolymer coating, 70% Kynar 500 or equal. Gauges required, flat sheet for fabrication. Color selected from entire range of standard colors of metal siding manufacturers such as:
 - 1. AEP-Span
 - 2. Vincent (Colorclad)
 - 3. Pac-Clad by Peterson Aluminum Corp.
 - 4. Una Clad by Copper Sales, Inc.

2.02 FLASHING SHEET

- A. "Ply-Bar Plus" glass reinforced laminated vapor barrier sheet by Glas-Kraft Inc., Slaterville, RI for continuous flashing under metal cap flashings.
- B. Caulking and/or sealants specified refer 07900 Caulking and Sealants.

PART 3 – EXECUTION

3.01 GENERAL

- A. Fabricate and install in accordance with existing locations and accepted good practice of the industry.
- B. Form with bending break
- C. Shaping, seaming, hand trimming shall be done on bench.
- D. Holes, dents, creases or wrinkle shall be cause for rejection
- E. Install in long lengths over flashing sheet.
- F. Finished work; tight fitting, in line, with neat flat surfaces and straight edges.
- G. Anchoring concealed unless indicated or noted otherwise.
- H. Joints butted with 6” long concealed splice plate. Apply bond breaker tape on splice plate min. ½” wide. Space facing metal at least 3/8” apart over the tape. Seal over joint specified Section 07900 Caulking and Sealants.
- I. Rivet and seal joints except as other specified and at expansion conditions.
- J. Set flashings on top of roofing when applicable/appropriate.
- K. Cap ends all flashings.

3.02 CAP (COUNTER) FLASHING

- A. Lap cap (counter) flashing joints 4”, seal. Refer Section 07900 Caulking and Sealants.
- B. Install cap (counter) flashing to spring tight against roofing (when applicable/appropriate), secure cap (counter) flashing in reglet. Stagger joints at least 12” from reglet joints.

3.03 METAL REGLET

- A. Formed as part of other flashing such as wall flashing, etc. Lap and seal joints.

SECTION 07900
CAULKING AND SEALANTS

PART 1 – CAULKING AND SEALANTS

1.00 DESCRIPTION

A. The work includes caulking and sealant work.

1.01 WORK TO BE CAULKED-Areas listed below. Numbers and letters which appear in parenthesis refer to the materials listed under Part 2 – Products.

A. EXTERIOR

1. Perimeters of exterior opening frames at adjoining materials.
2. Expansion and control joints in exterior or surfaces of masonry and precast concrete. (1B, 1D, 2B, 2D, 3D)
3. Coping joints and coping-to-facade joints (1B, 1D, 2B, 2D, 3D)
4. Metal flashing trim joints. (1B, 1D, 2B, 2D, 3D)
5. Control and expansion joints open or soft joints in masonry under steel support members on the interior or exterior poured-in-place concrete. (1B, 1D, 2B, 2D, 3D)
6. One inch (1”) expansion joints shall be two part non-sag at vertical joints (1B, 2B, 2D)
7. One inch (1”) expansion joints shall be two part self-leveling at horizontal joints. (1A, 2A)
8. Sealing of exterior and interior perimeters of all electrical and mechanical items which penetrate the foundation and façade of the building.

1.02 QUALITY ASSURANCE

- A. Use only qualified workers thoroughly skilled and specially trained in the techniques of caulking, who can demonstrate to the satisfaction of the owner their ability to fill joints solidly and neatly.
- B. Mix and apply sealing compounds in strict accordance with the manufacturer’s printed directions. Initial mixing and application shall be under the direct supervision of the manufacturer’s representative unless otherwise approved.
- C. Products shall meet or exceed ASTM C834 (Acrylic), ASTM C920 (Medium & High Mod.), FS TT-S-01543 (Silicones) or FS TT-S-001657 & ASTM C1085 (Butyl).

1.03 SUBMITTALS

- A. Submit in accordance with General Conditions, Supplementary General Conditions and Section 01340.

- B. Caulking and Sealant Project Manual including minimum
 1. Materials and configuration to be used for each type condition.
 2. Manufacturer's instructions for preparation, use, conditions, installation temperature limitations, etc.
 3. Data to show material compliance with specification.
 4. Manufacturer's letter of assurance that sealants, primers, etc. are compatible with abutting finishes.
- C. Submit color card indicating actual sealant samples for r Owner's selection.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver caulking and sealing compounds to the job in unbroken, sealed containers bearing the manufacture's mixing direction and shelf life expiration date. Store materials in sealed containers in a dry protected area above the ground or floor.
- B. Protect caulking materials before, during and after installation. Protect the installed work of other trades during installation.
- C. Do not use caulking materials that have been stored for a period of time exceeding the maximum recommended shelf life of the materials.

1.05 GUARANTEE

- A. Submit written five-year Guarantee for weathertight caulking and sealant work in accordance with this specification covering workmanship and materials.

1.06 JOB CONDITIONS

- A. The joint configuration, joint surfaces and backing, forming the sealant rabbet are all existing and should be applied according to the approved Sealant Project Manual and in accordance with the contract specification. All observed detrimental conditions shall be reported immediately in writing to the General Contractor and the Owner for correction by the General Contractor.
- B. Do not proceed with the installation of sealants under adverse weather conditions when joint to be sealed is damp, wet or frozen, or when temperature are below or above the manufacturer's recommended limitations for installation.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Materials shall have a life expectancy in the project climate of not less than 10 years.

2.02 TYPE OF SEALANT AND APPROVED PRODUCT

A. **POLYSULFIDES**

Two Part

1A – Self Leveling

Grace, Daraseal U

Gaco Western, Gaco VG22

1B – Non-Sag

Pecora, Synthacalk GC-5

Sonneborn, Sonolastic Two-Part Sealant

One Part

1C – Self-Leveling

None available

1D – Non-Sag

Pecora, Synthacalk GC-9

Sonneborn, Sonolastic Sealant

B. **URETHANES**

Two Part

2A – Self Leveling

Pecora, Urexpan NR-200

Tremco, THC900

Vulkem, 255

2B – Non-Sag

Pecora, Dynatrol II

Tremco, Dymeric 511

Sonneborn, Sonolastic NP11

One Part

2C – Self-Leveling

Pecora, Urexpan NR-201

Vulkem, 45

Sika, 1A, SL

Sonneborn, Sonolastic NL 1

2D – Non-Sag
Pecora, Dynatrol I
Tremco, Dymonic
Sika, Sikaflex 1A

C. **SILICONES**

3G – High Strength
Pecora, 863
(glazing uses)
Dow, 791
G.E., Silglaze N

3D – Low Modulus
Pecora, 864
Dow, 790
G.E., Gesil N
Tremco, Spectrem 2

D. **ACRYLICS**

One Part
4
Pecora, 60+ Unicrylic
Tremco, Mono
PTI, 767

E. **ACRYLIC LATEX**

One Part
5
Pecora, Ac-20
Tremco, Acrylic Latex
Sonneborn, Sanolac

F. **PERFORMED COMPRESSIBLE FILLERS**

Polyurethane foam-impregnated with polybutylene or similar non-asphaltic sealer which can be painted:

Polytite by Sandell Mfg. Co., Inc., Cambridge, MA
Will-Seal by Illbruck/USA, Minneapolis, MN
Emseal Grayflex by Emseal Corp., Stanford, CT.

G. Package sealer in rolls, precompressed to approximately 25% of expanded width, windings separated by non-adhering tape.

- H. Size sealer so original expanded width of sealer is four times the in-place width to create a weather seal; depth as recommended by manufacturer for width of joint.

2.03 MATERIALS/PERFORMANCE REQUIREMENTS

- A. Specifications-Conform to Federal and ASTM Specifications
- B. Colors-As selected by Owner from manufacturer's standard colors. In general, colors will be selected to match or be slightly darker than the adjacent material (s).
- C. Joint Backing-Preformed compressible, resilient, non-waxing, non-extruding, non-staining strips (polyethylene foam, urethane foam, butyl), heat resisting where hot sealant is used, as recommended by the sealant manufacturer. Backing shall be sizes and shapes to suit the various conditions and shall be compatible with sealant, primers, and substrates.
- D. Bond Breaker-As recommended by the sealant manufacturer.
- E. Cleaning Agent-As recommended by the sealant manufacturer.

PART 3 EXECUTION

3.01 GENERAL

- A. Joint surfaces to receive caulking and sealant shall be sound, smooth, clean and dry and free of all visible contaminants. Test for applications of non-visible coatings or contaminants to surfaces of rabbet area prior to application of sealer. Report in writing to Owner and Contractor for Contractor's correcting. Do not seal contaminated joints.
- B. Joint size minimum.

3.02 PREPARATION OF SURFACES

- A. Thoroughly clean joints and apply primer, if recommended by sealant manufacturer, to dry surfaces, apply primer prior to application of joint backing, bond breaker or sealants.
- B. In joints where the depth of the joint exceeds the required depth of the sealant, install joint backing to provide backing and uniform depth of sealant. Install with approximately 30% compression. Do not stretch, twist, puncture or tear joint backing. Butt at intersections and end joints. Gage depth of backing to assure proper sealant depth.

- C. Install bond breaker tape smoothly at back of joint where joint backing is not required backing cannot be installed. (Sealant shall adhere only to the sides and not to the back of the joint so as to eliminate three-sided adhesion.)

3.03 INSTALLATION

- A. Apply sealant in accordance with manufacturer's application manual and instruction. Do not install when drastic temperature changes are expected. Use handguns or pressure equipment, with proper nozzle sizes, on clean, dry, properly prepared substrates. Force sealant into joint and against sides of joint to make uniform. Avoid pulling of the sealant from the sides. Fill sealant space completely with sealant and attain proper cover of backing material.
- B. Tooling is required to ensure firm full contact with the interfaces of the joint. Tool joints to form smooth, uniform beads with slightly concave surfaces. Finish joints shall be straight, uniform, smooth and neatly finished. Remove any excess sealant from adjacent surfaces of joint, leaving the work in a neat, clean condition. Tooling agents should only be used if recommended by the sealant manufacturer.
- C. Where an irregular surface or sensitive joint border exists the applicator shall apply masking tape at the end of the joint to insure joint neatness and protection. Remove tape after sealant is applied.
- D. Remove and reseal improperly prepared, installed and finished joints.

3.04 COMPRESSIBLE SEALER

- A. Precompress sealer of 4 times joint width x manufacturer's recommended depth, factory package with separator between layers of sealer.
- B. Insert sealer in joints, protecting adjacent surfaces from soiling or contamination while in precompressed size. Install uniformly recessed in relation to adjacent finish surfaces.
- C. Refrigerating sealer to slow down expanding of sealer while being installed is permitted.
- D. Snugly butt joints compressing as manufacturer recommends to attain leak resistant joint.
- E. In joints where compression cannot be maintained, recompress sealer with subsequent construction to attain weathertight seal.
- F. Remove and reseal improperly prepared, installed and sealed joints.

3.05 CLEANING

- A. Clean off excess compound or smears with cleaning material recommended by the manufacturer of the compound for surface contaminated. Leave work in a condition satisfactory to the Owner.

3.06 TESTING AND INSPECTION

- A. Furnish labor and material to remove and replace sealant during on-site inspection(s) as hereinafter specified.
- B. As sealant work is completed and as directed by Owner, remove the sealant installed in joints at not to exceed 2 locations of approximately 1 lineal foot per location for each 1000 lin. Ft. of sealant. The location(s) to be selected by the Owner.
- C. Upon removal of the sealant and backup material, the work shall be checked for compliance with the contract documents.
- D. If defective work is found in any of the test locations, additional test sections shall be made by the Contractor at no additional cost to the Owner.
- E. In the event any test section(s) removed reveals work that is not in compliance with the contract, remove all adjacent sealant to the point where the work is found to be acceptable and replace with new sealant in accordance with plans and specifications.

**SECTION 08110
HOLLOW METAL DOORS AND FRAMES**

PART 1 - GENERAL

1.01 Scope of work:

- A. Work included – Install hollow metal door in the areas shown in drawings.
 - 1. All hollow metal doors shall be 16 gauge hollow metal doors. Doors shall be prepped for mortise locks, exit device and hinges.
 - 2. Door hardware schedule as follows:

Storage (Pairs) - Two total openings:				
6	Hinges	McKinney	TA2714 4-1/2"x4-1/2" US26D	or equal
1 St.	Auto Flush Bolts	McKinney	FB10W US26D	RCK 1942
1	Classroom Lockset	Corbin	ML2055xLWM 626	NO-SUB
2	Door Closers	Corbin	DC6210-A3 689	NO-SUB
2	Kickplates	McKinney	KP50 10"x2" LDW US32D	RCK K1050
1	Dust Proof Strike	McKinney	DPS3 US26D	RCK 570
2	Brush Astragals	Pemko	1041CNB	NGP A605
1 St.	Gasketing	Pemko	PK55D (Head & Jambs)	NGP 2525C
1	Coordinator	McKinney	US125 USP	RCK 1700

Classroom / Locker Room - Two total openings:				
3	Hinges	McKinney	Ta2714 4-1/2" x 4-1/2" US26D	or equal
1	Classroom Security	Corbin	ML2072xLWM 626	NO-SUB
1	Door Closer	Corbin	DC6210-A3 689	NO-SUB
1	Kickplates	McKinney	KP50 10"x2" LDW US32D	RCK K1050
1	Wall Stop	McKinney	WS02 US32D	RCK 409
1 St	Gasketing	Pemko	PK55D (Head & Jambs)	NGP 2525C

Office - Two total openings:				
3	Hinges	McKinney	TA2714 4-1/2" x 4-1/2" US26D	or equal
1	Office Lockset	Corbin	M1201XLWM 626	NO-SUB
1	Wall Stop	McKinney	WS02 US32D	RCK 409
3	Door Silencers	McKinney	S1M	RCK 908

1.02 References:

- A. ANSI A250.8-1998/SDI-100 – Recommended Specifications for Standard Steel Doors & Frames; Steel Door Institute.
- B. SDI-105 – Recommended Erection Instructions for Steel Frames.
- C. SDI-111 – Recommended Standard Details for Steel Doors & Frames.
- D. ASTM A 568/A 568M – Standard Specification for Steel, Sheet, Carbon, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled.
- E. ASTM A 1008/A 1008M-09 – Steel, sheet, Cold-Rolled, Carbon, Structural, High Strength Low alloy and High Strength Low alloy with improved formability.
- F. ASTM A 10111/A 1011M-09 – Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High Strength Low-Alloy with Improved Formability, and ultra-High Strength.
- G. ASTM A 591/A 591M – Standard specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications.
- H. ASTM A 653/A 653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- I. ASTM A 924/A 924M – Standard Specification for General Requirements for Sheet Steel, Metallic-Coated by the Hot-Dip Process.
- J. NFPA 80 – Standard for Fire Doors and Windows.
- K. Building Materials Directory; Underwriters Laboratories, Inc.
- L. ICC 500 Chapter 8 – Test Method for Impact and Pressure Testing.

1.03 QUALITY ASSURANCE

- A. Provide all products from a single approved manufacturer.
- B. Provide certificates from a qualified testing agency for all doors and frames in the exterior walls, including those for window protection, indicating the unit has been tested.

1.04 MANUFACTURERS

- A. Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include the following:
 - 1. Ceco, Curries, Republic, Steelcraft, ELCO.
 - 2. Others as approved by Owner.

PART 2- PRODUCTS

2.01 MATERIALS

- A. Steel sheet for doors and frames shall be:
 - 1. Cold rolled steel: ASTM A1008.
 - 2. Hot rolled pickled, and oiled steel: ASTM A569 and A1011.
 - 3. Where noted below, provide zinc coated steel: A-60 Galvanized steel in accordance with ASTM A525.
- B. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- C. Grout: ASTM C 475, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.

2.02 MANUFACTURED UNITS

- a. Steel doors, frames, and trim shall be fabricated in sizes and design as scheduled. Steel doors are to be used where scheduled and steel frames and trim are to be used throughout. Doors shall be flush seamless construction with 16 ga. Hinge and lock rails welded at 5". The top edge shall be flush, joints filled and smoothed.
- b. Sheet steel for anchors and accessories shall be Electrolytically deposited zinc coated steel: ASTM A 591 and A 568.
- c. Frames: Fabricate from 16 ga. Cold rolled steel reinforced for hardware to template and complying with SEI-100. Frames shall be set-up and welded. Reinforce frames for closures and other hardware. Furnish metal plaster guards for all mortised cutouts. Furnish adjustable floor anchors and six jamb anchors per door of type to suit wall conditions. Frames to have standard rubber silencers. Erection of steel frames shall comply with SDI-105.

2.03 SHOP PAINTING

- A. Shop finishing shall consist of bonderizing and one coat of baked on prime paint.

2.04 CERTIFICATIONS

- A. Doors and frames shall carry Underwriter's Labels as scheduled.
- B. 20 minute and 90 minute rated doors shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

2.05 STANDARDS

- A. All metal gauges are U.S. Standard.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install all hollow metal units plumb, rigid and in true alignment.
- B. Frames shall be securely anchored to masonry construction with manufacturer's recommended T-anchors. Bend stem of anchor into masonry block cores so as not to obstruct reinforcing and grouting.
- C. At fire-protection-rated openings, install frames according to NFPA 80.
- D. Allow 1/4" joint at all sides of frames installed in masonry walls.
- E. Protect installed doors from damage by construction activities.

SECTION 09638
WOOD FLOOR FINISHING

PART 1 – GENERAL

1.01 DESCRIPTION

A. WORK INCLUDED

1. Prepare the rooms and floors for the finishing process.
2. Finish the floors in the gymnasium following completion of new floor installation and allow for cure time before Owner takes possession.
3. Clean up the site and remove all containment erected as part of the floor replacement project.

PART 2 - PRODUCTS

2.01 FLOOR FINISH

A. Sika Sikafloor Seal coat WP-4.1 Fast Dry 350 Poly Sealer, low VOC and MFMA Approved.

B. Sika Sikafloor WP-1, Finish coat.

2.02 SCREEN

- a. 100 grit screen for raw / unfinished wood.
- b. 120 grit screen or pad between coats, depending on the machine employed.

2.03 PAINT

- A. New courtlines use Bona Courtlines Sport Floor Paint. See color selections in drawings.
- B. Matching oil based paint (if the screen back process removes some of the existing paint).

PART 3 - EXECUTION

3.01 PROCEDURES

- A. Separate the gymnasium that is being finished from the rest of the building to prevent dust and fume transfer.

- B. Screen back the gymnasium floor with 100 grit screen to prepare the new wood surface for the new seal coats.
- C. For newly installed floors, apply Sikafloor WP-4.1 to seal the bare wood, minimum three coats required.
- D. Vacuum, then tack rag the floor with water.
- E. Use 120 grit screen, then tack rag with water before applying seal coat.
- F. Allow the floor to dry to a dull, glossless surface.
- G. For newly installed floors, apply line marking paint between second and third coats, test every color for compatibility.
- H. Abrade the lines lightly with 120 grit screen before applying WP-1 finish coat. Then tack rag with water before applying seal coat.
- I. For previously coated floor, touch up any lines that were impacted by the screen backing procedure.
- J. Vacuum and tack rag all the necessary surfaces to keep the floor dust free during application of the new finish coats.
- K. Apply a minimum of two coats of floor finish per manufacturer's recommendations.
- L. Install signs and barriers to keep people out of the area until the finish has cured.

SECTION 09645
WOOD ATHLETIC FLOORING

PART 1 GENERAL

1.01 DESCRIPTION – Finished surface of new wood athletic flooring must be at the same elevation as all adjacent finished floor surfaces.

- A. Anchored Resilient Floor System
- B. Moisture barriers must be adequate for conditions.
- C. MFMA does not acknowledge the use of FF/FL numbers to measure levelness/flatness tolerances in gymnasium concrete slabs.

1.02 QUALITY ASSURANCE

- A. All system component parts must be supplied by Action Floor Systems, LLC.
- B. Manufacturer shall be a MFMA Mill Member, an established firm experienced in the field and have been in business a minimum of ten (10) years and able to demonstrate successfully completed installations for a minimum of 10 projects; Action Floor Systems, LLC.
- C. Manufacturer shall be solvent with no bankruptcy proceedings the previous seven (7) years.
- D. The flooring Contractor must be approved by Action Floor Systems, LLC.
- E. Flooring system shall be independently tested to meet or exceed the athletic performance requirements of EN 14904 (2006) and/or DIN 18032 Part 2 (2001). Independent testing laboratory shall have Scientific Body Membership in the International Association of Sports Surface Sciences (ISSS).
- F. The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14064-1:2006 World Resource Institutes Greenhouse Gas Protocol, Scope 1, 2 and 3.
- G. The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14040:2006 and ISO 14044:2006 Life Cycle Assessment (LCA), confirming a negative carbon footprint.

1.03 SUBMITTALS

- A. Manufacturers product data.
- B. Samples: Submit one (1).

- C. Maintenance literature: Submit one (1) copy of manufactures maintenance instructions.

1.04 WORKING CONDITIONS

- A. Flooring materials must be allowed to acclimate to building conditions on the job site in a dry, well-ventilated area, not in contact with masonry, and shall be installed at a moisture content not to exceed 8% except in areas of constant high humidity where the moisture content of the flooring shall not exceed 10%.
- B. The wood flooring shall not be installed until all masonry, plastering, tile, marble and terrazzo work is completed, and overhead mechanical trades and painters have finished in wood floor area. The building must be reasonably dry; all openings must be closed in; permanent heating and air conditioning installed and operating.
- C. The concrete slab shall be dry, free of foreign materials, and turned over to the wood flooring contractor broom clean. Moderate room temperature of 65 degrees (18 C) or more shall be maintained a week preceding and throughout the duration of the work. Humidity conditions within the building shall approximate humidity conditions which will prevail when the building is occupied. Care should be taken to maintain humidity within the range of 35% to 50%.

1.05 WARRANTY

- A. Supplier warrants the material it ships to be free from defects in materials and workmanship for a period of one year and the flooring installer warrants the installation of the flooring to be free of defects in materials and workmanship for a period of one year. The exclusive remedy under this warranty shall be replacement of defective material supplied by Supplier or correction of defective installation by the flooring installer. All implied warranties of merchantability or fitness for intended use are limited to the period of this warranty. This warranty excludes consequential damages.
- B. This warranty does not cover damage caused by fire, winds, floods, chemicals, or other abuse, or by failure of other contractors to adhere to specifications, or neglect of reasonable precaution to provide adequate ventilation. This warranty also excludes damage due to excessive dryness or excessive moisture from humidity, spillage, migration through the slab or wall or any other source. This warranty also excludes damage to floors due to ordinary wear and tear, faulty construction of the building, (other than the flooring installation), separation of the concrete slab underlying the floor, settlement of the walls, or use of water on the floor.

- C. During the warranty period, the floor cannot be coated without the permission of the floor Contractor.

PART 2 PRODUCTS

2.01 MATERIALS

A. Flooring

1. Flooring shall be Northern Hard Maple standard strip flooring, 25/32" x 2-1/4" , TGEM, MFMA grade marked & stamped as manufactured by Action Floor Systems, LLC.
2. Grades available are MFMA 2nd & Btr.
3. Long Length Strip Flooring Action Aero NR by Action Floor Systems, LLC, or Acer (optional).
4. FSC Certified lumber (optional).
5. Expansion Ridge Technology (ERT) 1/64" milled expansion spacer (optional).

B. Subfloor

1. Vapor barrier shall be Reef Industries Vaporguard.
2. The Action Aero NR panels shall be pre-assembled with 5/8" (16mm) ProAction pads as supplied by Action Floor Systems. 3-7/8" wide laminated nailers to be spaced 12" o.c.,
3. Anchoring retainers shall be 16ga galvanized steel as supplied by Action Floor Systems.
4. Anchoring pins shall be 1/4" x 1-1/4"(6mm x 32mm) long hardened steel or as needed for proper concrete depth.

C. Fasteners

1. Flooring fasteners shall be 1-3/4" (38mm) cleats, or 15-gauge coated staples.

D. Wall Base

1. Wall base shall be 3" x 4" (76mm x 102mm) vented cove base with pre-molded corners (specify black or brown), as supplied by Action Floor Systems, LLC.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect concrete slab for proper tolerance and dryness reporting any discrepancies in writing to the General Contractor.

- B. All work to put the concrete slab in acceptable condition shall be the responsibility of the General Contractor.
- C. Slab shall be broom cleaned by the General Contractor.

3.02 INSTALLATION

- A. Cover concrete slab with Reef Industries Vaporguard.
- B. Place **Aero NR** panels end-to-end in a brick pattern at right angles to the direction of the finish flooring leaving a ¼” gap between panel ends, use construction adhesive and fasten with staples.
- C. Secure panels using Action z-clips and ¼” x 1-1/4” drive pins or TapCons in an alternating pattern at 2’-0” on center. The Action z-retainer must be placed directionally to allow for expansion and contraction.
- D. Place solid blocking at all bleacher stack areas and doorways.
- E. Machine fasten strip flooring approximately 12” on center. End joints must be properly driven up. Provide adequate expansion as dictated by the average humidity conditions of the area according to the recommendations of the local Action Flooring Systems, LLC. Flooring Contractor. Allow 2” (50mm) expansion voids at perimeters and all vertical obstructions.

3.03 FLOOR SANDING

- A. Use coarse, medium and fine grade sandpaper.
- B. After sanding, buff entire floor using 100-grit screen or equal grit sandpaper, with a heavy-duty buffing machine.
- C. Vacuum or tack floor before first coat of finish.
- D. Floor shall present a smooth surface without drum stop marks, gouges, streaks or shiners.

3.04 FINISHING

- A. Inspect entire area of floor to ensure that the surface is acceptable for finishing, completely free of sanding dust and perfectly clean.

- B. Apply seal and finish per manufacturer's instructions. See 09638 WOOD FLOOR FINISHING.
- C. Buff and vacuum or tack between each coat after it dries.
- D. Apply game lines accurately after the seal coat, after buffing and vacuuming. Lay out in accordance with drawings. Lines shall be straight with sharp edges in colors described in the drawings. For game lines, use current rules of association having jurisdiction. Game line paint shall be compatible with finish.
 - 1. Where game lines cross, break minor game line at intersection; do not overlap lines

3.05 BASE INSTALLATION

- A. Affix rubber base to wall with recommended adhesive or screws. Miter all corners carefully. Use pre-molded outside corners. Install aluminum thresholds as required, anchoring firmly in floor beyond limits of wood flooring.

3.06 CLEAN UP

- A. Clean up all unused materials and debris and remove from premises, properly dispose of all waste materials.

SECTION 09840
ACOUSTICAL TREATMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Acoustical Wall Panels – Tectum Standard 2” thick Panels.

1.02 QUALITY ASSURANCE

- A. Manufacturer Qualifications Minimum of ten (10) years experience manufacturing all products listed in this section.
- B. Installer Qualifications: Minimum of two (2) years experience successfully installing products from this section on projects of similar type and scope, acceptable to the manufacturer of the acoustical products being installed.
 - 1. Install acoustical products in areas designated by the attached drawings.
 - 2. Install a mock-up section for project representative examination and approval.
 - 3. Approved mock-up may remain as part of the work.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Protect acoustical products from moisture during shipment, storage, and handling.
- B. Store products in manufacturer’s unopened packaging until ready for installation.
 - 1. Store materials flat, in dry, well-ventilated space.
 - 2. Do not stand panels on end.
 - 3. Protect edges from damage.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of all federal, state and local authorities having jurisdiction.

1.04 PROJECT CONDITIONS

- A. Do not install products under environmental conditions outside manufacturer’s absolute limits.

WARRANTY

- A. Manufacturer’s Warranty: At project closeout, submit to the owner the manufacturer’s standard warranty document executed by authorized company official.

- B. Provide 5 percent, but not less than 1 of each type of acoustical unit actually installed, for Owner's use in maintenance.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. WALL SYSTEM: Acceptable Manufacturer or equal as approved by Owner.
 - 1. Tectum, Inc., which is located at P.O. Box 3002, Newark, OH 43058, Phone (888) 977-9691 or (740) 345-9691, Fax (800) 832-8869, email: info@tectum.com or www.tectum.com.

- B. **NO SUBSTITUTIONS ALLOWED**

2.02 ACOUSTICAL WALL SYSTEM

- A. TECTUM Panels, provide furring and insulation using C-40 mounting. Install to furring with construction adhesive and 2-1/2" finish nails. Embed nails so as to be below the surface of fabric face.
 - 1. Furring Size: 2x Furring strips, 24" o.c., as required.
 - 2. Insulation: (R8) – Noise barrier batts.
 - 3. Size, finish, material and color as noted on drawings
 - 4. Mounting: C-40 for Tectum and 2 1/2" finish nails

PART 3 EXECUTION

3.01 EXAMINATION

- A. Clean surfaces thoroughly prior to installation.

3.02 INSTALLATION

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Do not begin installation until materials sufficient to complete the entire room are received and prepared for installation.
- C. Measure and establish layout of acoustical units to balance widths at opposite edges of rooms. Avoid use of less-than-half width units at borders.
- D. Symmetrically locate panels in each space. Coordinate work around existing lighting fixtures, grilles, and other mounted fixtures.
- E. Field paint cut edges to match surface color and sheen.

- F. Any painting of tectum material must be done in accordance with Tectum Marketing Bulletin M77.

3.04 CLEANING

- A. Clean exposed surfaces of acoustical trim, edge moldings and suspension members to comply with manufacturer's instructions for cleaning.
- B. Touch up any minor finish damage.
- C. Remove and replace work which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

3.05 PROTECTION

- A. Protect installed and existing products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 09910
PAINT

PART 1 GENERAL

1.01 SUMMARY

- A. Provide painting and surface preparation to all walls in the gymnasiums.

1.02 QUALITY ASSURANCE

- A. Comply with all local, state and federal governing codes and regulations. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Regulations: Compliance with VOC and environmental regulations.

1.03 COLORS

- A. Color schedule as follows:
 - 1. Base color – Sherwin Williams 259 Gray semi-gloss.
 - 2. Ceilings and duct work – Sherwin Williams 7007 Ceiling Bright White with flat finish.
 - 3. Court lines and Logos – Refer to drawings.
 - 4. Accent colors – Allow for up to three Sherwin Williams semi-gloss colors for accent painting and or striping. Accent colors and locations will be selected at the pre-construction meeting.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Painting: Walls
 - 1. Manufacturers:
 - a. Sherwin-Williams ProMar 200
 - 2. Primary Coating Type: Latex based paints
- B. Painting: Walls, Brick, Glazed Block
 - 1. Manufacturers:
 - a. Sherwin - Williams Primer: Prepright Problock
 - b. Sherwin -Williams Top Coat Catalyzed water borne epoxy Semi Gloss

- C. Painting: Metal Doors, Casings and Handrails
 - 1. Manufacturers:
 - a. Benjamin Moore P22 High Gloss

- D. Painting: Duct Work
 - 1. Manufacturers:
 - a. Sherwin – Williams Primer – Prepright Problock
 - b. Sherwin – Williams ProMar 200

PART 3 EXECUTION

3.01 INSTALLATION

- A. Inspect surfaces, report unsatisfactory conditions in writing; beginning work means acceptance of substrate.

- B. Comply with manufacturer’s instructions and recommendations for preparation, priming and coating work.

- C. At existing areas to be repainted, remove blistered or peeling paint to sound substrates. Remove chalk deposits and mildew and wash all surfaces with mild detergent. Perform related minor preparation including caulk and glazing compounds. Spot prime bare areas before priming and painting as specified.

- D. Match existing approved for color, texture, and pattern. Re-coat or remove and replace work which does not match or shows loss of adhesion. Clean up, touch up and protect work.

SECTION 10100
VISUAL DISPLAY BOARDS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Porcelain enamel markerboards.
 - 2. Porcelain enamel chalkboards.
 - 3. Vinyl-fabric-faced cork tackboards.

1.03 SUBMITTALS

- A. Product Data: For each type of visual display board indicated.

1.04 QUALITY ASSURANCE

- A. Source Limitations: Obtain visual display boards through one source from a single manufacturer.
- B. Product Options: Drawings indicate size, profiles, and dimensional requirements of visual display boards and are based on the products indicated. Other manufacturers' products with equal performance characteristics may be considered.
- C. Fire-Test-Response Characteristics: Provide vinyl-fabric-faced tackboards with the following surface burning characteristics as determined by testing assembled materials composed of facings and backing identical to those required in this Section per ASTM E 84 by a testing and inspecting agency acceptable to authorities having jurisdiction. Identify vinyl-fabric-faced tackboards with appropriate marking of applicable testing and inspecting agency.
 - 1. Flame Spread: 25 or less.
 - 2. Smoke Developed: 10 or less.

1.05 PROJECT CONDITIONS

- A. Field Measurements: Verify field measurements before preparation of Shop Drawings and before fabrication to ensure proper fitting. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 1. Allow for trimming and fitting where taking field measurements before fabrication might delay the Work.

2. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating chalkboards without field measurements. Coordinate wall construction to ensure actual dimensions correspond to established dimensions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide products by the following:
 1. Porcelain Enamel Markerboards:
 - a. Claridge Products and Equipment, Inc., Series 800 LCS (Basis for Specification)
 - b. Nelson Adams Company
 2. Tackboards:
 - a. Claridge Products and Equipment, Inc., Series 800 Fabricork (Basis for Specification) with extruded aluminum trim. White color.
 - b. Nelson Adams Company.

2.02 MATERIALS

- A. Porcelain Enamel Markerboards: Balanced, high-pressure-laminated, porcelain enamel chalkboards of 3-ply construction consisting of face sheet, core material and backing.
 1. Face Sheet: 0.024", "LCS", porcelain enamel clad, Type 1, stretcher-leveled aluminized-steel face sheet, as manufactured by Claridge Products and Equipment. Fuse porcelain enamel coating to steel at approximately 1000 deg F.
 - a. Cover Coat: Provide manufacturer's standard, light-colored, special writing surface with gloss finish intended for use with erasable dry markers.
 2. Core: 7/16" thick, "Duracore" material complying with requirements of ANSI A208.1, Grade 1-M-1.
 3. Backing Sheet: 0.002" thick, aluminum-foil sheet backing.
 4. Laminating Adhesive: Manufacturer's standard, moisture-resistant, thermoplastic type adhesive.

- B. Porcelain Enamel Chalkboards: Porcelain enamel Vitracite chalkboards shall be manufactured in accordance with Porcelain enamel Institute's specification. Porcelain enamel finish shall be fusion bonded to a 24 gauge steel substrate at lowest possible temperature to reduce steel and porcelain stresses and achieve superior enamel bond and hardness.
1. Face Sheet: 24 gauge Vitracite, factory-built.
 - a. Panel color: As selected from manufacturer's standard colors.
 2. Core: 7/16 " thick, "Duracore" material complying with requirements of ANSI A208.1, Grade 1-M-1.
 3. Backing Sheet: 0.002" thick, aluminum-foil sheet backing.
 4. Laminating Adhesive: Manufacturer's standard, moisture-resistant, thermoplastic-type adhesive.
- C. Vinyl-Fabric-Faced Tackboards: Mildew-resistant, washable vinyl fabric complying with FS CCC-W-408, Type II, weighing not less than 13oz./sq. yd., laminated to 1/4" sheet. Provide fabric with a flame spread rating of 25 or less when tested according to manufacturer's standards.
1. Backing: Factory laminate cork face sheet under pressure to 7/16: thick fiberboard backing.

2.03 ACCESSORIES

- A. Metal Trim and Accessories: Fabricate frames and trim of not less than 0.062" thick, extruded-aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight, single-length units. Keep joints to a minimum. Miter corners to a neat, hairline closure.
1. Where size of visual display boards or other conditions require support in addition to normal trim, provide structural supports or modify trim as indicated or as selected by project representative from manufacturer's standard structural support accessories to suit conditions indicated.
 2. Field-Applied Trim: Manufacturer's standard snap-on trim with no visible screws or exposed joints.
 3. Chalktrough: Manufacturer's standard continuous, solid type aluminum chalktray with ribbed section and injection molded end closures.
 4. Map Rail: Furnish map rail at top of each unit, complete with the following accessories:
 - a. Display Rail: Provide continuous cork display rail approximately 2 inches wide, as indicated, integral with map rail.
 - b. End Stops: Provide one end stop at each end of map rail.
 - c. Map Hooks: Provide 2 map hooks for every 48 inches of map rail or fraction thereof.
 - d. Flag Holder: Provide one flag holder for each room.

2.04 FABRICATION

- A. Assembly: Provide factory-assembled chalkboard and tackboard units, unless field assembled units are required.
 - 1. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, balanced around center of board, as acceptable to the project representative.

2.05 FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
- B. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.
- C. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating; Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 607.1.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine wall surfaces, with Installer present, for compliance with requirements and other conditions affecting installation of visual display boards.
 - 1. Surfaces to receive chalkboards or markerboards shall be free of dirt, scaling paint, and projections or depressions that would affect smooth, finished surfaces of chalkboards or markerboards.
 - 2. Surfaces to receive tackboards shall be dry and free of substances that would impair the bond between tackboards and substrate.
 - 3. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Deliver factory-built visual display boards completely assembled in one piece without joints, where possible. If dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to the project representative. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site. Use splines at joints to maintain surface alignment.
- B. Install units in locations and at mounting heights indicated and according to manufacturer's written instructions. Keep perimeter lines straight, plumb and level. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim and accessories necessary for complete installation.

- C. Coordinate Project – site – assembled units with grounds, trim and accessories. Join parts with a neat, precision fit.

3.03 ADJUSTING AND CLEANING

- A. Verify that accessories required for each unit have been properly installed and that operating units function properly.
- B. Clean units according to manufacturers' written instructions.

SECTION 11488
PROTECTIVE WALL PADDING

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes information about the wall pads to be installed in the gymnasiums.

1.02 SUBMITTALS

- A. Submit in accordance with Section 01340 – Submittal Procedures.

PART 2 – PRODUCTS

2.01 PROTECTIVE WALL PADDING

- A. Approved product is Model 4120 as manufactured by Performance Sports Systems, Aalco and Porter.
- B. Twelve feet of panels will be required. Individual panels of the wall pad shall measure 2' x 6' except where there is a graphic required in the center.
- C. Panels must be 2" thick with six lb. density bonded foam.
- D. Covering shall be 14 oz. polyester reinforced laminated vinyl.
- E. Each panel shall be cemented to 7/16" plywood with one inch anchoring margins at top and bottom.

PART 3 – EXECUTION

3.01 ANCHORING

- A. No plastic anchors will be accepted.
- B. Nails will not be accepted.
- C. Tapcons, expandable lead, and sleeve anchors are approved for mounting wall pads.

3.02 CUTOUTS FOR ELECTRICAL BOXES

- A. Cutouts will be made on site.
- B. The edges around the cutout shall be addressed in a manufacturer' approved finish method such as the 4701 or 4702 from Performance Sports Systems.

3.03 MOUNTING HEIGHT

- A. Wall pads shall be mounted at 6" above the floor, depending on obstructions. Contact Project Representative for direction if circumstances require deviating from this instruction.

3.04 COLORS

- A. Wall pad colors will be selected at the pre-construction meeting from the manufacturer's standard colors from samples provided by the contractor.

SECTION 11525
WINCHES

PART 1 – DESCRIPTION

1.01 SCOPE OF SERVICE

- A. In locations that are marked with the power for winch symbol in the print the Contractor shall provide a winch and connect it to the goal nearest the symbol location. Power for the winches will be determined by the winches that are selected by the contractor. The winches shall be operable from the related key operated switch shown on the prints.

PART 2 - PRODUCTS

2.01 WINCHES

- A. Winches shall be capable of lifting a minimum of 1000 pounds vertically and 1500 pounds horizontally.
- B. The winches selected shall have enough cable travel to allow the goal to fully articulate.
- C. The cable drum shall be equipped with a tensioner to ensure the cable spools correctly with and without a load.
- D. Winches installed as part of the contract shall not require regular oiling or greasing.
- E. The winches braking system shall be rated to hold the entire vertical or horizontal load it is required to lift.
- F. Upper and lower limits shall be set on the winch after installation.
- G. Reversal of the winch shall be instant.
- H. Winch motor shall be equipped with an automatic reset overload protector.
- I. Winches that meet these specifications shall be selected by the contractor to best meet the varied installations.
- J. The winch outlet shall be rated for use with the winches provided as part of this project.

2.02 KEY OPERATED SWITCH

- A. The keyed switches shall be fully functional with the winches installed as part of this project.
- B. The switches shall have a minimum of 3 settings including: up, down, and stop.

- C. The switches do not need individualized keys; however, the contractor shall provide the Project Representative with 1 extra key per keyed switch.
- D. The keyed switches shall be installed on a single gang stainless steel cover.
- E. Tamper proof screws are required for the keyed switches.
- F. Keyed switches shall be installed at 48 inches to center off of finished floor.

2.03 SAFETY BELTS

- A. All goals that are getting electric winches shall also receive safety belts.
- B. Safety belts shall, upon exceeding 1.5 feet per second, automatically restrain the load until the load is lifted off the restrained position.
- C. Safety belts installed as part of this contract must be able to stop a 1500 pound falling weight without damage to the belt or unit.
- D. The safety belt must be long enough to allow for full articulation of the unit it is installed on.
- E. The safety belt must automatically retract as the unit is moved closer to the safety belt.
- F. The safety belt must be mounted in a location relative to the unit that requires the belt to move out as it descends and retract as it ascends.

PART 3 – EXECUTION

3.01 PROCEDURES

- A. Winches and safety belts must be mounted to structure in a fashion that will support the loads required for their operation, and in positions that allow for their operation.
- B. Winches and safety belts shall be installed in a manner consistent with their manufacturer specifications.
- C. Winches and safety belts shall include a five year warranty covering the installation which shall include mounting parts, and a one year warranty covering the units themselves.

SECTION 11660
GYMNASIUM EQUIPMENT

PART 1 - GENERAL

1.01 QUALITY ASSURANCE

- A. All system component parts must be shipped by a single manufacturer.
- B. Verify that the gym floor conditions are ready and complete for any and all gymnasium equipment installation.

1.02 WARRANTY

- A. The material shipped to be free from defects in materials and workmanship for a period of three years and the installer warrants the installation to be free of defects in materials and workmanship for a period of three years. The exclusive remedy under this warranty shall be replacement of defective material or correction of defective installation by the installer.
- B. Provide manufacturer's standard material warranty, covering a period of not less than 3 years.
 - 1. Warranty to cover repair or replacement of equipment which deteriorates excessively due to failures of materials and workmanship and not due to unusual exposure to moisture or other abusive forces and elements not anticipated for the application.

1.03 PROTECTION OF INSTALLED & EXISTING WORK

- A. Protect installed and existing work and provide special protection as required in individual specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

1.04 SUBMITTALS

- A. See Section 01340 SUBMITTALS for submittal procedures.
- B. Product Data: Provide data for all gymnasium equipment installed.
- C. Installation Instructions: Indicate standard and special installation procedures.
- D. Maintenance Data: Include maintenance procedures.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Basketball goals
 1. Porter Athletic Equipment Company: www.porterathletic.com.
 2. Performance Sports Systems
 3. IPI by Bison
- B. Volleyball Equipment
 1. Sports Imports
 - a. DE11 Steel volleyball upright
 - b. HDNR-R Red heavy duty net ratchet and crank handle
 - c. HM50 Techora volleyball net
 - d. KAZ5 Volleyball/tennis floor plate and sleeve

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Basketball goals - All products MUST meet NFHS specifications
 1. New goals shall be mounted to the ceiling structure not the wall.
 2. The support structure shall be painted black.
 3. The structure of the goals must be designed to work with the structural steel they will be mounted to including height, thickness, and span.
 4. Center court: 2 units, single post, forward folding front braced backstops with rectangle glass backboards.
 - a. Basis of design: Performance Sports Systems 3109 Series.
 5. Side courts: 4 units, single post side folding side braced backstops with fan shaped glass backboards
 - a. Basis of design: Performance Sports Systems 3107 Series
 6. The rectangle shaped backboards must be 42 inches by 72 inches glass backboards.
 7. The fan shaped backboards must be 35" high by 54" wide glass backboards
 8. The backboards must come with padding and a rim.
- B. Volleyball Equipment
 1. Install floor plates and sleeves as directed on the drawings. If the nets will not work with the layout shown on the print inform the project manager so changes can be made.
 2. Floor plates and sleeves shall be installed according to manufacturer recommendations.
 3. In addition to the floor plates and sleeves shown on the drawings four (4) volleyball uprights, two (2) heavy duty net ratchets and crank handles, and two (2) volleyball nets shall be provided to the school.

3.02 CLEAN UP

- A. Clean up all unused materials, debris and remove from site.

SECTION 15000
ROUND DUCT

PART 1 GENERAL

1.01 Work

A. Scope

1. Remove and dispose of existing ductwork to the boundaries of the gym.
2. Install round ductwork to distribute the conditioned air throughout the gym.
3. The round ductwork must be installed in the space between the roof trusses.

PART 2 PRODUCTS

2.01 Rectangular Duct and Fittings

- A. General Fabrication Requirements-Must comply with SMACNA'S "HVAC Duct Construction Standards-Metal and Flexible" Based on indicated static pressure class unless otherwise indicated.

2.02 Double wall round ducts

A. Manufacturers

1. Lindab Inc.
2. McGill Airflow LLC.
3. Semco Incorporated
4. Sheet Metal Connectors, Inc.
5. Wichita Sheet Metal

- B. Outer Duct must comply with SMACNA'S "HVAC Duct Construction Standards-Metal and Flexible."

C. Inner Duct

1. Minimum .028 inch perforated galvanized sheet metal
2. 3/32 inch diameter perforations
3. 23% overall open area

- D. Interstitial Insulation: Fiber Glass liner complying with ASTM C 1071, NFPA 90A or B, and with NAIMA AH124 "Fibrous Glass Duct Liner Standard"

1. Maximum Thermal Conductivity: .27 BTU x IN./H x SQ. FT x DEG F at 75 DEG F mean temperature.
2. Install spacers to keep the inner duct centered in the outer duct without compressing the insulation.
3. Insulation shall have an antimicrobial coating.
4. Cover insulation with polyester film complying with UL 181, class 1.

- E. Dust Liner
 - 1. Fibrous-Glass Duct Liner: Comply with ASTM C 1071, NFPA 90A or B, and with NAIMA AH124, "Fibrous Glass Duct Liner Standard" 1 inch thick, 1.5 PCF Minimum.
 - 2. Manufacturers
 - a. Certainteed Corporation: Insulation Group
 - b. Johns Manville
 - c. Knauf Insulation
 - d. Owens Corning

- F. Maximum Thermal Conductivity:
 - 1. Type 1, Flexible: .27 BTU x IN./H x SQ. FT x DEG F (.039 W/M x K at 75 DEG F (24 DEG C) mean temperature.

- G. Antimicrobial Erosion-Resistant Coating: Apply to the surface of the liner that will form the interior surface of the duct to act as a moisture repellent and erosion-resistant coating. Antimicrobial compound shall be tested for efficacy by an NRTL and registered by the EPA for use in HVAC systems.

- H. Water based Liner Adhesive: Comply with NFPA 90A or B and with ASTM C 916.
 - 1. Use adhesives that has a VOC content of 80 G/L or less when calculated according to 40 CFR 59, subpart D (EPA method 24).

PART 3 EXECUTION

- 3.01 Round Duct shall be double wall, perforated, insulated duct product.

- 3.02 It is the responsibility of the contractor to coordinate all items that affect other disciplines with the corresponding contractor and the general contractor if equipment, materials, etc. other than those scheduled and specified are furnishes.

SECTION 15010
HVAC DISTRIBUTION EQUIPMENT CLEANING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. The work of this project shall be done in conformance with the National Fire Protection Association codes, Section 11.3 and 11.4.

1.02 SCOPE OF WORK

- A. Contractor is required to provide 'before and after' digital photos of the cleaning.
 - 1. Photos will show the duct and equipment 'before and after' being cleaned.
 - 2. A digital photo of the school's name will precede photos taken of that particular school site cleaning efforts.
 - 3. Project Representative will inspect the daily work represented in the digital photography provided by the contractor.
 - 4. The contractor will deliver digital photo medium to the Project Coordinator within 48 hours of cleaning each day.

- B. Work included: Provide all labor, materials, tools, transportation, equipment, services and facilities required for the complete and proper execution of Work as stated in these specifications. **Only Contractors and Sub-Contractors with experience in each type of cleaning shall be used.**
 - 1. Work included
 - a. The equipment at the following designated locations shall be thoroughly cleaned of grease, lint, residue and overspray completely removed including the exterior of the exposed duct and grills.
 - b. Disposable filter media and filters shall be replaced with like filters furnished by the contractor. This project is to clean the interior and exterior of duct work and exposed surfaces of dirt and debris which, with build-up, can be a fire hazard.
 - 2. All chemicals and cleaning materials used shall be non-flammable.
 - 3. Replace return air grills and clean the supply vent covers.
 - 3. Grease, residue and debris from hoods, filters, ducts and fans shall be removed from the premises. The work area shall be left clean and free of grease, residue and materials accumulated from the job. Used filters will be boxed up and returned to USD 259 for disposal.
 - 4. Procedure for cleaning the Gymnasium Distribution System and filter replacement:
 - a. Clean all return grilles at the equipment where dust is collected.
 - b. Vacuum all equipment connected to the system.
 - c. Holes may be required to access the inside of the ductwork for cleaning. Cut in a neat workmanship manner with no ragged edges. Then at the end of the cleaning, seal all holes in ductwork to ensure optimum vacuum when power vacuum system is in operation.

- d. The Duct-Whip shall pass through the entire length of the system to ensure all debris and dust is broken free of the interior ductwork and vacuumed into the Power Vacuum System.
 - e. Vacuum the blower compartment and clean blower motor.
 - f. Filter replacement – Contractor to match existing and provide new filters.
 - g. Major remodeling in each Gymnasium will be concurrent with this project, so contractor must cooperate in scheduling with the Owner and multiple other contractors, including seating installer, rigging, acoustical treatment, painting, carpet, etc.
5. Double check the areas for over-spray and damage to floors and equipment from Duct cleaning. Contractor is responsible for clean-up and repair of any damage.
6. Inform the Project Representative when project is ready to be inspected.

1.03 REGULATORY REQUIREMENTS

- A. Fire protection: Conform to National Fire Protection Association codes and procedures.
- B. Conform to all OSHA, EPA, DHE, FDA, and all State and local rules and regulations.
- C. All licenses, permits, fees, etc. required for the cleaning and disposal of materials shall be obtained and paid for by this contractor.

1.04 PROJECT/SITE CONDITIONS

- A. Clean HVAC distribution equipment in the locations below:
 - 1. Brooks Middle School, 3802 E 27th St. North, Wichita KS 67220

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. All products shall be new, of the best quality normally used for the purpose in good commercial practice, and shall be the products of reputable manufacturers.

PART 3 - EXECUTION

3.01 COORDINATION AND BUILDING CONDITIONS

- A. The contractor shall visit the site and determine all existing local conditions affecting work in this contract.

3.02 CLEANING

- A. Clear the premises upon completion of the work and remove all dirt and rubbish resulting from the operations.

SECTION 16000
ELECTRICAL

PART 1 – GENERAL

1.01 SCOPE

- A. Provide power for the score boards, lights, sound system, and bleachers. Install switching for the lights as directed in the drawings – refer to the “E” Sheets.
- B. Install security devices and cabling.

1.02 GENERAL

- A. EMT (electrical metallic tubing) is acceptable in attics and crawl spaces.
- B. Wire Mold shall be used on walls and ceilings.
- C. Circuits with more than 100 volts shall use a minimum of #12 AWG, and shall follow the color code set forth in the Wichita Electrical Code Title 19.
- D. All plates for switches, receptacles, and wire mold blanks shall be stainless steel.

PART 2 - PRODUCTS

2.01 OUTLETS

- A. An outlet shall be installed to feed each light, score board, and sound equipment rack.
- B. Outlets that feed lights shall be twist lock style and rated for the use.
- C. Outlets used for the score boards and sound equipment racks shall be 120 volt 20 amp duplexes and rated for the use.
- D. The sound equipment rack requires two (2) duplex receptacles under the rack, and within one (1) foot of the bottom of the rack.
- E. The score boards require one (1) duplex receptacle above the board, and within one (1) foot of the top of the board.

2.02 SWITCHES

- A. All lights installed as part of this project shall be controlled with magnetic contactors.
- B. The contactors shall be installed in a box outside the panel.
- C. The box that contains the contactors shall be installed between 8 and 12 feet off the floor.

- D. The contactors shall be controlled with single pole or three way switching as directed by the drawings. Refer to the "E" Sheets.

2.03 Security Devices

- A. Cabling
 - 1. West Penn 25357B-OR
 - 2. Must be run from each motion detector to the main building panel.
 - 3. Cables must be in conduit when in view of the public and shall be supported from the device to the panel by J hooks or in conduit.

PART 3 EXECUTION

3.01 GENERAL

- A. The electrical installation shall be done in a neat and workman like manner.
- B. The installation must meet or exceed all applicable codes including the 2011 NEC and the Wichita Electrical Code Title 19.
- C. The Contractor shall make every effort to ensure the devices and conduit installed under this specification will not create a hazard for the children that will be in contact with them.

SECTION 16050
LIGHTING

PART 1 – SCOPE OF SERVICES

1.01 REPLACE LIGHT FIXTURES

- A. Install the fixtures shown on Drawings (refer to drawing section E).
- B. Remove the existing general illumination fixtures in the rooms where the new lights are being installed.
- C. Dispose of the ballasts, lamps, and trash in accordance with KDHE and EPA regulations.
- D. Ceiling height varies and should be taken into consideration in the bid.
- E. Scheduling shall be coordinated with the staff per Section 01010 part 1.02 A. and B. The completion date for this project is based on the need for this project to be completed without minors in the building, and has been set far enough out to be workable.
- F. Electrical installations and/or changes shall conform to the Facility Standards 2008 Phase 3 found at www.usd259.org – District Offices – Facilities – Construction Related Documents, 2008 NEC, and workmanship standards. Electrical installations and/or changes that do not meet those standards shall be removed and replaced by the preapproved electrical contractor.
- G. Replace all wall-mounted Exit signs and emergency lights with their Dual-Lite equivalent and install new wire guards on these fixtures.
- H. All exit lights shall utilize LED's for their illumination sources. In gymnasium spaces, exit lights shall be provided with wire guards.
- I. Battery-powered emergency lights shall be provided with LED. Where used in spaces illuminated by HID sources, each emergency light shall be provided with a time delay relay (5 minutes minimum) so that HID lamps may have ample time to restrike in the event of a momentary power dip which causes the HID lamps to extinguish. In gymnasium spaces, emergency lights shall be provided with wire guards

PART 2 - GENERAL

2.01 FIXTURES

- A. The Contractor shall supply all fixtures shown on the print. All fixtures supplied by the Contractor must meet current codes and include advance ballasts.
- B. Fixtures must have a disconnect plug installed between the ballast and power.
- C. All fixtures installed as part of this project shall have wire guards.

SECTION 16450
WIRELESS SCOREBOARD INSTALLATIONS

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Install new wireless score boards at Brooks Middle School, 3802 E 27th St. North, Wichita KS 67220.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Approved manufacturers and part numbers for this project are:
 - 1. Daktronics
 - a. Score Board BB-2103-13
 - b. Scoring Console All Sport 5000 Controller or newest comparable controller.
 - 2. Colors
 - a. Colors will be called out after the bid opening. Colors called out will be from the Daktronics color pallet or Martin Senour Paints MA4290LF color chart.
 - b. If the manufacturer cannot use the Daktronics or Martin Senour Paints color pallets, submit colors to be used in place of the colors called out in this specification for approval a minimum of 14 days before the letting of this bid.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Coordinate exact score board location and height with Project Representative.
- B. Electrical installations and/or changes shall conform to 2008 Bond Phase 3 Facility Standards, 2008 NEC, and workmanship standards. Electrical installations and/or changes that do not meet those standards shall be removed and replaced by the preapproved electrical contractor.
- C. Electrical boxes, conduit, and fittings shall be painted to match the wall or ceiling they are mounted on after they are installed.

3.02 DEMONSTRATION

- A. The Contractor shall provide up to 4 hours of training for staff per site.

3.03 WARRANTY

- A. The project shall be warranted for a period of one year starting the day on final payment and shall include the following:
 - 1. The controllers
 - 2. The structure of the boards including its mounting
 - 3. The lights in the boards
 - 4. All electronic parts in the boards
 - 5. The branch circuit that feeds the board

SECTION 16701
GYMNASIUM SOUND SYSTEMS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Remove the old speakers from the ceiling for reuse.
- B. Install the old speakers as directed in the drawings.

PART 2 PRODUCTS

2.01 PRODUCTS

- A. Plates
 - 1. All plates installed in the gym shall be stainless steel.
 - 2. Microphone plates shall be installed in locations shown on the print.
 - 3. Microphone jacks shall be XLR.
- B. Speaker and microphone cable
 - 1. Speaker cable shall be 14 gauge 2 conductor plenum cable.
 - 2. Microphone cable shall be 22 gauge 2 conductor shielded plenum cable.

PART 3 EXECUTION

3.01 EXECUTION

- A. Speaker cables shall be in conduit.
- B. Junctions in the speaker cable must be made in boxes.
- C. Cabling may be supported with J hooks when run outside the gym in ceiling cavities. Cabling shall be supported at all times with J hooks or conduit.
- D. Coordinate the installation of the sound system with light and score board installation as well as the acoustical material installation.
- E. Electrical boxes, conduit and fittings shall be painted to match the wall or ceiling they are mounted on after they are installed.
- F. The sound system should be fully tested and cleaned before it is given back to the Owner. Test all microphone jacks soldered joints.