



**STATE OF ALASKA
DEPARTMENT OF CORRECTIONS
INVITATION FOR QUOTES
A SMALL PROCUREMENT
(CONSTRUCTION RELATED)
[per AS 36.30.320(a)]**

Project Name: WWCC Boiler Replacement Project No.: WWCC 20-084-23-1 Location: Wildwood Correctional Center (WWCC) 10 Chugach Avenue Kenai, Alaska 99611	Procurement Agency and Address: Department of Corrections Division of Administrative Services P.O. Box 112000 Juneau, Alaska 99811-2000
Procurement Officer: Michael Lim 907-465-6014	Date of Issuance: 6/26/2023
DESCRIPTION OF WORK, REQUIRED COMPLETION DATE, LISTING OF ATTACHMENTS: Contractor will provide all labor, materials, equipment and travel to replace the existing boilers at Wildwood Correctional Center in Kenai, Alaska. See Section 01000 for the Scope of Work on these projects. See Section 01560, Cleaning. See Section 01045, Cutting and Patching. Substantial Completion date for both facilities is <u>November 30, 2023.</u> Final Completion date for both facilities is <u>December 29, 2023.</u> Pre-Bid/Site Visit: A pre-bid site visits is schedule for July 11, 2023 at 10:00 a.m. See Section 01000for more information. Question: Question pertaining to the project requirement and specification should be in writing and received by the procurement officer no later than close of business July 14, 2023 to allow adequate time for the issuance of an addendum, if needed. Attachments: Invitation for Quotes package includes: Invitation for Quotes; Instructions to Offerors; Appendix B1 (Insurance Requirements); Small Procurement Quote Submittal; Special Notice to Bidders; Laborers & Mechanics Minimum Rates of Pay Pamphlet #600 (Not provided but can be upon request); General Provisions 01000; Security Background Clearance form; Bid Bond; Payment Bond; Performance Bond The Project cost estimate is: <u>\$90,000-\$140,000.</u> 1. Any project in excess of \$100,000 must be bonded. Davis-Bacon Wages (Title 36.05): are required on this project. Required for all project over \$25K	
The following insurance coverages are required: <input checked="" type="checkbox"/> Workers Comp <input checked="" type="checkbox"/> General Liability <input checked="" type="checkbox"/> Automobile	
<u>Bonding Requirement:</u> Projects over \$100,000 will require bonding. Bid Bond (25D-14), Payment Bond (SPC-005) Performance Bond (SPC-006) are required on this project.	
Quotes for furnishing all labor, equipment and materials and performing all work for the above Project are invited. To be eligible for consideration, quotes must be received before 2PM local time on the 18th day of July 2023 . Late quotes cannot be accepted. Disadvantaged Business Enterprises (DBE's) may submit quotes and will not be discriminated against on the grounds of race, color, national origin or sex in consideration for an Award which results from this invitation. Any errors, omissions, or questions pertaining to solicitation procedures or Project requirements, requests for additional documents, or inquiries pertaining to site conditions or scheduled visits must be made to Michael Lim, Procurement Officer, Telephone: 907-465-6014 Applicable provisions of AS 36.30 and 2 AAC 12 govern this solicitation.	
SUBMITTAL OF QUOTES: Quotes for this Project must be submitted in the manner noted below. All Offerors must familiarize themselves with the <i>Instructions to Offerors</i> , page 2 of this form, prior to submitting their quote.	
<div style="display: flex; align-items: flex-start;"><div style="margin-right: 10px;"><input type="checkbox"/></div><div>- VERBAL QUOTES SHALL BE GIVEN TO _____ AT THE ABOVE NOTED TELEPHONE NUMBER, PRIOR TO THE STATED DEADLINE. (See above Bonding Requirements.)</div></div> <div style="margin-top: 10px;"><div style="display: flex; align-items: flex-start;"><div style="margin-right: 10px;"><input checked="" type="checkbox"/></div><div>- WRITTEN QUOTES, INCLUDING AMENDMENTS OR WITHDRAWALS, MUST BE RECEIVED PRIOR TO THE ABOVE NOTED DEADLINE. QUOTES MUST BE SUBMITTED ON FORM SPC-002, QUOTE SUBMITTAL, ATTACHED. (See above Bonding Requirements.)</div></div></div>	
Written quotes may be submitted by electronically, hand delivered, or mailed in a sealed envelope. Confidentiality is only assured for sealed quotes. Email: erin.messing@alaska.gov Mailed quotes must allow time for delivery and the envelope must be marked as follows:	
<u>Quote for Project:</u> Name: WWCC Boiler Replacement Number: WWCC 20-084-23-1 Attn: Michael Lim	<u>Procurement Agency Address:</u> Department of Corrections P.O. Box 112000 Juneau, Alaska 99811-2000
<u>NOTE:</u> Quote amendments or withdrawals must be made in writing to the individual of the Procurement Agency receiving the quotes and must be received prior to the time for quote submittal.	



STATE OF ALASKA DEPARTMENT OF CORRECTIONS

INVITATION FOR QUOTES FOR A SMALL PROCUREMENT (CONSTRUCTION RELATED)

INSTRUCTIONS TO OFFERORS

The State of Alaska desires that all Offerors submitting quotes on construction contracts are given a fair and equal opportunity to compete. Offerors are required to follow these instructions:

REVIEW THE PROJECT DOCUMENTS: Most construction Projects in excess of \$1,000 will have some type of written documentation prepared expressly for the Work. If you are asked to submit a quote and no written information has been provided, you should ask the procurement Agency for written documentation. If the scope of services have been described to you verbally, and you are selected for Contract Award, you must ensure that the information of the services to be performed (scope of work) is put in writing prior to accepting the Contract. When providing a Quote, carefully review and consider all materials related to the solicitation and work of the contract. **By submitting a quote the Offeror warrants that they are familiar with the Project requirements, have visited or otherwise examined the site, and are aware of the conditions to be encountered.** Offeror's can verify the contents and completeness of their quote documents by contacting the procurement Agency individual named on the front of this form.

SUBMITTING THE QUOTE: The Quote must be submitted in one of the following formats as called for in the Invitation:

1. **ORALLY** - if a verbal quote is solicited, the Offeror must provide, in addition to their quote amount and mailing address -- (1) their valid Alaska Business License number, (2) if applicable, a valid Contractor's Registration number, (3) their status as an Alaskan Bidder (Offeror), (4) their intended use of Alaskan products, (5) the carrier's name and policy number for their Workers' Comp Insurance (or a statement of sole proprietorship, if applicable), and (6) the Employer (Tax) Identification Number or Social Security Number. The Procurement Agency will enter this information on the quote schedule.

2. **WRITTEN** - if a written quote is solicited, the Offeror must complete, in ink or typewritten, the *Small Procurement Quote Submittal*, Form SPC-002. Failure to acknowledge receipt of addenda or to execute the form correctly and completely may disqualify the quote.

NOTE: The *Department of Labor* requires an Offeror to be licensed and registered for the required type of work prior to submitting a quote. If the procurement Agency determines the Offeror is improperly registered or licensed, their quote may be deemed nonresponsive.

SUBCONTRACTOR LISTING: Subcontractors intended to be utilized on this contract must be listed in the response to the solicitation. Work shall not be awarded to any subcontractor without prior approval from the procurement Agency. Subcontractors may be added or removed only as approved by the procurement Agency.

DETERMINATION OF THE LOWEST RESPONSIBLE QUOTE AND CONTRACT AWARD: Following receipt and determination of all **responsive** oral, written or sealed quotes, the procurement Agency will compare the quotes and determine the lowest Offeror. If the procurement Agency discovers a discrepancy between the unit price amount and the extended amount; the unit price amount will prevail. Conditioned quotes, unless expressly requested, will not be considered. When the quote schedule is composed of a basic amount with alternates, the procurement Agency will base its determination of the low quote and the amount of the Contract Award solely upon those quotes, basic and alternates, that are priced within the extent of available construction funds. Alternates will be considered for Award in the order listed, except that if the order of Offerors is not affected, the Award may include any combination of funded alternates, or none, as may be in the best interest of the procurement Agency.

When determining the lowest quote, the procurement Agency will also give a 5% Alaska Offeror's preference and an appropriate Alaska Products preference to quotes designating the applicability of a preference. To qualify for the Offeror's preference (per AS 36.30.170) the Offeror **must** (1) hold a current Alaska Business License, (2) submit the quote under the name appearing on the license, (3) have staffed and maintained a place of business within Alaska for the previous six months and (4) be incorporated or qualified to do business under the laws of the State. In addition, if the Offeror is a partnership or joint venture, all parties must meet the criteria to be eligible for the preference. A booklet fully describing the Alaska Preferences (Bidder, Offeror, Product, Disabilities, Veteran) program is available at <http://doa.alaska.gov/dgs/pdf/pref2.pdf>. A detailed description of the Alaska Products Preference Program is available at <http://www.commerce.state.ak.us/ded/dev/prodpref/prodpref.htm>.

The procurement Agency will make a determination of **responsibility** as required by 2 AAC 12.500. If the lowest Offeror is declared responsible, the procurement Agency will execute the *Notice of Award / Notice to Proceed*, Form SPC-003, and send it to the Offeror for acknowledgement. If the lowest Offeror is found to be nonresponsive, this process will be repeated with the second lowest Offeror -- and so on until the lowest responsive and responsible Offeror is determined.

NOTICE OF AWARD AND PROTEST: A written notice will be provided on all Awards exceeding \$ 25,000 (2 AAC 12.400(h)). All protests must be filed with the Commissioner of the procurement Agency (or designee) and copied to the Procurement Officer. Protest procedures are described in AS 36.30.560 and 2 AAC 12.695. The extent of the protest remedy is limited to quote preparation costs (AS 36.30.585).

INDEMNITY AND INSURANCE – The following insurance is required for all construction contracts:

Article 1. Indemnification

The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

Article 2. Insurance

Without limiting Contractor's indemnification, it is agreed that Contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the Contracting Officer prior to beginning work and must provide for a notice of cancellation, nonrenewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the Contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.

2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

**STATE OF ALASKA
DEPARTMENT OF CORRECTIONS
SMALL PROCUREMENT
QUOTE SUBMITTAL
(CONSTRUCTION RELATED)**



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

SMALL PROCUREMENT
(CONSTRUCTION RELATED)
OFFEROR'S QUESTIONNAIRE

Project Number: WWCC 20-084-23-1

Project Name: WWCC Boiler Replacement

Project Location: Wildwood Correctional Complex (WWCC) 10 Chugach Avenue, Kenai, Alaska 99611

A. FINANCIAL

1. Have you ever failed to complete a contract due to insufficient resources?
Yes ☐ No ☐ If yes, explain: _____
2. Describe any arrangements you would make to finance this work _____

B. EQUIPMENT

1. Describe the equipment you have available and would use for this project.

ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE

2. What percent of the total value of this contract would you subcontract? _____
3. Would you purchase any equipment for use on this project: Yes ☐ No ☐
If yes, describe type, quantity, and approximate cost:
4. Would you rent any equipment for this work? Yes ☐ No ☐
If yes, describe type, quantity, and approximate cost:
5. Is your proposal based on firm offers for all materials for this project? Yes ☐ No ☐
If no, please explain: |

C. EXPERIENCE

1. Have you had previous construction contracts or subcontracts with the State of Alaska?
Yes ☐ No ☐
Describe the most recent or current contract, its completion date, and scope of work:
2. List, as an attachment to this questionnaire, other construction projects you have completed; the dates of completion, scope of work, and total contract amount for each project completed in the past 12 months.

I hereby certify that the above statements are true and complete.

Contractor Name

Signature

Date

Name and Title of Person Signing

SECTION 01000
GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Work Covered by Contract Documents
- B. Contract Method
- C. Building Permits and Inspections
- D. Substantial Completion
- E. Contractor Use of the Premises
- F. Using Agency Occupancy
- G. Department Furnished Products
- H. Alternates
- I. Applications for Payment
- J. Reference Standards
- K. Preconstruction Conference
- L. Progress Meetings
- M. Submittals
- N. Shop Drawings
- O. Product Data
- P. Electricity, Lighting
- Q. Heat, Ventilation
- R. Water
- S. Sanitary Facilities
- T. Enclosures/Barriers
- U. Protection of Installed Work
- V. Cleaning During Construction
- W. Removal
- X. Closeout Procedures
- Y. Project Record Documents
- Z. Operation and Maintenance Data
- AA. Warranties
- BB. Spare Parts and Materials

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary conditions requirements in Appendix A.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

This project will include all materials, equipment, labor, and travel to replace the two (2) existing Weil McLain Series 1 888 Steam Boilers with two (2) new Weil McLain Series 2 888 Boilers located at Building 10 at the

Wildwood Correctional Center, 10 Chugach Avenue, Kenai, Alaska 99611.

All steam heating specialties expect as noted, such as gate valves, control valves, flanges, pressure gauges, temperature wells and fittings that are in usable conditions are to remain. Contractor to provide alternate proposal for replacing any items as deemed necessary.

Steam Piping, Fittings and Domestic Water insulation in the mechanical room and utilidors may have Asbestos Containing materials. Any cost for abatement measures that are required for the safety and protection of contractor employees should be noted as a separate line item in the contractor's proposal.

Note that the boiler gas burners were recently replaced with new Beckett CG50 Burners. It is the intent of the DOC to re-use the burners for this project.

Note that the Contractor must make the best effort at maintaining heat in the building and to keep the domestic water heaters functional during the construction process. Domestic hot water can be interrupted for a maximum of 72 hours. Interruptions to the building heat and/or domestic hot water will be scheduled with the facility with 24 hours advance notice.

SCOPE OF WORK:

Wildwood Correctional Center (WWCC):

Provide all labor, materials, equipment and associated travel and lodging cost to:

a. Steam Boiler

Remove and demolish existing Weil McLain steam boilers, steam piping and flue piping in sequence to the extent necessary for demolition and to keep supplying steam to the building and domestic water heaters. Cap and isolate as necessary.

Furnish and install new Weil McLain 888 Steam Boilers with all boiler trim (less burners). Brand specific. No substitute.

Remove and safely store for re-use of each new Beckett CG50 gas burner during the project.

Furnish and install all materials including, steam piping, gas piping, flue piping, insulation, anchors, hangers, etc., for a complete and functional installation.

Boilers to be installed in accordance with manufacturers specifications.

Start-up and commission new boilers including start up and tune Beckett Burners.

b. Feedwater Tank

Remove and demolish existing feedwater tank package.

Furnish and install new 200-gallon feedwater tank package (Hurst Feedmiser FM-200D-15) or state approved equivalent.

Start-up and commission feedwater tank package.

Provide flue gas analysis report at project closure.

Provide 1 year warranty for installation and labor. (Steam Boiler and Feed water Tank)

Provide Operation and Maintenance Manuals to the owner. (Steam Boiler and Feed water Tank)

All scrap materials generated from the demolition of the piping and fittings will be removed from the facility and disposed of by the contractor.

1.04 CONTRACT METHOD

A. All work shall be performed under a single **fixed-price** contract.

1.05 BUILDING PERMITS AND INSPECTIONS

A. Contractor is responsible for all fees and permits to include inspections through the proper state and local governing authorities.

1.06 SUBSTANTIAL / FINAL COMPLETION

A. Project shall be substantially completed for both facilities by **November 30, 2023** after Award of Contract or Notice to Proceed is issued. Substantial Completion defined by "Work ready for its intended use by the Owner."

B. Final Completion date for both facilities is **December 29, 2023**.

1.07 CONTRACTOR USE OF PREMISES

A. Limit use of premises for Work and for construction operations, to allow for DOC occupancy and security.

B. Site availability to Contractor is to be coordinated through the On-Site Project Manager.

C. Contractor is hereby advised that there is no equipment, there are no tools, and there are no materials at the facility available for the use of the Contractor.

1. Project Manager will be John Gard, (907) 269-7391.

2. WWCC Maintenance Point of Contact, John Tuttle (907) 260-7203.

1.08 DEPARTMENT OF CORRECTIONS OCCUPANCY

- A. DOC will not directly occupy project area during the construction period. However, DOC will continue to occupy the facility and inmates and staff will require limited access in and around the construction area during the entire period of construction. Coordinate with the DOC on-site Project Manager to minimize conflict when needing to access construction area.

1.09 DEPARTMENT FURNISHED PRODUCTS – Not Used

1.10 ALTERNATES – None

1.11 APPLICATIONS FOR PAYMENT

- A. Submit two copies of application on Application for Payment form provided by the Department or on contractor form acceptable to the Department.
- B. Content & Format: Include contract number, period covered by the project. Identify portion of contract the invoice is for, i.e., Basic Bid and/or Change Order (if applicable).

1.12 REFERENCE STANDARDS

- A. For products specified by association or trade standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Project Advertisement date, or Effective Date of the Contract when there was no advertisement, except when a specific date is specified.
- C. Specific Required Reference Standards will be listed in each Specification Section.

1.13 PRE-BID SITE VISITS

- A. The DOC has scheduled a pre-bid site visit for WWCC building lobby on **July 11, 2023 at 10:00 A.M.** local time.

1.14 PROGRESS MEETINGS

- A. Contractor to allow time each week to meet with the Project Manager or his representative to review the work in progress and his proposed schedule. This will be an informal meeting on a day and time convenient to both parties.

1.15 SUBMITTALS (If applicable)

A. Deliver one (1) copy plus the number required for the Contractor's use of Project submittals as directed. Transmit each item under Department accepted format. Apply contractor's review stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the contract documents. Identify variations from contract documents and products or system limitations.

B. After DOC review of submittal, revise and resubmit as required.

1.16 SHOP DRAWINGS

A. When required by the Contract Documents, submit the number of opaque reproductions that Contractor requires, plus four copies, which will be retained by DOC.

1.17 PRODUCT DATA

A. Where required by the Contract Documents, mark each copy to identify applicable products, models, options, and other data; supplement manufacturers' standard data to provide information unique to the Work.

B. Submit the number of copies that the Contractor requires, plus four copies that will be retained by the DOC.

1.18 ELECTRICITY, LIGHTING

A. Connect to existing service; provide branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords. Department will pay costs of energy used. Take measures to conserve energy.

B. Provide lighting for construction operations.

C. Existing and permanent lighting may be used during construction. Maintain lighting and make routine repairs.

1.19 HEAT, VENTILATION

A. Coordinate use of existing facilities with Department; extend and supplement with temporary units as required to maintain specified conditions for construction operations, to protect materials and finishes from damage due to temperature or humidity. Department will pay costs of energy used.

- B. Prior to operation of permanent facilities for temporary purposes, verify that installation is approved for operation, and that filters are in place. Provide and pay for operation and maintenance.
- C. Provide ventilation of enclosed areas to cure materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, or gases.

1.20 WATER

- A. Provided by the facility, coordinate with the point of contact.

1.21 SANITARY FACILITIES

- A. Coordinate with the facility.

1.22 ENCLOSURES / BARRIERS

- A. Provide as required to prevent public entry to construction areas to provide for Department and Using Agency's use of site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades as required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect against vehicular traffic, stored materials, dumping, chemically injurious materials, and puddling or continuous running water, as required.

1.23 PROTECTION OF INSTALLED WORK

- A. Provide temporary protection for installed products. Control traffic, as required, in immediate area to minimize damage
- B. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.
- C. Prohibit traffic and storage on waterproofed and roofed surfaces, on lawn and landscaped area.

1.24 CLEANING DURING CONSTRUCTION

- A. Control accumulation of waste materials and rubbish, clean area and dispose of off-site.
- B. Clean interior areas prior to start of finish work, maintain areas free of dust and other contaminants during finishing operations.

1.25 REMOVAL

- A. Remove temporary materials, equipment, services and construction prior to substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.

1.26 CONTRACT CLOSEOUT PROCEDURES

- A. Comply with procedure stated in the General Conditions of the Contract for issuance of Certificate of Substantial Completion.
- B. Using Agency will occupy Project for the purpose of conduct of business under provision stated in certificate of Substantial Completion.
- C. When Contractor considers work has reached Final Completion, submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and requesting Department inspection.
- D. In addition to submittals required by the conditions of the Contract, provide submittals required by governing authorities, and submit a final statement of accounting giving total adjusted Contract Price and sum due.
- E. Department will issue a summary Change Order reflecting final adjustments to Contract price not previously made by Change Order.

1.27 PROJECT RECORD DOCUMENTS - Not Used.

1.28 OPERATION AND MAINTENANCE DATA

- A. Provide data for:
 - 1. Mechanical/Plumbing equipment and controls.
 - 2. Electrical equipment, controls and visual / audible alarms.
- A. Operation and maintenance instructions. For each system, give names, addresses, and phone numbers of Subcontractors and Suppliers.
 - 1. Appropriate design criteria.
 - 2. List of equipment.
 - 3. Parts list.
 - 4. Operating instructions.
 - 5. Maintenance instructions, equipment.
 - 6. Maintenance instructions, finishes.
 - 7. Shop drawings and product data.
 - 8. Warranties.

1.29 WARRANTIES

- A. Contractor shall guarantee / warranty the work, material and labor for one (1) year from the date of project acceptance. Provide duplicate, notarized copies.
- B. Submit material prior to final application for payment. For equipment put into use with Department permission during construction, submit within 10 days after first operation. For items of work delayed materially beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.
- C. YEAR 2023 WARRANTY: The Contractor warrants that each hardware, software, or firmware product or item delivered or developed under this contract shall accurately process date data (including, but not limited to calculating, comparing, and sequencing) from, into, during, and between the twentieth and twenty-first centuries, including leap year calculations, when used in accordance with the documentation provided by the Contractor.
 - 1. If the contract requires that specific products or items perform as a system, then this Year 2023 Warranty shall also apply to those listed items as a system.
 - 2. The duration and remedies available to the State for breach of the Year 2023 Warranty shall be as defined in, and subject to, the year 2023 terms and limitations of any general warranty provisions contained in this solicitation. In the absence of any such general warranty provision(s), the remedies available to the State shall include repair or replacement, without any cost to the State, of any listed product or item whose noncompliance is discovered and made known to the contractor in writing by November 1, 2023, or within one (1) year after acceptance, or within the time limits of the contractor's warranty, whichever is longer.
 - 3. Nothing in this Year 2023 warranty shall be construed to limit any rights or remedies the State may otherwise have under the Uniform Commercial Code, State or Federal law, or with respect to defects other than Year 2023 performance.
 - 4. The warranties contained herein are separate and distinct from any other warranties expressed or implied and are not subject to any disclaimer of warranty or limitation of the supplier's liability.

1.30 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, and maintenance materials from excess materials remaining from that used from construction of work. Coordinate with Department deliver to Project site and obtain receipt prior to final payment.

PART 2 PRODUCTS - Not Used.

PART 3 EXECUTION - Not Used

END OF SECTION

NOTICE TO BIDDERS

In an attempt to save money and paper the department will no longer send hard copies out with solicitations on construction projects of the PAM 600. Instead we have provided web links and contact information below. If you are unable to view this links and would like a hard copy of these documents, please contact the Procurement Officer for this project and request a copy.

Pamphlet 600: Laborers' & Mechanics' Minimum Rates of Pay

<https://labor.alaska.gov/lss/pamp600.htm>

Pamphlet 400: Title 36 Public Contracts & 8 AAC Chapter 30

<https://labor.alaska.gov/lss/lssforms.htm>

Notice of Work / Notice of Completion (Required On All Projects Over \$25,000.00)

You must submit these through “My Alaska” web link at <https://my.alaska.gov/> you must register if not already.

Once you have logged in, return to the home page under “Services for Businesses”, click on “LSS-Online Filing Services”.

<https://certpay.dol.alaska.gov/portal.aspx>

Employment Preference Determination (July 1, 2017)

<http://labor.alaska.gov/lss/forms/2017-employment-pref-determination.pdf>

DOL Alaska Employment Preference Information

<http://labor.alaska.gov/lss/forms/2015-employment-info-sheet.pdf>

Alaska Wage and Hour Administration

Offices / Hours and Web links:

Anchorage: Anchorage.lss-wh@alaska.gov

Phone: 907-269-4909

Fax: 907-269-4915

Juneau: Juneau.lss-wh@alaska.gov

Phone: 907-465-4842

Fax: 907-465-3584

Fairbanks: Fairbanks.lss-wh@alaska.gov

Phone: 907-451-2886

Fax: 907-451-2885

If you have questions or need further assistance, please contact the Procurement Officer.



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

ALASKA BIDDER PREFERENCE CERTIFICATION

In response to the advertised procurement for:

Project Name and Number: WWCC Boiler Replacement, WWCC 20-084-23-1

Bidder/Proposer (company name): _____

Operation of Alaska Bidder Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.990(2), if a bidder is an eligible "Alaska Bidder", the Department will apply a five percent preference to the price of the bidder's proposal.

Instructions regarding Alaska Bidder Preference

A bidder that claims the Alaska Bidder Preference must review and then certify that each statement appearing under the heading "Alaska Bidder Certification" is true. The individual that signs the certification shall include his/her printed name and position within bidder's organization, *e.g.*, sole proprietor, partner, etc. If a bidder fails to submit a signed certification, the Department will not apply the claimed preference.

Alaska Bidder Certification

The bidding entity for which I am the duly authorized representative:

- (A) Holds a current Alaska business license;
- (B) Is submitting a bid or proposal for goods, services, or construction under the name appearing on the bidder's current Alaska business license;
- (C) Has maintained a place of business in the State staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the proposal;
- (D) Is incorporated or qualified to do business under the laws of the State, is a sole proprietorship and the proprietor is a resident of the State, is a limited liability company organized under AS 10.50 and all members are residents of the State, or is a partnership under former AS 32.05, AS 32.06, or AS 32.11 and all partners are residents of the State; and
- (E) If a joint venture, is composed entirely of ventures that qualify under the four preceding paragraphs of this Alaska Bidder Certification.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning its proposal, and that the foregoing statements are true and correct.

By (signature) _____

Date _____

Printed name _____

Alaska Business License Number _____

Title: _____

(See Reverse Side for Instructions)

Bid Phase: _____ Bidder: _____

1. This worksheet accurately reports the type and quantity of product(s) that: (a) qualify for application of the Alaska Product Preference under AS 36.30.321 *et seq.* and (b) this bidder will use in performing the advertised project, if awarded the contract; and
2. All listed product(s) are specified for use on the project and will be permanently incorporated; and
3. I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning its proposal.

DateTOTAL

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

Special Notice: All procurements, except those funded from Federal sources, shall contain Contract provisions for the preference of Alaska products. To be considered for the Alaska Product Preference, each product listed by the Bidder on this worksheet must have current certification from the Alaska Products Preference Program at the time of Bid Opening or the proposal due date. A product with expired certification at the bid opening or proposal due date will not be considered eligible. Products that are not specified for use on the project will not be considered eligible.

The Alaska Product Preference Program List of certified products is available online at:

<https://www.commerce.alaska.gov/web/dcra/AlaskaProductPreferenceProgram.aspx> or may be obtained by contacting Dept. of Commerce & Economic Development Alaska Division of Community and Regional Affairs, Alaska Products Preference Program, 550 W. 7th Ave., Suite 1650, Anchorage AK 99501-3510; Phone: (907) 269- 4501 Fax: (907) 269-4563, E-mail: madeinalaska@alaska.gov

BIDDERS INSTRUCTIONS:

A. General. The contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation(s) accordingly.

B. Form Completion – BASIC BIDS.

- (1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.
- (2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows.
- (3) For each suitable product submitted under the "Basic Bid" enter:
 - The product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
 - The company name of the Alaska producer under the heading "Manufacturer", and
 - The product class (I, II, or III) and preference percentage (3, 5, or 7% respectively) under the "CLASS/% heading.
- (4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:
 - Under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work,) and
 - The resulting preference – i.e. the preference percentage times the total declared value amount – under the heading "REDUCTION AMOUNT".
- (5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page # SUB" in front of the word "TOTAL" and on the first line of the following pages enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".
- (6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".
- (7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.
- (8) Compute a Grand Total for the Basic Bid Preference. Enter the amount on the final page of the worksheet. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Basic Bid Schedule.) Submit worksheet(s) with the Bid Schedule.

C. Form Completion – ALTERNATE BIDS.

- (1) Enter project number and name, the words "ALTERNATE BID # ", and CONTRACTOR'S name in the heading of each page as provided.
- (2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID # ", and repeat procedures 2 through 5 under part B these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid # ."
- (3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID # - SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.
- (4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS:
- (5) Beginning on the next line, enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (i.e. "Pre-hung doors by Alaska Door Co., Anchorage.") Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the products has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.
- (6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FROM BASIC BID SUBTOTAL" and enter a subtotal amount for all non-applicable products listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.
- (7) At the bottom of the final page enter the words "ALTERNATE BID # ___ PREFERENCE GRAND" immediately before the word "TOTAL".
- (8) Compute a Grand Total for the Alternate Bid Preference (for Alternate #) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Alternate Bid Schedule.) Submit separate worksheet(s) with each Alternate Bid



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

ALASKA VETERAN PREFERENCE CERTIFICATION

In response to the advertised procurement for:

Project Name and Number WWCC Boiler Replacement, WWCC 20-084-23-1

Bidder (Contractor) _____

Operation of Alaska Veteran Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.321, an eligible entity receives a five percent preference to the price of in the bidder's proposal if the bidder meets three requirements.

The bidder must be:

1. an "Alaska Veteran";
2. a "Qualifying Entity"; and
3. an "Alaska Bidder".

Unless a bidder satisfies all three requirements and furnishes corresponding certifications, it is not eligible for the Alaska Veteran Preference. This preference may not exceed \$5,000.

Instructions regarding Alaska Veteran Preference

A bidder that claims the Alaska Veteran Preference must review and complete the "Alaska Veteran Certification", the "Qualifying Entity Certification", and the "Alaska Bidder Certification". The individual that signs a certification shall include his/her printed name and position within bidder's organization, *e.g.*, sole proprietor, partner, etc. If a bidder fails to submit properly completed certifications, the Department will not apply the claimed preference.

Alaska Veteran Certification

(To be completed by individual(s) upon whom the bidder relies in claiming the Alaska Veteran status. If bidder is a partnership, limited liability company, or corporation, then a majority of partners, members, or shareholders who are Alaska Veterans must sign this Alaska Veteran Certification for the Bidder to be eligible for this preference.)

I hereby represent to the Department that:

I served in the armed forces of the United States, a reserve unit of the United States armed forces, the Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and

I was separated from service under a condition that was not dishonorable; and

I am Alaska resident in that I am physically present in the State of Alaska with the intent to remain in the State indefinitely and to make a home in the State.

I certify under penalty of perjury that the foregoing statements are true and correct as they apply to me.

By (signature)

Date

Printed name

Title

Qualifying Entity Veteran Certification

The bidding entity for which I am the duly authorized representative is a:

(Check the appropriate box)

- ☐ sole proprietorship owned by an Alaska Veteran;
- ☐ partnership under AS 32.06 or AS 32.11 and a majority of the partners are Alaska Veterans;
- ☐ limited liability company organized under AS 10.50 and a majority of the members are Alaska Veterans;
or
- ☐ corporation that is wholly owned by individuals and a majority of the individuals are Alaska Veterans.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning the proposal and that the statement I have acknowledged above by checking the appropriate box is true and correct.

By (signature)

Date

Printed name

Title

Alaska Bidder Certification

(To complete your claim for the Alaska Veteran Preference, you must also submit an Alaska Bidder Certification)

APPENDIX B¹
INDEMNITY AND INSURANCE

Article 1. Indemnification

The contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the contracting agency's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

Article 2. Insurance

Without limiting contractor's indemnification, it is agreed that contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the contracting officer prior to beginning work and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under AS 21.

2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

SECTION 01560 - CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Execute cleaning during progress of the Work and at completion of the Work.

1.2 DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

PART - EXECUTION

3.1 DURING CONSTRUCTION

- A. Execute periodic cleaning to keep the Work, the site, and adjacent properties free from accumulations of waste materials, rubbish, and wind blown debris resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris, and rubbish.
- C. Properly remove waste materials, debris and rubbish from the site and legally dispose of.

3.2 DUST CONTROL

- A. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly coated surfaces.

3.3 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Prior to final completion or Using Agency occupancy, the Contractor shall conduct an inspection of sight-exposed interior surfaces and all Work areas to verify that the entire Work is clean.

END OF SECTION

SECTION 01540
SECURITY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. This document outlines security provisions that the CONTRACTOR working at the Wildwood Correctional Center (WWCC) will be required to follow. The facility is an unoccupied correctional institution. As the performance of the Work could impact the operation of the institution, the Department of Corrections (DOC) is concerned that the CONTRACTOR understands and comply with its security requirements. The intent of this Section is to prevent: any escape, sabotage, or assault attempt; any disturbance, or; the importation of contraband.

1.02 REQUIREMENTS INCLUDED

- A. Security Check
- B. Project Manager
- C. Personnel Access
- D. Vehicle Access
- E. Tool Control
- F. Contraband

1.03 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 SECURITY CHECK

- A. All personnel (CONTRACTOR and Subcontractor staff) will be required to undergo a security check prior to commencement of work. A mandatory security briefing will be provided to CONTRACTOR's forces by the WWCC staff prior to start of on-site work.

- B. The CONTRACTOR will submit a list of personnel and a completed "Request for Clearance" form for each individual to the WWCC security officer for review at least 72 hours prior to commencement of work. A clearance form will be provided to the Contractor upon award of the contract. In general, the following information is required for each person:
 - 1. Full name.
 - 2. Residence address.
 - 3. Telephone Number.
 - 4. Date of birth.
 - 5. Social Security Number.
 - 6. Valid driver's license and state of issue, or other photo identification bearing social security number.
- C. The security check will look for recent or frequent past convictions or for outstanding warrants. WWCC reserves the right to disqualify anyone from access to the work site. A past conviction will not automatically disqualify.

3.02 PROJECT COORDINATOR

- A. DOC will designate an On-Site Project Coordinator to be the liaison between the CONTRACTOR and WWCC.
- B. In the event of an emergency affecting the secure operation of WWCC, the Project Coordinator is authorized to direct the CONTRACTOR to take appropriate action. The directions of the Project Coordinator will be followed immediately.
- C. The Project Coordinator shall be briefed each week by the CONTRACTOR regarding the CONTRACTOR's work requirements and weekly work plan for the subsequent week. This briefing may be performed concurrently with the progress meetings that may be required under the contract.

3.03 PERSONNEL ACCESS

- A. Access to the Work site, which is within a correctional facility, will be monitored and controlled by the Department of Corrections in order to prevent importation of contraband and escape of inmates.
- B. Construction crews will report at the beginning of each shift to obtain their identification badge or visitors badge and sign in on the Contractor's log. At the end of each shift, workmen will return their badges to this office and sign out on the Contractor's log. If workers leave the compound for lunch, they must leave as a group. Contractor should encourage workmen to bring lunch rather than leave.

- C. Contractors, Subcontractors, Employees may be denied access or be removed from the facility for the following reasons:
1. Contractors or workers that are incompetent, careless or otherwise detrimental to the work or the security of the facility.
 2. Security requirements.
 3. Disruptive, abrasive, and/or argumentative conduct.
 4. Being under the influence of Alcohol, Drugs and/or any substance that is considered contraband by the Facility.
 5. Refusal to submit to search of personal property/belongings or themselves.
 6. Health problems.
 7. Failure to show proper identification.
 8. Failure to follow the direction of Correctional Officers and/or staff members.
 9. Having any contact or interaction with inmates.
 10. Failure to pass security check.
 11. Failure to secure tools and work areas. (Contractor is required to provide personnel to secure his work area and tools. This means that there will be a member of the Contractor's staff in the active work area. If no personnel are physically present in the work area, the work area and/or tools will be secured.)

3.04 VEHICLE ACCESS

- A. No privately-owned vehicles may enter inside the security fence without approval of the DOC on-site Security Officer. Employee vehicles can be parked in the employee/visitor parking lot outside the security fence.
- B. Authorized work vehicles, i.e. job site trailers and trucks may be left inside the fence in a location if they can be secured and upon the approval of the WWCC on-site Security Officer.

3.05 TOOL CONTROL

- A. Do not leave prisoner-accessible work areas unattended without first removing or securing all tools and objects that would be considered contraband.
- B. At the end of each work day, remove all tools and equipment from inmate-accessible work areas and store within locked cabinets, locked containers, or locked storage trailers.
- C. Maintain written inventory of tools and equipment daily. Tools and equipment that cannot be accounted for at the end of each work day shall be brought to the immediate attention of the WWCC Security Officer.

3.06 CONTRABAND

- A. The mailing, bartering, introducing, exchanging or buying of items between inmates and contractors or their employees is strictly prohibited without the written consent of the Superintendent of the institution.

3.07 CELL PHONES / CAMERAS

- A. No Cell phones allowed inside of security perimeter. No cameras or pictures are allowed. Pictures if necessary will be permitted of work area only, but only under supervision of project manager or facility security sergeant.

The following quotes are from Alaska Statutes and are provided herein to inform the CONTRACTOR:

Title 11 - Alaska Statutes

Section 11.56.375, Promoting contraband in the first degree.

1. A person commits the crime of promoting contraband in the first degree if the person violates AS 11.56.380 and the contraband is:
 - a. a deadly weapon;
 - b. an article that is intended by the defendant to be used as a means of facilitating an escape;
 - c. a controlled substance; or
2. Promoting contraband in the first degree is a class C felony.

Section 11.56.380, Promoting contraband in the second degree.

1. A person commits the crime of promoting contraband in the second degree if the person:
 - a. introduces, takes, conveys, or attempts to introduce, take, or convey contraband into a correctional facility; or
 - b. makes, obtains, possesses, or attempts to make, obtain, or possess anything that person knows to be contraband while under official detention within a correctional facility.
2. Promoting contraband in the second degree is a Class A misdemeanor.
 - a. Effective August 26, 1999, contraband includes tobacco products.

Sec. 11.56.390, definition:

In AS 11.56.300-11.56.390, "contraband" means any article or thing which persons confined in a correctional facility are prohibited by law from obtaining, making, or possessing in that correctional facility."

END OF SECTION

SECTION 01045

CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Requirements and limitations for cutting and patching of Work.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01120 – Alteration Project Procedures.
- C. Section 01600 - Materials and Equipment: Substitutions.
- D. Individual Specifications Sections:
 - 1. Cutting and patching incidental to Work of the section.
 - 2. Advance notification to other Sections of openings required in Work of those Sections.
 - 3. Limitations on cutting structural members.

1.03 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant elements such as siding or roof systems.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of Department or separate Contractor.
- B. Include in request:
 - 1. Identification of Project and Department's project number.
 - 2. Location and description, with photos of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work, and products proposed to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of Department or separate Contractor.
 - 7. Written permission of affected separate Contractor.
 - 8. Date and time Work will be executed.
- C. Submit product data for replacement materials to be used in the work, including product description, specifications, recommended installation methods, and samples. Submittals shall cover all sight-exposed elements applicable, such as roofing, exterior siding, floor tile, ceiling tile, and wall covering.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Materials used for replacement shall match existing materials removed. Interior or exterior finish materials shall visually match surrounding surface finishes. Replacement interior finish materials, such floor tile, wall tile, ceiling tile, or wall covering shall be of the same manufacturer and pattern as materials removed to assure compatibility. New doors and frames to be finished to match existing. Submittals to be approved prior to installation.
- B. Replacement gypsum wallboard surfaces are to be finished smooth or in a texture to match the existing wall or ceiling finish or Finish Schedule in drawings as required. Paint new exposed surfaces with two coats semi-gloss acrylic latex enamel in a color to match existing. New paint shall cover the entire plane of the area impacted and shall extend to the nearest joint or corner.
- C. Cut and patch work at roof assemblies shall provide a complete weather tight installation and shall be compatible with existing roofing materials. Contractor to verify manufacturer, materials, and warranty of the existing roofing system and ensure work does not have a negative impact on the performance of the existing roof membrane or existing drainage pattern. Cut and patch work shall not have a negative impact on any active warranty of the existing roofing system.
- D. For replacement of work removed, comply with specifications for type of work to be done, manufacturers' recommendations, and good construction practice.
- E. Provide materials for cutting and patching which will result in equal to or better than the work being cut and patched in terms of performance characteristics and visual effect where applicable.

PART 3 EXECUTION

3.01 GENERAL

- A. Contractor shall be responsible for all cutting, fitting, and patching required to complete the work or to:
 - 1. Accommodate the installation or coordination of work.
 - 2. Remove and replace defective work.
 - 3. Remove and replace work not conforming to requirements of the Contract Documents.
 - 4. Uncover other work for access or inspection.
 - 5. Obtain samples for testing or similar purposes.
 - 6. Provide routine penetrations of nonstructural surfaces for installation of piping, ductwork, chimneys, vents, louvers, electrical conduit or other equipment included in the work.
- B. Contractor shall not cut or alter any existing structural members without the approval of the Department. If structural members must be cut or altered, the Contractor shall provide engineered details with structural engineer's stamp for review in the submittal process.
- C. Execute cutting, fitting, and patching to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other work.
 - 2. Uncover work to install ill-timed work.
 - 3. Remove and replace non-conforming and Defective Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical work.

- D. Installation of replacement materials shall be in accordance with specifications for type of work to be done, manufacturers' recommendations, and good construction practice.

3.02 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
 - 1. Notify the Department immediately of any suspected hazardous materials.
- B. Do not cut and patch work which is exposed to view in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the cut and patch work. Remove and replace work judged by the Department to be visually unsatisfactory.
- C. After uncovering, inspect conditions affecting performance of Work.
- D. Beginning of cutting or patching means acceptance of existing conditions.

3.03 PREPARATION

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by cutting and patching operations, as directed. Return adjacent areas to condition existing prior to start of work.
- B. Provide supports to ensure structural integrity of surroundings; devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for areas which may be exposed by uncovering work; maintain excavations free of water.

3.04 PERFORMANCE

- A. Execute work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- B. For all new work, employ qualified installer to perform cutting and patching for weather-exposed and moisture resistant elements, and sight-exposed surfaces.
- C. Cut rigid materials using masonry saw or core drill. Use wet-type core drill for all holes over 1/2" in diameter. Pneumatic/hammer tools or dry-type core drills not allowed without prior approval. Cutting structural reinforcement with heat is strictly forbidden without prior written approval.
- D. Restore Work with new products in accordance with requirements of Contract Documents.
- E. Fit Work tightly to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. Maintain all fire-rated wall or area separation construction per applicable codes. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-rated material, full thickness of the construction element or in accordance with U.L. listed assembly requirements.
- G. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

END OF SECTION

Section 26 05 00 – Common Work Results for Electrical

Part 1 GENERAL

1.1 Section Includes

- A. General Requirements specifically applicable to Division 26, in addition to Division 01 provisions.
- B. The electrical system equipment and installation shall comply with all provisions and requirements of this specification, as well as any and all applicable national, state and local codes and standards.

1.2 Work Sequence

- A. Construct Work in sequence under provisions of Division 01.

1.3 Coordination

- A. Coordinate the Work specified in this Division under provisions of Division 01.
- B. Prepare drawings showing proposed rearrangement of Work to meet job conditions, including changes to Work specified under other Sections. Obtain permission of Owner prior to proceeding.

1.4 References

- A. ANSI/NFPA 70 - National Electrical Code, latest adopted edition including all state and local amendments.
- B. NECA - Standard of Installation.
- C. NETA ATS – Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- D. Electrical Reference Symbols: The Electrical "Legend" on drawings is standardized version for this project. All symbols shown may not be used on drawings. Use legend as reference for symbols used on plans.
- E. Electrical Drawings: Drawings are diagrammatic; complimentary to the Architectural drawings; not intended to show all features of work. Install material not dimensioned on drawings in a manner to provide a symmetrical appearance. Do not scale drawings for exact equipment locations. Review Mechanical Drawings and adjust work to conform to conditions shown thereon. Field verification of dimensions, locations and levels is directed.

1.5 Regulatory Requirements

- A. Conform to ANSI/NFPA 70.
- B. Conform to the latest adopted edition of the International Building Code and the International Fire Code including all state and local amendments thereto.

- C. Obtain electrical permits, plan review, and inspections from authority having jurisdiction.

1.6 Submittals

- A. Submittal review is for general design and arrangement only and does not relieve the Contractor from any requirements of Contract Documents. Submittal not checked for quantity, dimension, fit or proper operation. Where deviations of substitute product or system performance have not been specifically noted in the submittal by the Contractor, provisions of a complete and satisfactory working installation is the sole responsibility of the Contractor.
- B. In addition to requirements referenced in Division 01, the following is required for work provided under this division of the specification.
 - 1. Provide material and equipment submittals containing complete listings of material and equipment shown on Electrical Drawings and specified herein. Separate from work furnished under other divisions.
 - 2. Submittals shall be provided in PDF format with each section indexed in the PDF document. Submittals for Division 26 shall be complete and submitted at one time. Unless given prior approval, partial submittals will be returned unreviewed.
 - 3. Clearly identify all material and equipment by item, name or designation used on drawings and in specifications.
 - 4. Submit only pages which are pertinent; mark catalog sheets to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring diagrams and controls; component parts; finishes; dimensions; and required clearances.
 - 5. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable.
 - 6. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
 - 7. Coordinate submittals with requirements of work and of Contract Documents.
 - 8. Certify in writing that the submitted shop drawings and product data are in compliance with requirements of Contract Documents. Notify Owner in writing at time of submittal, of any deviations from requirements of Contract Documents.
 - 9. Do not fabricate products or begin work which requires submittals until return of submittal with Owner acceptance.

10. Equipment scheduled by manufacturer's name and catalog designations, manufacturer's published data and/or specification for that item, in effect on bid date, are considered part of this specification. Approval of other manufacturer's item proposed is contingent upon compliance therewith.

1.7 Substitutions

- A. In accordance with the General Conditions and the General Requirements, Substitution and Product Options, all substitute items must fit in the available space, and be of equal or better quality including efficiency performance, size, and weight, and must be compatible with existing equipment.

1.8 Project Record Drawings

- A. Maintain project record drawings in accordance with Division 01.
- B. In addition to the other requirements, mark up a clean set of drawings as the work progresses to show the dimensioned location and routing of all electrical work which will become permanently concealed. Show routing of work in permanently concealed blind spaces within the building. Show complete routing and sizing of any significant revisions to the systems shown.
- C. Record drawing field mark-ups shall be maintained on-site and shall be available for examination of the Owner's Representative at all times.

1.9 Demonstration of Electrical Systems

- A. During substantial completion inspection:
 1. Conduct operating test for approval under provisions of Division 01.
 2. Demonstrate installation to operate satisfactorily in accordance with requirements of Contract Documents.
 3. Should any portion of installation fail to meet requirements of Contract Documents, repair or replace items failing to meet requirements until items can be demonstrated to comply.
 4. Have instruments available for measuring light intensities, voltage and current values, and for demonstration of continuity, grounds, or open circuit conditions.
 5. Provide personnel to assist in taking measurements and making tests.

1.10 Warranty

- A. In addition to the requirements of Division 01, or as specified in other sections. Warrant all materials, installation and workmanship for one (1) year from date of acceptance.
- B. Copies of manufacturer product warranties for all equipment shall be included in the operation and installation manuals.

Part 2 PRODUCTS

2.1 Materials and Equipment

- A. All Materials and Equipment shall be new.
- B. All Materials and Equipment shall be listed by Underwriter's Laboratories or equivalent third party listing agency for the use intended.
- C. Materials and Equipment shall be acceptable to the authority having jurisdiction as suitable for the use intended when installed per listing and labeling instructions.
- D. No materials or equipment containing asbestos in any form shall be used. Where materials or equipment provided by this Contractor are found to contain asbestos such items shall be removed and replaced with non-asbestos containing materials and equipment at no cost to the Owner.
- E. In describing the various items of equipment, in general, each item will be described singularly, even though there may be numerous similar items.

Part 3 EXECUTION

3.1 Workmanship

- A. Install Work using procedures defined in NECA Standard of Installation and/or the manufacturer's installation instructions.

3.2 Penetrations of Fire Barriers

- A. Related information to this section appears in Division 07, Fire Stopping.
- B. All holes or voids created to extend electrical systems through fire rated floors, walls or ceiling shall be sealed with an asbestos-free intumescent fire stopping material capable of expanding 8 to 10 times when exposed to temperatures 250°F or higher.
- C. Materials shall be suitable for the fire stopping of penetrations made by steel, glass, plastic and shall be capable of maintaining an effective barrier against flame, smoke and gases in compliance with the requirements of ASTM E814 and UL 1479.
- D. The rating of the fire stops shall be the same as the time-rated floor, wall or ceiling assembly.
- E. Install fire stopping materials in accordance with the manufacturer's instructions.

End of Section 26 05 00

Section 26 05 05 – Selective Demolition for Electrical

Part 1 GENERAL

1.1 Section Includes

- A. Electrical Demolition.

1.2 Related Sections

- A. Division 01 - Alteration Project Procedures.
- B. Division 02 - Minor Demolition for Remodeling.

Part 2 PRODUCTS

2.1 Materials and Equipment

- A. Materials and equipment for patching and extending work: As specified in individual Sections.

Part 3 EXECUTION

3.1 Examination

- A. Verify field measurements and circuiting arrangements are as shown on Drawings.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities.
- C. Demolition Drawings are based on existing record documents. Report discrepancies to Owner before disturbing existing installation.
- D. Beginning of demolition means installer accepts existing conditions.

3.2 Preparation

- A. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.

3.3 Demolition and Extension of Existing Electrical Work

- A. Demolish and extend existing electrical work under provisions of Division 01, Division 02, and this Division.
- B. Remove, relocate, and extend existing installations to accommodate new construction.
- C. Remove abandoned wiring to source of supply.
- D. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
- E. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets which are not removed.
- F. Disconnect and remove electrical devices and equipment serving utilization equipment that has been removed.

- G. Disconnect and remove abandoned luminaires. Remove brackets, stems, hangers, and other accessories.
- H. Repair adjacent construction and finishes damaged during demolition and extension work.
- I. Maintain access to existing electrical installations which remain active.
- J. Extend existing installations using materials and methods as specified.
- K. Where materials or equipment are to be turned over to Owner or reused and installed by the Contractor, it shall be the Contractor's responsibility to maintain condition of materials and equipment equal to the existing condition of the equipment before the work began. Repair or replace damaged materials or equipment at no additional cost to the Owner.
- L. Contractor to field verify conduits and electrical items in walls to be demolished prior to start of work. Demolish conduits, boxes, devices, equipment, etc. In walls that are scheduled for demolition. Where conduits pass through the walls or circuits are shared with equipment that is existing to remain, provide all work necessary (including extending and re-routing conduits) to maintain access and provide electrical continuity to existing systems and circuitry.

3.4 Existing Panelboards

- A. Ring out circuits in existing panel affected by the Work. Where additional circuits are needed, reuse circuits available for reuse. Install new breakers.
- B. Tag unused circuits as spare.
- C. Where existing circuits are indicated to be reused, use sensing measuring devices to verify circuits feeding Project area or are not in use.
- D. Remove existing wire no longer in use from panel to equipment.
- E. Provide new updated directories where more than three circuits have been modified or rewired.

3.5 Cleaning and Repair

- A. Clean and repair existing materials and equipment which remain or are to be reused.
- B. Panelboards: Clean exposed surfaces and check tightness of electrical connections. Replace damaged circuit breakers and provide closure plates for vacant positions.

3.6 Installation

- A. Install relocated materials and equipment under the provisions of Division 01.

3.7 Disposal

- A. Dispose of all hazardous waste in accordance with all local, State and Federal requirements.

End of Section 26 05 05

Section 26 05 19 – Low-Voltage Electrical Power Conductors and Cables

Part 1 GENERAL

1.1 Section Includes

- A. Building Wire.
- B. Cable.
- C. Wiring Connections and Terminations.

1.2 Related Sections

- A. Section 26 01 26 – Maintenance Testing of Electrical Systems.
- B. Section 26 05 53 – Identification for Electrical Systems.

1.3 References

- A. Federal Specification FS-A-A59544 – Cable and Wire, Electrical (Power, Fixed Installation).
- B. Federal Specification FS-J-C-30B – Cable Assembly, Power, Electrical.
- C. ANSI/NEMA WC 70-2009 – Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy.
- D. NETA ATS – Acceptance testing specifications for Electrical Power Distribution and Systems.
- E. NFPA 70 – National Electrical Code.
- F. NFPA 262 – Standard Method of test for flame travel and smoke of wires and cables for use in air-handling spaces.
- G. UL 62 – Flexible Cords and Cables.
- H. UL 83 – Thermoplastic Insulated Wire and Cable.
- I. UL 1424 – Standard for Cables for Power-Limited Fire Alarm.
- J. UL 1479 – Standard for Fire Tests of Through Wall Penetration Fire Stops.
- K. UL 1581 – Reference Standard for Electrical Wires, Cables and Flexible Cords.

1.4 Submittals

- A. Submittals are not requested for this section.

1.5 Quality Assurance

- A. Provide wiring materials located in plenums with peak optical density not greater than 0.5, average optical density not greater than 0.15, and flame spread not greater than 5 feet (1.5m) when tested in accordance with NFPA 262.

Part 2 PRODUCTS

2.1 Building Wire

- A. Thermoplastic-insulated Building Wire: NEMA WC 70.
- B. Feeders and Branch Circuits 6 AWG and Smaller: Copper conductor, 600 volt insulation, THHN/THWN or XHHW-2. 6 and 8 AWG, stranded conductor; smaller than 8 AWG, solid or stranded conductor.
- C. Branch Circuit Wire Color Code:
 - 1. Color code wires by line or phase as follows:
 - a. Black, red, blue and white for 120/208V systems.
 - 2. For conductors 6 AWG and smaller, insulation shall be colored.
 - 3. Grounding conductors 6 AWG and smaller shall have green colored insulation.
- D. Control Circuits: Copper, stranded conductor 600 volt insulation, THHN/THNN or XHHW-2.

2.2 Remote Control and Signal Cable

- A. Control Cable for Class 1 Remote Control and Signal Circuits: Copper conductor, 600 volt insulation, rated 90° C, individual conductors twisted together, shielded, and covered with an overall PVC jacket; UL listed.
- B. Control Cable for Class 2 or Class 3 Remote Control and Signal Circuits: Copper conductor, 300 volt insulation, rated 90° C, individual conductors twisted together, [shielded or unshielded (as required),] and covered with a PVC jacket; UL listed.
- C. Plenum Cable for Class 2 or Class 3 Remote Control and Signal Circuits: Copper conductor, 300 volt insulation, rated 90° C, individual conductors twisted together, shielded or unshielded (as required), and covered with a nonmetallic jacket; UL listed for use in air handling ducts, hollow spaces used as ducts, and plenums.

2.3 Wiring Connections and Terminations

- A. For conductors 8 AWG and smaller:
 - 1. Dry interior areas: Spring wire connectors, pre-insulated "twist-on" rated 105 degrees C per UL 468C. Where stranded conductors are terminated on screw type terminals, install crimp insulated fork or ring terminals. Thomas & Betts Sta-Kon or equal.
 - 2. Motor connections: Spring wire connectors, pre-insulated "twist-on" rated 105 degrees C per UL 468C. Provide a minimum of 8 wraps of Scotch 33+ electrical tape around conductors and connector to eliminate connector back off.

Part 3 EXECUTION

3.1 General Wiring Methods

- A. Use no wire smaller than 12 AWG for power and lighting circuits, and no smaller than 18 AWG for control wiring.
- B. Use 10 AWG conductor for 20 ampere, 120 volt branch circuit home runs longer than 75 feet.
- C. Splice only in junction or outlet boxes.
- D. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- E. Make Conductor lengths for parallel circuits equal.
- F. Wiring in lighting fixture channels shall be rated for 90° C minimum.
- G. Do not share neutral conductors. Provide a dedicated neutral conductor for each branch circuit that requires a neutral.

3.2 Wiring Installation in Raceways

- A. Pull all conductors into a raceway at the same time. Verify that raceway is complete and properly supported prior to pulling conductors.
- B. Install wire in raceway after interior of building has been physically protected from the weather and all mechanical work likely to injure conductors has been completed.
- C. Do not install XHHW-2 conductors when ambient temperatures are below -5 degrees C and THHN/THWN conductors when ambient temperatures are below 0 degrees C.
- D. Conductors shall be carefully inspected for insulation defects and protected from damage as they are installed in the raceway. Where the insulation is defective or damaged, the cable section shall be repaired or replaced at the discretion of the Owner and at no additional cost to the Owner.
- E. Place an equal number of conductors for each phase of a circuit in same raceway or cable.
- F. Route conductors from each system in independent raceway system and not intermix in the same raceway, enclosure, junction box, wireway, or gutter as another system unless otherwise shown on the plans.
- G. No more than six current carrying conductors shall be installed in any homerun unless otherwise indicated on the drawings or without prior approval from the Engineer.
- H. Completely and thoroughly swab raceway system before installing conductors.
- I. When two or more neutrals are installed in one conduit, identify each with the proper circuit number in accordance with Section 26 05 53.

3.3 Cable Installation

- A. Provide protection for exposed cables where subject to damage.

- B. Support cables above accessible ceilings; do not rest on ceiling tiles. Use spring metal clips or cable ties to support cables from structure. Do not support cables from ceiling suspension system. Include bridle rings or drive rings.
- C. Use suitable cable fittings and connectors.

3.4 Wiring Connections and Terminations

- A. Stranded wire shall not be wrapped around screw terminals.
- B. Splice only in accessible junction boxes.
- C. Thoroughly clean wires before installing lugs and connectors.
- D. Make splices, taps and terminations to carry full ampacity of conductors without perceptible temperature rise.
- E. Terminate spare conductors with twist on connectors or heat shrink insulation to proper voltage rating.
- F. Control systems wiring in conjunction with mechanical, electrical or miscellaneous equipment to be identified in accordance with wiring diagrams furnished with equipment.
- G. Code sound and signal systems wiring and any special equipment in accordance with manufacturer's diagrams or recommendations.
- H. Do not exceed manufacturer's recommended pull tensions.

3.5 Field Quality Control

- A. Field inspection and testing will be performed under provisions of Division 01 and Section 26 01 26.
- B. Inspect wire and cable for physical damage and proper connection.
- C. Torque conductor connections and terminations to manufacturer's recommended values.

3.6 Wire and Cable Installation Schedule

- A. All Locations: Building wire and/or remote control and signal cable in conduit.

End of Section 26 05 19

Section 26 05 29 – Hangers and Supports for Electrical Systems

Part 1 GENERAL

1.1 Section Includes

- A. Section included hangers and supports for Power Systems.
- B. Conduit Supports.
- C. Formed Steel Channel.
- D. Spring Steel Clips.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under Division 01 General Requirements, and Section 26 05 00 – Common Work Results for Electrical.

1.3 References

- A. International Building Code (IBC), Chapter 16 – Structural Design.

1.4 Submittals

- A. Submittals are not requested for this section.

1.5 Coordination

- A. Coordinate size, shape and location of concrete pads with Division 03.

1.6 Quality Assurance

- A. Support systems shall be adequate for weight of equipment and conduit, including wiring, which they carry.

Part 2 PRODUCTS

2.1 Conduit Supports

- A. Manufacturers:
 - 1. Allied Tube & Conduit Corp.
 - 2. Minerallac Fastening Systems.
 - 3. O-Z Gedney Co.
 - 4. Substitutions: per Division 01
- B. Hanger Rods: Threaded high tensile strength galvanized carbon steel with free running threads.
- C. Beam Clamps: Malleable Iron, with tapered hole in base and back to accept either bolt or hanger rod. Set screw: hardened steel.

- D. Conduit clamps for trapeze hangers: Galvanized steel, notched to fit trapeze with single bolt to tighten.
- E. Conduit clamps - general purpose: One-hole malleable iron for surface mounted conduits.
- F. Cable Ties: High strength nylon temperature rated to 185 degrees F. self-locking.

2.2 Formed Steel Channel

- A. Manufacturers:
 - 1. B-Line Systems.
 - 2. Allied Tube & Conduit Corp.
 - 3. Unistrut Corp.
 - 4. Substitutions: per Division 01.
- B. Product Description: Galvanized 12 gage thick steel. With holes 1-1/2 inches on center.

Part 3 EXECUTION

3.1 Examination

- A. Division 01: Verification of existing conditions before starting work.

3.2 Preparation

- A. Obtain permission from Owner's Representative before using powder-actuated anchors.
- B. Obtain permission from Owner's Representative before drilling or cutting structural members.

3.3 Installation - General

- A. Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using precast insert system, expansion anchors, preset inserts, beam clamps, or spring steel clips.
- B. Use toggle bolts or hollow wall fasteners in hollow masonry partitions and walls; expansion anchors or preset inserts in solid masonry walls; self-drilling anchors or expansion anchor on concrete surfaces; sheet metal screws in sheet metal studs; and wood screws in wood construction.
- C. Do not fasten supports to piping, ductwork, mechanical equipment, conduit, or ceiling suspension system.
- D. Fabricate supports from structural steel or steel channel, rigidly welded or bolted to present a neat appearance. Use hexagon head bolts with spring lock washers under all nuts.
- E. Install surface-mounted cabinets and panelboards with minimum of four anchors.
- F. Bridge studs top and bottom with channels to support flush-mounted cabinets and panelboards in stud walls.

- G. Securely fasten fixtures and equipment to building structure in accordance with manufacturer's recommendations and to provide necessary earthquake anchorage.
- H. Provide wall attached fixtures and equipment weighing less than 50 pounds with backing plates of at least 1/8" x 10" sheet steel or 2" x 10" fire retardant treated wood securely built into the structural walls. Submit attachment details of heavier equipment for approval.
- I. Earthquake Anchorages:
 - 1. Equipment weighing more than 50 pounds shall be adequately anchored to the building structure to resist lateral earthquake forces.
 - 2. Total lateral (earthquake) forces shall be 1.5 times the equipment weight acting laterally in any direction through the equipment center of gravity. Provide adequate backing at structural attachment points to accept the forces involved.
- J. Power-driven fasteners are prohibited for tension load applications (such as supporting luminaries or conduit racks from ceiling above). Use drilled-in expansion anchors, or drilled and screw-in anchors such as Kwik-Con II or Tapcon.

End of Section 26 05 29

Section 26 05 33 – Raceway and Boxes for Electrical Systems

Part 1 GENERAL

1.1 Section Includes

- A. Metal Conduit.
- B. Flexible Metal Conduit.
- C. Liquidtight Metal Conduit.
- D. Electrical Metallic Tubing.
- E. Fittings and Conduit Bodies.
- F. Wall and Ceiling Outlet Boxes.
- G. Pull and Junction Boxes.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under Division 01 - General Requirements and Section 26 05 00 – Common Work Results for Electrical.
- B. Section 26 05 19 – Low-Voltage Electrical Power Conductors and Cables.
- C. Section 26 05 29 – Hangers and Supports for Electrical Systems.
- D. Section 26 05 53 – Identification for Electrical Systems.
- E. Section 26 27 26 – Wiring Devices.

1.3 References

- A. American National Standards Institute (ANSI):
 - 1. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
 - 2. ANSI C80.3 - Electrical Metallic Tubing, Zinc Coated.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM A 123 – Specification for Zinc Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strip.
- C. National Electrical Manufacturers Association (NEMA):
 - 1. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
 - 2. NEMA OS 1 - Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
 - 3. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- D. Underwriters Laboratory (UL):
 - 1. UL 6 - Rigid Steel Conduit, Zinc Coated.

- 2. UL 514B – Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
- E. National Fire Protection Association (NFPA):
 - 1. NFPA 70 - National Electrical Code.
- F. International Building Code (IBC):
 - 1. IBC chapters 16 and 17 seismic requirements.

1.4 Raceway and Boxes installation Schedule

- A. In or through CMU walls:
 - 1. Raceway: Provide rigid steel conduit or intermediate metal conduit. EMT conduit may penetrate through CMU walls where the EMT is installed in a sleeve and does not come in direct contact with the CMU.
 - 2. Boxes and Enclosures: Provide concrete tight cast and sheet metal steel metal boxes.
- B. Outdoor Above Grade, Damp or Wet Interior Locations:
 - 1. Raceway: Provide rigid steel conduit or intermediate metal conduit.
 - 2. Boxes and Enclosures: Provide weatherproof malleable iron for branch circuit junction and outlet boxes. Provide weatherproof NEMA 3R sheet metal enclosures for safety and disconnect switches and NEMA 4 sheet metal enclosures with gaskets for motor controllers and control panels.
 - 3. Fittings: Provide galvanized malleable iron with gaskets. Provide Myers threaded hubs for all conduit entries into top and side of sheet metal enclosures.
- C. Concealed Dry Locations:
 - 1. Raceway: Provide rigid steel conduit, intermediate metal conduit, or electrical metallic tubing.
 - 2. Boxes and Enclosures: Provide sheet-metal boxes. Provide vapor barrier boxes in exterior walls and the ceiling.
 - 3. Fittings: Provide galvanized malleable iron and steel.
- D. Exposed Dry Locations:
 - 1. Raceway: Provide rigid steel conduit or intermediate metal conduit. EMT conduit may be used where exposed conduit is allowed, where it is not subject to physical damage, or where installed on the ceiling or a minimum of ten feet above the floor.
 - 2. Boxes and Enclosures: Provide sheet-metal boxes with raised steel covers.
 - 3. Fittings: Provide galvanized malleable iron and steel.
- E. Equipment Connections: Provide short extensions (three feet maximum) of flexible metal conduit for connections to light fixtures, motors, transformers, vibrating equipment or equipment that requires removal for maintenance or replacement. Use Liquidtight flexible conduit and fittings for motors and equipment in damp or wet

locations or subject to spilling of liquids as at pumps, kitchen equipment, in mechanical rooms, boiler rooms, pump rooms, etc.

1.5 Design Requirements

A. Raceway Minimum Size:

1. Provide 1/2 inch minimum, unless otherwise noted. Raceway may be reduced to 1/2 inch for final connection of raceway up to 6 feet for connection to fixture or device where maximum conduit entry size is 1/2 inch.
2. Line Voltage Circuits: Raceway is sized on the drawings for copper conductors with 600-Volt type XHHW insulation, unless otherwise noted. Where a raceway size is not shown on the drawings, it shall be calculated to not exceed the percentage fill specified in the NEC Table 1, Chapter 9 using the conduit dimensions of the NEC Table 4, Chapter 9 and conductor properties of the NEC Table 5, Chapter 9.
3. Fire Alarm and other Low-Voltage Circuits: Where installed in raceways, the raceway size shall be calculated to not exceed the percentage fill specified in the NEC Table 1, Chapter 9, using the conduit dimensions of the NEC Table 4, Chapter 9, and cable diameter provided by the manufacturer.

B. Box Minimum Size: Provide all boxes sized and configured per NEC Article 370 and as specified in this section.

C. Seismic Support: Provide support in accordance with section 26 05 29 – Hangers and Supports for Electrical Systems.

1.6 Submittals

A. Submittals are not requested for this section.

1.7 Delivery, Storage, and Handling

A. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.

Part 2 PRODUCTS

2.1 Rigid Metal Conduit (RMC)

- A. Rigid Steel Conduit: ANSI C80.1, UL 6.
- B. Fittings and Conduit Bodies: NEMA FB 1, UL 514B; Galvanized malleable iron with threaded hubs for all conduit entries. Provide threaded connections and couplings only. Set Screw and running thread fittings are not permitted.
- C. Provide insulated throat bushings at all conduit terminations.

2.2 Intermediate Metal Conduit (IMC)

- A. Product Description: ANSI C80.6, UL 1242; Galvanized Steel Conduit.
- B. Fittings and Conduit Bodies: NEMA FB 1, UL 514B; use fittings and conduit bodies specified above for rigid steel conduit.

- C. Provide insulated throat bushings at all conduit terminations.

2.3 Flexible Metal Conduit (FMC)

- A. Product Description: UL 1, FS WW-C-566; galvanized or zinc-coated flexible steel, full or reduced-wall thickness.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1; steel or malleable iron with insulated throat bushings. Die cast zinc or threaded inside throat fittings are not acceptable.

2.4 Liquidtight Flexible Metal Conduit (LFMC)

- A. Product Description: UL 360, flexible metal conduit with interlocked steel construction and PVC jacket.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1; liquid tight steel or malleable iron with insulated throat bushings. Die cast fittings are not acceptable.

2.5 Electrical Metallic Tubing (EMT)

- A. Product Description: ANSI C80.3, UL 797; galvanized steel tubing.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1; steel or malleable iron, compression or set screw type with insulated throat bushings. Zinc die cast or indentor fittings are not acceptable.
- C. Maximum size shall be 2". Provide factory elbows on sizes 1-½" and larger.

2.6 Outlet Boxes

- A. Sheet Metal Outlet Boxes: ANSI/NEMA OS 1, UL514A galvanized steel, with plaster ring where applicable.
 - 1. Minimum Size: 4 inches square or octagonal, 1-1/2 inches deep, unless otherwise noted.
 - 2. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported; furnish 1/2 inch male fixture studs where required. Minimum Size: 4 inches square or octagonal, 2-1/8 inches deep.
 - 3. Concrete and Masonry: Concrete type with field installed tape cover to prevent concrete entry to raceway system. Minimum Size: 4 inches square, 2-1/8 inches deep.
- B. Vapor Barrier Boxes: Airtight box with vapor barrier flange and integral wire entry seal. Lessco, Nutek, Enviroseal, or approved equal.
- C. Cast Boxes: NEMA FB 1, Type FD, galvanized malleable iron. Furnish gasketed cover by box manufacturer. Furnish threaded hubs. "Bell" boxes are not acceptable.
- D. Wall Plates: As specified in Section 26 27 26.

2.7 Pull and Junction Boxes

- A. Sheet Metal Pull and Junction Boxes: ANSI/NEMA OS 1, UL514A galvanized steel.
 - 1. Minimum Size: 4 inches square or octagonal, 1-1/2 inches deep, unless otherwise noted.
- B. Sheet Metal Boxes Larger Than 12 Inches in Any Dimension: Hinged enclosure, Hoffman or approved equal.

2.8 Expansion Fittings

- A. Galvanized malleable iron, galvanized with grounding bond jumper.

2.9 Bushings

- A. Non-grounding: Threaded impact resistant plastic.
- B. Grounding: Insulated galvanized malleable iron/steel with hardened screw bond to raceway and conductor lug.

2.10 Locknuts

- A. Threaded Electro Zinc Plated Steel designed to cut through protective coatings for ground continuity.

2.11 Wireway

- A. Product Description: General purpose type wireway. Size per NEC minimum fill capacity required.
- B. Knockouts: Field-installed, no factory knockouts acceptable.
- C. Cover: Screw cover.
- D. Fittings and Accessories: Include factory couplings, offsets, elbows, adapters and support straps required for a complete system. Provide internal ground bonding jumper bonded to each section.

Part 3 EXECUTION

3.1 Installation

- A. Ground and bond raceway and boxes in accordance with Section 26 05 26.
- B. Provide seismic support and fasten raceway and box supports to structure and finishes in accordance with Section 26 05 29.
- C. Identify raceway and boxes with origin and destination in accordance with Section 26 05 53.
- D. Unless otherwise noted, do not inter-mix conductors from separate panelboards or any other system in the same raceway system or junction boxes.

3.2 Installation – General Raceway

- A. Install raceway for all systems, unless otherwise noted.

- B. Install an equipment grounding conductor inside of all raceways containing line voltage conductors.
- C. Provide raceways concealed in construction unless specifically noted otherwise, or where installed at surface cabinets, motor and equipment connections and in Mechanical and Electrical Equipment rooms. Do not route conduits on roofs, outside of exterior walls, or along the surface of interior finished walls unless specifically noted on the plans.
- D. Raceway routing and boxes are shown in approximate locations unless dimensioned. Where raceway routing is not denoted, field-coordinate to provide complete wiring system.
- E. Do not route raceways on floor. Arrange raceway and boxes to maintain a minimum of 6 feet 6 inches of headroom and present a neat appearance. Install raceways level and square to a tolerance of 1/8" per 10 feet. Route exposed raceways and raceways above accessible ceilings parallel and perpendicular to walls, ceiling, and adjacent piping.
- F. Maintain minimum 6-inch clearance between raceway and mechanical and piping and ductwork. Maintain 12-inch clearance between raceway and heat sources such as flues, steam pipes, heating pipes, heating appliances, and other surfaces with temperatures exceeding 104 degrees F.
- G. Do not install raceway imbedded in spray applied fire proofing. Seal raceway penetrations of fire-rated walls, ceilings, floors in accordance with the requirements of Section 26 05 00.
- H. Where raceway penetrates fire-rated walls and floors, seal opening around conduit with UL listed firestop sealant or intumescent firestop, preserving the fire time rating of the construction.
- I. Raceways and boxes penetrating vapor barriers or penetrating areas from cold to warm shall be taped and sealed with a non-hardening duct sealing compound to prevent the accumulation of moisture, and shall include a vapor barrier on the outside.
- J. Arrange raceway supports to prevent misalignment during wiring installation. Support raceway using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers.
- K. Do not attach raceway to ceiling support wires or other piping systems and do not fasten raceway with wire or perforated pipe straps. Remove all wire used for temporary raceway support during construction, before conductors are pulled. Raceway shall be installed to permit ready removal of equipment, piping, ductwork, or ceiling tiles.
- L. Group raceway in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps, as specified in Section 26 05 29. Provide space on each rack for 25 percent additional raceway.
- M. Cut conduit square; de-burr cut ends. Bring conduit to the shoulder of fittings and couplings and fasten securely. Where locknuts are used, install with one inside box and one outside with dished part against box.
- N. Use threaded raintight conduit hubs for fastening conduit to cast boxes, and for fastening conduit to sheet metal boxes in damp or wet locations. Sealing locknuts are not acceptable.

- O. Install no more than the equivalent of three 90-degree bends between boxes.
- P. Install conduit bodies to make sharp changes in direction, such as around beams. "Goosenecks" in conduits are not acceptable.
- Q. Provide protective plastic bushings or insulated throat bushings at each raceway termination not installed to an enclosure. Bushings shall be threaded to the raceway end or connector.
- R. Avoid moisture traps; install junction box with drain fitting at low points in raceway system.
- S. Install fittings designed and listed to accommodate expansion and contraction where raceway crosses control and expansion joints.
- T. Use cable sealing fittings forming a watertight non-slip connection to pass cords and cables into conduit. Size cable sealing fitting for the conductor outside diameter. Use Appleton CG series or equal cable sealing fittings.
- U. Use suitable caps to protect installed raceway against entrance of dirt and moisture.
- V. Provide nylon "jet-line" or approved equal pull string in empty raceway, except sleeves and nipples.

3.3 Installation – General Boxes

- A. Provide electrical boxes as shown on Drawings, and as required for splices, taps, wire pulling, equipment connections, and code compliance. All electrical box locations shown on Drawings are approximate unless dimensioned.
- B. Install pull boxes and junction boxes above accessible ceilings and in unfinished areas only. Where installation is inaccessible, install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed luminaries.
- C. Coordinate layout and installation of boxes to provide adequate headroom and working clearance. Coordinate mounting heights and locations of outlets mounted above counters, benches, and backsplashes.
- D. Align wall-mounted outlet boxes for switches, thermostats, and similar devices.
- E. Use multiple-gang boxes where more than one device are mounted together; do not use sectional boxes. Provide barriers to separate wiring of different voltage systems and where normal and emergency power circuits occur in the same box.
- F. Adjust box location up to 6 feet prior to rough-in to accommodate intended purpose.
- G. Locate and install boxes to maintain headroom and to present a neat appearance.
- H. Provide knockout closures for unused openings.
- I. Install boxes in walls without damaging wall insulation or reducing its effectiveness.
- J. Do not fasten boxes to ceiling support wires or other piping systems.
- K. Support boxes independently of conduit.
- L. Clean interior of boxes to remove dust, debris, and other material and clean exposed surfaces and restore finish.

- M. Provide blank covers or plates for all boxes that do not contain devices.

End of Section 26 05 33

Section 26 05 53 – Identification for Electrical Systems

Part 1 GENERAL

1.1 Section Includes

- A. Nameplates and Tape Labels.
- B. Wire and Cable Markers.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under Division 01 General Requirements, and Section 26 05 00 – Common Work Results for Electrical.
- B. Section 26 05 19 – Low-Voltage Electrical Power Conductors and Cables.
- C. Section 26 05 33 – Raceway and Boxes for Electrical Systems.
- D. Section 26 27 26 – Wiring Devices.

1.3 Submittals

- 1. Submittals are not requested for this section.

1.4 Environmental Requirements

- A. Install labels and nameplates only when ambient temperature and humidity conditions for adhesive are within range recommended by manufacturer.

Part 2 PRODUCTS

2.1 Nameplates

- A. Product Description: Laminated three-layer plastic with engraved white letters on black background. Nameplate for service disconnect shall be engraved white letters on red background.
- B. Letter Size:
 - 1. 1/4-inch high letters for identifying individual panel or equipment.
 - 2. 1/8-inch high letters for remaining lines with 1/8 inch spacing between lines.
- C. Minimum nameplate size: 1/8 inch thick with a consistent length and height for each type of nameplate wherever installed on the project.

2.2 Tape Labels

- A. Product Description: Adhesive tape labels, with 3/16 inch Bold Black letters on clear background made using Dymo Rhino series label printer or approved equal.
- B. Embossed adhesive tape will not be permitted for any application.

2.3 Wire Markers

- A. Power and Lighting Description: Machine printed heat-shrink tubing, cloth or wrap-on type, for all neutrals and Phase conductors.
- B. Low Voltage System Description: Self-adhesive machine printed label with unique wire number that is shown on shop drawing for system.

2.4 Fire Alarm Conduit and Box Identification

- A. Product Description: Red spray paint for fire alarm boxes.

Part 3 EXECUTION

3.1 General Installation

- A. Degrease and clean surfaces to receive nameplates and tape labels.
- B. Install nameplates and tape labels parallel to equipment lines.

3.2 Nameplate Installation

- A. Secure nameplates to equipment fronts using machine screws tapped and threaded into panelboard, or using rivets. The use of adhesives is not acceptable. Machine screws to not protrude more than 1/16 inch on back side.
- B. Disconnects, Starters, or Contactors:
 - 1. Provide nameplate for each device with the following information:
 - a. Line 1: Load served.
 - b. Line 2: Panelboard and circuit number from which the device is fed.
 - c. Line 3: Fuse or Circuit amperage and poles. Where fused disconnect is installed, denote the maximum fuse size to be installed.
- C. Control or Low Voltage System Panels:
 - 1. Provide nameplate for each control panel with the following information:
 - a. Line 1: Unique panel name as shown on the shop drawings.
 - b. Line 2: System description such as Fire Alarm, Intercom, BAS, Security, etc.
 - c. Line 3: Panelboard and circuit number from which the panel is fed if applicable.

3.3 Wire Identification

- A. Provide wire markers on each conductor in panelboard gutters, pull boxes, outlet and junction boxes, and at load connection. Identification shall be as follows:
 - 1. Markers shall be located within one inch of each cable end, except at panelboards, where markers for branch circuit conductors shall be visible without removing panel deadfront.
 - 2. Each wire and cable shall carry the same labeled designation over its entire run, regardless of intermediate terminations.

3. Color code phases, neutral, and ground per NEC requirements and Section 26 05 19.
 4. Color-code all low-voltage system wires and cables in accordance with the individual sections in which they are specified.
 5. For power and lighting circuits, identify with branch circuit or feeder number.
 6. Control Circuits: Control wire number as indicated on schematic and shop drawings.
 7. Fire Alarm Circuits: Provide cable markers showing NAC or SLC loop identification number at all fire alarm junction boxes and pullboxes.
- B. Provide pull string markers at each end of all pull strings. Marker shall identify the location of the opposite end of the pull string.

3.4 Junction Box Identification

- A. Label each lighting and power junction box with the panelboard name and circuit number.
- B. For junction boxes above ceilings, mark the box cover with the circuit or system designation using permanent black marker. For junction boxes in finished areas, mark the inside of the cover with the circuit or system designation using permanent black marker.

3.5 Device Plate Identification

- A. Label each receptacle device plate or point of connection denoting the panelboard name and circuit number.
- B. Install adhesive label on the top of each plate.

3.6 Low-Voltage System Identification

- A. Install all labeling in accordance with the requirements of this section and of each section where the individual systems are specified.

End of Section 26 05 53

Section 26 27 26 – Wiring Devices

Part 1 GENERAL

1.1 Section Includes

- A. Receptacles.
- B. Device Plates and Box Covers.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under Division 01 - General Requirements and Section 26 05 00 – Common Work Results for Electrical.
- B. Section 26 05 33 – Raceway and Boxes for Electrical Systems.
- C. Section 26 05 53 – Identification for Electrical Systems.

1.3 Reference Standards

- A. FS W-C-596 – Federal Specification for Electrical Power Connector, Plug, Receptacle, and Cable Outlet.
- B. FS W-S-896 – Federal Specification for Switches, Toggle (Toggle and Lock), Flush Mounted.
- C. NEMA WD 1 - General Color Requirements for Wiring Devices.
- D. ANSI/NEMA WD 6 – Wiring Devices – Dimensional Requirement.
- E. UL 498 - Attachment Plugs and Receptacles.
- F. UL 943 – Ground-Fault-Circuit-Interrupters.

1.4 Submittals

- A. Submittals are not requested for this section.

Part 2 PRODUCTS

2.1 Acceptable Manufacturers – Receptacles

- A. Hubbell.
- B. Leviton.
- C. Pass & Seymour.
- D. Arrow Hart
- E. Substitutions: Under provisions of Division 01.

2.2 Receptacles

- A. Convenience and Straight-blade Receptacles: UL 498, ANSI/NEMA WD-6 and Federal Specification FS W-C-596 industrial grade receptacle.

- B. Locking-Blade Receptacles: NEMA WD 5.
- C. Convenience Receptacle Configuration: ANSI/NEMA WD-6; Type 5-20R, white [ivory] nylon face.
- D. GFCI Receptacles: ANSI/NEMA WD-6; 20A, duplex convenience receptacle with integral class 'A' ground fault current interrupter, LED indicator lamp and integral lockout.

2.3 Device Plates

- A. Decorative Cover Plate: Smooth 430 or 302 stainless steel with metal, counter sunk screws to match device plate.
- B. Exposed Work Cover Plate: ½ inch raised, square, pressed, galvanized or cadmium plated steel cover plate supporting devices independent of the outlet box.

Part 3 EXECUTION

3.1 Installation

- A. Install convenience receptacles 18 inches above floor, grounding pole on bottom unless noted otherwise.
- B. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface-mounted outlets.
- C. Install devices and wall plates flush and level.
- D. Ground receptacles to boxes with a grounding wire. Grounding through the yoke or screw contact is not an acceptable alternate to the ground wire.
- E. Install circuit label on each receptacle and light switch in accordance with Section 26 05 53.

End of Section 26 27 26

Section 26 28 16 – Enclosed Switches and Circuit Breakers

Part 1 GENERAL

1.1 Section Includes

- A. Enclosed Switches.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under Division 01 General Requirements and Section 26 05 00 – Common Work Results for Electrical.
- B. Section 01 40 00 – Quality Requirements.
- C. Section 26 05 53 – Identification for Electrical Systems.

1.3 Reference Standards

- A. ANSI/UL 98 Enclosed and Dead Front Switches.
- B. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
- C. NEMA 250 – Enclosures for Electrical Equipment (1000 Volts Maximum).
- D. NETA ATS – Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

1.4 Submittals

- A. Product Data: Submit product data for all components provided, showing electrical characteristics, material, and dimensions. Each catalog sheet should be clearly marked to indicate exact part number provided, including all options and accessories.
- B. Shop Drawings: Submit shop drawings include outline drawings with dimensions, and equipment ratings for voltage, capacity, horsepower, and short circuit current interrupting rating.

1.5 Closeout Submittals

- A. Project Record Drawings: Accurately indicate actual location of enclosed switches.

1.6 Quality Assurance

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.

Part 2 PRODUCTS

2.1 Acceptable Manufacturers – Enclosed Switches

- A. Square D.
- B. Siemens.

- C. Cutler Hammer.
- D. General Electric.
- E. Substitutions: Under provisions of Division 01.

2.2 Enclosed Switches

- A. Nonfusible Switch Assemblies: NEMA KS 1; Heavy Duty type; quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in OFF position.
- B. Enclosures: NEMA KS 1; Type 1, 3R or 4 as indicated on Drawings.

2.3 Enclosures

- A. Enclosed circuit breaker shall have NEMA 1 general-purpose ratings unless otherwise noted. Provide enclosure suitable for locations as indicated on drawings.

Part 3 EXECUTION

3.1 Installation

- A. Install enclosed switches where indicated on Drawings, and where required for NEC required disconnect of equipment specified under other divisions, but installed under Division 26.
- B. All enclosed switches shall have signage for arc hazard installed. The marking shall be located to be clearly visible to qualified personnel before examination, adjustment, servicing or maintenance of the equipment. At a minimum the signage shall state the following:

Warning

Arc Flash and Shock Hazard

Appropriate PPE Required

3.2 Field Quality Control

- A. Field inspecting, testing, adjusting and balancing.
- B. Inspect and test in accordance with NETA ATS, exception Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.5.

3.3 Adjustments

- A. The Contractor shall perform necessary field adjustments of the circuit breakers to place the equipment in final operating condition. The settings shall be in accordance with the approved protective device coordination study or as directed by the Engineer.

End of Section 26 28 16

Section 26 50 00 – Lighting

Part 1 GENERAL

1.1 Section Includes

- A. Interior Luminaires and Accessories.
- B. Emergency Lighting Units.

1.2 Related Sections

- A. The Work under this section is subject to requirements of the Contract Documents including the General Conditions, Supplementary Conditions, and sections under General Conditions of the Contract General Requirements, and Section 26 05 00 – Common Work Results for Electrical.
- B. Section 26 05 19 – Low Voltage Electrical Power Conductors and Cables.
- C. Section 26 05 29 - Hangers and Supports for Electrical Systems: General Supports for Luminaires.
- D. Section 26 05 33 – Raceway and Boxes for Electrical Systems.
- E. Section 26 05 53 – Identification for Electrical Systems.

1.3 Definitions

- A. CCT: Correlated Color Temperature.
- B. CRI: Color Rendering Index.
- C. Driver: LED Power Supply.
- D. Fixture: See "Luminaire."
- E. IES: Illuminating Engineering Society of North America
- F. IP: International Protection or Ingress Protection Rating.
- G. Lamp Module: Replaceable LED board array/light engine including a plug-in connector.
- H. LED: Light-emitting diode.
- I. Lumen: Measured output of lamp and luminaire, or both.
- J. Luminaire: Complete lighting unit, including lamp or lamp module, driver, reflector, and housing.
- K. THD: Total Harmonic Distortion.

1.4 Reference Standards

- A. NECA/IESNA 500 – Recommended Practice for Installation Indoor Commercial Lighting System.
- B. IES TM-21-11 Projecting Long Term Lumen Maintenance of LED Light Sources.
- C. IES LM-80 IES Approved Method: Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules.
- D. UL 924 - Emergency Lighting and Power Equipment.

1.5 Submittals

- A. Product Data: Submit the following:
 - 1. Luminaires: Include manufacturer's product data sheets and/or shop drawings including outline drawings showing support points, weights, and accessory information for each luminaire type. Clearly indicate all options being provided. Arrange data for luminaires in the order of fixture designation.
 - 2. Prior to preparing submittals, coordinate with the reflected ceiling plan for ceiling finishes and provide all necessary kits, brackets, stems, trim, etc. to install the specified fixtures in the ceilings provided. Clearly note these configurations on the product data sheets.
- B. Warranty: Provide copies of manufacturer's warranty information for each luminaire. If warranty information is the same for a group of manufacturer's luminaires, provide a letter or schedule clearly indicating what warranty applies to each fixture.

1.6 Delivery, Storage, and Handling

- A. Deliver products to site, store and protect in a clean, dry environment under provisions of General Conditions of the Contract.

Part 2 PRODUCTS

2.1 Interior and Exterior Luminaires and Accessories

- A. Luminaires: Provide UL listed luminaires as scheduled on the drawings or as approved equal.
- B. Listing: Luminaires shall be listed for use in the environment in which they are installed. For example, luminaires installed in return air plenums, direct contact with insulation, or in hazardous, wet, damp, or corrosive locations shall be UL listed for such application.
- C. Accessories: Provide all mounting kits, supports, interconnecting wiring, power supplies, trim kits, gaskets, etc. for a complete installation.
- D. Housing:
 - 1. Metal parts shall be free of burrs and sharp corners and edges. Form and support to prevent warping and sagging.
 - 2. Doors, Frames and Other Internal Access: Smooth operating, free of light leakage under operating conditions. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position.
 - 3. Luminaires shall be factory painted and free of discoloration. Color as scheduled.

2.2 Drivers - LED

- A. LED Driver: Provide UL listed power supply as recommended by the LED fixture manufacturer for operation of the specified LED lamps. Power supply shall be integral to the luminaire unless otherwise noted on the Plans. Power supply shall be dual

voltage (120/277V) where available or operate at the supply voltage indicated on the Plans.

2.3 Emergency Lighting Units

- A. Luminaires: Provide UL listed emergency lighting units as scheduled on the drawings or as approved equal.

Part 3 EXECUTION

3.1 Installation

- A. Coordinate layout and installation of ceiling-mounted devices with other construction items that penetrate ceilings or are supported by them, including luminaires, occupancy sensors, HVAC equipment, smoke detectors, fire-suppression system, IP video cameras, and partition assemblies. Adjust locations as required.
- B. Unless otherwise noted on Plans, provide drivers integral to luminaires, pre-wired and installed at the factory, suitable for use with the selected LED lamps.
- C. Support surface-mounted luminaires directly from building structure. Install level and parallel/perpendicular with ceiling or wall surfaces.
- D. Provide luminaire disconnecting means in the wiring compartment of each luminaire. Where the luminaire is fed from a multi-wire branch circuit, provide multi-pole disconnect to simultaneously break all supply conductors to the ballast, including the grounded conductor.
- E. Mechanical Rooms: Lighting fixture locations shown on Plans in mechanical and electrical equipment rooms are approximate. Coordinate mounting height and location of lighting fixtures to clear mechanical, electrical and plumbing equipment and to adequately illuminate meters, gauges and equipment. Support all lighting fixtures independently of duct work or piping.
- F. Aim directional lampheads of emergency lighting units to illuminate the path of egress.
- G. installed in.
- H. Coordinate location of wall mounted emergency lighting units with mechanical equipment, ductwork, piping, or any other obstruction that would impact the lighting output.

3.2 Relamping

- A. Re-lamp or replace luminaires that have failed lamps at completion of work.

3.3 Adjusting and Cleaning

- A. Align luminaires and clean lenses and diffusers at completion of work. Clean paint splatters, dirt, and debris from installed luminaires.
- B. Touch up luminaire finish at completion of work.

3.4 Field Quality Control

- A. Tests: Perform tests listed below according to manufacturer's written instructions. Test unit functions, operations, and protective features. Adjust to ensure operation complies

with Specifications. Perform tests required by NFPA 70, Articles 700 and 701. Perform tests on completion of unit installation and after building circuits have been energized. Provide instruments to permit accurate observation of tests. Include the following tests:

1. Simulate power outage: Verify proper operation of each individual emergency power supply.
 2. Verify emergency supply duration.
- B. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

3.5 Adjusting

- A. Aim lamps on wall-mounted emergency lighting units to obtain the following illumination of egress pathway:
1. An average of 1 foot-candle.
 2. A minimum at any point of 0.1 foot-candle measured along the path of egress at floor level.
 3. Maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.
- B. Test emergency lighting equipment in accordance with the manufacturer's instructions and NECA/IESNA 500.

End of Section 26 50 00



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

PAYMENT BOND

Bond No. _____

For

WWCC Boiler Replacement

Project # WWCC 20-084-23-1

Wildwood Correctional Center (WWCC) Kenai, Alaska

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,

firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-referenced project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements
of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work
under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any
subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they
shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Corrections Authorized Representative

Date

INSTRUCTIONS

1. This form, for the protection of persons supplying labor and materials, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

BID BOND

for

WWCC Boiler Replacement

Project # WWCC 20-084-23-1

Wildwood Correctional Center (WWCC), Kenai, Alaska

Project Name and Number

DATE BOND EXECUTED: _____

PRINCIPAL (Legal name and business address):

TYPE OF ORGANIZATION:

	<input type="checkbox"/> Individual	<input type="checkbox"/> Partnership
	<input type="checkbox"/> Joint Venture	<input type="checkbox"/> Corporation
STATE OF INCORPORATION:		

SURETY(IES) (Name and business address):

A.	B.	C.
PENAL SUM OF BOND:		DATE OF BID:

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument.

THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on the above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefore, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the contract, then the obligation to the State created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL

Signature(s)	1.	2.	3.
Name(s) & Title(s) (Typed)	1.	2.	3.
See Instructions on Reverse			Corporate Seal

CORPORATE SURETY(IES)

Surety A	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety B	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety C	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Re: Project # WWCC 20-084-23-1, WWCC Boiler Replacement

INSTRUCTIONS

1. This form shall be used whenever a bid bond is submitted.
2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
9. The date that bond is executed must not be later than the bid opening date.

Re: Project # WWCC 20-084-23-1, WWCC Boiler Replacement



STATE OF ALASKA
DEPARTMENT OF CORRECTIONS

PERFORMANCE BOND

Bond No. _____

For

WWCC Boiler Replacement
Wildwood Correctional Center (WWCC), Kenai, Alaska
Project # WWCC 20-084-23-1

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-named project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall well and truly perform and
complete all obligations and work under said contract and if the Principal shall reimburse upon demand of the Department of
Corrections any sums paid him which exceed the final payment determined to be due upon completion of the project, then these
presents shall become null and void; otherwise they shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Corrections Authorized Representative

Date

See Instructions on Reverse

INSTRUCTIONS

1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



State of Alaska
Department of Corrections
REQUEST FOR CLEARANCE

Contractor/Contract Staff Background
Check

Date: _____

Applicant Name: _____

Mailing Address: _____

Purpose of this check: _____

Date of Birth: _____ Social Security # : _____

Alaska driver's license #: _____

Other states applicant has resided in and the dates: _____

Prior criminal history (including the state the offense occurred in): _____

Is applicant currently on probation or parole? _____ If yes, where? _____

Does applicant have any relatives or acquaintances presently incarcerated in Alaska or under the Dept. of Corrections supervision? _____ If yes, state the person's name/location: _____

Clearance requested by (Contractor): _____

Address: _____ Phone: _____

The information that I have provided is true and accurate to the best of my knowledge. I authorize the Department of Corrections to perform a background investigation for any and all prior convictions or current warrants.

Signature of applicant: _____ Date: _____

Contractor's signature: _____ Date: _____

DO NOT WRITE BELOW THIS SECTION

* * * * *

APSIN/WANTS: Clear: _____ Wants: _____ See Attached: _____

NCIC/WANTS: Clear: _____ Wants: _____ See Attached: _____

Criminal History Check (AK) No record found: _____ See Attached: _____

Criminal History Check (other states) No record found: _____ See Attached: _____

Request Granted: _____ Request Denied: _____

Reason for denial: _____

Director/Superintendent (or designee): _____ Date: _____

ALL SEXUAL BEHAVIOR IS PROHIBITED
ZERO-TOLERANCE POLICY
PRISON RAPE ELIMINATION ACT (PREA)

1. Alaska Department of Corrections Policy and Procedure 808.19 Prisoner Rights, Sexual Abuse / Sexual Assault and Reporting establishes a **zero-tolerance** policy toward sexual misconduct and provides guidelines and procedures consistent with the Prison Rape Elimination Act (PREA) to reduce the risk of sexual misconduct within the correctional setting.
2. Sexual assault, sexual misconduct, and sexual harassment, or any type of sexual behaviors are PROHIBITED.
3. Types of Sexual Assault, Misconduct, and Harassment
 - Prisoner-on-employee/contract worker/volunteer
 - Employee/contract worker/volunteer-on-prisoner
 - Prisoner on prisoner
4. Acts of Sexual Assault, Misconduct, and Harassment
 - **There is NO allowable consensual agreement between DOC employees, contract workers, volunteers, or offenders to engage in ANY sexual behavior or act.**
 - The physical act
 - The attempt of the physical act, including inappropriate touching and exhibitionism.
 - Threats, intimidation, and actions/communications meant to coerce or pressure another to engage in the inappropriate act.
 - Retaliation against individuals reporting prohibited sexual behavior is prohibited and punishable.
5. All Department personnel, contractors or volunteers who receive information concerning prisoner sexual misconduct or have reasonable belief to suspect a prisoner is a victim of sexual misconduct or observe an incident or behavior shall immediately report the information to the most appropriate supervisory staff. The information shall be documented on an Incident Report form 809.03A.
6. Prisoners may report allegations of conduct prohibited by Policy and Procedures 808.09, including threats of sexual misconduct to any Department employee, contractor, or volunteer. The such allegation may be reported verbally, in writing, or may be made by a third party.
7. All reports of prohibited sexual behavior will be referred to a law enforcement agency for investigation and referral to the Alaska State Troopers by the Department of Corrections.
8. Privileged communications between ordained clergy, medical or mental health staff, and clients does not extend to the matter that threatens the safety of the institution, staff, or prisoners; if it contains a threat to public safety or if it is specifically addressed by state statutes.
9. Confidentiality: All information related to a victim of sexual abuse or sexual harassment shall be considered confidential and shall be released only to those who need the information to perform their official duties.

I HAVE READ, UNDERSTOOD, AND AGREE WITH THE ABOVE RULES.

*** I also acknowledge that I have been informed of my Prison Rape Elimination Act Responsibilities.***

Name (print and sign)

Date