



**TUESDAY, JULY 25, 2023
3:00 PM**

**CAMERON COUNTY
835 EAST LEEVE &
SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES**



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June 23, 2023

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06-23-2023

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CAMERON COUNTY
835 EAST LEVEE & SAN BENITO ANNEX BUILDING
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PREPARED FOR
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ISSUED: MAY 25, 2023

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[Handwritten Signature]

5-25-2023



**CAMERON COUNTY
PURCHASING DEPARTMENT
REQUEST FOR PROPOSALS**

RFP NUMBER: # 230704

RFP TITLE: CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

DATE DUE: July 25, 2023

DUE NO LATER THAN 3:00 P.M.

RFP's will be opened at the Cameron County Courthouse, 1100 East Monroe Street, Brownsville, Texas in the Purchasing Department – 3rd Floor – Room # 345 at 3:01 p.m. (as per Purchasing Dept. time clock) on deadline due date.

Please return RFP **ORIGINAL (marked "ORIGINAL") AND SEVEN (7) COPIES (marked "COPY")** sets and an **electronic (PDF format file only)** of your qualification statement for review by evaluation committee in a sealed envelope. Be sure that return envelope shows the RFP Number, Description and is marked "SEALED RFP".

RETURN RFP TO:

by U.S. mail or delivered to the office of Purchasing Dept., **County Courthouse (Dancy Bldg.) 1100 E. Monroe St, 3rd Floor, Room 345, Brownsville, Texas 78520.**

PRE-PROPOSAL MEETINGS SCHEDULE:

Tuesday, July 11, 2023 at 3:00 P.M.

PRE-PROPOSAL MEETING LOCATION:

835 East Levee Building, 2nd floor, conference room, Brownsville, Texas 78520

CONTACT PERSON: Danny Villarreal, Construction Manager 956-454-1378

Proposal questions/clarifications must be submitted by: **Wednesday, July 19, 2023 before 5:00P.M.**

(e-mail to roberto.luna@co.cameron.tx.us or fax 956-550-7219 attention, Roberto C. Luna, Interim Purchasing Agent)

For additional information or to request addendum email: Roberto C. Luna and/or Dalia Loera at roberto.luna@co.cameron.tx.us or dalia.loera@co.cameron.tx.us

YOU MUST SIGN BELOW IN INK. FAILURE TO SIGN WILL DISQUALIFY THE OFFER.

Company Name: _____

Company Address: _____

City, State, Zip Code: _____

Historically Underutilized Business (State of Texas) Certification VID Number: _____

Telephone No. _____ Fax No. _____ e-mail _____

SIGNATURE: _____ Print Name: _____

How did you find out about this RFP? _____ (ex: Newspaper, Web, and Mail)

Is Bidder's principal place of Business within Cameron County? Yes No

If yes what City: _____

Your signature attests to your offer to provide the goods and/or services in this RFQ according to the published provision of this RFP. When an award letter is issued, this RFP becomes the contract. If an RFP required specific Contract is to be utilized in addition to this RFP, this signed RFP will become part of that contract. When an additional Contract is required a RFP award does not constitute a contract award and RFP / Contract is not valid until contract is awarded by Commissioners Court (when applicable) signed by County Judge) and Purchase Order is issued.

Bidders must sign each bid page to ensure you have read each page's information, terms, conditions and/or required forms. Failure to sign or initial each bid page will disqualify the BID/PROPOSAL offer.

CHECK LIST

Proposers are asked to review the package to be sure that all applicable parts are included. If any portion of the package is missing, notify the Purchasing Department immediately. It is the Proposer's responsibility to be familiar with all the Requirements and Specifications. Be sure you understand the following before you return your RFP packet.

- Cover Sheet**
Your company name, address and your signature (**IN INK**) should appear on this page.
- Instructions to Proposers**
You should be familiar with all of the Instructions to Proposers.
- Special Requirements**
This section provides information you must know in order to make an offer properly.
- Specifications / Scope of Work**
This section contains the detailed description of the product/service sought by the County.

Attachments

- Attachments A, B, C, D, E, F, G, H, I**
Be sure to complete these forms and return with packet.
- Minimum Insurance Requirements**
Included when applicable
- Worker's Compensation Insurance Coverage Rule 110.110**
This requirement is applicable for a building or construction contract.
- Financial Statement**
When this information is required, you must use this form.

Other - Final reminders to double check before submitting RFP

- Is your RFP sealed with RFP #, title, Proposer's Name, & return address, on outside?
- Did you complete, sign and submit page 1?
- Did you provide the number of copies as required on the cover page?
- Did you visit our website for any addendums?

<https://www.cameroncounty.us/purchasing-bids-rfpq-addms-tabs/>

If not interested in responding please let us know why e-mail to: Purchasing@co.cameron.tx.us

INSTRUCTIONS FOR SUBMITTING RFP'S

These General Instructions apply to all offers made to Cameron County, Texas (herein after referred to as "County") by all prospective vendors (herein after referred to as "Proposers") on behalf of Solicitations including, but not limited to, Invitations to RFP and Requests for Quotes.

Carefully read all instructions, requirements and specifications. Fill out all forms properly and completely. Submit your RFP with all appropriate supplements and/or samples. Prior to returning your sealed RFP response / submittal, all Addendums - if issued - should be reviewed and downloaded by entering the County Purchasing web <https://www.cameroncounty.us/purchasing-bids-rfpq-addms-tabs/>

Addendums Column (updated Addendums). These Addendums must be signed and returned with your RFP in order to avoid disqualification. All Tabulations can also be viewed and downloaded at this site. Annual RFP award information can be accessed at: <https://www.cameroncounty.us/purchasing-bids-rfpq-addms-tabs/>

Review this document in its entirety. Be sure your RFP is complete, and double check your RFP for accuracy.

Cameron County is an Equal Employment Opportunity Employer. Review this document in its entirety. Be sure your RFP is complete, and double check your RFP for accuracy.

GOVERNING FORMS: In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Cameron County's interpretation shall govern. Where substitutions are used, they must be of equivalent value or service, and specified by the Proposer as such, in the columns to the right on the "Minimum Specifications' Forms". The County's specifications may be exceeded and should be noted by the Vendor as such. Any RFP NOT MEETING the Minimum Requirements specified will be rejected.

GOVERNING LAW: This invitation to RFP is governed by the competitive RFP requirements of the County Purchasing Act, Texas Local Government Code, §262.021 et seq., as amended. Offerors shall comply with all applicable federal, state and local laws and regulations. Offeror is further advised that these requirements shall be fully governed by the laws of the State of Texas and that Cameron County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.

Questions requiring only clarification of instructions or specifications will be handled verbally. If any questions results in a change or addition to this RFP, the Change(s) and addition(s) will be forwarded to all vendors involved as quickly as possible in the form of a written addendum only.

Verbal changes to RFP's must be backed-up by written addendum or written Q/A clarifications which would be posted on County Purchasing Web site. Without written Addendum or written Q / A clarification, verbal changes to RFP will not apply.

Sign the Vendor's Affidavit Notice, complete answers to Attachments A,B, C, D, E, F, G, H, I and return all with your RFP.

The RFP is particularly interested in Proposers' ability to meet the funding eligibility requirements set for in the American Rescue Plan Act of 2021 (ARPA) *Please see Appendix A "FHWA 1273" & Appendix B "Super Circular-Procurement Standards 2 CFR Parts 200.317 – 200.327"*

CONFLICT OF INTEREST QUESTIONNAIRE:

For vendor or other person doing business with local governmental entity

This questionnaire must be filed in accordance with chapter §176 of the Local Government Code by a person doing business with the governmental entity.

By law this questionnaire must be filed with the records administrator (County Clerk's Office) of the local government not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section §176.006, Local Government Code. A person commits an offense if the person violates Section §176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section §176.006(a), Local Government Code, is pending and not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.

Please review this entire document, if for any reason there is any information to disclose, relative to any questions in this Conflict of Interest form, you must file with County Clerk's Office subject to above instructions.

can be downloaded at the following web site:

https://www.cameroncounty.us/wp-content/uploads/Purchasing/docs/Conflict_of_Interest_Questionnaire_New_2015_.pdf

DISCLOSURE OF INTERESTS:

This questionnaire must be filed with the records administrator (County Clerk's Office) of the local government and no later than the 7th business day after the person becomes aware of facts that require this statement to be filed. Cameron County, Texas requires all persons or firms seeking to do business with the County to **provide the following information if the person becomes aware of facts that require this statement to be filed.** Every question must be answered. If the question is not applicable, answer with "N/A."

Please review this entire document, if for any reason there is any information to disclose, relative to any questions in this disclosure of interest form, you must file with County Clerk's Office subject to above instructions.

can be downloaded at the following web site: <https://www.cameroncounty.us/wp-content/uploads/Purchasing/CIS.pdf>

TEXAS ETHICS COMMISSION FORM 1295

All RFPs prior to award or award of Contract by Commissioner's Court will require that the Texas Ethics Commission (TEC) Form 1295 Electronic (on line) Vendor filing procedure be completed by Vendor.

All Vendors being recommended to Commissioners Court for award or renewal of award on Agenda must register and obtain a TEC Certification for the specific award. This Certification Form 1295 must be electronically submitted and printed form must be emailed or delivered to County Purchasing Department making the request for form. This process must be completed prior to Commissioners Court Agenda for approval consideration of RFP award. There is no charge for this TEC online process.

Texas Ethics Commission (TEC) Form 1295 must be completed (by firm - on line "New Form 1295 Certificate of Interested Parties Electronic Filing Application" Site at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm)

If any Vendors have questions as to TEC Form 1295 visit the County Purchasing Web site left column tab "Vendor – TEC Form 1295" for more information. TEC Web site links can be found at this location including Question / Answers and Video instructions. tab Link: <https://www.cameroncounty.us/vendors-tec-form-1295/>

PROPOSER SHALL SUBMIT RFP ON THE FORM PROVIDED, SIGN THE VENDOR AFFIDAVIT, AND RETURN ENTIRE RFP PACKET. In the event of inclement weather and County Offices are officially closed on a Proposal deadline day, RFP's will be received unit 2:00 p.m. of the next business day. Proposals will be opened at the Cameron County Courthouse, 1100 East Monroe Street, Brownsville, Texas in the Purchasing Department – 3rd Floor – Room # 345 (as per Purchasing Dept. time clock.

RFP's SUBMITTED AFTER THE SUBMISSION DEADLINE SHALL BE RETURNED UNOPENED AND WILL BE CONSIDERED VOID AND UNACCEPTABLE.

PRESENTATIONS SEQUENCE TO EVALUATION COMMITTEE. Presentations to Evaluation Committee will be sequenced (in order) as determined by the utilization of RANDOM.ORG. Process will be conducted in the Purchasing Dept. with Auditor's designee present.

SUCCESSFUL PROPOSERS WILL BE NOTIFIED BY MAIL. All responding vendors will receive written notification regarding outcome of award.

PROPOSERS MAY ATTEND PUBLICLY HELD COMM COURT MEETING FOR AWARD OF THIS SOLICITATION. All responding proposers are welcome to attend the publicly held Commissioners Court meeting relative to the outcome / award of this solicitation. Court Meeting agenda date and times may be obtained at the following web site: <https://www.cameroncountytexas.gov/commissioners-court-agendas/>

OPEN RECORDS ACCESS TO ALL INFORMATION SUBMITTED. All information included will be open to the public, other proposers, media as per the Open Records Act and not be confidential in nature. If you deem any information as confidential, it should not be made part of your RFP package.

PLEASE NOTE CAREFULLY

THIS IS THE ONLY APPROVED INSTRUCTION FOR USE ON SUBMITTING YOUR REPOSE. ITEMS BELOW APPLY TO AND BECOME A PART OF TERMS AND CONDITIONS OF RFP. ANY EXCEPTIONS THERETO MUST BE IN WRITING.

1. **ORIGINAL (marked "ORIGINAL") AND SEVEN (7) COPIES (marked "COPY")** sets and **an electronic (PDF format file only) MUST BE SUBMITTED.** Each RFP shall be placed in a separate envelope completely and properly identified with the name and number of the bid. Proposals must be in the Purchasing Department BEFORE the hour and date specified.
2. Proposals **MUST** give full firm name and address of the proposer. **Failure to manually sign RFP will disqualify it.** Person signing RFP should show TITLE or AUTHORITY TO BIND THE FIRM IN A CONTRACT.
3. Proposals **CANNOT** be altered or amended after deadline time. Any alterations made before deadline time must be initiated by Proposer or his authorized agent. No RFP can be withdrawn after opening time without approval by the Commissioners Court based on a written acceptable reason.
4. Written and verbal inquires pertaining to bids must give RFP Number and Company.

5. NO changes or cancellations permitted without written approval of Purchasing Agent. The County reserves the right to accept or reject all or any part of any RFP and waive minor technicalities.
6. This is a RFP inquiry only and implies no obligation on the part of Cameron County.
7. Partial RFP's will not be accepted unless awarded by complete RFP.
8. It is expected that the Proposer will meet all state and federal safety standards and laws in effect on the date of the RFP, for the item(s) being specified, and the particular use for which they are meant.
9. It is the responsibility of the Proposer to ask any and all questions the Proposer feels to be pertinent to the proposal. Cameron County shall not be required to attempt to anticipate such questions for proposers. Cameron County will endeavor or respond promptly to all questions asked.
10. If PROPOSER takes exception to specifications or reference data, he will be required to provide details etc. as specified.
11. A proposal may not be withdrawn or canceled by the proposer without the written acknowledgment of the County for a period of sixty (60) days following the date designated for the receipt of proposal, and proposer so agrees upon submittal of the proposal.
12. If a Bid Bond is required in this Proposal it must be included in Proposers Sealed RFP package.
13. The County reserves the right to accept or reject all or any part of any RFP, waiver minor technicalities. The County of Cameron reserves the right to award by item category or by total RFP. Prices should be itemized. County also reserves the right to award either with or without trade-in, if applicable. Cameron County reserves the right to award if only one (1) RFP was received. Cameron County retains the option to re-solicit at any time if in its best interest and is not automatically bound to renewal or re-solicitation. The County reserves the right to hold all RFPs for 60 days from the due date of receipt without actions. The County reserves the right to add additional County Departments (at a later time during this RFP award) as the need arises. The County also reserves the right to consider utilizing CO-OP Interlocal Agreements / pricing if determined to be more advantageous to the County.
14. All property of Cameron County must remain (at all times) within the United States – without exception – unless prior Agenda approval has been given by Commissioners Court.
15. The County is exempt from State Sales Tax and Federal Excise Tax. DO NOT INCLUDE TAX IN RFP. Cameron County claims exemption from all sales and/or use taxes under Texas Tax Code §151.309, as amended. Texas Limited Sales Tax Exemption Certificates will be furnished upon written request to the Cameron County Purchasing Agent.
16. Proposals are scheduled to be opened and publicly acknowledged at the Cameron County Commissioners Courtroom, on the scheduled date and time specified on cover sheet of this RFP package. Proposers, their representatives and interested persons may be present. The proposals shall be opened and acknowledged only so as to avoid disclosure of the contents to competing proposers and shall remain confidential during negotiations. However, all proposals shall be opened for public review after the concession lease agreement is approved, except for trade secrets and confidential information contained in the proposal and identified by proposers as such.
17. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting concession agreement. All change orders to this RFP will be made in writing by the Cameron County Purchasing Department. Award of proposal does not constitute a concession agreement. A binding concession agreement will be negotiated by the Cameron County Property Manager and approved by the Commissioners Court after the proposal has been awarded.
18. No public official shall have interest in this RFP except in accordance with Vernon's Texas Codes Annotated, Local Government Code Title 5. Subtitle C, Chapter §171.
19. The proposer shall not offer or accept gifts or anything of value nor enter into any business arrangement with any employee, official or agent of Cameron County.
20. All proposals meeting the intent of this RFP will be considered for a possible negotiation.
21. Any interpretations, corrections or changes to this RFP will be made by addenda. Sole issuing authority of addenda shall be vested in Cameron County Purchasing Department. Addenda will be mailed to all who are known to have received a copy of this RFP. Proposers shall acknowledge receipt of all addenda in writing.
22. Proposals must comply with all federal and state laws, County policy and local regulations.
23. Cameron County may request a presentation and additional information to determine proposer's ability to sufficiently meet these minimum responsible standards listed above.
24. Cameron County requests proposer to supply, with this RFP, a list of at least three (3) references. Include full name and title, address, telephone number, fax number and name(s) of contact person.

25. Successful proposer shall defend, indemnify and save harmless Cameron County and all its officers, agents and employees from all suits, actions, or other claims of any person, persons, or property on account of negligent act or fault of the successful offered, or of any agent, employee, subcontractor or supplier in the execution of or performance under any contract which may result from proposal award. Successful proposer shall pay any judgment including costs, which may be obtained against Cameron County developing out of such injury or damages.
26. Any notice provided by this proposal or required by Law to be given to the successful proposer by Cameron County shall be conclusively deemed to have been given and received on the next day after such written notice has been deposited in the mail in Brownsville, Texas by Registered or Certified mail with sufficient postage affixed thereto, addressed to the successful proposer at the address so provided; this shall not prevent the giving of actual notice in any other manner.
27. It is the responsibility of the bidder or proposer to ask any and all questions the bidder or proposer feels to be pertinent to the bid or proposal. Cameron County shall not be required to attempt to anticipate such questions for bidders or proposers. Cameron County will endeavor to respond promptly to all questions asked.
28. **AWARD OF CONTRACT** - Award(s), if made, will be made to the responsive and responsible Offeror(s) whose proposal is most advantageous to Cameron County, taking into consideration price and the other factors set forth in the Request for Proposals "R.F.P. . Contract will be negotiated with the offeror whose proposal is determined to be most advantageous to County. The County reserves the right and option to reject any and all proposals and to waive any formality in proposals received, to accept or reject any or all of the items in the proposal, and award the contract in whole or in part, if it is deemed in the best interest of the County. Proposals should be submitted initially on the most favorable terms, from both price and technical standpoints. The County further reserves the right to award without discussion after proposals are received to request written "BEST AND FINAL OFFERS" from respondents judged to be responsive to the minimum technical requirements.

PURCHASE ORDER AND DELIVERY: The successful PROPOSER shall not deliver products or provide services without a contract approved by the Cameron County Commissioners Court and a Cameron County Purchase Order signed by an authorized agent of the Cameron County Purchasing Department.

This shall be understood to include bringing merchandise to the appropriate room or place designated by the using department. Every tender or delivery of goods must fully comply with all provisions of these requirements and the specifications including time, delivery and quality. Nonconformance shall constitute a breach which must be rectified prior to expiration of the time for performance. Failure to rectify within the performance period will be considered cause to reject future deliveries and cancellation of the contract by Cameron County without prejudice to other remedies provided by law. **Where delivery times are critical, Cameron County reserves the right to award accordingly.**

NO PLACEMENT OF DEFECTIVE TENDER: Every tender or delivery of goods must fully comply with all provisions of this contract as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender provided, where the time for performance has not yet expired, the Seller may seasonably notify Buyer of their intention to cure and may then make a conforming tender within the contract time but not afterward.

PLACE OF DELIVERY: The place of delivery shall be that set forth on the purchase order. Any change thereto shall be affected by modification as provided for in clause 20, "Modifications", hereof. The terms of this agreement are "no arrival, no sale".

DELIVERY TERMS AND TRANSPORTATION CHARGES: RFP must show number of days required to place material in receiving agency's designated location under normal conditions. Failure to state delivery time obligates Proposer to complete delivery in 24 hours. A five-day difference in delivery promise may break a tie. Unrealistically short or long delivery promises may cause RFP to be disregarded. Consistent failure to meet delivery promises without valid reason may cause removal from Proposer list.

An accurate delivery date must be quoted on the "RFP Form". When there are various items, a delivery date must be included with each item quoted. Freight and shipping charges to Cameron County must be included in the RFP price. Final location will be supplied to the vendor on award of RFP, F.O.B. destination. Delivery locations will be: Various County Building locations. Delivery days after receipt of order (ARO). Specify all (various) dates by categories or item if different.

If delay is foreseen, contractor shall give written notice to Director of Purchasing. The County has the right to extend delivery date if reasons appear valid. Contractor must keep County advised at all times of status of order. Default in promised delivery (without accepted reasons) or failure to meet specifications, authorized the County to purchase supplies elsewhere and charge full increase in cost and handling to defaulting contractor.

Delivery shall be made during normal working hours only, 8:00 a.m. to 5:00 p.m. unless otherwise noted in RFP.

VARIATION IN QUANTITY: The County assumes no liability for commodities produced, processed or shipped in excess of the amount specified herein.

SELLER TO PACKAGE GOODS: Seller will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently packed as follows: (a) Seller's name and address; (b) Consignee's name, address and purchase order or purchase release number and the supply agreement number if applicable; (c) Container number and total number of containers, e.g. box 1 of 4 boxes; and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. Buyer's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

SHIPMENT UNDER RESERVATION PROHIBITED: Seller is not authorized to ship the goods under reservation, and no tender of a bill of lading will operate as a tender of goods.

TITLE AND RISK OF LOSS: The title and risk of loss of the goods shall not pass to Buyer until Buyer actually receives and takes possession of the goods at the point or points of delivery.

INSPECTION: Upon receiving item(s), they will be inspected for compliance with the RFP Specifications. If the item(s) do not pass inspection, the vendor will be required to pick up the rejected item(s) at the delivery point, provide the necessary replacement, and return the item(s) to the original point of delivery.

All items proposed shall be new, in first class condition, including containers suitable for shipment and storage (Cameron County prefers recycled packaging whenever possible), unless otherwise indicated in RFP. Verbal agreements to the contrary will not be recognized. All materials and services shall be subject to Purchaser's approval. Unsatisfactory material will be returned at Seller's expense. Cameron County reserves the right to inspect any item(s) or service location for compliance with specifications and requirements and needs of the using department. If an offeror cannot furnish a sample of a RFP item, where applicable, for review, or fails to satisfactorily show an ability to perform, the County can reject the RFP as inadequate.

TESTING: Cameron County reserves the right to test equipment, supplies, material and goods Proposed for quality, compliance with specifications and ability to meet the needs of the user. Demonstration units must be available for review. Should the goods or services fail to meet requirements and/or be unavailable for evaluation, the RFP is subject to rejection. **County user Dept.(s) reserves the right to make the final determination as to equivalents.**

SPECIAL TOOLS AND TEST EQUIPMENT: If the price stated on the face hereof includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the Buyer and to the extent feasible shall be identified by the Seller as such.

INVOICES AND PAYMENTS: (a) Vendor shall submit separate invoices, in duplicate, on each purchase order after each delivery. Invoices shall indicate the purchase order number, shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading and the freight weigh bill when applicable, should be attached to the invoice. Mail to: Cameron County, ATTN: Auditor's Office, 1100 East Monroe St., Brownsville, Texas 78520. Payment shall not be due until the above instruments are submitted after delivery. Vendors must keep the Auditor advised of any changes in your remittance addresses. (b) County's only obligation to pay Vendor is to pay from funds budgeted and available for the purpose of the purchase. Lack of funds shall render this contract null and void to the extent funds are not available and any delivered but unpaid for goods will be returned to Vendor by the County. (c) Do not include Federal Excise, State or City Sales Tax. County shall furnish tax exemption certificate if required.

Any invoice, which cannot be verified by the contract price and/or is otherwise incorrect, will be returned to the Vendor for correction. Under term contracts, when multiple deliveries and/or services are required, the Vendor may invoice following each delivery and the County will pay on invoice. Contracts providing for a monthly charge will be billed and paid on a monthly basis only. Prior to any and all payments made for good and/or services provided under this contract, the Vendor should provide his Taxpayer Identification Number or social security number as applicable. This information must be on file with the Cameron County Auditor's office. Failure to provide this information may result in a delay in payment and/or back-up withholding as required by the Internal Revenue Services.

Vendor shall submit two (2) copies of an itemized invoice showing RFP number and purchase order number to:

**CAMERON COUNTY AUDITOR
ACCOUNTS PAYABLE
1100 EAST MONROE ST.,
BROWNSVILLE, TEXAS 78520**

Please note that any payment due under this RFP award will be applied towards any debt, including but not limited to delinquent taxes that is owed to Cameron County.

PAYMENT DISCOUNT: Indicate the payment discount (s) available depending on the when invoices are paid. For example, 1/30 means a 1% discount if paid within 30 days, 2/15 means a 2% discount if paid within 15 days, etc. Payment in full will be made within thirty (30) days of delivery, inspection, and receipt of invoice.

All costs quotations must include all the various features needed to satisfy the requirements. Note: No amounts will be paid for the items in this RFP in excess of the amounts quoted.

**CAMERON COUNTY
REQUEST FOR PROPOSAL (RFP)**

RFP # 230704

**CAMERON COUNTY 835 EAST LEVEE
& SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES**

INSTRUCTIONS

PART I – GENERAL REQUIREMENTS

1.0 By order of the Commissioners’ Court of Cameron County, Texas, sealed proposals will be received for:

**CAMERON COUNTY 835 EAST LEVEE
& SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES**

SEE EXHIBIT “A” WHICH FURTHER DESCRIBES THE SCOPE OF WORK/SERVICES AS SPECIFIED ON TECHNICAL SPECIFICATIONS AND CONSTRUCTION DRAWINGS PROVIDED BY ENGINEERING FIRM.

Cameron County is looking to install a commercial emergency generator at the Levee Annex building located at 835 East Levee St. in Brownsville, Texas and the San Benito Annex Building located at 1390 W. Expressway 83, San Benito, Texas 78586. Awarded contractor will remove existing generator and any other related equipment.

It is the responsibility of the bidder to provide and install new emergency generator equipment which best complies with the specifications listed in RFP package.

It is the Responder’s responsibility to provide a Payment and Performance Bond, and proof of insurance. Responder’s shall fill out the form which follows, which details basic equipment and construction and installation requirements. Failure to fill out the form, leaving items blank, or referencing other manufacturer documents instead of filling out the form, will be considered non-responsive and could disqualify proposal.

2.0 **INCURRED EXPENSES:** There is expressed or implied obligation for Cameron County to reimburse for any expense incurred in preparing proposals in response to this request, and Cameron County will not reimburse anyone for these expenses. Cameron County will consider all RFP’s from all responsible proposers.

3.0 **CASHIER'S CHECK AND FORFEITURE:** Each RFP shall be accompanied by a Cashier’s Check, Certified Check, or acceptable Proposer’s Bond payable to Cameron County, in the amount of not less than 5% of the largest possible total for the proposal submitted, must accompany each proposal. Proposal guarantee bond as a guarantee that if the Proposer receives an award, the Proposer will enter into a contract for services and submit proof of any required insurance. Checks of unsuccessful Proposers will be returned. If the successful Proposer fails to satisfy all pre-work requirements or commence work after award, that Proposer shall forfeit this security deposit. Cameron County shall retain it as liquidated damages.

4.0 **GENERAL CONDITIONS:** Proposers shall thoroughly examine the specific requirements, schedules, instructions and all other contract documents. RFP must set forth accurate and complete information as required by this RFP (including attachments). No plea of ignorance by the Proposer of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the Proposer to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the contract documents, will be accepted as a basis for varying the requirements of Cameron County.

5.0. **SITE INSPECTION:** Before submitting a Proposal, Proposers are encouraged to visit the site and make all investigations and examinations necessary to ascertain site and/or local physical conditions and requirements affecting the full performance of the construction Agreement and to verify any representations made by Cameron County, Texas, upon which the Proposer will rely. If the Proposer receives an award because of its RFP submission, failure to have made such investigations and examinations will in no way relieve the Proposer from its obligations to comply in every detail with all provisions and requirements of the Concession Agreement, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim by the Proposer for additional compensation or relief. Failure to do so will not relieve the successful Proposer from performing the contract in accordance with all terms and conditions as set forth.

Each Proposer attests, by signing this RFP that he/she has acquainted themselves with the job site and fully understands there will be no recourse for negligence or oversight for not doing so.

6.0 **ASSIGNMENT:** The awarded Proposer shall not assign, transfer, convey, sublet, or otherwise dispose of any award or of any of its rights, title, or interests therein, without the prior written consent of the County Commissioners Court.

7.0 **CONTRACT PERIOD:** .

a. Contact Danny Villarreal, Cameron County Construction Manager at: phone (956) 454-1378 for questions and to make arrangement to inspect Levee Annex building and/or San Benito Annex Building.

8.0 **RFP PRICE:**

PROPOSER hereby certifies that this RFP is made without prior understanding, agreement or connection with any corporation, firm or person submitting a RFP for the same materials, supplies, services or equipment and is in all respects fair and without collusion or fraud. Further, the PROPOSER hereby agrees to abide by all terms and conditions of this RFP and certifies that the person executing the RFP form is authorized to sign this RFP for the PROPOPSER.

9.0 **PRE-AWARD SURVEY:** After RFP opening and prior to award, County reserves the right to make a pre-award survey of proposer's facilities and its operation to be used in the services and performance of this work. Proposer agrees to allow all reasonable requests for inspection of such facilities or operations with two (2) working days advance notice. Failure to allow an inspection is cause for rejection of a RFP as non-responsive. County reserves the right to reject facilities or equipment as unacceptable for performance as a result of the pre-award survey.

10.0 **MINIMUM REQUIREMENTS FOR RESPONSIBLE PROPOSAL:**

A proposer must affirmatively demonstrate proposer's responsibility. At a minimum, a prospective proposal must contain in the order presented here an outlined response to the following criteria:

A)

11.0 **RFP EVALUATION AND AWARD:**

EVALUATION AND SELECTION CRITERIA

WEIGHTED QUANTITATIVE SCORING:

Each Vendor will be assigned a score of 0 - 4 by each evaluator for each criteria

- 4 = Very good / Exceeds expectations
- 3 = Above expectations
- 2 = Meets expectations
- 1 = Does not meet expectations
- 0 = non-responsive

Evaluators score by category will be multiplied by the assigned weight for each criteria by vendor then totaled.

Scoring for price will be a ratio and based on a pro rata factor of the best price submitted.

Once RFPs are reviewed and scored, a short list will be compiled. Interviews may be conducted with Proposers determined by total score rankings. Additional information may be required at that time. Negotiations will begin with the Proposer selected for the project. Commissioners Court will make the final selection and possible approval of the contract.

An Evaluation Committee will review each proposal. Committee will be comprised of, but not limited to, County Staff. Proposer may be requested to appear before the Committee to answer questions or give additional information regarding the project or for a formal presentation.

Proposals will be evaluated as to the proposal, which offers the best overall project and is deemed to be the most advantageous and yield the greatest benefit to the County. Some specific elements the Committee will be evaluating are as follows:

1. **Commercial Quality. (40 points)**
Satisfactory response to terms and conditions. Experience with similar programs. Proposal quality and customer references and satisfaction of existing customers.
2. **Cost Factor. (30 points)**
Total cost and additional cost.
3. **Customer Service. (20 points)**
Warranties and engineering value options.
4. **Functional & Technical. (10 points)**
A clearly demonstrated understanding of the work to be performed and completeness and reasonableness of the proposing firm's plan for accomplishing the requested services.

TOTAL 100 points

At the discretion of the Committee, some or all proposals may be ranked in order of meeting the overall requirements of the highest and best use of concession project. The County reserves the right to negotiate with any, one, or all the ranked proposers. The Evaluation Committee will make a recommendation for award by the Cameron County Commissioners' Court.

12.0 **REJECTION OF RFP:**

County expressly reserves the right to:

- 1) waive any defect, irregularity or informality in any proposal;
- 2) reject or cancel any RFP or parts of any proposal;
- 3) accept proposals from one or more proposers; or

- 4) procure the services in whole or in part by other means.

PART II - REQUIRED DOCUMENTATION

RFP # 230704

Please note this Section may not address all documentation required by the RFP. The Proposer is cautioned to read the entire RFP to determine all requirements. CAMERON COUNTY RESERVES THE RIGHT TO REJECT ANY RFP WHICH DOES NOT CONTAIN ALL INFORMATION REQUIRED BY THIS RFP.

Proposals shall include all of the information solicited in this RFP, and any additional data that the Proposer deems pertinent to the understanding and evaluation of the Proposal. The Proposer should not withhold any information from the written response in anticipation of presenting the information orally or in a demonstration, since oral presentations or demonstrations may not be solicited.

Submittal of a RFP shall constitute the Proposer's agreement and intent to follow and adhere to all statements, offerings and monetary incentives contained within this Proposal.

In conjunction with other material and information requested in the RFP, all Proposers responding to this solicitation shall provide one (1) original (marked "Original") and seven (7) copies and all attachments of the following in 8 ½ " by 11" format, clearly legible, tabbed and in a binder. To achieve a uniform review process and to obtain a maximum degree of comparability, Cameron County requires that RFP information be submitted in the following order:

Table of Contents

List title of each tabbed section and title of any additional information included in this Proposal.

Tab 1 - Transmittal Cover

(Format and Content: Please included in your RFP's / RFQ's as part of your cover).

Executive Summary (2 pages max.)

Submit a signed letter (Executive Summary) briefly addressing the services to be provided by Proposer.

Introduction (2 pages max.)

Proposals must include confirm that the firm will comply with all of the provisions in this RFP. If exceptions will be taken it should be so noted. Proposals must be signed by a company officer empowered to bind the company. A proposer's failure to include these items in their proposals may cause their proposal to be determined to be non-responsive and the proposal may be rejected. Include the following: *Firms Name, Address, Phone #, Contact Name, Phone #, Email address.*

Understanding of the Project (1 pages max.)

Proposers must provide a comprehensive narrative statement that illustrates their understanding of the project as proposed and detail schedule (timeline).

Methodology Used for the Project (1 page max.)

Proposers must provide a comprehensive narrative statement that sets out the methodology they intend to employ and that illustrates how their methodology will serve to accomplish the work and meet project schedule.

Management Plan for the Project (1 page max.)

Proposers must provide a comprehensive narrative statement that sets out the management plan they intend to follow and illustrates how their plan will serve to accomplish the work and meet project schedule.

Provide list specific to the personnel assigned to accomplish the work called for in this RFP; illustrate the lines of authority; designate the individual responsible and accountable for the completion of the proposed project.

Provide a narrative description of the organization of the project team.

Provide a personnel roster that identifies each person who will actually work on the contract and provide the following information about each person listed and Title;

RFP MAG Guarantee per Proposal (1 page max.)

Proposer's MAG Guarantee associated with this offer.

Tab 2 - Proposed General Contractor Information

- a. Name of owner/operator
- b. Address of GE owner/operator
- c. Telephone & Fax number
- d. Identification by name and address of principal financial investors/supporters committed to the project, specifying estimated proportionate levels of involvement for each in the total project.
- e. Include the name and telephone numbers of the designated individual(s), who will answer technical and contractual questions with respect to the proposal.

Tab 3 - Authorization to Do Business in Texas and Management / Organization

Evidence of authorization and if incorporated: certificate of good standing issued by the Secretary of State of Texas indicating Proposer is authorized to conduct business within the State of Texas.

If Business is an individual: proof of registration with Cameron County doing business under assumed name (d/b/a).

Tab 4 - RFP Bond

Each RFP shall be accompanied by a **Cashier's Check** made payable to Cameron County in the amount of five (5) percent (%) of the total cost proposal as a guarantee that if the Proposer receives an award, the Proposer will enter into a contract for services and submit proof of any required insurance. Checks of unsuccessful proposers will be returned. If the successful Proposer fails to satisfy all pre-work requirements or commence work after award, that Proposer shall forfeit this security deposit. Cameron County shall retain it as liquidated damages.

Tab 5 – Price Proposal

Proposer shall provide a detailed breakdown of the total project cost.

Tab 6 - Security (Performance Bond)

The selected Proposer, within 30 days of the time of the execution of the Construction Agreement, shall furnish the County with a valid security (performance) deposit for the amounts detailed in Construction Agreement.

Tab 7 - Time Frame

Describe the time frame for proposed construction of improvements of the proposed emergency generator upgrade. Project commencement date (number of months after construction contract is approved by the Cameron County Commissioners Court.) Project completion date (emergency generator in working/running conditions).

Tab 8 – Changes / Deviations

Requested changes to Construction Agreement

List any requested changes to the draft construction Agreement. Each requested change shall reference the lease article and page number. All terms and conditions in the Draft Construction Agreement are final unless any requested changes are approved and agreed upon. The County has the right to negotiate the terms and conditions with the selected Proposer.

Deviations to terms, conditions and specifications

Any deviations from the terms, conditions and technical specifications and/or schematic drawings listed herein must be clearly indicated; otherwise, it will be considered that the RFP offered is in strict compliance with these specifications and the successful Proposer will be held responsible.

Tab 9 - References - Mandatory

Complete & include **Attachment A** three (3) references page. References to include (3) three business/Commercial references and one (1) creditor or bank.

Tab 10 - All other information required by this RFP

(Please note if applicable: All design documents must be reviewed and approved by Cameron County prior to any construction. It is the responsibility of the selected Proposer to obtain and comply with all permits, licenses and authorizations as may be applicable from all governing agencies having jurisdiction over the construction site/building).

Proposer must submit the following documents after contract award:

- Insurance documentation within ten (10) days from execution of the contract.
- Payment and Performance Bonds.
- Permits.
- All other information required in this RFP

Tab 11 - Acknowledgment of compliance with the American Rescue Plan Act of 2021 (ARPA)

Please see Appendix A “ FHWA 1273” & Appendix B “Super Circular- Procurement Standards 2 CFR Parts 200.317 – 200.327”

Deviations

All Proposals must clearly and with specific detail, note all deviations to the exact requirements imposed upon the Proposer by the specifications. Such deviations must be stated upon the RFP Form; otherwise Cameron County will consider the subject Proposals as being made in strict compliance with said specifications to Proposers, the Proposer being held therefore accountable and responsible. Proposers are hereby advised that Cameron County will only consider Proposals that meet the exact requirements imposed by the specifications; except, however, said Proposals may not be subject to such rejection where, at the sole discretion of Cameron County, the stated deviation is considered to be equal or better than the imposed requirement and where said deviation does not destroy the competitive character of the RFP process by affecting the amount of the RFP such that an advantage or benefit is gained to the detriment of the other Proposers.

Records & Right to Audit

The Proposer shall maintain such financial records and other records as may be prescribed by the County or by applicable federal and state laws, rules, and regulations. The Proposer shall retain these records for a period of three (3) years after final payment, or until they are audited by the County, whichever event occurs first. These records shall be made available during the term of the Concession Agreement and the subsequent three-year period for examination, transcription, and audit by the County, its designees, or other authorized entities.

Modifications Due to Public Welfare or Change in Law

The County shall have the power to make changes in the Concession Agreement as the result of changes in law and/or Ordinances of Cameron County to impose new rules and regulations on the Proposer under the Concession Agreement relative to the scope and methods of providing services as shall from time-to-time be necessary and desirable for the public welfare. The County shall give the Proposer notice of any proposed change and an opportunity to be heard concerning those matters. The scope and method of providing services as referenced herein shall also be liberally construed to include, but is not limited to, the manner, procedures, operations and obligations, financial or otherwise, of the Proposer. In the event any future change in Federal, State or County law or the Ordinances of Cameron County materially alters the obligations of the Proposer, or the benefits to the County, then

the Concession Agreement shall be amended consistent therewith. Should these amendments materially alter the obligations of the Proposer, then the Proposer or the County shall be entitled to an adjustment in the rates and charges established under the Concession Agreement. Nothing contained in the Concession Agreement shall require any party to perform any act or function contrary to law. The County and Proposer agree to enter into good faith negotiations regarding modifications to the lease which may be required in order to implement changes in the interest of the public welfare or due to change in law. When such modifications are made to the Concession Agreement, the County and the Proposer shall negotiate in good faith, a reasonable and appropriate adjustment for any changes in services or other obligations required of the Proposer directly and demonstrably due to any modification in the lease under this clause.

Right to Require Performance

- a. The failure of the County at any time to require performance by the Proposer of any provision hereof shall in no way affect the right of the County thereafter to enforce same. Nor shall waiver by the County of any breach of any provision hereof be taken or held to be a waiver of any succeeding breach of such provision or as a waiver of any provision itself.
- a. In the event of failure of the Proposer to deliver services in accordance with the lease terms and conditions, the County, after due written notice, may procure the services from other sources and hold the Proposer responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies that the County may have.

NON-PERFORMANCE

- a. Time is of the essence in this contract and failure to deliver the services specified shall be considered a default.
- b. In case of default, the County may procure the services from other sources and hold the Proposer responsible for all costs occasioned there by and may immediately cancel the contract.

SPECIAL PROVISIONS

- a. PUBLIC ENTITY CRIMES - Any person submitting a RFP or RFP in response to this invitation certifies that they are aware of, and in compliance with, all requirements under Section 287.133, Texas Statutes, on Public Entity Crimes. Prior to RFP award, the recommended Proposer may be required to submit a sworn statement attesting to compliance with said statute.
- b. PERMITS AND LICENSES - The Proposer agrees to secure all necessary licenses and permits prior to award and agrees to comply with all Federal and State laws, and

Minor Irregularities

The County reserves the right to waive minor irregularities in RFP's, providing such action is in the best interest of the County. Minor irregularities are defined as those that have no adverse effect on the County's best interests, and will not affect the outcome of the selection process by giving the Proposer an advantage or benefit not enjoyed by other Proposers.

Governing Laws

Except to the extent Federal law is applicable, the laws and regulations of the State of Texas, and the County of Cameron, Texas, shall govern the interpretation, effect, and validity of any contract(s) resulting from this RFP. Venue of any court action shall be in Cameron County. In the event that a suit is brought for the enforcement of any term of the contract, or any right arising there from, the parties expressly waive their respective rights to have such action tried by jury trial and hereby consent to the use of non-jury trial for the adjudication of such suit.

INSURANCE AND LIABILITY

During the period of this Contract, contractor shall maintain at his expense, insurance with limits not less than those prescribed below. With respect to required insurance, Contractor shall:

- a. Name County as additional insured, as its interests may appear,
- b. Provide County a waiver of subrogation,
- c. Provide County with a thirty (30) calendar days advance written notice of cancellation or material change to said insurance,
- d. Provide the County Purchasing Agent at the address shown on Page 1 of this contract, a Certificate of Insurance evidencing required coverage within ten (10) calendar days after receipt of Notice of Award. Also, please assure your certificate contains the contract number as indicated on the Contract Award form when issued by Cameron County. All insurance policies shall be issued by insurers licensed to do business in the State of Texas and any insuring company is required to have a minimum rating of B, Class VIII in the "Best Key Rating Guide" published by A.M. Best & Company, Inc.,
- e. Loss Deductible Clause: The County shall be exempt from, and in no way liable for, any sums of money, which may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Proposer and/or subcontractor providing such insurance, and
- f. Submit an original certificate of insurance reflecting coverage as follows:

Automobile Liability:

Bodily Injury (Each person)	\$250,000.00
Bodily Injury (Each accident)	\$500,000.00
Property Damage	\$500,000.00

General Liability (Including Contractual Liability):

Bodily Injury (Per occurrence)	\$5,000,000.00
Bodily injury Aggregate	\$10,000,000.00
Property Damage (Per occurrence)	\$5,000,000.00
Property Damage Aggregate	\$10,000,000.00
Fire Damage	\$5,000,000.00
Medical Expense (Anyone (1) person)	\$5,000,000.00

Excess Liability:

Umbrella Form Not Required

Worker's Compensation: Statutory

g. INDEMNITY

The Proposer covenants and agrees that it will indemnify and hold harmless the COUNTY and all of the County's officers, agents, and employees from any claim, loss, damage, cost, charge, attorney's fees and costs, or any other expense arising out of any act, action, neglect, or omission by Proposer during the performance of the contract, whether direct or indirect, and whether to any person or property to which the COUNTY or said parties may be subject, except that neither the Proposer nor any of its subcontractors, or assignees, will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the COUNTY or any of its officers, agents, or employees.

d. PROTECTION OF PERSONS AND PROPERTY

- 1) The Proposer will take all reasonable precautions for, and will be responsible for initiating, maintaining and supervising all programs relating to the safety of all persons and property affected by, or involved in, the performance of his operations under this contract.
 - 2) The Proposer will take all reasonable precautions to prevent damage, injury or loss to: (a) all persons who may be affected by the performance of his operations, including employees; (b) all materials and equipment; and (c) all property at or surrounding the work site. In an emergency affecting the safety of persons or property, the Proposer will act, with reasonable care and discretion, to prevent any threatened damage, injury or loss.
- i. Companies issuing the insurance policy, or policies, shall have no recourse against the County for payment of premiums or assessments for any deductibles which all are the sole
- j. PROPOSERS may, at the COUNTY'S request, be required to provide proof that their firm meets the preceding insurance requirements, by submission of Certificates of Insurance Coverage(s), prior to award of the Contract.

RFP Title _____ Proposer's Name _____ Date: _____

REFERENCES

Please list (3) three references - (1) should be a concessionaire customer who can verify the quality of service your company provides. The County prefers customers of similar size and scope of work to this RFP.

REFERENCE ONE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ e-mail address: _____

Contract Period: _____ Scope of Work _____

REFERENCE TWO

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ e-mail address: _____

Contract Period: _____ Scope of Work _____

REFERENCE THREE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ e-mail address: _____

Contract Period: _____ Scope of Work _____

THIS FORM MUST BE RETURNED WITH YOUR RFP.

BANK OR CREDITOR REFERENCES

REFERENCE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ e-mail address: _____

Contract Period: _____ Scope of Work _____

STATE OF TEXAS
COUNTY OF CAMERON

AFFIDAVIT

The undersigned certifies that the RFP prices contained in this RFP have been carefully checked and are submitted as correct and final and if RFP is accepted (within 60 days), agrees to furnish any and/or all items upon which prices are offered, at the price(s) and upon the conditions contained in the Specifications.

BEFORE ME, the undersigned authority, A Notary Public in and for the State of _____, on this day personally appeared _____ who, after having first been duly sworn, upon oath did depose and say;

That the foregoing RFP submitted by _____ hereinafter called "Proposer" is the duly authorized agent of said company and that the person signing said RFP has been duly authorized to execute the same. Proposer affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this RFP in collusion with any other Proposer. The Proposer is not a member of any trust, pool, or combination to control the price of products or services RFP on, or to influence any person to RFP or not to RFP thereon. I further affirm that the Proposer has not given, offered to give, nor intends to give, at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discounts, trip, favor, or service to a public servant in connection with the submitted RFP. The contents of this RFP as to prices, terms or conditions of said RFP have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this RFP.

Name and Address of Proposer:

Telephone number _____ Fax number _____

Signature

Name: _____ Title: _____

SWORN TO AND SUBSCRIBE BEFORE ME THIS _____ day of _____ 20_____.

Notary Public in and for County _____ State _____

THIS FORM MUST BE RETURNED WITH YOUR RFP

RESIDENCE CERTIFICATION

Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Cameron County requests Residence Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

“Nonresident Proposer” refers to a person who is not a resident.

“Resident Proposer” refers to a person whose principal place of business is in this State, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

I certify that _____ is a Resident
(Company Name)
Proposer of Texas as defined in Government Code §2252.001.

I certify that _____ is a Nonresident
(Company Name)
Proposer as defined in Government Code §2252.001 and our principal place of business is

(City and State)

Print Name: _____ Signature: _____

THIS FORM MUST BE RETURNED WITH YOUR RFP

CAMERON COUNTY EXPRESSLY REQUESTS THAT PROPOSERS NOT DISCUSS THIS ENGAGEMENT OR THIS PROPOSER'S PLANS, EXPERIENCE OR CREDENTIALS WITH OTHER PROPOSER'S OR ANY MEMBER OF COMMISSIONERS' COURT, ANY COUNTY OFFICIAL, OR ANY EVALUATION COMMITTEE MEMBER APPOINTED BY COMMISSIONERS COURT. EXCLUDED ARE PRE-RFP OR PRE-RFP CONFERENCES, EVALUATION COMMITTEE SCHEDULED PROPOSER PRESENTATIONS OR PROPOSER INTERVIEWS, OR EVALUATION COMMITTEE SCHEDULED EQUIPMENT OR SERVICES DEMONSTRATIONS. YOU MAY CONTACT THE PURCHASING AGENT / PURCHASING DEPARTMENT AT ANY TIME.

FROM RFP OPENING DATE THROUGH COMMISSIONERS COURT MEETING FOR SELECTION, VENDORS WILL NOT APPROACH THE COUNTY JUDGE OR COMMISSIONERS TO DISCUSS MATTERS PERTAINING TO THIS BID.

- 01. Has any individual with the firm submitting this RFP response made any contact with any member of Commissioners Court, any County Official, or an Evaluation Committee member concerning this Proposal, other than questions to the Purchasing Agent?

- 02. Has any individual with the firm submitting this RFP response made any contact with any other proposer concerning this RFP?

Signature of person doing business with the governmental entity

Date

THIS FORM MUST BE RETURNED WITH YOUR RFP

ORDER NO. 2007O2005

THE STATE OF TEXAS §
COUNTY OF CAMERON §

**ORDER ADOPTING CONTRACTING RULES
FOR PERSONS INDEBTED TO COUNTY**

WHEREAS, pursuant to V.T.C.A., Local Government Code, Section 262.0276, a commissioner’s court is authorized to adopt rules permitting a county to refuse to enter into a contract or other transaction with a person indebted to the county;

WHEREAS, the Commissioners Court of Cameron County finds it is in the best interest of Cameron County to adopt such rules;

NOW THEREFORE, BE IT ORDERED by the Commissioners Court of Cameron County, that the following rules be adopted regarding Cameron County and persons interested in doing business with Cameron County:

1. Cameron County may refuse to enter into a contract or other transaction with a person with a past due debt to Cameron County, including delinquent ad valorem taxes, even if the person is the lowest or successful Proposer; and
2. For purposes of this Order, a debt is past due if it is not received in the County Treasurer’s Office by the due date in a written agreement or notice, and ad valorem taxes are past due if not received in the County Tax Assessor/Collector’s Office by February 1st following the January 1st on which the ad valorem taxes are due.
3. For purposes of this Order, a person includes an individual, sole proprietorship, corporation, nonprofit corporation, partnership, joint venture, limited liability Company, and any other entity that proposes or otherwise seeks to enter into a contract or other transaction with Cameron County requiring approval by the Commissioners Court.

ADOPTED this 13 day of March, 2007.

Taxpayer Identification Number (T.I.N.): _____

Cameron County Acct #'s: Real Estate _____ Personal Property _____

01. Is the person or the firm submitting this RFP current with all local and State taxes?

Yes ___ No ___

Signature of person submitting this Bid

Date

THIS FORM MUST BE RETURNED WITH YOUR RFP

Certification Regarding Debarment & Suspension Ineligibility

As is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 76, Government-wide Debarment and Suspension, the applicant certifies, to the best of his or her knowledge and belief, that both it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;
- b. Have not within a three-year period preceding this bid and/or application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction, violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a government entity with commission of any of the offenses enumerated herein; and
- d. Have not within a three-year period preceding this bid had one or more public transactions terminated for cause or because of default.

Company Name: _____

Signature: _____

Print Name: _____

Title: _____

Telephone Number: _____

Date: _____

If the Bidder is unable to certify to all of the statements in this Certification, such Bidder should attach an explanation to this Bid.

THIS FORM MUST BE RETURNED WITH YOUR RFP

Company Name: _____

Please answer each individual question. If it does not pertain to your company, please write "N/A" and sign at the bottom of page.

CONFLICT OF INTEREST QUESTIONNAIRE		FORM CIQ
For vendor doing business with local governmental entity		
<p>This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.</p> <p>This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).</p> <p>By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.</p> <p>A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.</p>	OFFICE USE ONLY	
<p>1 Name of vendor who has a business relationship with local governmental entity.</p> 	<p>Date Received</p> 	
<p>2 <input type="checkbox"/> Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)</p>		
<p>3 Name of local government officer about whom the information is being disclosed.</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Name of Officer</p>		
<p>4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.</p> <p style="margin-left: 40px;">A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?</p> <p style="margin-left: 100px;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p style="margin-left: 40px;">B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?</p> <p style="margin-left: 100px;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p>		
<p>5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.</p>		
<p>6 <input type="checkbox"/> Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).</p>		
<p>7</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Signature of vendor doing business with the governmental entity Date</p>		

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at [http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm](http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm). For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

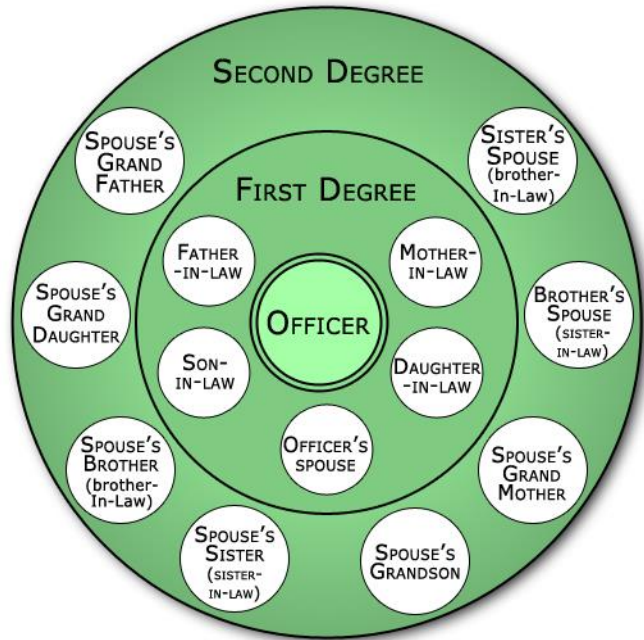
(C) of a family relationship with a local government officer.

NEPOTISM CHART

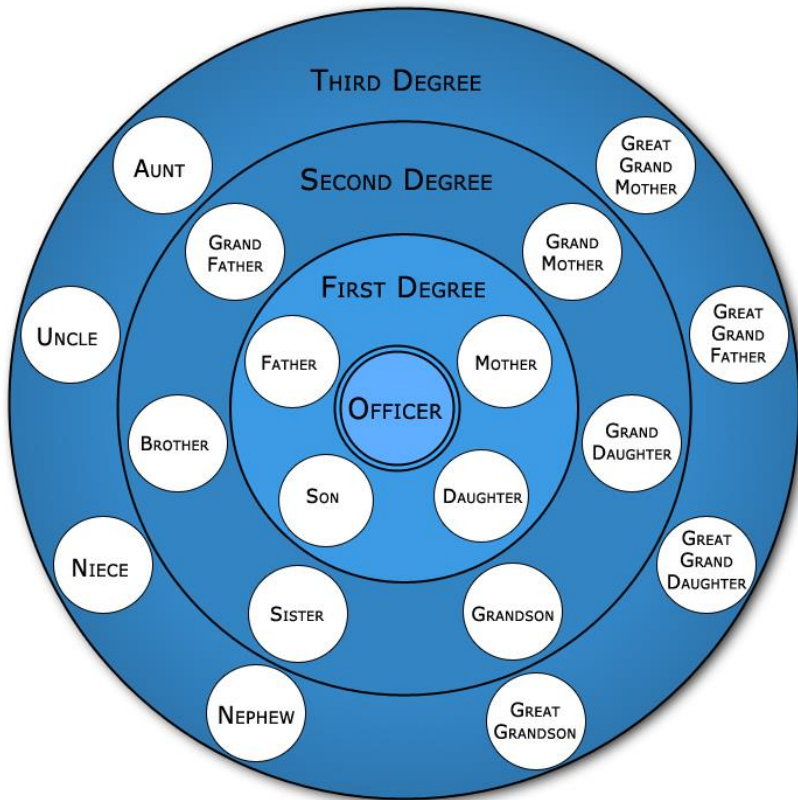
The chart below shows

- **Affinity Kinship** (relationship by marriage)
 - **Consanguinity Kinship** (relationship by blood)
- for purposes of interpreting nepotism as defined in VTCA Government Code, Chapter 573, §§573.021 - .025

AFFINITY KINSHIP Relationship by Marriage



CONSANGUINITY KINSHIP Relationship by Blood



DISCLOSURE OF INTERESTS

MUST BE FILLED OUT AND SUBMITTED WITH THE BID/RFP/RFO
IF DISCLOSING: BIDDER / PROPOSER MUST ALSO FILE WITH THE COUNTY CLERK’S OFFICE
THE PURCHASING DEPT. WILL NOT BE FILING ON THE BIDDER’S BEHALF

Cameron County, Texas requires all persons or firms seeking to do business with the County to provide the following information. Every question must be answered. If the question is not applicable, answer with “N/A.” By law this questionnaire must be filed with the records administrator (County Clerk’s Office) of the local government.

Date _____

FIRM NAME: _____

ADDRESS: _____

FIRM is: 1. Corporation () 2. Partnership () 3. Sole Owner ()
4. Association () 5. Other () _____

DISCLOSURE QUESTIONS

If additional space is necessary, please use the reverse side of this page or attach separate sheet.

1. State the names of each “employee, elected official, or member of Commissioners Court” of Cameron County having **Substantial Interest in Business Entity Local Govt. Code 171.002**
 - a) For purpose of this chapter, a person has a substantial interest in a business entity if:
 - (1) the person owns 10 percent or more of the voting stock or shares of the business entity or owns either 10 percent or more or \$15,000 or more of the fair market value of the business entity; or
 - (2) funds received by the person from the business entity exceeds 10 percent of the person’s gross income for the previous year.
 - b) A person has a substantial interest in real property if the interest is an equitable or legal ownership with a fair market value of \$2,500 or more.
 - c) A local public official is considered to have a substantial interest under this section if a person related to the official in the first degree by consanguinity or affinity, as determined under Chapter 573, Government Code, has a substantial interest under this section.

DISCLOSURE OF INTERESTS (CONTINUED)

Name	Title	Department

CERTIFICATE

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the Cameron County as changes occur.

Certifying Person: _____ Title: _____
 (Type or Print)

Signature of Certifying Person: _____ Date: _____

THIS FORM MUST BE RETURNED WITH YOUR RFP

GENERAL TERMS & CONDITIONS (Requests for proposals (RFP))

RFP # 230704

ADDENDA: If RFP specifications, terms or conditions are revised, the Cameron County Purchasing Department will issue an addendum addressing the nature of the changes and notify interested potential Proposers. Proposers must acknowledge receipt and consideration of any such changes by signing the addendum and including it in the RFP package containing the Proposer's submittal.

ADVERTISING: Unless otherwise required by law, Proposers to County RFPs shall not publish and shall keep confidential their intentions and actions respecting any response to the RFP.

AWARD: Cameron County may hold RFP responses for a period of sixty (60) days. Cameron County reserves the right to reject any or all responses to RFPs. Cameron County reserves the right to award a contract, if any, based on the Proposer's response when compared to the EVALUATION CRITERIA (AS STATED IN THE RFP) and, in accordance with the laws of the State of Texas, reserves the right to waive any formality or irregularity, to make awards to more than one proposer. Commissioners Court reserves the right to determine the method and procedures for the final award of all RFPs at any time they may choose, regardless of the Point System used by the Evaluation Committee.

BONDS: If the contract that may be entered into with the County will likely require a performance guarantee or bond, the Purchasing Department will attach a separate page to the RFP explaining those requirements.

CANCELLATION AND TERMINATION: In any contract resulting from the RFP, the County shall have the right to cancel all or any part of the undelivered portion of the contract if (1) Proposer breaches any of the terms hereof, including, but not limited to, applicable warranties, and/or (2) Proposer becomes insolvent or files for bankruptcy. Such right of cancellation is in addition to, and not in lieu of, any other remedies which the County may have in law or equity. Cancellation of work hereunder shall be affected by the delivery to the Proposer of a "Notice of Cancellation of Undelivered Work" specifying the extent to which performance of work, including all goods and services, under the contract is cancelled and the date upon which such cancellation becomes effective.

The performance of work under any resulting contract may be terminated in whole, or in part, by the County in accordance with this provision. The County shall have the right to terminate all or any part of the contract if (1) the Proposer breaches any of the terms hereof, including, but not limited to, applicable warranties, and/or (2) Proposer becomes insolvent or files for bankruptcy. Such right of termination is in addition to, and not in lieu of, any other remedies which the County may have in law or equity. Termination of work hereunder shall be affected by the delivery to the Proposer of a "Notice of Termination" specifying the extent to which performance of work, including all goods and services, under the contract is terminated and the date upon which such termination becomes effective.

CHANGE ORDERS: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by mutual consent of the Proposer and the County.

CONTRACT RENEWALS: Contract Renewals must receive Commissioners Court approval. For contract renewal status and information, please contact Elisa Cisneros at 956-982-5405 e-mail: Elisa.Cisneros2@co.cameron.tx.us Cameron County Purchasing Dept. or Dylbia Jeffries 956-550-1340 djefferies@co.cameron.tx.us at the Cameron County Civil Legal Division. Any price escalations are limited to those stated by the original contract terms. All contracts with a one (1) year renewal option require that the Proposer must notify Cameron County of any anticipated price increases in writing at least three months (90 calendar days) prior to the annual renewal award date unless otherwise specified within the specific provisions of the contract up for renewal. This allows the County sufficient time to find an alternative vendor if possible. If Proposer fails to notify the County within time noted it shall be assumed that there will be no price increase for the following year's award period if renewed. This procedure does not apply to any contract which allows for Open Market Price increases or Cost allowance increases.

DISCRIMINATION: In order to encourage fair employment practices, the Proposer agrees as follows: 1.) Proposer will not discriminate against any employee or applicant for employment because of race, sex, color, age, religion, handicap, or national

origin; 2) in all solicitations or advertisements for employees, the Proposer will state that all qualified applicants will receive consideration without regard to race, color, sex, age, religion, handicap or national origin; 3) the Proposer will furnish such relevant information and reports as requested by the County for the purpose of determining compliance with these regulations; and 4) failure of the Proposer to comply with these laws will be deemed a breach of contract and it may be cancelled, terminated or suspended in whole or in part as a result thereof.

DISQUALIFICATION OF PROPOSER: Upon submitting a response to this RFP, Proposer certifies that the Proposer has not violated the antitrust laws of this state codified in Texas Business and Commerce Code 15.01, *et seq.*, as amended, or the federal antitrust laws, and has not communicated directly or indirectly its RFP considerations, plan or response to any competitor or any other person engaged in such line of business. Any and all responses may be rejected if the County believes that collusion exists among the Proposers. If multiples are submitted by a Proposer and after all responses to the RFPs are opened one or more of the responses are withdrawn, the result will be that all of the responses submitted by that Proposer will be withdrawn; however, nothing herein prohibits a Proposer from submitting multiples for different products or services.

EVALUATION: All responses will be evaluated in accordance with law and reviewed to assure they are in the best interest of Cameron County. Evaluations shall be based on criteria bearing on price and performance of the items or services in the user environment. Any specific criteria section or sections identified elsewhere in this RFP may be evaluated by one or more evaluators once the basis and details of this process have been approved by the Purchasing Officer and acknowledged by the Evaluation Committee. Detailed information pertaining to this selective evaluation process is available to Proposers and the Commissioners Court upon request. Evaluation sheets and any summary of all responses are subject to review by the Cameron County Purchasing Department and Evaluation Committee's recommendation to Cameron County Commissioners Court. Compliance with all RFP requirements, delivery terms and needs of the using department are considerations in evaluating responses. Pricing is NOT the only criterion for making a recommendation (see criteria and relative importance of price and other evaluation factors, if any, specified elsewhere in this RFP). The Cameron County Purchasing Department reserves the right to contact any Proposer, at any time, to clarify, verify or request information with regard to that Proposer's response. The Cameron County Purchasing Department further reserves the right to hold negotiation discussions with any responsible Proposer determined to be reasonably susceptible of being selected for award in accordance with law.

PROTEST PROCEDURES: Procedure - This protest procedure is available to Proposers responding to this RFP and requesting a debriefing conference.

Debriefing Conference – A debriefing conference must be requested in writing to the Purchasing Department within five (5) business days from the date of the RFP award by the Cameron County Commissioners' Court. Debriefing questions must be submitted in writing to the Purchasing Department no later than two (2) business days before the scheduled date for the Debriefing Conference. These questions will be answered at the debriefing conference. Follow-up questions must be submitted (in writing) no later than one (1) business day after the date of the Debriefing Conference and answered no later than two (2) business days after the date of the Debriefing Conference. Follow-up answers will be sent via e-mail or fax (if e-mail not available). For RFPs, Proposers are given the opportunity to ask questions of the Evaluation Committee relative to their responses and the Committee's scores.

Protests are made: 1. To the Purchasing Department after the debriefing conference. Proposer protests shall be received, in writing, by the Purchasing Department within five (5) business days after the debriefing conference. 2. To the Protest Committee, only after the protest to the Purchasing Department was not satisfactorily resolved. Protests to the Protest Committee shall be made within five (5) business days after the Proposer has received notification from the County Purchasing Department of its decision.

Grounds for protest

1. Errors were made in computing the score.
2. The County failed to follow procedures established in the RFP, the Purchasing policy on acquisitions or applicable state or federal laws or regulations.
3. Bias, discrimination or conflict of interest on the part of an evaluator. Protests not based on these criteria shall not be considered.

Format and Content - Protesting Proposers shall include, in their written protest to the Cameron County Purchasing Department, all facts and arguments upon which they rely. Proposers shall, at a minimum, provide:

1. Information about the protesting Proposer; name of firm, mailing address, phone number and name of individual responsible for submission of the protest.
2. Information about the acquisition and the acquisition method.
3. Specific and complete statement of the County's action(s) being protested. 4. Specific reference to the grounds for the protest.
5. Description of the relief or corrective action requested.
6. For protests to the Protest Committee, a copy of the Purchasing Department's written decision on the protest.

Review Process:

1. Upon receipt of a Proposer's protest, the Purchasing Department shall postpone further steps in the acquisition process until the Proposer protest has been resolved.
2. The Department's internal protest review procedures consist of the following:
 - a) The Purchasing Department shall perform an objective review of the protest by individuals not involved in the acquisition protested. The review shall be based on the written protest material submitted by the Proposer.
 - b) A written decision will be delivered to the Proposer within five business days after receipt of the protest, unless more time is needed. The protesting Proposer shall be notified if additional time is necessary.

Final Determination:

The final determination shall:

1. Find the protest lacking in merit and uphold the agency's action; or
2. Find only technical or harmless errors in the agency's acquisition process, determine the agency to be in substantial compliance, and reject the protest; or 3. Find merit in the protest and provide the agency options which may include recommendations to a) correct its errors and reevaluate all proposals, and/or b) reissue the Proposer solicitation document; or c) make other findings and determine other courses of action as appropriate.

Protest Committee Review Process:

Protests to the Protest Committee may be made only for Protest Committee approved acquisitions, and only after review by County Purchasing Department. Protests of the decisions of County Purchasing Department shall be made by letter to the Protest Committee, who may establish procedures to resolve the protest. Protests shall be received by the Protest Committee within five business days after the decision of Purchasing Department in order to be considered. The Committee's decision is final, with no further administrative appeal available.

FISCAL FUNDING: A multi-year lease or lease/purchase arrangement (if requested by the Special Requirements/Instructions), or any contract continuing as a result of an extension option, must include "fiscal funding out" clause. If, for any reason, funds are not appropriated to continue the lease or contract, said lease or contract shall become null and void on the last day of the current appropriation of funds. After expiration of the lease, leased equipment shall be removed by the Proposer from the using department without penalty of any kind or form to Cameron County. All charges and physical activity related to delivery, installation, removal and redelivery shall be the responsibility of the Proposer.

GRATUITIES AND PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS: Any elected or appointed official who has any substantial interest, either direct or indirect, in any business entity seeking to contract with the County, shall, before any vote or decision on any matter involving the business entity, file an affidavit stating the nature and extent of interest and shall abstain from any participation in the matter. This is not required if the vote or decision will not have any special

effect on the entity other than its effect on the public. However, if a majority of the governing body is also required to file, and do file similar affidavits, then the member is not required to abstain from further participation. Attached and included in this RFP is a disclosure of all of this Company's business or pecuniary financial relationships with officers or employees of Cameron County or County entities (if any such relationships exist) which must be filled out, attached and included with the RFP response. The County may, by written notice to the Proposer, cancel this contract without liability to Proposer if it is determined by County that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the Proposer, or any agent, or representative of the Proposer, to any officer or employee of Cameron County with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or the making or any determinations with respect to the performance of such a contract. In the event this contract is cancelled by County pursuant to this provision, County shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the costs incurred by Proposer in providing such gratuities. Proposer guarantees that he has not retained a person to solicit or secure any contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the Proposer for the purpose of securing business.

HISTORICALLY UNDERUTILIZED BUSINESS (HUB) CERTIFICATION: If Proposer is a Certified Historically Underutilized Business (HUB), please include a copy of your HUB Certificate with your response. This information will assist Cameron County in the percentage tracking of HUB utilization.

INSURANCE: The Proposer shall secure and maintain, throughout the duration of the Contract, insurance of such types and in such amounts as may be necessary to protect the Proposer and the interests of the County against all hazards or risks of loss as hereinafter specified. The form and limits of such insurance, together with the insurer, shall be acceptable to the County. It shall be the responsibility of the Proposer to maintain adequate insurance coverage at all times. Failure of the Proposer to maintain adequate coverage shall not relieve the Proposer of any contractual responsibility or obligation.

MAINTENANCE: Maintenance required for equipment requested in RFPs should be available in Cameron County by a manufacturer authorized maintenance facility. Costs for this service shall be shown on the Pricing/Delivery Information form. If Cameron County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

MATERIAL SAFETY DATA SHEETS: Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", a Proposer must provide to the County with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the Proposer to furnish this documentation will be cause to reject any RFP applying thereto.

NAME BRANDS: Specifications may reference name brands and model numbers. It is not the intent of Cameron County to restrict responses to RFPs in such cases, but to establish a desired quality level of merchandise or to meet a pre-established standard common to similar existing items. Proposers may offer items of equal stature and standard, but the burden of proof of such stature and standard rests with Proposers. Cameron County shall act as sole judge in determining equality and acceptability of products offered.

PRICING: Prices for all goods and/or services shall be firm for the duration of the contract and shall be stated on the Pricing/Delivery Information form. Prices shall be all inclusive: No price changes, additions, or subsequent qualifications will be honored during the term of the contract. All prices must be written in ink or typewritten. Pricing on all transportation, freight, drayage and other charges are to be prepaid by the Proposer and included in the price. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, Proposer MUST indicate the items required and attendant costs or forfeit the right to payment for such items. Where unit pricing and extended pricing differ, unit pricing prevails.

RECYCLED MATERIALS: Cameron County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. County will be the sole judge in determining product preference application.

SCANNED RE-TYPED RESPONSE: If in its RFP response, Proposer either electronically scans, re-types, or in some way reproduces the County's published RFP package, then in event of any conflict between the terms and provisions of the County's published RFP specifications, or any portion thereof, and the terms and provisions of the RFP response made by Proposer, the County's RFP specifications as published shall control. Furthermore, if an alteration of any kind to the County's published RFP

specifications is only discovered after the contract is executed and is or is not being performed, the contract is subject to immediate cancellation.

SILENCE OF SPECIFICATIONS: The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. The manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item needed in the RFP. Substitute items will not be accepted unless approved (in advance).

SUPPLEMENTAL MATERIALS: Proposers are responsible for including all pertinent product data in the returned RFP package. Literature, brochures, data sheets, specification information, completed forms requested as part of the RFP package and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the Proposer wishes to include as a condition of the RFP response must also be in the returned RFP response package. Failure to include all necessary and proper supplemental materials may be cause to reject the Proposer's entire RFP.

TITLE TRANSFER: Title and Risk of Loss of goods shall not pass to Cameron County until Cameron County actually receives and takes possession of the goods at the point or points of delivery. Receiving times may vary with the using department. Generally, deliveries may be made between 8:30 a.m. and 4:00 p.m., Monday through Friday. Proposers are advised to consult the using department for instructions. The place of delivery shall be shown under the "Special Requirements/Instructions" section of this RFP package and/or on the Purchase Order as a "Deliver To:" with the address.

USAGE REPORTS: Cameron County reserves the right to request, and receive at no additional cost up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this RFP. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by

Cameron County department with a description, of each item purchased, including the manufacturer, quantity of each item purchased, the per unit and extended price of each item purchased, and the total amount and price of all items purchased.

WARRANTY PRICE: (a) The price to be paid by the County shall be that contained in Proposer's response to the RFP which Proposer warrants to be no higher than Proposer's current prices on orders by others for products of the kind and specification covered by this agreement for similar quantities under similar or like conditions and methods of purchase. In the event Proposer breaches this warranty, the prices of the items shall be reduced to the Proposer's current prices on orders by others, or in the alternative, County may cancel this contract without liability to Proposer for breach or Proposer's actual expense.

(b) The Proposer warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Proposer for the purpose of securing business. For breach or violation of this warranty, the County shall have the right in addition to any other right or rights to cancel this contract without liability and to deduct from the contract price, or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

Proposers shall furnish all data pertinent to warranties or guarantees which may apply to items in the RFP.

Proposers may not limit or exclude any implied warranties.

Proposer warrants that products sold and services provided to the County shall conform to the highest commercial and/or professional standards in the industry and laws established by the U.S. Department of Labor, U.S. Department of Homeland Security, Occupational Safety and Health Administration and O.S.H.A. Act of 1970. In the event any product does not conform to OSHA Standards, where applicable, Cameron County may return the product for correction or replacement at the Proposer's expense. If Proposer fails to make the appropriate correction within a reasonable time, Cameron County may correct at the Proposer's expense.

-WARRANTY ITEMS/PRODUCTS: Proposer warrants that products sold and services provided to the County shall conform to the highest commercial and/or professional standards in the industry and laws established by the U.S. Department of Labor, U.S. Department of Homeland Security, Occupational Safety and Health Administration and O.S.H.A. Act of 1970. In the event product does not conform to OSHA Standards, where applicable, Cameron County may return the product for correction or replacement at the Proposer's expense. If Proposer fails to make the appropriate correction within a reasonable time, Cameron County may correct at the Proposer's expense.

Proposer shall not limit or exclude any implied warranties and any attempt to do so shall render this contract voidable at the option of the County.

Proposer warrants that the goods furnished will conform to the specifications, drawings and descriptions listed in the RFP invitation and to the sample(s) furnished by Proposer, if any. In the event of a conflict between the specifications, drawings and descriptions, the specifications shall govern. All items must be new, in first class condition, unless otherwise specified. The design, strength, and quality of materials must conform to the highest standards of manufacturing practice.

Items supplied under this contract shall be subject to the County's approval. Successful Proposer shall warrant that all items/services shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title. Any items found defective or not meeting specifications shall be picked up and promptly replaced by the successful Proposer at no expense to the County.

SAFETY WARRANTY: As noted above, Proposer warrants that the products sold to County shall conform to the standards promulgated by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, County may return the product for correction or replacement at the Proposer's expense. In the event Proposer fails to make the appropriate correction within a reasonable time, correction made by County will be at Proposer's expense. Have you attached the required warranty information to the RFP (if applicable)? "Yes" or "No"

APPLICABLE LAW

To the extent it is applicable, this agreement shall be governed by the Uniform Commercial Code. Wherever the term "Uniform Commercial Code" is used, it shall be construed as meaning "the Uniform Commercial Code" as adopted in the State of Texas as effective and in force on the date of this agreement. Otherwise, Texas state and federal law shall apply.

ASSIGNMENT DELEGATION: No right, obligation or interest in this contract shall be assigned or delegated to another by Proposer without the written permission of the County. Any attempted assignment or delegation by Proposer shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.

CONTRACT OBLIGATION: Cameron County Commissioners Court must award any resulting contract and the County Judge or other person authorized by the Cameron County Commissioners Court must sign the contract before it becomes binding on Cameron County or the Proposer. Department Heads are NOT authorized to sign agreements for Cameron County. Binding agreements shall remain in effect until all products and/or services covered by this RFP - have been delivered and accepted and all contract requirements have been satisfied.

ERRORS AND OMISSIONS: Errors and Omissions in the RFP or any provision herein described will not be construed as to relieve the Proposer of any responsibility or obligation requisite to the complete and satisfactory implementation, operation, and support of all obligations under any resulting contract.

FORCE MAJEURE: If, by reason of Force Majeure, either party hereto shall be rendered unable wholly, or in part, to carry out its obligations under this RFP and any resulting contract, then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the

continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term "Force Majeure" as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority, insurrections, riots, epidemics, landslides, lightening, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely with the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

HOLD HARMLESS AGREEMENT: The successful Proposer shall indemnify and hold Cameron County harmless from all claims for personal injury, death and/or property damage resulting directly or indirectly from Proposer's performance. Proposer shall procure and maintain, with respect to the subject matter of this RFP, appropriate insurance coverage including, as a minimum, public liability and property damage with adequate limits to cover Proposer's liability as may arise directly or indirectly from work performed and goods or services sold under the terms of this RFP. Certification of such coverage must be provided to the County upon request.

INFRINGEMENTS: There will be no warranty by County against infringements. As part of this contract for sales, Proposer agrees to ascertain whether goods manufactured in accordance with the specifications attached to this agreement will give rise to the rightful claim of any third person by way of infringement or the like. County makes no warranty that the production of goods according to the specification will not give rise to such a claim, and in no event shall County be liable to Proposer for indemnification in the event that Proposer gets sued on the grounds of infringement or the like. If Proposer is of the opinion that an infringement or the like will result, Proposer shall notify County to that effect in writing within two (2) weeks after the signing of this agreement. If County does not receive notice and is subsequently held liable for the infringement or the like, Proposer will hold County harmless. If Proposer in good faith ascertains that production of the goods in accordance with the specifications will result in infringement or the like, this contract shall be null and void, except that County will pay Proposer the reasonable cost of Proposer's search as to infringement. The Proposer agrees to protect the County from claims involving infringement of patents or copyrights.

INTERPRETATION PAROLE EVIDENCE: Unless a separate contract or addendum hereof is prepared and entered into following the award of this RFP to a successful Proposer, this writing is intended by the parties as a final expression of the terms of this RFP and the general terms of any resulting contract. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term. Acceptance or acquiescence in a course of performance rendered under this RFP and any resulting contract shall not be relevant to determine meaning even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this agreement, the definition contained in the Code is to Control, if applicable.

LATE RESPONSES: RFP responses must be received by the County before the hour and date specified. Responses received after the time and date specified will be disqualified and may be returned to sender. The County is not responsible for lateness or non-delivery of mail, delivered to wrong office, carrier, etc.

MODIFICATIONS: This contract can be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents.

O.S.H.A: Proposer must meet all Federal and State OSHA requirements.

REMEDIES: The successful Proposer and County agree that both parties have all rights, duties, defenses and remedies available under law.

RIGHT TO ASSURANCE: During the RFP process and any resulting contract, whenever a Proposer or County in good faith has reason to question the other's intent to perform, demand may be made that the other party give written assurance of intent. In the event that a demand is made, and no assurance is given within five (5) days, such failure may be treated as an anticipatory repudiation of the RFP and any resulting contract.

SEVERABILITY: If any section, subsection, paragraph, sentence, clause, phrase or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.

VENUE: Both parties agree that venue for any litigation arising from this contract shall lie in Cameron County, Texas.

PROPOSER SHALL CONFIRM ACCEPTANCE OF RFB TERMS: The Proposer shall specifically state acceptance of these terms and conditions as a basis for providing the County with a response to this RFP.

THESE TERMS INCORPORATED: These General Terms and Conditions shall be incorporated in the response to the RFP and any resulting contract to this RFP. The Proposer shall specifically state acceptance of these terms and conditions as a basis for providing the County with a response to this RFP.

OTHER TERMS: The Proposer shall state any exceptions desired to these terms and conditions and may suggest alternate wording that addresses the intent of the term or condition. The County may accept or reject any suggestions in accordance with law.

REQUIRED CONTRACT CLAUSES FOR CONTRACTS UNDER FEDERAL AWARD

2 C.F.R. § 200.327 & 2 C.F.R. PART 200, APPENDIX II, REQUIRED CONTRACT CLAUSES FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

The United States Office of Management and Budget (OMB) issued in 2 C.F.R. 200: *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards* (Uniform Guidance). Subpart D: Post Federal Award Requirements: **2 CFR §§200.317-200.327** of the Uniform Guidance contain provisions applicable to procurements made with federal grant funding. [Except as otherwise provided, updated Post Federal Award Requirements (i.e.: 2 CFR §§200.317-200.327) apply to declarations and awards issued on or after November 12, 2020]. <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200#subject-group-ECFR45ddd4419ad436d> *See Appendix "B"*

As a non-Federal entity, the County of Cameron's ("County") contracts must contain the applicable contract clauses described in Appendix II to the Uniform Guidance (Contract Provisions for non-Federal Entity Contracts Under Federal Awards), which are set forth below. (2 C.F.R. §200.327). If applicable, the following clauses shall supersede any existing, similar clauses stated within the bid document, contract, and/or Terms and Conditions. *The term "Contractor" used herein refers to the proposer, bidder or other entity/individual responding to the applicable procurement packet.*

If applicable, the regulations in 2 CFR, Part 200 and Appendix II to the Uniform Guidance, as it may be amended from time to time, and the contract clauses below, are incorporated by reference as part of this procurement packet and any resulting agreement.

To procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. The following provisions are required and apply when federal funds are expended by the County of Cameron for any contract resulting from this procurement process.

1. Remedies.

- a. Applicability. This requirement applies to all Federal grant and cooperative agreement programs.
- b. Standard. Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. See 2 C.F.R. Part 200, Appendix II, A.

c. Statement. Pursuant to Federal Rule (A) above, when federal funds are expended by the County, the County reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party. Contractor shall comply with all applicable Federal, State of Texas, and local laws, rules, and regulations and shall obtain all applicable licenses and permits for the conduct of its business and the performance of the services, and any provision of equipment and material (“Applicable Law”). All transactions related to any of the Contract Documents shall be governed by the laws of the State of Texas, and trial of any action brought in connection with the bid or the Contract Documents shall be held exclusively in a state court in the County of Cameron, Texas.

2. Termination for Cause and Convenience.

a. Applicability. This requirement applies to all Federal grant and cooperative agreement programs.

b. Standard. All contracts in excess of \$10,000 shall address termination for cause and for convenience by the non-Federal entity including the manner by which it will be affected and the basis for settlement as follows. See 2 C.F.R. Part 200, Appendix II, B.

c. Statement. *Termination*. County may terminate this Agreement for any reason upon ten (10) days written notice to the other party. County may terminate this Agreement immediately upon written notice if Contractor breaches this Agreement. In the event of any termination, Contractor shall promptly deliver to the County any and all Work Materials prepared for the County prior to the effective date of such termination, all of which shall become County’s sole property. After receipt of the Work Materials, County will pay Contractor for the services which the County determines were satisfactorily performed as of the effective date of the termination.

Excuses for Non-Performance. Either party shall be absolved from its obligations under this contract when and to the extent that performance is delayed or prevented (and in the County of Cameron’s case when and to the extent that its need for the articles, materials or work to be supplied hereunder is reduced or eliminated) by reason of acts of God, fire explosion, war riots, strikes, labor disputes, or governmental laws, orders or regulations.

Default. If Contractor or Subcontractor shall breach any provision hereof or shall become insolvent, enter voluntary or involuntary bankruptcy or receivership proceedings or make an assignment to the benefit of creditors, County of Cameron shall have the right (without limiting any other rights or remedies which it may have hereunder or by operation of law) to terminate this contract by written notice to Contractor whereupon County shall be relieved of all further obligation hereunder except the obligation to pay the reasonable value of Contractor's prior performance (at not exceeding the contract rate), and Contractor shall be liable to County for all costs incurred by County in completing or procuring the completion of performance in excess of the contract price herein specified. The County's right to require strict performance of any obligation hereunder shall not be affected by any previous waiver, forbearance of course of dealing. Time is of the essence thereof.

3. Equal Employment Opportunity.

a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs.

b. Standard. Except as otherwise provided under 41 C.F.R. Part 60, all contracts that meet the definition of “*federally assisted construction contract*” in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. § 60- 1.4(b), in accordance with Executive Order 11246, *Equal Employment Opportunity* (30 Fed. Reg. 12319, 12935, 3 C.F.R. Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, *Amending Executive Order 11246 Relating to Equal Employment Opportunity*, and implementing regulations at 41 C.F.R. Part 60 (Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor). See 2 C.F.R. Part 200, Appendix II, C.

c. Key Definitions:

(1) *Federally Assisted Construction Contract.* The regulation at 41 C.F.R. § 60-1.3 defines a “federally assisted construction contract” as any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Government or borrowed on the credit of the Government pursuant to any Federal program involving a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, or any application or modification thereof approved by the Government for a grant, contract, loan, insurance, or guarantee under which the applicant itself participates in the construction work.

(2) *Construction Work.* The regulation at 41 C.F.R. § 60-1.3 defines “construction work” as the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction

d. Statement: Contractor will comply with the Nondiscrimination Civil Rights Act of 1964, as amended and all Federal regulations relative to nondiscrimination in Federally assisted programs. The regulation at 41 C.F.R. Part 60-1.4(b) requires the insertion of the following contract clause:

“During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States."

4. Davis Bacon Act and Copeland Anti-Kickback Act.

- a. Applicability of Davis-Bacon Act. The Davis-Bacon Act only applies to the emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. **It does not apply to other Federal grant and cooperative agreement programs, including the Public Assistance Program.**

- b. Standard. All prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction).

In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

In contracts subject to the Davis-Bacon Act, the contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). The Copeland Anti-Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA or applicable Federal entity. See 2 C.F.R. Part 200, Appendix II, ¶ D.

- c. Statement. The regulation at 29 C.F.R. § 5.5(a) does provide the required contract clause that applies to compliance with both the Davis-Bacon and Copeland Acts. However, as discussed in the previous subsection, the Davis-Bacon Act does not apply to Public Assistance recipients and subrecipients. In situations where the Davis-Bacon Act does not apply, neither does the Copeland “Anti-Kickback Act.” However, for purposes of grant programs where both clauses do apply, FEMA or applicable Federal entity requires the following contract clause:

“Compliance with the Copeland “Anti-Kickback” Act.

- (1) *Contractor*. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- (2) *Subcontracts*. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as Federal requirements may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

(3) *Breach.* A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.”

5. **Contract Work Hours and Safety Standards Act.**

a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs.

b. Standard. Where applicable (see 40 U.S.C. § 3701), all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5.

Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. See 2 C.F.R. Part 200, Appendix II, E.

The regulation at 29 C.F.R. § 5.5(b) provides the required contract clause concerning compliance with the Contract Work Hours and Safety Standards Act:

c. Statement.

“Compliance with the Contract Work Hours and Safety Standards Act.

(1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards,

employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The County of Cameron shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.”

6. Rights to Inventions Made Under a Contract or Agreement.

- a. Applicability: Stafford Act Disaster Grants. This requirement **does not apply to the Public Assistance**, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as FEMA or Federal awards under these programs do not meet the definition of “funding agreement.”
- b. Standard. If the FEMA or Federal award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the non-Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA or applicable awarding agency. See 2 C.F.R. Part 200, Appendix II, E.
- c. Key Definition: The regulation at 37 C.F.R. § 401.2(a) currently defines “funding agreement” as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the County of Cameron, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

7. Clean Air Act and the Federal Water Pollution Control Act.

- a. **Applicability and Standard:** Contracts of amounts in excess of \$150,000 must contain a provision that requires the contractor to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency. See 2 C.F.R. Part 200, Appendix II, G.
- b. **Statement:** Included in contracts as provided in section “7a” above.
- (1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. and the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
 - (2) The contractor agrees to report each violation to the Federal awarding agency (e.g. Federal Emergency Management Agency-FEMA) and the Regional Office of the Environmental Protection Agency. Contractor understands and agrees that each violation reported to the County of Cameron will, in turn, be reported as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection Agency Regional Office.
 - (3) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by the applicable Federal awarding agency (e.g. FEMA).

8. Debarment and Suspension.

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** Non-Federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security’s regulations at 2 C.F.R. Part 3000 (Non-procurement Debarment and Suspension).

These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities. See 2 C.F.R. Part 200, Appendix II, H; and Chapter IV, 6.d and Appendix C, 2. A contract award must not be made to parties listed in the SAM Exclusions. SAM Exclusions is the list maintained by the General.

Services Administration that contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. SAM exclusions can be accessed at www.sam.gov See 2 C.F.R. § 180.530; Chapter IV, 6.d and Appendix C, 2.

In general, an “excluded” party cannot receive a Federal grant award or a contract within the meaning of a “covered transaction,” to include subawards and

subcontracts. This includes parties that receive Federal funding indirectly, such as contractors to recipients and subrecipients. The key to the exclusion is whether there is a “covered transaction,” which is any non-procurement transaction (unless excepted) at either a “primary” or “secondary” tier. Although “covered transactions” do not include contracts awarded by the Federal Government for purposes of the non-procurement common rule and DHS’s implementing regulations, it does include some contracts awarded by recipients and subrecipient.

Specifically, a covered transaction includes the following contracts for goods or services:

- (1) The contract is awarded by a recipient or subrecipient in the amount of at least \$25,000.
- (2) The contract requires the approval of FEMA or applicable Federal entity, regardless of amount.
- (3) The contract is for Federally-required audit services.
- (4) A subcontract is also a covered transaction if it is awarded by the contractor of a recipient or subrecipient and requires either the approval of FEMA or applicable Federal entity or is in excess of \$25,000.

c. Statement. The following provides a debarment and suspension clause. It incorporates a method of verifying that contractors are not excluded or disqualified:

For maximum protection, provide a print or electronic document for every prime and subcontractor, from www.sam.gov in order to ensure that they are not debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities.

This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. §180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by (insert name of subrecipient). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state City serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.”

9. Byrd Anti-Lobbying Amendment.

- a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs.
- b. Standard. Contractors that apply or bid for an award of \$100,000 or more must file the required certification. See 2 C.F.R. Part 200, Appendix II, I; 44 C.F.R. Part 18; Chapter IV, 6.c; Appendix C, 4. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any City, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. See Chapter IV, 6.c and Appendix C, 4.
- c. Statement. The following statement in bold provides a Byrd Anti-Lobbying contract clause:

(IF APPLICABLE, PLEASE FILL IN BLANKS AND SIGN)

“Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.”

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned Contractor, _____ certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying

Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

10. Procurement of Recovered Materials.

a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs.

b. Standard. A non-Federal entity that is a **state agency or agency of a political subdivision** of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, Pub. L. No. 89-272 (1965) (codified as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962). See 2 C.F.R. Part 200, Appendix II, ¶ J; 2 C.F.R. § 200.323; *PDAT Supplement*, Chapter V, 7.

The requirements of Section 6002 include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

c. Statement. The following provides the clause that a state agency or agency of a political subdivision of a state and its contractors can include in contracts meeting the above contract thresholds:

(1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired—

(i) Competitively within a timeframe providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) Information about this requirement, along with the list of EPA-designate items, is available at EPA’s Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

(3) The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.”

11. Prohibition on Contracting for Covered Telecommunications Equipment or Services – 2 CFR § 200.216 (FEMA Interim Policy #405-143-1 effective August 13, 2020).

a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs and/or as provided below, and is effective August 13, 2020.

b. Standard. A non-Federal entity is prohibited against using federal funds to purchase telecommunications and video surveillance equipment and services (such as but not limited to mobile phones, land lines, internet, video surveillance, and cloud servers) from certain companies/entities in covered foreign countries for national security reasons. This regulation is being incorporated into federal grants and contracts received by the County

through 2 CFR 200.216 and/or Federal Acquisition Regulations (FAR) clause 52.204-25; as well as guidance provided through Federal Emergency Management Agency (FEMA) Policy #405-143-1. See 2 C.F.R. Part 200, Appendix II, ¶ K

Currently, applicable federal provisions provide that Covered Foreign country means the People's Republic of China and covered telecommunications equipment or services means

- i. Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation, (or any subsidiary or affiliate of such entities);
- ii. For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- iii. Telecommunications or video surveillance services provided by such entities or using such equipment; or
- iv. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The definition of "Affiliate" can be found in FAR 2.101. Listing of subsidiaries and affiliates can be found in Supplement Number 4 to 15 CFR Part 744.

- c. Statement. Federal awards recipients and subrecipients, as well as their contractors and subcontractors, include the following required contract clause in applicable new, extended, or renewed contracts and subcontracts as per the provisions discussed above.

PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES

(a) Definitions. As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy, #405-143-1 Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services As used in this clause

(b) Prohibitions.

- (1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement,

loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:

- (i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Exceptions.

(1) This clause does not prohibit contractors from providing—

- a. A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- b. Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

- a. Covered telecommunications equipment or services that:
 - i. Are not used as a substantial or essential component of any system; and
 - ii. Are not used as critical technology of any system.
- b. Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) Reporting requirement.

(1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the

information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

12. Domestic Preferences for Procurements

a. Applicability: This requirement of this section must be included in all subawards including all contracts and purchase orders for work or products under Federal award applies to all contracts and purchase orders for work or products using federal funds.

b. Standard. As appropriate, and to the extent consistent with law, Non-Federal Entities should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products or materials produced in the United States. This includes, but is not limited to, iron, aluminum, steel, cement, and other manufactured products. See 2 C.F.R. Part 200.322 and 2 C.F.R. Part 200, Appendix II, L

c. Statement. The following provides the required Domestic Preferences for Procurements contracts clause that is incorporated herein by reference.

“Domestic Preference for Procurements

As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

- *Produced in the United States* means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- *Manufactured products* mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products

such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.”

ADDITIONAL REQUIRED CONTRACT CLAUSES FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS WITH THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Additional FEMA or applicable Federal Requirements. In addition to the requirements above, non-Federal entity contracts under Federal award subject to financial assistance from FEMA are required to contain the following additional contract clauses. The Uniform Guidance authorizes FEMA to require additional provisions for non-Federal entity contracts. FEMA, pursuant to this authority, requires or recommends the following:

These clauses are incorporated by reference as part of this procurement packet and any resulting agreement.

1. Changes.

- a. Standard. To be eligible for FEMA assistance under the non-Federal entity’s Federal grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope. FEMA or applicable Federal entity recommends, therefore, that a non-Federal entity include a changes clause in its contract that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may differ depending on the nature of the contract and the end-item procured.

- b. Statement. The following provides a contract clause regarding access to records:

“The contractor shall secure written authorization before proceeding with any additional work, whether requested by the County or required to complete the contract. The cost for any changes to the contract price, whether requested by the County or the Contractor will be approved only after submitting the contractor’s true costs for the work and related equipment costs and site expenses.”

2. Access to Records.

- a. Standard. All non-Federal entities must place into their contracts a provision that all contractors and their successors, transferees, assignees, and subcontractors acknowledge and agree to comply with applicable provisions governing Department and FEMA or applicable Federal entity access to records, accounts, documents, information, facilities, and staff. See DHS Standard Terms and Conditions, v 3.0, XXVI (2013).

- b. Statement. The following provides a contract clause regarding access to records:

“Access to Records. The following access to records requirements applies to this contract:

- (1) The contractor agrees to provide the City of Concord, the FEMA or applicable Federal Administrator, the Comptroller General of the United States, or any of their authorized

representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

- (2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- (3) The contractor agrees to provide the FEMA or applicable Federal Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.”

3. DHS Seal, Logo, and Flags.

- a. Standard. All non-Federal entities must place in their contracts a provision that a contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS City officials without specific FEMA or applicable Federal entity pre-approval. See DHS Standard Terms and Conditions, v3.0, XXV (2013).
- b. Statement. The following provides a contract clause regarding DHS Seal, Logo, and Flags:

“The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS City officials without specific FEMA or applicable Federal entity pre- approval.”

4. Compliance with Federal Law, Regulations, and Executive Orders.

- a. Standard. All non-Federal entities must place into their contracts an acknowledgement that FEMA or applicable Federal financial assistance will be used to fund the contract along with the requirement that the contractor will comply with all applicable Federal law, regulations, executive orders, and FEMA or applicable Federal policies, procedures, and directives.
- b. Statement. The following provides a contract clause regarding Compliance with Federal Law, Regulations and Executive Orders:

“This is an acknowledgement that Federal financial assistance will be used to fund the contract only. The contractor will comply will all applicable Federal law, regulations, executive orders, FEMA or applicable Federal policies, procedures, and directives.”

5. No Obligation by Federal Government.

- a. Standard. The non-Federal entity must include a provision in its contract that states that the Federal Government is not a party to the contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.
- b. Statement. The following provides a contract clause regarding no obligation by the Federal Government:

“The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.”

6. Program Fraud and False or Fraudulent Statements or Related Acts.

- a. Standard. The non-Federal entity must include a provision in its contract that the contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the contract.
- b. Statement. The following provides a contract clause regarding Fraud and False or Fraudulent Related Acts:

“The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor’s actions pertaining to this contract.”

7. FEMA Contract requirement regarding Prohibition on Contracting for Covered Telecommunications Equipment or Services – 2 CFR § 200.216 (FEMA Interim Policy #405-143-1 effective August 13, 2020).

FEMA recipients and subrecipients and their contractors and subcontractors are required per 2 C.F.R. Part 200, Appendix II K to include a contract provision in all FEMA-funded contracts and subcontracts, including any purchase orders. To satisfy this requirement, the contract provision found in Number 11 above is incorporated by reference by the County of Cameron in all new, extended, or renewed contracts and subcontracts. Applicable County contractors and subcontractors shall also comply with the applicable law and requirements. (See Number 11 above).

8. FEMA Contract requirement regarding Domestic Preferences for Procurements

For purchases in support of FEMA declarations and awards issued on or after November 12, 2020, all FEMA recipients and subrecipients are required per 2 C.F.R. Part 200, Appendix II ¶ L to include in all contracts and purchase orders for work or products the contract provision included in number 12 above encouraging domestic preference for procurements.

Contractor agrees to comply with all federal, state and local laws, rules, regulations and ordinances, as applicable. It is further acknowledged that the Contractor read and understands all provisions, laws, acts, regulations, etc. as specifically noted above and certifies compliance with the same.

Vendor’s Name/Company Name:

Printed Name and Title of Authorized Representative:

Signature of Authorized Representative:

Date: _____

Appendix A

FHWA 1273

I. General

II. Nondiscrimination III. No segregated Facilities
FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final

- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60- 1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions:

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.

The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

- a. The records kept by the contractor shall document the following:
 - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA 1273 format and FHWA program requirements.

1. Minimum wages

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

Appendix B

Super Circular – Procurement Standards 2 CFR Parts 200.317 – 200.327

§ 200.317 Procurements by states.

When procuring property and services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will comply with §§ 200.321, 200.322, and 200.323 and ensure that every purchase order or other contract includes any clauses required by § 200.327. All other non-Federal entities, including subrecipients of a State, must follow the procurement standards in §§ 200.318 through 200.327.

§ 200.318 General procurement standards.

(a) The non-Federal entity must have and use documented procurement procedures, consistent with State, local, and tribal laws and regulations and the standards of this section, for the acquisition of property or services required under a Federal award or subaward. The non-Federal entity's documented procurement procedures must conform to the procurement standards identified in §§ 200.317 through 200.327.

(b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(c)

(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

(2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a State, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.

(d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services. Competition requirements will be met with documented procurement actions using strategic sourcing, shared services, and other similar procurement arrangements.

(f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also [§ 200.214](#).

(i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to, the following: Rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(j)

(1) The non-Federal entity may use a time-and-materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time-and-materials type contract means a contract whose cost to a non-Federal entity is the sum of:

(i) The actual cost of materials; and

(ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

(2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

[[85 FR 49543](#), Aug. 13, 2020, as amended at [86 FR 10440](#), Feb. 22, 2021]

§ 200.319 Competition.

(a) All procurement transactions for the acquisition of property or services required under a Federal award must be conducted in a manner providing full and open competition consistent with the standards of this section and [§ 200.320](#).

(b) In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

(1) Placing unreasonable requirements on firms in order for them to qualify to do business;

(2) Requiring unnecessary experience and excessive bonding;

(3) Noncompetitive pricing practices between firms or between affiliated companies;

(4) Noncompetitive contracts to consultants that are on retainer contracts;

(5) Organizational conflicts of interest;

(6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and

(7) Any arbitrary action in the procurement process.

(c) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(d) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(e) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

(f) Noncompetitive procurements can only be awarded in accordance with [§ 200.320\(c\)](#).

§ 200.320 Methods of procurement to be followed.

The non-Federal entity must have and use documented procurement procedures, consistent with the standards of this section and [§§ 200.317](#), [200.318](#), and [200.319](#) for any of the following methods of procurement used for the acquisition of property or services required under a Federal award or sub-award.

(a) **Informal procurement methods.** When the value of the procurement for property or services under a Federal award does not exceed the *simplified acquisition threshold (SAT)*, as defined in [§ 200.1](#), or a lower threshold established by a non-Federal entity, formal procurement methods are not required. The non-Federal entity may use informal procurement methods to expedite the completion of its transactions and minimize the associated administrative burden and cost. The informal methods used for procurement of property or services at or below the SAT include:

(1) **Micro-purchases** -

(i) **Distribution.** The acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (See the definition of *micro-purchase* in [§ 200.1](#)). To the maximum extent practicable, the non-Federal entity should distribute micro-purchases equitably among qualified suppliers.

(ii) **Micro-purchase awards.** Micro-purchases may be awarded without soliciting competitive price or rate quotations if the non-Federal entity considers the price to be reasonable based on research, experience, purchase history or other information and documents it files accordingly. Purchase cards can be used for micro-purchases if procedures are documented and approved by the non-Federal entity.

(iii) **Micro-purchase thresholds.** The non-Federal entity is responsible for determining and documenting an appropriate micro-purchase threshold based on internal controls, an evaluation of risk, and its documented procurement procedures. The micro-purchase threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations. Non-Federal entities may establish a threshold higher than the Federal threshold established in the Federal Acquisition Regulations (FAR) in accordance with [paragraphs \(a\)\(1\)\(iv\)](#) and [\(v\)](#) of this section.

(iv) **Non-Federal entity increase to the micro-purchase threshold up to \$50,000.** Non-Federal entities may establish a threshold higher than the micro-purchase threshold identified in the FAR in accordance with the requirements of this

section. The non-Federal entity may self-certify a threshold up to \$50,000 on an annual basis and must maintain documentation to be made available to the Federal awarding agency and auditors in accordance with [§ 200.334](#). The self-certification must include a justification, clear identification of the threshold, and supporting documentation of any of the following:

- (A) A qualification as a low-risk auditee, in accordance with the criteria in [§ 200.520](#) for the most recent audit;
- (B) An annual internal institutional risk assessment to identify, mitigate, and manage financial risks; or,
- (C) For public institutions, a higher threshold consistent with State law.

(v) **Non-Federal entity increase to the micro-purchase threshold over \$50,000.** Micro-purchase thresholds higher than \$50,000 must be approved by the cognizant agency for indirect costs. The non-federal entity must submit a request with the requirements included in [paragraph \(a\)\(1\)\(iv\)](#) of this section. The increased threshold is valid until there is a change in status in which the justification was approved.

(2) **Small purchases -**

(i) **Small purchase procedures.** The acquisition of property or services, the aggregate dollar amount of which is higher than the micro-purchase threshold but does not exceed the simplified acquisition threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources as determined appropriate by the non-Federal entity.

(ii) **Simplified acquisition thresholds.** The non-Federal entity is responsible for determining an appropriate simplified acquisition threshold based on internal controls, an evaluation of risk and its documented procurement procedures which must not exceed the threshold established in the FAR. When applicable, a lower simplified acquisition threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations.

(b) **Formal procurement methods.** When the value of the procurement for property or services under a Federal financial assistance award exceeds the SAT, or a lower threshold established by a non-Federal entity, formal procurement methods are required. Formal procurement methods require following documented procedures. Formal procurement methods also require public advertising unless a non-competitive procurement can be used in accordance with [§ 200.319](#) or [paragraph \(c\)](#) of this section. The following formal methods of procurement are used for procurement of property or services above the simplified acquisition threshold or a value below the simplified acquisition threshold the non-Federal entity determines to be appropriate:

(1) **Sealed bids.** A procurement method in which bids are publicly solicited and a firm fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bids method is the preferred method for procuring construction, if the conditions.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

- (A) A complete, adequate, and realistic specification or purchase description is available;
- (B) Two or more responsible bidders are willing and able to compete effectively for the business; and
- (C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

- (A) Bids must be solicited from an adequate number of qualified sources, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;
- (B) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;

(C) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;

(D) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(E) Any or all bids may be rejected if there is a sound documented reason.

(2) **Proposals.** A procurement method in which either a fixed price or cost-reimbursement type contract is awarded. Proposals are generally used when conditions are not appropriate for the use of sealed bids. They are awarded in accordance with the following requirements:

(i) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Proposals must be solicited from an adequate number of qualified offerors. Any response to publicized requests for proposals must be considered to the maximum extent practical;

(ii) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and making selections;

(iii) Contracts must be awarded to the responsible offeror whose proposal is most advantageous to the non-Federal entity, with price and other factors considered; and

(iv) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby offeror's qualifications are evaluated and the most qualified offeror is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services through A/E firms that are a potential source to perform the proposed effort.

(c) **Noncompetitive procurement.** There are specific circumstances in which noncompetitive procurement can be used. Noncompetitive procurement can only be awarded if one or more of the following circumstances apply:

(1) The acquisition of property or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (see [paragraph \(a\)\(1\)](#) of this section);

(2) The item is available only from a single source;

(3) The public exigency or emergency for the requirement will not permit a delay resulting from publicizing a competitive solicitation;

(4) The Federal awarding agency or pass-through entity expressly authorizes a noncompetitive procurement in response to a written request from the non-Federal entity; or

(5) After solicitation of a number of sources, competition is determined inadequate.

§ 200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
- (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in [paragraphs \(b\)\(1\) through \(5\)](#) of this section.

§ 200.322 Domestic preferences for procurements.

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

§ 200.323 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at [40 CFR part 247](#) that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

§ 200.324 Contract cost and price.

- (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.
- (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under [subpart E of this part](#). The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.

(d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§ 200.325 Federal awarding agency or pass-through entity review.

(a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

- (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
- (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
- (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a “brand name” product;
- (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
- (5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in [paragraph \(b\)](#) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

- (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third-party contracts are awarded on a regular basis;
- (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§ 200.326 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

[§ 200.327 Contract provisions.](#)

The non-Federal entity's contracts must contain the applicable provisions described in appendix II to this part.

[PART 200 - UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200](https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200)

Code of Federal Regulations

Subpart D – Post Federal Award Requirements

<https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-D>

Subpart D [Post Federal Award Requirements 200.300 – 200.346](#)

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[Performance and Financial Monitoring and Reporting](#) [200.328 – 200.330](#)

§ 200.328	Financial reporting.
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[Subrecipient Monitoring and Management](#) [200.331 – 200.333](#)

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[Record Retention and Access](#) [200.334 – 200.338](#)

§ 200.334	Retention requirements for records.
§ 200.335	Requests for transfer of records.
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§ 200.339	Remedies for noncompliance.
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§ 200.340	Termination.	
§ 200.341	Notification of termination requirement.	
§ 200.342	Opportunities to object, hearings, and appeals.	
§ 200.343	Effects of suspension and termination.	
Closeout		200.344
§ 200.344	Closeout.	
Post-Closeout Adjustments and Continuing Responsibilities		200.345
§ 200.345	Post-closeout adjustments and continuing responsibilities.	
Collection of Amounts Due		200.346
§ 200.346	Collection of amounts due.	



CAMERON COUNTY

INVITATION

Cameron County is requesting bids/proposals/qualifications for the following, which should BE REFERENCED ON ENVELOPE, "ATTN: COMMISSIONERS COURT - SEALED BID/PROPOSAL: DEADLINE – 3:00 p.m.

07/25/23 RFP# 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

The RFP is particularly interested in Proposers' ability to meet the funding eligibility requirements set for in the American Rescue Plan Act of 2021 (ARPA) Please see Appendix A "FHWA 1273" & Appendix B "Super Circular-Procurement Standards 2 CFR Parts 200.317 – 200.327"

A = Annual Q = Quarterly B = Bid RFP = Proposal RFQ = Qualifications

Detailed specifications are available from Dalia Loera at [956/544-0871](tel:9565440871) of the County Purchasing Department or web site – Bids & Specs. Tab <https://www.cameroncountytexas.gov/purchasing-bids-rfpq-addms-tabs/>

Your sealed submittals should contain the REFERENCE "ATTN: COMMISSIONERS COURT – SEALED BID/PROPOSAL/REQUEST FOR QUALIFICATIONS ON THE OUTSIDE OF YOUR RETURN ENVELOPE and addressed and sent to the County Purchasing Department - **Cameron County Courthouse, (Dancy Building) 1100 E. Monroe St., 3rd Floor, Room # 345, Brownsville, Tx. 78520.** Properly referenced and returned Bids/ RFP's / RFQ's will be opened at the Cameron County Courthouse, 1100 East Monroe Street, Brownsville, Texas in the Purchasing Department – 3rd Floor – Room # 345 at 3:00 p.m. (as per Purchasing Dept. time clock) on deadline date. Bidders are invited to attend. Cameron County is an Equal Employment Opportunity Employer and expressly reserves the right to accept or reject any and all submittals and may waive formalities.

TO APPEAR: **July 2nd, 2023**

Brownsville Herald - **P.O. #**

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
POWER UPGRADES

RFP PROPOSAL FORM
(GENERAL CONTRACT)

Project: CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
POWER UPGRADES

Place: Cameron County Purchasing Department, 1100 E. Monroe Street 3rd Floor,
Attention: Mr. Roberto C. Luna, Interim Purchasing Agent

Due Date: **July 25, 2023**

Time: Before 3:00 p.m.

1. Pursuant to and in compliance with the RFP and the proposed Contract Documents, prepared by _____, Inc. relating to the above referenced project, the undersigned, having become thoroughly familiar with the terms and conditions of the proposed Contract Documents and with local conditions affecting the performance and costs of the work at the place where the work is to be completed, and having fully inspected the site in all particulars, hereby proposes and agrees to fully perform the work within the time stated and in strict accordance with the proposed Contract Documents, and addenda, thereto, including furnishing of any and all labor and materials for all emergency generator upgrade work, for the following sum of money:

A: BASED PROPOSAL:

All labor, materials, services and equipment, necessary for completion of the work shown on the drawings and described in the specifications.

835 EAST LEVEE BUILDING DOLLARS (\$))

Same in Words: _____

SAN BENITO ANNEX BUILDING DOLLARS (\$))

Same in Words: _____

2. If awarded this Contract the undersigned will execute a satisfactory Construction Contract, Performance Bond, Labor and Material Payment Bond and proof of insurance coverage, with the Owner for the entire work as per the Contract Documents within 5 days after notice of award. It is agreed that this proposal is subjected to the Owner's acceptance for a period of Thirty (30) days from the above date.
3. Contractor shall be substantially completed within _____ calendar days.

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
POWER UPGRADES

4. Enclosed is a Certified Check or Bidders Bond in the amount of \$ _____
compliance with the specification requirements. (5% of the highest amount bid).

The above check or Bidders Bond is to become the property of the Owner in the event the Construction Contract (when offered by the Owner) and the bonds and proof of insurance coverage are not executed within the time set forth above.

5. The undersigned agrees to the following:

- A. To furnish all materials as shown and specified in the plans and specifications.
- B. To start work 5 days after notice of award of contract.
- C. To work _____ working days per week.

6. The full amount of all allowances as specified in the General Requirements, Division 1, of the specifications, in the Base Proposal price shown.

7. Receipt is acknowledged of the following addendas:

No.	Dated	No.	Dated
No.	Dated	No.	Dated

8. Bidder agrees that the Owner has the right to accept or reject any or all bids and to waive all informalities.

Respectfully submitted,

By: _____ Date _____
Signature

Title: _____

Business Address: _____

(Seal - if Bidder is a corporation)

ADDENDUM ACKNOWLEDGEMENT

Receipt of the following addenda is acknowledged (addenda number):

Respectfully Submitted:

Name: _____

(Signature)

Address: _____

(P.O. Box) (Street)

(City) (State) (Zip)

Telephone: _____

NOTE: Do not detach bid from other papers.
Fill in with ink and submit complete
with attached papers.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, as PRINCIPAL, AND _____, as SURETY are held and firmly bound unto _____ hereinafter called the OWNER Dollars, (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that Whereas the Principal has submitted the Accompanying Bid,

dated _____, 20____, for

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within then (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work of supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise, to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this ___ day of _____ 20____, the name and corporate seal of each corporate party being here to affixed and these present signed by its undersigned representative, pursuant to authority of its governing body.

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

ATTEST:

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES

BY:

BY:

Corporate Seal Affix

ATTEST:

BY:

BY:

Affix Corporate Seal

Countersigned

BY:

Attorney-in-Fact, State of

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the
, Secretary of the Corporation named as Principal in the within bond; that
, who signed the said bond on behalf of the Principal was then
of said corporation; that I know his signature, and his signature there to is genuine; and that said
bond was duly signed, and attested to for and in behalf of said corporation by authority of this
governing body.

Title (Corporate Seal)

Power-of-Attorney for person signing for surety company must be attached to bond.

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, as PRINCIPAL, AND _____, as SURETY are held and firmly bound unto _____ hereinafter called the OWNER Dollars, (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that Whereas the Principal has submitted the Accompanying Bid,

dated _____, 20____, for

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within then (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work of supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise, to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this ____ day of _____ 20____, the name and corporate seal of each corporate party being here to affixed and these present signed by its undersigned representative, pursuant to authority of its governing body.

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

ATTEST:

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

BY:

BY:

Affix
Corporate Seal

ATTEST:

BY:

BY:

Affix Corporate Seal

Countersigned

BY:

Attorney-in-Fact, State of

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the
, Secretary of the Corporation named as Principal in the within bond; that
, who signed the said bond on behalf of the Principal was then
of said corporation; that I know his signature, and his signature there to is genuine; and that said
bond was duly signed, and attested to for and in behalf of said corporation by authority of this
governing body.

(Corporate Seal)
Title

Power-of-Attorney for person signing for surety company must be attached to bond.

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT: that

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and
(Corporation/Partnership)

(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Recipient)

hereinafter called OWNER, in the penal sum of \$ _____ dollars and
cents in lawful money of the United States, for the payment of which sum well and truly to be
made we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.

THE CONDITION OF THE OBLIGATION is such that whereas, the Principal entered into a
certain contract with the OWNER dated the _____ day of _____, 20____, a copy of which is
hereto attached and made a part hereof for the construction of:

(Name of Recipient)

(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ _____ dollars and
_____ cents in lawful money of the United States, for the payment of which sum well and
truly to be made we bind ourselves, successors, and assigns, jointly and severally, firmly in these
presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a
certain contract with the OWNER dated the _____ day of _____, 20____, a copy of
which is hereto attached and made a part hereof for the construction of:

BID # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

NOW THEREFORE , if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporation furnishing materials or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the WORK to be performed or the SPECIFICATIONS accompanying the same in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the SPECIFICATIONS

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ parts,
(Number)
one of which shall be deemed an original, this the _____ day of _____, 20____.

ATTEST:

(Principal)

_____ BY _____ (s)
(Principal Secretary)

(SEAL)

(Witness as to Principal)

(Address)

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

ATTEST:
(Surety)

_____ BY
(Witness as to Surety)

(Attorney in Fact)

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENT: that

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and
(Corporation/Partnership)

(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Recipient)

hereinafter called OWNER, in the penal sum of \$ _____ dollars \$ _____ cents
in lawful money of the United States, for the payment of which sum well and truly to be made
we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a
certain contract with the OWNER dated the _____ day of _____, 200__, a copy of which
is hereto attached and made a part hereof for the construction of:

BID # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES.

NOW THEREFORE, the condition of this obligation is such that, if Contractor shall promptly
and faithfully perform said Contract, then this obligation shall be null and void; otherwise, it
shall remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees
that no change, extension of time, alteration or addition to the terms of the contract or
the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same in
any way accompanying the same in any way affect its obligation on this BOND, and it does
hereby waive notice of any such change, extension of time, alteration or addition to the
terms of the contract or to the WORK or to the SPECIFICATIONS.

IN WITNESS WHEREOF, this instrument is executed in _____ parts,
(Number)
one of which shall be deemed an original, this the _____ day of _____, 20____.

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

ATTEST:

(Principal)

BY:

(Principal Secretary)

(Witness as to Principal)

(Address)

ATTEST:

(Surety)

BY:

(Attorney in Fact)

(Witness as to Surety)

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

STATEMENT OF BIDDERS QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. The statement must be notarized. If necessary, may be answered on separate attached sheets. Bidders may submit any additional information he desires.

Name of Bidder: _____ Date Organized: _____

Address: _____ Date Incorporated: _____

Number of years in contracting business under present name _____

Contracts on Hand:

Contract	Amount \$	Completion Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Type of work performed by your company: _____

Have you ever failed to complete any work awarded to you? _____

Have you ever defaulted on a contract? _____

List the projects most recently completed by your firm (include projects of similar importance):

Project	Amount \$	Mo./Yr. Completed
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Major equipment available for this contract:

Attach resume(s) for the principal member(s) of your organization, including the officers as well as the proposed superintendent for the project.

Credit available: \$ _____ Bank reference: _____

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any and all information requested by the _____ for verification of the recitals comprising this Statement of Bidders Qualifications.

Executed this _____ day of _____, 20_____.

By: (signature) _____ Title: _____

(print name) _____

LIST OF SUBCONTRACTORS

To be submitted in a separate envelope with the RFP Proposal

Owner's Project:

RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX
BUILDING STANDBY POWER UPGRADES

To: Cameron County

The undersigned submit the following names of subcontractors to be used in performing the Contract. Each subcontractor is required to submit a standard AIA Qualification Statement clearly indicating prior historical restoration project experience and references.

SUBCONTRACTORS

- 1. Site Work and Paving _____
- 2. Concrete _____
- 3. Masonry _____
- 4. Finish Carpentry _____
- 5. Plaster _____
- 6. Wood Flooring _____
- 7. Painting _____
- 8. Elevator _____
- 9. HVAC _____
- 10. Plumbing _____
- 11. Electrical _____
- 12. Environmental _____

All Qualification Statements will be reviewed by the Architect, who will make appropriate recommendations to the Owner.

SPECIAL INSURANCE CONDITIONS OF THE AGREEMENT

The following minimum limits of insurance coverage will be required:

CONTRACTOR shall maintain, at his sole cost, at all times while performing work hereunder, the insurance coverage set forth below with companies satisfactory to the Company with full policy limits applying but not less than as stated. A Certificate evidencing the required insurance and specifically quitting the indemnification provision set forth in this agreement shall be delivered to the Company prior to commencement of the work and shall provide that any change restricting or reducing coverage or the cancellation of any policies under which certificates are issued shall not be valid as respects the Company's interest therein until the Company has received 30 days' notice in writing of such change or cancellation.

- (1) **Workman's Compensation Insurance** as required by laws and regulations applicable to and covering employees of **CONTRACTOR** engaged in the performance of the work under this agreement.
- (2) **Employer's Liability Insurance** protecting **CONTRACTOR** against common law liability, in the absence of statutory liability, for employee bodily injury arising out of the master/servant relationship with a limit of not less than \$100,000.
- (3) **Comprehensive General Liability Insurance** including products/completed operation with limits of liability of not less than: Bodily Injury \$500,000. each Person, \$500,000. each occurrence/aggregate; Property Damage \$500,000. each occurrence/aggregate. OR Combined Coverage limit \$5,000,000.
- (4) **Automobile Liability Insurance** including non-owned and hired vehicle coverage with limits of liability of not less than: Bodily Injury \$250,000. each Person, \$500,000. each occurrence; Property Damage \$250,000. each occurrence.
- (5) **Excess Liability Insurance** Comprehensive General Liability, Comprehensive Automobile Liability and coverage afforded by the policies described above, with minimum limits of \$500,000. excess of the specified limits.
- (6) **Builder's "All-Risk Insurance"** protecting the respective interest of Company and **CONTRACTOR** and its "Field Sub-contractors" covering loss or damage during the course of construction of the project described in this agreement and all property at the job site or in transit thereof which shall become a part of such project. Such insurance shall be maintained until such project is completed and accepted. This insurance shall be terminated with respect to portions of such project when such portions are completed and accepted.

A RESOLUTION IN SUPPORT OF MAINTAINING A HIGHER MINIMUM WAGE REQUIREMENT FOR ALL CONTRACTORS DOING WORK FOR CAMERON COUNTY.

Whereas, Cameron County, Texas, has in recent years shown unprecedented growth and experienced increasing cost of living expenses; and

Whereas, there exists within Cameron County, and particularly among the elected officials, a desire to improve the living conditions and income potential of the members of the local work force; and

Whereas, the Cameron County Commissioners' Court desires to provide an opportunity for an increase in the standard of living for employees in our area; and

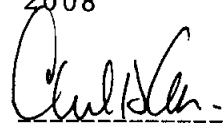
Whereas, the Cameron County Commissioners' Court desires to continue awarding contracts to contractors who support their workers;

Cameron County Commissioners' Court does hereby pass this resolution to demonstrate support for an increase in the minimum wage of all workers employed by the contractors doing work for the County of Cameron;

Now therefore, the Cameron County Commissioners' Court hereby resolves to establish a minimum wage requirement for all contractors bidding on and being awarded contracts for goods or services to be provided to the County of Cameron,

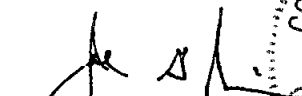
THEREFORE, UPON THE PASSAGE OF THIS RESOLUTION, IT IS HEREBY DECREED, ORDAINED AND RESOLVED that the County of Cameron, Texas will require that all prime and subcontractor contracts explicitly include a minimum wage of \$8.50 per hour for all full time and part time employees hired by prime and subcontractors who bid for and perform all types of contractual work for the County.

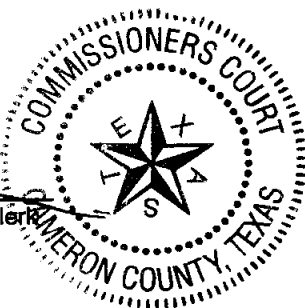
Done on this the 16th day of December, 2008



Carlos Cascos
County Judge

Attested by:


Joe G. Rivera, County Clerk



**INSTRUCTIONS TO RESPONDERS
(Special Provisions)**

1. **It shall be the Responder's responsibility to ensure delivery of his proposal to the proper place and at the proper time.**

2. **RFP's shall be addressed as follows:**

SEALED RFP FOR: CAMERON COUNTY 835 EAST LEVEE & SAN BENITO
ANNEX BUILDING STANDBY POWER UPGRADES RFP #230704

Attn: Roberto C. Luna, Interim Purchasing Agent
Cameron County Courthouse, Purchasing Dept, 3rd Floor
1100 E. Monroe
Brownsville, TX 78520

RFP Due Date: **July 25, 2023**
Time: 3:00 P.M. C.S.T.

3. **Use of Separate RFP Forms:**

These Contract Documents include a complete set of proposal and Contract forms which are for the convenience of responders and are not to be detached from the Contract Document, filled out, or executed. Separate copies of RFP Forms are furnished for that purpose.

4. **Interpretations of Addenda:**

No oral interpretation will be made to any Responder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the County Engineer. Any inquiry received seven or more days prior to the date fixed for opening of proposals will be given consideration. Every interpretation made to a Responder will be in the form of an Addendum to the Contract Documents, and when issued, will be on file in the office of the Engineer at least three days before Proposals are opened. In addition, all Addenda will be mailed or telecopied to each person holding contract Documents, but it shall be the Responder's responsibility to inquire as to the Addenda issued. All such Addenda shall become part of the Contract and all Responders shall be bound by such Addenda, whether or not received by the Responders.

5. **Inspection of Site:**

Each Responder should visit the site of the proposed work and fully acquaint himself with the existing conditions there, relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Responder should thoroughly examine and familiarize himself with the Drawings, Technical Specifications, and all other Contract documents. The Contractor by the execution of the Contract shall in no way be relieved of any

obligation under it, due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing, and the Owner will be justified in rejecting any claim based on facts regarding which the Contractor should have been on notice as a result thereof.

6. Alternative Proposal:

No alternative proposal will be considered unless alternative proposals are specifically requested by the technical specifications, or proposal package. Base proposal must be provided for each **item**, even though an alternative proposal item is also specified.

7. Proposals:

- A. All Proposals must be submitted on forms supplied by the Owner and shall be subject to all requirements of the Contract Documents including the Drawings, and these INSTRUCTIONS TO RESPONDERS. All Proposals must be regular in every respect and no interlineation, excisions or special conditions shall be made or included in the proposal Form by the Responder.
- B. Proposal Documents including the Proposal, the Proposal Guaranty, the Non-Collusion Affidavit and the Statement of Responder's Qualifications (If required) shall be enclosed in an envelope, which shall be sealed and clearly labeled with the words "Proposal Documents", name of Responder, date and time of the RFP opening in order to guard against premature opening of the RFP.
- C. The Owner may consider as irregular any Proposal on which there is an alteration to or departure from the Proposal Form hereto attached and at its option may reject the same.
- D. If the contract is awarded, it will be awarded by the Owner to a responsible Responder on the basis of the best and final proposal and the selected Alternative Proposal items, if any. The Contract will require the completion of the work according to the Contract Documents.
- E. Each Responder shall include in his/her Proposal the following information:

Principals

Names

Social Security Number

Home Addresses, including City, State & Zip Code

Firm

Name

Treasury Number

Address

City, State & Zip Code

8. Proposal Guaranty:

- A. The Proposal must be accompanied by a Proposal Guaranty which shall not be less than 5 percent (5%) of the amount of the base Proposal. At the option of the Responder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bonds (at par value), or a bid bond in the form attached. The Proposal bond shall be secured by a guaranty or a surety company Licensed to do business in the State of Texas. The amount of such Proposal bond shall be within the maximum amount specified for such Company. No Proposal will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of County of Cameron. Cash deposits will not be accepted. The Proposal guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Responders, all as required by the Contract documents.
- B. Revised Proposals submitted before the opening of Proposals, whether forwarded by mail or telegram, if representing an increase in excess of ten percent (10%) of the original Proposal, the Proposal will not be considered.
- C. Certified checks or bank drafts, or the amount thereof, Proposal Bonds and negotiable U.S. Government bonds of unsuccessful Responders will be returned as soon as practical after the opening of the Proposals.

9. Collusive Agreement:

- A. Each Responder submitting a Proposal to the Owner for any portion of the work contemplated by the documents on which bidding is based shall execute and attach thereto, an affidavit substantially in the form herein provided, to the effect that he has not entered into a collusive agreement with any other person, firm, or corporation in regard to any proposal submitted.
- B. Before executing any subcontract, the successful Responder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form to be provided by the Owner. Copies are available upon request.

10. Statement of Responder's Qualifications:

Each Responder shall submit on the form furnished for that purpose a statement of the Bidder's qualifications, his experience records in organization and equipment available in the contract, his organization and equipment available for the work contemplated and, when specifically requested by the Owner, a detailed financial statement. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract and the Responder shall furnish the owner all such information and data for this purpose as it may request.

The right is reserved to reject any Proposals where an investigation of the available evidence or information does not satisfy the Owner that the Responder is qualified to carry out properly the terms of the contract.

11. **Sub-Contractors:**

All Sub-Contractors must be approved by the Owner. A list of all proposed Sub-Contractors must be furnished to the Owner, prior to the start of construction.

12. **Interpretation of Quoted Prices:**

In case of difference in written words and figures in a Proposal, the amount stated in written words shall govern.

13. **Unit Prices:**

The unit price for each of the several items in the proposal of each Responder shall include its pro rata share of overhead for both labor and materials so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price Proposal represents the total Proposal. Any Proposal not conforming to this requirement may be rejected as informal. The special attention of all Responders is called to this provision, for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work (i.e., difference in cost shall not increase or decrease the original contract award price by more than twenty-five percent (25%), except for work not covered in the Drawings and Technical Specifications.

14. **Rejection of Proposals:**

Proposals may be rejected if they show any alteration of works or figures, additions not called for, conditional or uncalled for alternate bids, incomplete bids, any alteration or words or figures, or erasures not initialed by the person or persons signing the proposal, or irregularities of any kind.

15. **Time for Receiving Proposals:**

Proposals received prior to the advertised hour of opening shall be kept securely sealed. The officer appointed to open the proposals shall decide when the specified time has arrived and no proposal received thereafter will be considered; except that when a proposal arrives by mail after the time fixed for opening, but before the reading of all other proposals is completed, and it is shown to the satisfaction of the County that the late arrival of the proposal was solely due to delay in the mails for which the responder was not responsible, such proposal will be received and considered.

16. **Opening of Proposals:**

The County shall, at the time and place fixed for the opening and acknowledgment of proposals, cause each proposal to be publicly opened and read aloud, irrespective of any irregularities therein. Responders and other interested individuals may be present.

17. **Withdrawal of Proposals:**

Proposals may be withdrawn on written or telegraphic request dispatched by the Responder in time for delivery in the normal course of business to the time fixed for opening; provided, that written confirmation of any telegraphic withdrawal over the signature of the Responder is placed in the mail and postmarked prior to the time set for Proposal opening. The proposal guaranty of any Responder withdrawing his/her Proposal in accordance with the foregoing conditions will be returned promptly.

18. **Award of Contract: Rejection of Proposals**

- A. The Contract will be awarded to the responsible and qualified Responder submitting the best value proposal complying with the conditions of the request for proposals. The Responder to whom the award is made will be notified at the earliest possible date. The Owner, however, reserves the right to reject any and all Proposals and to waive any informality in RFP's received whenever such rejection or waiver is in its interest.
- B. The Owner reserves the right to consider as unqualified to do work of general construction any Responder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in this Contract.
- C. Time is of the essence in this Contract and the Owner may weigh the calendar days or working days bid in award of the Contract. The calendar days or working days will be valued equal to the liquidated damages charged per day of delay.

19. **Execution of Agreement: Performance and Payment Bond**

- A. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver the Owner an Agreement in the form included in the Contract Documents in such number of copies as the Owner may require (not to exceed six (6) copies).
- B. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful Responder shall, within the period specified in paragraph "a" above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract, and for the payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him, in performing the work. Such bond shall be in the same form as that included in the Contract Documents and shall bear the same date as, or a date subsequent to that of the Agreement. The current **Power of Attorney** for the person who signs for any surety company and issued be attached to such bond. This bond shall be signed by a guaranty or surety company authorized to do business in the State of Texas.

- C. The failure of the successful Responder to execute such Agreement and to supply the required bond or bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Owner may grant, based upon reasons determined sufficient by the Owner, shall constitute a default, and the Owner may either award the Contract to the next lowest responsible Responder or re-advertise for Proposals "RFP's", and may charge against the Responder the difference between the amount of the Proposal and the amount of which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Proposal Bond. If a more favorable proposal is received by re-advertising, the defaulting Responder shall have no claim against the Local Public Agency for a refund.
- D. Full (100%) performance and payment bonds are required on all contracts in excess of \$25,000.00. The only exception is that if the contract is less than \$50,000.00, the entity may hold all payment, with no interim payments made, until final completion and presentation of lien releases from all subcontractors and suppliers, in lieu of the performance bond. Such bonds must be issued by a corporate surety authorized to do business in the State of Texas.
20. **This project will be awarded for construction in accordance with these specifications and upon approval by the Owner.**
21. **Insurance:**
See Special Conditions of the Agreement.
22. **Certificate of Insurance:**
The successful bidder will furnish a completed Certificate of Insurance with the executed contract. This Certificate of Insurance shall include all applicable policies and their numbers. These policies will cover all sub-contractors and the sub-contractors Certificate of Insurance will also be submitted covering the same amount stated above for the Contractor.
23. **In case of discrepancies or conflicts between the specifications, bid documents or contract documents, the following order of priority shall govern:**
1. RFP Documents
 2. Instructions to Responders
 3. Special Instructions to Responders
 4. Supplemental General Conditions
 5. Technical Specifications
 6. Standard Form of Agreement
 7. General Conditions of the Agreement
 8. Special Conditions of the Agreement
 9. Other Contract Documents
24. **The award of the proposal does not constitute award of a contract. A contract will be binding on both parties when executed by both parties and a purchase order is issued.**

GENERAL CONDITIONS OF THE AGREEMENT

Contract and Contract Documents

The project to be constructed subject to all applicable Federal and State laws and regulations.

The Plans, Specifications, Supplemental Conditions (or Special Conditions), and Addenda shall form part of this contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth:

DEFINITIONS

Whenever used in any of the contract Documents, the following meanings shall be given to the terms here in defined:

- A. The term "Contract" means the Contract executed between the County of Cameron, hereinafter called the **“County”** and, ***** hereinafter called **“Contractor”**, of which these GENERAL CONDITIONS form a part.
- B. The term "Project Area" means the area within which is the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this contract.
- C. The term "Engineer" means the Cameron County Engineer, Engineer in charge, serving the **County** with architectural or engineering services, his successor, or any other person or persons, employed by the **County** for the purpose of directing or having in charge the work embraced in this Contract.
- D. The term **“Architect”** means the architect contracted for the project by **Cameron County**.
- E. The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings).

ADMINISTRATION OF THE CONTRACT BY ARCHITECT AND ENGINEER

The Engineer and Architect will provide administration of the Contract and will be the Owner’s representatives (1) during construction and (2) until final payment is due. The Architect will advise and consult with the Owner and Engineer.

The Architect may appoint an employee or other person to assist him during the construction. These representatives will be instructed to assist the **Contractor** in interpreting the Contract Documents; however, such assistance shall not relieve the

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Contractor from any responsibility as set forth by the Contract Documents. The fact that the Architect's representative may have allowed work not in accordance with the Contract Documents shall not prevent the Architect from insisting that the faulty work be corrected with the Contract Documents and the Contractor shall correct same.

SUPERVISION BY CONTRACTOR

- A. Except where the **Contractor** is an individual and gives his personal supervision to the work, the **Contractor** shall provide a competent superintendent, satisfactory to the **County** and the **Engineer**, on the work at all times during working hours with full authority to act for him. The **Contractor** shall also provide an adequate staff for the proper coordination and expediting of his work.
- B. The **Contractor** shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.
- C. The **Contractor** expressly recognizes that the **Architect** does not owe him any duty to supervise or direct his work as to protect the **Contractor** from the consequences of his own acts or omissions.

SUBCONTRACTS

- A. The **Contractor** shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until he has verified the subcontractor as eligible to participate in federally funded contracts.
- B. No proposed subcontractor shall be disapproved by the **County** except for cause.
- C. The **Contractor** shall be as fully responsible to the **County** for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them.
- D. The **Contractor** shall cause appropriate provisions to be inserted in all subcontracts relative to the work that require compliance by each subcontractor with the applicable provisions of this Contract.
- E. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the **County**.

FITTING AND COORDINATION OF WORK

The **Contractor** shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material suppliers engaged upon this Contract.

PAYMENTS TO CONTRACTOR

A. Partial Payments

1. The **Contractor** shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Architect and Engineer for their approval, on a notarized AIA G702 Application and Certificate for Payment form, and continuation sheet. In any contract where the total contract price at time of execution of the contract is \$400,000.00 or more and the contract provides for retainage of five percent (5%) of periodic contract payments, the Owner shall deposit the retainage in an interest-bearing account, and interest earned on such retainage funds shall be paid to the General Contractor upon completion of the contract. If the total contract price is less than \$400,000.00, then the retainage amount will be 10%. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) or ten percent (10%) of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the agreement. The value of materials properly stored on the site or bonded warehouse shall be based upon the estimated quantities of such materials and the invoice prices, Copies of all invoices shall be available for inspection of the Architect and Engineer.
2. Monthly or partial payments made by the **county** to the **Contractor** are monies advanced for the purpose of assisting the contractor to expedite the work of construction. The **Contractor** shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the **County**. Such payments shall not constitute a waiver of the right of the **County** to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the **County** in all details. Such payments will be made by the County within thirty days of receipt of the invoice by the County Auditor's Office.

B. Final Payment

1. After final inspection and acceptance by the **County** and Architect of all work under the Contract, the **Contractor** shall prepare his requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the **Contractor** under this contract shall be the amount computed as described above less all previous payments.

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2. The **County** before paying the final estimate shall require the **Contractor** to furnish releases (AIA G706A Contractor's Affidavit of Release of Liens form) or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the **Contractor**, if the **County** deems it necessary in order to protect its interest. The **County** may, if it deems such action advisable, make payment in part or in full to the **Contractor** without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract. Other close out documents shall include AIA G706 Contractor's Affidavit of Payment of Debts and Claims, AIA G707 Consent of Surety Company to Final Payment.
3. Any amount due the **County** under Liquidated Damages shall be deducted from the final payment due the contractor.

C. Payments Subject to Submission of Certificates

Each payment to the **Contractor** by the **County** shall be made subject to submission by the **Contractor** of all written certifications required of him and his subcontractors.

D. Withholding Payments

The **County** may withhold from any payment due the **Contractor** whatever is deemed necessary to protect the **County**, and if so elects, may also withhold any amounts due from the **Contractor** to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the **County** and will not require the **County** to determine or adjust any claims or disputes between the **Contractor** and his subcontractors or material dealers, or to withhold any moneys for their protection unless the **County** elects to do so. The failure or refusal of the **County** to withhold any moneys from the **Contractor** shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

CHANGES IN THE WORK

- A. The **County** may make changes in the scope of work required to be performed by the **Contractor** under the Contract without relieving or releasing the **Contractor** from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- B. Except for the purpose of affording protection against any emergency endangering

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health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the **County** authorizing the **Contractor** to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

- C. If applicable unit prices are contained in the Agreement, the **County** may order the **Contractor** to proceed with desired unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase the original total amount of the agreement by more than twenty-five percent (25%) or decrease the original the total amount by twenty-five percent (25%).
- D Each change order shall include in its final form:
1. A detailed description of the change in the work.
 2. The Contractor's proposal (if any) or a confirmed copy thereof.
 3. A definite statement as to the resulting change in the contract price and/or time.
 4. The statement that all work involved in the change shall be performed in Accordance with contract requirements except as modified by the change order.
 5. The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.
 6. The signatures of authorized representatives of Contractor and County.

CLAIMS FOR EXTRA COST

- A. If the **Contractor** claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the **County**, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- B. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- C. Any discrepancies, which may be discovered between actual conditions and those represented by the Drawings and maps, shall be reported at once to the Architect and the Engineer and work shall not proceed except at the Contractors risk, until written instructions have been received by him from the Engineer.

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- D. If, on the basis of the available evidence, the **County** determines that an adjustment of the Contract Price and/or time is justifiable, a change order shall be executed.

EXTRA WORK

The term “EXTRA WORK” as used in the agreement shall be understood to mean and include all work that may be required by the Engineer or **County** to be done by the **Contractor** to accomplish any change, alteration or addition to the work shown upon the plans, or reasonably implied by the specifications, and not covered by the Contractor’s proposal. It is agreed that the Contractor shall perform all Extra Work under the direction of the Engineer when presented with a written Work Order signed by the Engineer; Subject, however, to the right of the **Contractor** to require a written confirmation of such Extra Work Order by the **County**. It is also agreed that the compensation to be paid the **Contractor** for performing said Extra Work shall be determined by one or more of the following methods:

Method (a): By agreed unit prices;

Method (b): By agreed lump sum;

Method (c): If neither Method (a) nor Method (b) can be agreed the “actual field cost” of the work plus ten (10) percent.

In the event said Extra Work be performed and paid for under Method (c), then the provisions of this paragraph shall apply and the “actual field cost” is hereby defined to include the cost of all workmen, such as foremen, time keepers, mechanics and laborers, and materials, supplies, trucks, rental of machinery and equipment for the time actually employed or used on such Extra Work plus actual transportation changes necessarily incurred if the kind of equipment or machinery is not already on the job, together with the power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work, including Social Security, Old Age Benefits and other payroll taxes, and a rateable proportion of premiums on Construction and Maintenance Bonds, Public Liability and Property Damage and Workmen’s Compensation, and all other insurance as may be required by any law or ordinance, or directed by the Engineer or **County**, or by them agreed. The Engineer may direct the form in which accounts of the “actual field cost” shall be kept and may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used, otherwise these matters shall be determined by the **Contractor**. Where practicable the terms and prices for the use of machinery and equipment shall be incorporated in the Written Extra Work Order.

The ten (10) percent of the “actual field cost” to be paid the **Contractor** shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the “actual field cost” as above defined, save that where the Contractor’s Camp or Field Office must be maintained primarily on account of such Extra Work, then the cost to maintain and operate same, excluding staff, shall be included in the “actual field cost”.

No claim for extra work of any kind will be allowed unless ordered in writing by the Engineer.

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In case any orders or instructions, either oral or written, appear to the Contractor to involve extra work for which he should receive compensation, he shall make written request to the Engineer for written order authorizing Extra Work. Should a difference of opinion arise as to what does or does not constitute extra work, or as to the payment therefore, and the Engineer insists upon its performance, the **Contractor** shall proceed with the work after making written order and shall keep an accurate account of the "actual field cost" thereof, as provided under Method (c). The **Contractor** will thereby preserve the right to submit the matter for payment, as herein above described. Change orders shall be executed on form similar to AIA G701Change Order document.

TERMINATION, DELAYS, AND LIQUIDATED DAMAGES

A. Right of the County to Terminate Contract.

In the event that any of the provisions of this contract are violated by the **Contractor**, or by any of his subcontractors, the **County** may serve written notice upon the **Contractor** and the Surety of its intention to terminate the contract. The notices shall contain the reasons for such intention to terminate the contract, and unless such violation or delay shall cease and satisfactory arrangement of correction be made within ten days, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the **County** shall immediately serve notice thereof upon the Surety and the **Contractor**. The Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the **County** may take over the work and complete the project by bid/contract or by force account at the expense of the **Contractor** and his Surety shall be liable to the **County** for any excess cost incurred. In such event the **County** may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

B. Liquidated Damages for Delays.

If the work is not complete within the time stipulated in the applicable bid for Lump Sum or Unit Price Contract provided, the **Contractor** shall pay to the **County** as fixed, agreed, and liquidated damages (it being possible to determine the actual damage occasioned by the delay) the amount of Three Hundred Dollars (\$300.00) for each calendar day of delay, until the work is completed. The **Contractor** and his sureties shall be liable to the **County** for the amount thereof.

C. Hindrance and Delays.

No damages for delays shall be paid to the **Contractor** by the **County**, except for any unreasonable delays caused by the **County**.

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D. Excusable Delays.

The right of the **Contractor** to proceed shall not be terminated nor shall the **Contractor** be charged with liquidated damages for any delays in the completion of the work due to:

- (1) Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency;
- (2) Any acts of the **County**;
- (3) Causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the **Contractor**, including, but not restricted to, acts of God or of the public enemy, acts of another **Contractor** in the performance of some other contract with the **County**, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.

Provided, however, that the **Contractor** promptly notifies the **County** within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the **County** shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the **County** shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

The **Contractor** shall include a time to complete the scope of work stated in calendar days that includes anticipated number of working days that construction may be unable to take place, due to inclement weather and muddy ground. Extensions to the completion date will be granted only if, in the opinion of the Architect, climatological conditions that impede the progress of construction significantly exceed conditions for the local area. A guide for average climatological conditions will be the "Local Climatological Data" bulletin published by the Department of Commerce.

ASSIGNMENT OR NOVATION

The **Contractor** shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this **Contract** without the written consent of the **County**; provided, however, that assignments to banks or other financial institutions may be made without the consent of the **County**. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the **Contractors** rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance

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of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

DISPUTES

- A. All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of commencement of the dispute, be presented by the **Contractor** to the Architect and Engineer for review and decision. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt of the Architect and Engineer.
- B. The **Contractor** shall submit in detail his claim and his proof thereof.
- C. If the **Contractor** does not agree with any decision of the Architect and Engineer, he shall in no case allow the dispute to delay the work but shall notify the Architect and Engineer promptly that he is proceeding with the work under protest.

TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or vice versa shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Architect and Engineer, without whose decision, said discrepancy shall not be adjusted by the **Contractor**, save only at his own risk and expense.

SHOP DRAWINGS

- A. All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Architect and the Engineer in copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The **Contractor** may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the **Contractor**, for extension of the contract time shall be granted by reason of his failure in this respect.
- B. Shop drawings and samples shall be dated and marked to show the names of the Project, Architect, **Contractor**, Originating Subcontractor, Manufacturer or Supplier. Shop drawings shall completely identify specification section and locations at which materials or equipment is to be installed. All shop drawings are to be reviewed first by the

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General Contractor who shall affix his signature. Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the **Contractor** shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the **Contractor** will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

- C. The **Contractor** shall submit and, if necessary, resubmit one (1) reproducible and four (4) copies of the shop drawings.
- D. If a shop drawing is in accordance with the contract or involves only a minor adjustment in the interest of the **County** not involving a change in contract price or time; the Engineer may approve the drawing. The approval shall not relieve the **Contractor** from his responsibility for adherence to the contract or for any error in the drawing.

REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the **Contractor** to make timely requests of the **County** for any additional information not already in his possession which should be furnished by the **County** under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the **Contractor**. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The **Contractor** shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the **Contractor**. The **Contractor** shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provision of this section.

MATERIALS AND WORKMANSHIP

- A. Unless otherwise specifically provided for in the technical specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the technical specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- B. The **Contractor** shall certify in writing that no materials used in the work contain asbestos materials in them excess of amounts allowed by Local/State standards, laws, codes rules and regulations; the Federal Environmental Protection Agency (EPA) standards and/or the Federal Occupational Safety and Health Administration (OSHA)

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standards, whichever is most restrictive. The **Contractor** shall provide this written certification to the Engineer.

- C. The **Contractor** shall furnish to the **County** for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval full information concerning all other materials or articles which he proposes to incorporate.
- D. Products are generally specified by ASTM or other reference standard, and/or by manufacture's name and model number or trade name. When specified only by reference standard, the **Contractor** may select any product meeting this standard by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the **Contractor** has the option of using any product and manufacturer combination listed. When only one product manufacturer is specified this is the basis of the Contract, without substitution or exception.
- E. Substitutions will not be considered if they are indicated or implied on shop drawing submissions without formal request, or for their implementation they require a substantial revision of the Contract Documents in order to accommodate their use.
- F. No request for the substitution of products in place of those specified shall be considered after the Contract has been executed.
- G. Not later than seven (7) days from the Contract Date, the **Contractor** shall provide a list showing the name of the manufacturers proposed to be used for each of the products identified in the General Requirements of the Specifications, and where applicable, the name of the installing subcontractor.
- H. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- I. Materials specified by reference to the number or symbol of a specific standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in the technical specifications shall have full force and effect as though printed therein.
- J. The **County** may require the **Contractor** to dismiss from the work such employee or employees as the **County** or the Engineer may deem incompetent, or careless, or insubordinate.

SAMPLES, CERTIFICATES AND TESTS

- A. The **Contractor** shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.
- B. Each sample submitted by the **Contractor** shall carry a label giving the name of the **Contractor**, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the **Contractor** shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.
- C. Approval of any materials shall be general only and shall not constitute a waiver of the **County's** right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the **Contractor** as is equitable.
- D. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
1. The **Contractor** shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
 2. The **Contractor** shall assume all costs of re-testing materials, which fail to meet contract requirements;
 3. The **Contractor** shall assume all costs of testing materials offered in substitution for those found deficient;
 4. The **County** will pay all other expenses.

PERMITS AND CODES

- A. The **Contractor** shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the **Contractor** shall examine the drawings and technical specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the **County**. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the Architect will adjust the Contract by Change Order at his expense to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department).

Should the **Contractor** fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the drawings and technical specifications), the **Contractor** shall remove such work without cost to the **County**,

- B. The **Contractor** shall at his own expense, secure and pay for all permits for street pavement, sidewalks, shed, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.
- C. The **Contractor** shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements contained in this Contract.

CARE OF WORK

- A. The **Contractor** shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.
- B. The **Contractor** shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.
- C. In an emergency affecting the safety of life, limb or property, including adjoining property, the **Contractor**, without special instructions or authorization from the **County** is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the **County**.

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- D. The **Contractor** shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.
- E. The **Contractor** shall shore up, brace, underpin, secure, and protect as maybe necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements included in this Contract. The **Contractor** shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The **Contractor** shall indemnify and save harmless the County from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the **County** may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

ACCIDENT PREVENTION

- A. No laborer or mechanic employed in the performance of this Contract shall be required to work in surroundings or under working conditions, which are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards promulgated by the Secretary of Labor.
- B. The **Contractor** shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work.
- C. The **Contractor** shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The **Contractor** shall promptly furnish the **County** with reports concerning these matters
- D. The **Contractor** shall indemnify and save harmless the **County** from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.
- E. The **Contractor** shall provide trench protection for all trenches in excess of a depth of five (5) feet, in the manner specified in the technical specifications and drawings.

SANITARY FACILITIES

The contractor shall furnish, install and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

USE OF PREMISES

- A. The **Contractor** shall confine his equipment, storage of materials, and construction operations to the contract limits as shown on the drawings and as prescribed by ordinances or permits, or as may be desired by the **County**, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.
- B. The Contractor shall comply with all reasonable instructions of the County and all existing state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades
- C. Smoking and chewing of tobacco products is prohibited in the enclosed new construction.

REMOVAL OF DEBRIS, CLEANING, ETC.

The **Contractor** shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for work, and put the whole site of the work and public rights of way in a neat and clean condition.

INSPECTION

- A. All materials and workmanship shall be subject to inspection, examination, or test by the **County**, the Architect, and the Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The **County** shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the **Contractor** fails to proceed at once with the correction of rejected workmanship or defective material, the **County** may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any Monies which may be due the **Contractor**, without prejudice to any other rights or remedies of the **County**.

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- B. The **Contractor** shall furnish promptly all materials reasonably necessary for any tests, which may be required. All tests by the **County** will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the technical specifications.
- C. The **Contractor** shall notify the **County** sufficiently in advance of back filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the **County**, the **Contractor** shall uncover for inspection and recover such facilities at his own expense, when so requested by the **County**.
- D. Should it be considered necessary or advisable by the **County** at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the **Contractor** shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the **Contractor** or his subcontractors, the **Contractor** shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be allowed the **Contractor** and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved
- E. Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the technical specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.
- F. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the **County** or its agents shall relieve the **Contractor** or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

REVIEW BY COUNTY

The **County** and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the **Contractor** only by the **County** through its authorized representatives or agents.

FINAL INSPECTION

When the Improvements included in this Contract are substantially completed, the Architect shall notify the **County** in writing that the work will be ready for final inspection on a definite date, which shall be stated in the notice. The **County** will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable. The AIA Certificate of Substantial Completion G704 form shall be used to determine date of substantial completion.

DEDUCTION FOR UNCORRECTED WORK

If the **County** deems it not expedient to require the **Contractor** to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the **Contractor** and the **County** and subject to settlement, in case of dispute, as herein provided.

INSURANCE

The **Contractor** shall not commence work under this contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the **County**.

- A. Compensation Insurance: The **Contractor** shall procure and shall maintain during the life of this contract Workers Compensation Insurance as required by the State of Texas for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the **Contractor** shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractors Workers Compensation Insurance.
- B. Contractors Public Liability and Property Damage Insurance and Vehicle Insurance: The **Contractor** shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the following amounts: See Special Conditions of the Agreement.
- C. Proof of Insurance: The **Contractor** shall furnish the **County** with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the **County**."

INDEMNITY

Contractor shall indemnify, defend and hold harmless the Architect and **Cameron County**, its

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officials, officers, agents, and employees, from any and all liabilities, claims, demands, actions, losses, damages and costs, including all costs of defense thereof, of any nature whatsoever, for injury to or death of persons or loss or damage to property, or for any other reason (except for those resulting from the negligence of the County's or Architects' officials, officers, agents, and employees) occurring on the premises or in any manner arising out of or connected with Contractor's contractual obligations, including any claims, liabilities and actions based upon the acts or omissions of Contractor's officers, agents and employees.

WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest is retained by the seller or supplier. The **Contractor** shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed by him to the **County** free from any claims, liens, or charges. Neither the Contractor -nor any person, firm, or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the **Contractor** in the hands of the **County**. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

WARRANTY OF WORKMANSHIP AND MATERIALS

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the **County** or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the **Contractor** of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The **Contractor** shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of twelve (12) months from the date of final acceptance of the work.

COMPLIANCE WITH AIR AND WATER ACTS

In compliance with the Clean Air Act, as amended, 41 U.S.C. Sec 7401 ET. Seq., and the regulations of the Environmental Protection Agency with respect thereto, the **Contractor** agrees that:

1. Any facility to be utilized in the performance of this contract or any subcontract shall not be a facility listed on the EPA List of Violating Facilities pursuant to 40 CFR 15.20.
2. He will comply with all requirements of Section 114 of the Clean Air Act, as amended.

EQUAL EMPLOYMENT OPPORTUNITY

- A. The **Contractor** will not discriminate against any employee or the applicant for employment because of race, color, religion, sex, or national origin.
- B. The **Contractor** will cause the foregoing provision to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
- C. Nothing herein provided shall be construed as a limitation upon the application of other laws, which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS

The **Contractor** will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified.

NON-SEGREGATED FACILITIES

The **Contractor** certifies that he does not and will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not and will not permit his employees any segregated facilities at any of his establishments, or permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation. And housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

JOB OFFICES

- A. The **Contractor** will maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. Subcontractors may do the same. These shall be located so as to cause no interference to any work to be performed on the site. The **County** shall be consulted with regard to locations.
- B. Upon completion of the improvements, or as directed by the **County**, the **Contractors** shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

CONTRACT DOCUMENTS AND DRAWINGS

The **Contractor** will be furnished a maximum number of TWENTY (20) free of charge, copies of Drawings and Project Manuals. Additional sets will be furnished at the cost of reproduction, postage, and handling.

CONTRACT PERIOD

The work to be performed under this contract shall commence within the time stipulated by the **County** in the Notice to Proceed, and shall be fully completed within 150 calendar days thereafter.

ABANDONMENT BY CONTRACTOR

In case the **Contractor** should abandon or fail to resume work within ten (10) days after written notification from the **County** or the Engineer, or the **Contractor** fails to comply with the orders of the Engineer when such orders are consistent with this contract or this Agreement or with the specifications hereto attached, then and in that case, the Surety on the bonds shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the **Contractor**.

After receiving said notice of abandonment, the **Contractor** shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job, but the same, together with any materials and equipment under contract for work, may be held for use on the work by the **County** or the Surety on the construction bond, or another **Contractor**, in completion of the work; and the **Contractor** shall not receive any rental or credit therefore (except when used in connection with extra work, where credit shall be allowed as provided for under "Extra Work"), it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

In case the Surety should fail to commence compliance with the notice for completion herein before provided for within ten (10) days after services of such notice, then the **County** may provide for completion of the work in either of the following elective manners:

- A. The **County** may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as said **County** may deem necessary to complete the work and charge the expense of such labor, material, machinery, equipment, tools and supplies to said **Contractor** and the expense so charged shall be deducted and paid by the **County** out of such money as may be due, or that may thereafter at any time become due to the **Contractor** under and by virtue of this Agreement. In case such expense is more than the sum which would have been payable under this contract if the same had been completed by the Contractor, then the Contractor and/or his surety shall

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pay the amount of such excess to the County;

- B. The **County**, under sealed bids, after five (5) days' notice published one or more times in a newspaper having a general circulation in the **County** of the location of the work, may let a contract for the completion of the work under substantially the same terms and conditions which are provided in this contract. In case of any increase in cost to the **County** under the new contract as compared to what would have been the cost under this contract, such increase shall be charged to the **Contractor** and the Surety shall be and remain bound thereto. When the work shall have been substantially completed the **Contractor** and his Surety shall be notified and Certificates of Completion and Acceptance shall be issued as provided herein-above, a complete itemized statement of the contract accounts, certified to by the Engineer as being correct, shall then be prepared and delivered to the **Contractor** and his Surety, whereupon the **Contractor** and/or his Surety shall pay the balance due as reflected by said statement within twenty-one (21) days after the date of such Certificate of Completion.

In the event the statement of the account shows that the cost to complete the work is less than that which would have been the cost to the **County** had the work been completed by the **Contractor** under the terms of this contract and when the **Contractor** and/or his Surety shall pay the balance shown to be due by them to the **County**, then all machinery, equipment tools, materials or supplies left on the site of the work shall be turned over to the **Contractor** and/or his Surety. Should the cost to complete the work exceed the contract price and the **Contractor** and/or his Surety fail to pay the amount due the **County** within the time designated hereinabove, and there remains any machinery, equipment, tools, material or supplies on the site of the work, notice thereof, together with an itemized list of such equipment and materials, shall be mailed to the **Contractor** and his Surety at the respective addresses designated in this contract provided, however, that actual written notice given in any manner will satisfy this condition. After mailing or otherwise giving such notice, such property shall be held at the risk of the **Contractor** and his Surety subject only to the duty of the **County** to exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice the **County** may sell such machinery, equipment, tools, materials or supplies and apply the net sum derived from such sale to the credit of the **Contractor**, as the **County** may elect.

The **County** shall release any machinery, equipment, tools, materials or supplies, which remain on the work and belong to persons other than the **Contractor** or his Surety, to their proper Localities without notice to the **Contractor**.

ABANDONMENT BY THE COUNTY

In case the **County** shall fail to comply with the terms of this contract and should fail or refuse to comply with said terms within ten (15) days after written notifications by the **Contractor**, the **Contractor** may suspend or wholly abandon the work, and may remove therefrom all machinery, tools and equipment. And thereupon the Engineer shall make an estimate of the total

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earned by the **Contractor**, which estimate shall include the value of all work actually completed by said **Contractor** at the prices stated in the attached proposal, the value of all partially completed work at a fair and equitable price, and the amount of all extra work performed at the prices agreed upon, or provided for by the terms of this contract, and a reasonable sum to cover the cost of any provisions made by the **Contractor**, to carry the whole work to completion and which cannot be utilized. The Engineer shall then make a final statement of the balance due the **Contractor** by deducting from the above estimate all previous payments by the **County**, all other sums that may have been retained by the **County**, under the terms of this Agreement, and shall certify same to the **County** who shall pay to the **Contractor** on or before thirty (30) days after the date of the notification by the **Contractor**, the balance shown by said final statement as due the Contractor under the terms of this Agreement.

BONDS

It is further agreed by the parties of this contract that the **Contractor** shall execute a performance bond and a payment bond, each in the sum of one hundred (100%) percent, in the forms provided for this purpose, and it agreed that this contract shall not be in effect until such bonds are furnished and approved by the **County**.

RIGHTS AND REMEDIES

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

No action or failure to act by the **County** or Architect or **Contractor** shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such act or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

STANDARD FORM OF AGREEMENT

STATE OF TEXAS §

COUNTY OF CAMERON §

THIS AGREEMENT, MADE AND ENTERED INTO THIS THE ___ DAY OF _____, 20___, A.D., by and between the County of Cameron thereunto duly authorized so to do, Party of the First Part, hereinafter called County, and, of _____, Party of the Second Part hereinafter termed Contractor.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (County), and under the conditions expressed in the bond bearing every date herewith, the said Party of the Second Part (Contractor), hereby agrees with said Party of the First Part (County), to commence and complete the construction of certain improvements described as follows: **CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES RFP # 230704** and any extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement, Special Conditions of the Agreement, Technical Specifications and Plans and at his (or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories, with the conditions and prices stated in the Proposal attached hereto, in accordance with all General Conditions of the Agreement, Special Conditions of the Agreement, Technical Specifications and Plans and in accordance with the Plans, which include all maps, plats, blueprints and other drawings and printed or written explanatory matter thereof, and the specifications therefore, together with the Contractor's written approval, and the General Conditions of the Agreement, Special Conditions of the Agreement, Technical Specifications and Plans and the Construction Bonds hereto attached, all of which are made a part hereof and collectively evidence and constitute the entire contract.

The Contractor hereby agrees to commence work within ___ days after the date written notice to do so shall have been given to him, and to substantially complete same within calendar days, after the date of the written notice to commence work.

The County agrees to pay the Contractor in current funds the sum of \$ _____ for the performance of the Contract in accordance with the proposal submitted therefore, subject to additions and deductions as provided in the General Conditions of the Agreement, and to make payment on account thereof as provided therein.

Contractor further agrees not to do any work unless he has received a valid Purchase Order issued by Cameron County for payment of the work to be accomplished.

This instrument contains the entire agreement between the parties relating to the rights herein granted and obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force or effect, excepting a subsequent modification in writing, signed by the party to be charged. This Agreement may be amended, provided that no amendment, modification, or alteration of the terms of this agreement shall be binding unless the

same is in writing and duly executed by the parties hereto.

All notices to Cameron County shall be sent by certified or registered mail, addressed to: Cameron County Judge, Cameron County Courthouse, 1100 E. Monroe, Brownsville, Texas 78520, and Cameron County Engineer, 1390 W. Expressway 83, San Benito, Texas 78586, or at such other address as the COUNTY may otherwise designate. All notices to Contractor shall be sent certified or registered mail, addressed to: _____ or at such other address as said Contractor may otherwise designate in writing.

This Agreement shall be governed by the laws of the State of Texas and venue shall be in Cameron County.

IN WITNESS WHEREOF, the parties of these presents have executed this Agreement in quadruplicate in the year and day first above written.

PARTY OF THE FIRST PART
(Contractor)

PARTY OF THE SECOND PART
(County)
Eddie Treviño Jr.
Cameron County Judge

ATTESTED BY:

Sylvia Garza Perez, County Clerk

NOTICE OF AWARD

TO:

PROJECT DESCRIPTION:

**RFP # 230704 CAMERON COUNTY 835 EAST
LEVEE & SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES**

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement and Invitation to Bid dated _____.

You are hereby notified that your BID has been accepted in the amount of _____.

You are required by the Instructions to Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance Bond, Payment Bond and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said Bonds within ten (10) days from the date of the Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as forfeiture of your BID SECURITY. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of the NOTICE OF AWARD to the OWNER.

Dated the ____ day of _____, 20__.

OWNER: CAMERON COUNTY

BY:

TITLE: County Engineer

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____, this the _____ day of _____, 20__.

BY:

TITLE:

**RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN
BENITO ANNEX BUILDING STANDBYPOWER UPGRADES**

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____, _____, Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal was then _____ of said corporation; that I know his/her signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed, and attested to, for and in behalf of said corporation by authority of this governing body.

Corporate
Seal

Title: _____

* Power-of-attorney for person signing for surety company must be attached to bond.

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& SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES**

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned, Dylbia L. Jefferies Vega, the duly authorized and acting legal representative of the County of Cameron, Texas, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and am of the opinion that each of the agreements may be duly executed by the proper parties, acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties; and that the agreements shall constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Attorney's signature: _____ Date: _____

Print Attorney's Name: Dylbia L. Jefferies Vega



PROJECT CLOSE-OUT CHECK LIST

Project Name: RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

Project PO #:

TASK DESCRIPTION

COMPLETED DATE

A. General Requirements

- | | | |
|--|-------|-------|
| 1. Certificate of Substantial Completion (AIA G704)
(Executed by Architect/Engineer, Contractor and Owner) | _____ | _____ |
| 2. Inspections Certifications | | |
| a. Certificate of Occupancy
(By Building Inspections Officials) | _____ | _____ |
| b. Copy of Building Official Inspection Card
(Showing required inspection approvals) | _____ | _____ |
| c. Regulatory Inspection Sign-Offs (as applicable) | | |
| (1) General Contract | _____ | _____ |
| (2) Plumbing Subcontract | _____ | _____ |
| (3) Fire Protection Contract | _____ | _____ |
| (4) Mechanical Contract | _____ | _____ |
| (5) Electrical Contract | _____ | _____ |
| (6) Certification Reports for All Backflow Assemblies
(Includes Plumbing, HVAC, Fire Protection as applicable) | _____ | _____ |
| (7) Well Water Quality Test Report (if applicable) | _____ | _____ |
| (8) Other Certifications as Required
(NCDFS, NC DOT, Land Quality, Local Government, Utilities, Health
Dept., Fireproofing Certification, Structural Steel Inspection Certification, etc.) | _____ | _____ |
| 3. Closeout Reports & Documentation | | |
| a. Owner Instruction and Training with Equipment
and Systems | _____ | _____ |



PROJECT CLOSE-OUT CHECK LIST

Project Name: RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

Project PO #:

<u>TASK DESCRIPTION</u>	<u>COMPLETED</u>	<u>DATE</u>
(Memo/List of Attendees required for each session)		
b. HVAC Test and Balance Report (Approval cover letter from Architect/Engineer required)	_____	_____
c. Attic Stock Turnover (Transfer to Owner with Typed Inventory Required)	_____	_____
d. Keys & Permanent Hardware Changeover (Delivery of Final Keys and Cabinet to Owner; Memo of Hardware Changeover Date)	_____	_____
e. Insurance Coverage Change Over	_____	_____
f. Utility Account Change Over		
(1) Electric Service	_____	_____
(2) Gas Service	_____	_____
(3) Water Service	_____	_____
(4) Other Utility Service	_____	_____
 B. Record Document Requirements		
1. As-built drawings (as applicable)		
a. Site/Civil	_____	_____
b. Architectural & Structural	_____	_____
c. Plumbing	_____	_____
d. Fire Protection	_____	_____
e. Mechanical	_____	_____
f. Electrical	_____	_____
g. Security	_____	_____
h. Other (Kitchen Equipment, etc.)	_____	_____



PROJECT CLOSE-OUT CHECK LIST

Project Name: RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

Project PO #:

<u>TASK DESCRIPTION</u>	<u>COMPLETED</u>	<u>DATE</u>
2. Final Finish Schedule (updated with actual finishes and bound in with O+M Manual)	_____	_____
3. Operation & Maintenance (O+M) Manuals (Approval cover letter from Designer required)	_____	_____
a. Product & Operations Data	_____	_____
b. Maintenance Information	_____	_____
c. Product Warranty Certificates/Maintenance Agreements	_____	_____
4. Shop Drawings – Complete Set (With Architect's Review Stamp)	_____	_____
5. Construction Site Documentation (Contractor's Job Log and Photographs)	_____	_____
C. Final Accounting Requirements – by Contractor		
1. Affidavit of Release of Liens (AIA G706A)	_____	_____
2. Affidavit of Payment of Debts and Claims (AIA G706)	_____	_____
3. Consent of Surety to Final Payment (AIA G707)	_____	_____
4. Final Request for Payment Certified by Architect/Engineer	_____	_____
D. Final Accounting Requirements – by Architect/Engineer		
1. Cover Letter of Approval of Roof Warranty	_____	_____
2. Cover Letter of Approval for O&M Manuals	_____	_____



PROJECT CLOSE-OUT CHECK LIST

Project Name: RFP # 230704 CAMERON COUNTY 835 EAST LEVEE & SAN BENITO ANNEX BUILDING STANDBY POWER UPGRADES

Project PO #:

<u>TASK DESCRIPTION</u>	<u>COMPLETED</u>	<u>DATE</u>
3. Certification by Architect of Completed Final Punch List	_____	_____
4. Final Completion Certificate executed by Architect/Engineer	_____	_____
5. Final Liquidated Damages analysis by Architect/Engineer	_____	_____
6. Record Drawings (electronic CAD files +set of pdf files + 3 reproducible sets of all drawings based on Contractor As-Built)	_____	_____
7. Certification of Project Compliance	_____	_____
8. MSDS Asbestos Free Building Letter	_____	_____

E. Warranty Period

1. Pre-Expiration Warranty Inspection (Inspection 30 days prior to warranty expiration date)	_____	_____
---	-------	-------

F. Cameron County requirements

1. Final Payment Requires Commission Approval.	_____	_____
2. TDLR Accessibility Compliance Letter from Registered Accessibility Specialist (RAS)	_____	_____
3. Windstorm Certification – Flood Zone Certification, if required in Zone A designated areas for new buildings and additions	_____	_____
4. Required Training documentation/logs, complete with sign in sheets on personnel present for Elevators and Boilers, TDLR certification of Inspection.	_____	_____

REQUIRED CONTRACT CLAUSES FOR CONTRACTS UNDER FEDERAL AWARD

2 C.F.R. § 200.327 & 2 C.F.R. PART 200, APPENDIX II, REQUIRED CONTRACT CLAUSES FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

The United States Office of Management and Budget (OMB) issued in 2 C.F.R. 200: *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards* (Uniform Guidance). Subpart D: Post Federal Award Requirements: 2 CFR §§200.317-200.327 of the Uniform Guidance contain provisions applicable to procurements made with federal grant funding. [Except as otherwise provided, updated Post Federal Award Requirements (i.e.: 2 CFR §§200.317-200.327) apply to declarations and awards issued on or after November 12, 2020]. <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200#subject-group-ECFR45ddd4419ad436d> See Appendix "B"

As a non-Federal entity, the County of Cameron's ("County") contracts must contain the applicable contract clauses described in Appendix II to the Uniform Guidance (Contract Provisions for non-Federal Entity Contracts Under Federal Awards), which are set forth below. (2 C.F.R. §200.327). If applicable, the following clauses shall supersede any existing, similar clauses stated within the bid document, contract, and/or Terms and Conditions. *The term "Contractor" used herein refers to the proposer, bidder or other entity/individual responding to the applicable procurement packet.*

If applicable, the regulations in 2 CFR, Part 200 and Appendix II to the Uniform Guidance, as it may be amended from time to time, and the contract clauses below, are incorporated by reference as part of this procurement packet and any resulting agreement.

To procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. The following provisions are required and apply when federal funds are expended by the County of Cameron for any contract resulting from this procurement process.

1. Remedies.

- a. Applicability. This requirement applies to all Federal grant and cooperative agreement programs.
- b. Standard. Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. See 2 C.F.R. Part 200, Appendix II, A.
- c. Statement. Pursuant to Federal Rule (A) above, when federal funds are expended by the County, the County reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party. Contractor shall comply with all applicable Federal, State of Texas, and local laws, rules, and regulations and shall obtain all applicable licenses and permits for the conduct of its business and the performance of the services, and any provision of equipment and material ("Applicable Law"). All transactions related to any of the Contract Documents shall be governed by the laws of the State of Texas, and trial of any action brought in connection with the bid or the Contract Documents shall be held exclusively in a state court in the County of Cameron, Texas.

2. Termination for Cause and Convenience.

- a. **Applicability.** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** All contracts in excess of \$10,000 shall address termination for cause and for convenience by the non-Federal entity including the manner by which it will be affected and the basis for settlement as follows. See 2 C.F.R. Part 200, Appendix II, B.
- c. **Statement. Termination.** County may terminate this Agreement for any reason upon ten (10) days written notice to the other party. County may terminate this Agreement immediately upon written notice if Contractor breaches this Agreement. In the event of any termination, Contractor shall promptly deliver to the County any and all Work Materials prepared for the County prior to the effective date of such termination, all of which shall become County's sole property. After receipt of the Work Materials, County will pay Contractor for the services which the County determines were satisfactorily performed as of the effective date of the termination.

Excuses for Non-Performance. Either party shall be absolved from its obligations under this contract when and to the extent that performance is delayed or prevented (and in the County of Cameron's case when and to the extent that its need for the articles, materials or work to be supplied hereunder is reduced or eliminated) by reason of acts of God, fire explosion, war riots, strikes, labor disputes, or governmental laws, orders or regulations.

Default. If Contractor or Subcontractor shall breach any provision hereof or shall become insolvent, enter voluntary or involuntary bankruptcy or receivership proceedings or make an assignment to the benefit of creditors, County of Cameron shall have the right (without limiting any other rights or remedies which it may have hereunder or by operation of law) to terminate this contract by written notice to Contractor whereupon County shall be relieved of all further obligation hereunder except the obligation to pay the reasonable value of Contractor's prior performance (at not exceeding the contract rate), and Contractor shall be liable to County for all costs incurred by County in completing or procuring the completion of performance in excess of the contract price herein specified. The County's right to require strict performance of any obligation hereunder shall not be affected by any previous waiver, forbearance of course of dealing. Time is of the essence thereof.

3. Equal Employment Opportunity.

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** Except as otherwise provided under 41 C.F.R. Part 60, all contracts that meet the definition of "*federally assisted construction contract*" in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. § 60- 1.4(b), in accordance with Executive Order 11246, *Equal Employment Opportunity* (30 Fed. Reg. 12319, 12935, 3 C.F.R. Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, *Amending Executive Order 11246 Relating to Equal Employment Opportunity*, and implementing regulations at 41 C.F.R. Part 60 (Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor). See 2 C.F.R. Part 200, Appendix II, C.

c. **Key Definitions:**

- (1) ***Federally Assisted Construction Contract.*** The regulation at 41 C.F.R. § 60-1.3 defines a "federally assisted construction contract" as any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Government or borrowed on the credit of the Government pursuant to any Federal program involving a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, or any application or modification thereof approved

by the Government for a grant, contract, loan, insurance, or guarantee under which the applicant itself participates in the construction work.

- (2) *Construction Work*. The regulation at 41 C.F.R. § 60-1.3 defines “construction work” as the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction
- d. Statement: Contractor will comply with the Nondiscrimination Civil Rights Act of 1964, as amended and all Federal regulations relative to nondiscrimination in Federally assisted programs. The regulation at 41 C.F.R. Part 60-1.4(b) requires the insertion of the following contract clause:

“During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract

or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.”

4. Davis Bacon Act and Copeland Anti-Kickback Act.

- a. Applicability of Davis-Bacon Act. The Davis-Bacon Act only applies to the emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. **It does not apply to other Federal grant and cooperative agreement programs, including the Public Assistance Program.**
- b. Standard. All prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction).

In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

In contracts subject to the Davis-Bacon Act, the contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). The Copeland Anti-Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA or applicable Federal entity. See 29 C.F.R. Part 200, Appendix II, ¶ D.

- c. Statement. The regulation at 29 C.F.R. § 5.5(a) does provide the required contract clause that applies to compliance with both the Davis-Bacon and Copeland Acts. However, as discussed in the previous subsection, the Davis-Bacon Act does not apply to Public Assistance recipients and subrecipients. In situations where the Davis-Bacon Act does not apply, neither does the Copeland “Anti-Kickback Act.” However, for purposes of grant programs where both clauses do apply, FEMA or applicable Federal entity requires the following contract clause:

“Compliance with the Copeland “Anti-Kickback” Act.

- (1) *Contractor.* The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- (2) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as Federal requirements may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- (3) *Breach.* A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.”

5. **Contract Work Hours and Safety Standards Act.**

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** Where applicable (see 40 U.S.C. § 3701), all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5.

Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. See 2 C.F.R. Part 200, Appendix II, E.

The regulation at 29 C.F.R. § 5.5(b) provides the required contract clause concerning compliance with the Contract Work Hours and Safety Standards Act:

- c. **Statement.**

“Compliance with the Contract Work Hours and Safety Standards Act.

- (1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with

respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The County of Cameron shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.”

6. Rights to Inventions Made Under a Contract or Agreement.

- a. **Applicability: Stafford Act Disaster Grants.** This requirement **does not apply to the Public Assistance.** Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as FEMA or Federal awards under these programs do not meet the definition of “funding agreement.”
- b. **Standard.** If the FEMA or Federal award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the non-Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA or applicable awarding agency. See 2 C.F.R. Part 200, Appendix II, F.
- c. **Key Definition:** The regulation at 37 C.F.R. § 401.2(a) currently defines “funding agreement” as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the County of Cameron, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

7. Clean Air Act and the Federal Water Pollution Control Act.

- a. **Applicability and Standard:** Contracts of amounts in excess of \$150,000 must contain a provision that requires the contractor to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency. See 2 C.F.R. Part 200, Appendix II, G.
- b. **Statement:** Included in contracts as provided in section “7a” above.

- (1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. and the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- (2) The contractor agrees to report each violation to the Federal awarding agency (e.g. Federal Emergency Management Agency-FEMA) and the Regional Office of the Environmental Protection Agency. Contractor understands and agrees that each violation reported to the County of Cameron will, in turn, be reported as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection Agency Regional Office.
- (3) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by the applicable Federal awarding agency (e.g. FEMA).

8. Debarment and Suspension.

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** Non-Federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Non-procurement Debarment and Suspension).

These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities. See 2 C.F.R. Part 200, Appendix II, H; and Chapter IV, 6.d and Appendix C, 2. A contract award must not be made to parties listed in the SAM Exclusions. SAM Exclusions is the list maintained by the General.

Services Administration that contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. SAM exclusions can be accessed at www.sam.gov See 2 C.F.R. § 180.530; Chapter IV, 6.d and Appendix C, 2.

In general, an "excluded" party cannot receive a Federal grant award or a contract within the meaning of a "covered transaction," to include subawards and subcontracts. This includes parties that receive Federal funding indirectly, such as contractors to recipients and subrecipients. The key to the exclusion is whether there is a "covered transaction," which is any non-procurement transaction (unless excepted) at either a "primary" or "secondary" tier. Although "covered transactions" do not include contracts awarded by the Federal Government for purposes of the non-procurement common rule and DHS's implementing regulations, it does include some contracts awarded by recipients and subrecipient.

Specifically, a covered transaction includes the following contracts for goods or services:

- (1) The contract is awarded by a recipient or subrecipient in the amount of at least \$25,000.
- (2) The contract requires the approval of FEMA or applicable Federal entity, regardless of amount.
- (3) The contract is for Federally-required audit services.
- (4) A subcontract is also a covered transaction if it is awarded by the contractor of a recipient or subrecipient and requires either the approval of FEMA or applicable Federal entity or is in excess of \$25,000.

- c. Statement. The following provides a debarment and suspension clause. It incorporates a method of verifying that contractors are not excluded or disqualified:

For maximum protection, provide a print or electronic document for every prime and subcontractor, from www.sam.gov in order to ensure that they are not debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities.

This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. §180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by (insert name of subrecipient). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state City serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.”

9. Byrd Anti-Lobbying Amendment.

- a. Applicability: This requirement applies to all Federal grant and cooperative agreement programs.
- b. Standard. Contractors that apply or bid for an award of \$100,000 or more must file the required certification. See 2 C.F.R. Part 200, Appendix II, I; 44 C.F.R. Part 18; Chapter IV, 6.c; Appendix C, 4. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any City, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. See Chapter IV, 6.c and Appendix C, 4.
- c. Statement. The following statement in bold provides a Byrd Anti-Lobbying contract clause:

(IF APPLICABLE, PLEASE FILL IN BLANKS AND SIGN)

“Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.”

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION

REGARDING LOBBYING Certification for Contracts, Grants,

Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned Contractor, _____
certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying

Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

10. **Procurement of Recovered Materials.**

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs.
- b. **Standard.** A non-Federal entity that is a **state agency or agency of a political subdivision** of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, Pub. L. No. 89-272 (1965) (codified as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962). See 2 C.F.R. Part 200, Appendix II, ¶ J; 2 C.F.R. § 200.323; *PDAT Supplement*, Chapter V, 7.

The requirements of Section 6002 include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

- c. **Statement.** The following provides the clause that a state agency or agency of a political subdivision of a state and its contractors can include in contracts meeting the above contract thresholds:

- (1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired—
 - (i) Competitively within a timeframe providing for compliance with the contract performance schedule;
 - (ii) Meeting contract performance requirements; or
 - (iii) At a reasonable price.
- (2) Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- (3) The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.”

11. **Prohibition on Contracting for Covered Telecommunications Equipment or Services – 2 CFR § 200.216 (FEMA Interim Policy #405-143-1 effective August 13, 2020).**

- a. **Applicability:** This requirement applies to all Federal grant and cooperative agreement programs and/or as provided below, and is effective August 13, 2020.
- b. **Standard.** A non-Federal entity is prohibited against using federal funds to purchase telecommunications and video surveillance equipment and services (such as but not limited to mobile phones, land lines, internet, video surveillance, and cloud servers) from certain companies/entities in covered foreign countries for national security reasons. This regulation is being incorporated into federal grants and contracts received by the County through 2 CFR 200.216 and/or Federal Acquisition Regulations (FAR) clause 52.204-25; as well as guidance provided through Federal Emergency Management Agency (FEMA) Policy #405-143-1. See 2 C.F.R. Part 200, Appendix II, ¶ K

Currently, applicable federal provisions provide that Covered Foreign country means the People's Republic of China and covered telecommunications equipment or services means

- i. Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation, (or any subsidiary or affiliate of such entities);

- ii. For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- iii. Telecommunications or video surveillance services provided by such entities or using such equipment; or
- iv. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The definition of "Affiliate" can be found in FAR 2.101. Listing of subsidiaries and affiliates can be found in Supplement Number 4 to 15 CFR Part 744.

- c. Statement. Federal awards recipients and subrecipients, as well as their contractors and subcontractors, include the following required contract clause in applicable new, extended, or renewed contracts and subcontracts as per the provisions discussed above.

PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES

(a) Definitions. As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy, #405-143-1 Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services As used in this clause

(b) Prohibitions.

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:

(i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

(ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

(iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or

(iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Exceptions.

(1) This clause does not prohibit contractors from providing—

a. A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

b. Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

a. Covered telecommunications equipment or services that:

i. Are not used as a substantial or essential component of any system; and

ii. Are not used as critical technology of any system.

b. Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) Reporting requirement.

(1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

12. Domestic Preferences for Procurements

- a. Applicability: This requirement of this section must be included in all subawards including all contracts and purchase orders for work or products under Federal award applies to all contracts and purchase orders for work or products using federal funds.
- b. Standard. As appropriate, and to the extent consistent with law, Non-Federal Entities should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products or materials produced in the United States. This includes, but is not limited to, iron, aluminum, steel, cement, and other manufactured products. See 2 C.F.R. Part 200.322 and 2 C.F.R. Part 200, Appendix II, L
- c. Statement. The following provides the required Domestic Preferences for Procurements contracts clause that is incorporated herein by reference.

“Domestic Preference for Procurements

As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

- *Produced in the United States* means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- *Manufactured products* mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.”

ADDITIONAL REQUIRED CONTRACT CLAUSES FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS WITH THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Additional FEMA or applicable Federal Requirements. In addition to the requirements above, non-Federal entity contracts under Federal award subject to financial assistance from FEMA are required to contain the following additional contract clauses. The Uniform Guidance authorizes FEMA to require additional provisions for non-Federal entity contracts. FEMA, pursuant to this authority, requires or recommends the following:

These clauses are incorporated by reference as part of this procurement packet and any resulting agreement.

1. Changes.

- a. Standard. To be eligible for FEMA assistance under the non-Federal entity’s Federal grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope. FEMA or applicable Federal entity recommends, therefore, that a non-Federal entity include a changes clause in its contract that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may differ depending on the nature of the contract and the end-item procured.
- b. Statement. The following provides a contract clause regarding access to records:

“The contractor shall secure written authorization before proceeding with any additional work, whether requested by the County or required to complete the contract. The cost for any changes to the contract price, whether requested by the

County or the Contractor will be approved only after submitting the contractor's true costs for the work and related equipment costs and site expenses."

2. Access to Records.

a. Standard. All non-Federal entities must place into their contracts a provision that all contractors and their successors, transferees, assignees, and subcontractors acknowledge and agree to comply with applicable provisions governing Department and FEMA or applicable Federal entity access to records, accounts, documents, information, facilities, and staff. See DHS Standard Terms and Conditions, v 3.0, XXVI (2013).

b. Statement. The following provides a contract clause regarding access to records:

"Access to Records. The following access to records requirements applies to this contract:

- (1) The contractor agrees to provide the City of Concord, the FEMA or applicable Federal Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- (2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- (3) The contractor agrees to provide the FEMA or applicable Federal Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract."

3. DHS Seal, Logo, and Flags.

a. Standard. All non-Federal entities must place in their contracts a provision that a contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS City officials without specific FEMA or applicable Federal entity pre-approval. See DHS Standard Terms and Conditions, v3.0, XXV (2013).

b. Statement. The following provides a contract clause regarding DHS Seal, Logo, and Flags:

"The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS City officials without specific FEMA or applicable Federal entity pre- approval."

4. Compliance with Federal Law, Regulations, and Executive Orders.

a. Standard. All non-Federal entities must place into their contracts an acknowledgement that FEMA or applicable Federal financial assistance will be used to fund the contract along with the requirement that the contractor will comply with all applicable Federal law, regulations, executive orders, and FEMA or applicable Federal policies, procedures, and directives.

b. Statement. The following provides a contract clause regarding Compliance with Federal Law, Regulations and Executive Orders:

"This is an acknowledgement that Federal financial assistance will be used to fund the contract only. The contractor will comply will all applicable Federal law, regulations, executive orders, FEMA or applicable Federal policies, procedures, and directives."

5. **No Obligation by Federal Government.**

- a. **Standard.** The non-Federal entity must include a provision in its contract that states that the Federal Government is not a party to the contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.
- b. **Statement.** The following provides a contract clause regarding no obligation by the Federal Government:

“The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.”

6. **Program Fraud and False or Fraudulent Statements or Related Acts.**

- a. **Standard.** The non-Federal entity must include a provision in its contract that the contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the contract.
- b. **Statement.** The following provides a contract clause regarding Fraud and False or Fraudulent Related Acts:

“The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor’s actions pertaining to this contract.”

7. **FEMA Contract requirement regarding Prohibition on Contracting for Covered Telecommunications Equipment or Services – 2 CFR § 200.216 (FEMA Interim Policy #405-143-1 effective August 13, 2020).**

FEMA recipients and subrecipients and their contractors and subcontractors are required per 2 C.F.R. Part 200, Appendix II K to include a contract provision in all FEMA-funded contracts and subcontracts, including any purchase orders. To satisfy this requirement, the contract provision found in Number 11 above is incorporated by reference by the County of Cameron in all new, extended, or renewed contracts and subcontracts. Applicable County contractors and subcontractors shall also comply with the applicable law and requirements. (*See* Number 11 above).

8. FEMA Contract requirement regarding Domestic Preferences for Procurements

For purchases in support of FEMA declarations and awards issued on or after November 12, 2020, all FEMA recipients and subrecipients are required per 2 C.F.R. Part 200, Appendix II ¶ L to include in all contracts and purchase orders for work or products the contract provision included in number 12 above encouraging domestic preference for procurements.

Contractor agrees to comply with all federal, state and local laws, rules, regulations and ordinances, as applicable. It is further acknowledged that the Contractor read and understands all provisions, laws, acts, regulations, etc. as specifically noted above and certifies compliance with the same.

Vendor's Name/Company Name:

Printed Name and Title of Authorized Representative:

Signature of Authorized Representative:

Date: _____

Appendix A

FHWA 1273

I. General

II. Nondiscrimination III. No segregated Facilities
FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final

- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60- 1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
 - b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the job training."
- 2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
 - c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- 5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions:

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.

The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

- a. The records kept by the contractor shall document the following:
 - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA 1273 format and FHWA program requirements.

1. Minimum wages

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the

employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

Super Circular – Procurement Standards 2 CFR Parts 200.317 – 200.327

Procurement Standards <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200#subject-group-ECFR45ddd4419ad436d>

§ 200.317 Procurements by states.

When procuring property and services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will comply with [§§ 200.321](#), [200.322](#), and [200.323](#) and ensure that every purchase order or other contract includes any clauses required by [§ 200.327](#). All other non-Federal entities, including subrecipients of a State, must follow the procurement standards in [§§ 200.318](#) through [200.327](#).

§ 200.318 General procurement standards.

- (a) The non-Federal entity must have and use documented procurement procedures, consistent with State, local, and tribal laws and regulations and the standards of this section, for the acquisition of property or services required under a Federal award or subaward. The non-Federal entity's documented procurement procedures must conform to the procurement standards identified in [§§ 200.317](#) through [200.327](#).
- (b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.
- (c)
 - (1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.
 - (2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a State, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.
- (d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.
- (e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services. Competition requirements will be met with documented procurement actions using strategic sourcing, shared services, and other similar procurement arrangements.
- (f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also [§ 200.214](#).

(i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to, the following: Rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(j)

(1) The non-Federal entity may use a time-and-materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time-and-materials type contract means a contract whose cost to a non-Federal entity is the sum of:

(i) The actual cost of materials; and

(ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

(2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

[[85 FR 49543](#), Aug. 13, 2020, as amended at [86 FR 10440](#), Feb. 22, 2021]

§ 200.319 Competition.

(a) All procurement transactions for the acquisition of property or services required under a Federal award must be conducted in a manner providing full and open competition consistent with the standards of this section and [§ 200.320](#).

(b) In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

(1) Placing unreasonable requirements on firms in order for them to qualify to do business;

(2) Requiring unnecessary experience and excessive bonding;

(3) Noncompetitive pricing practices between firms or between affiliated companies;

(4) Noncompetitive contracts to consultants that are on retainer contracts;

(5) Organizational conflicts of interest;

(6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and

(7) Any arbitrary action in the procurement process.

(c) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(d) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(e) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

(f) Noncompetitive procurements can only be awarded in accordance with [§ 200.320\(c\)](#).

[§ 200.320 Methods of procurement to be followed.](#)

The non-Federal entity must have and use documented procurement procedures, consistent with the standards of this section and [§§ 200.317](#), [200.318](#), and [200.319](#) for any of the following methods of procurement used for the acquisition of property or services required under a Federal award or sub-award.

(a) ***Informal procurement methods.*** When the value of the procurement for property or services under a Federal award does not exceed the *simplified acquisition threshold (SAT)*, as defined in [§ 200.1](#), or a lower threshold established by a non-Federal entity, formal procurement methods are not required. The non-Federal entity may use informal procurement methods to expedite the completion of its transactions and minimize the associated administrative burden and cost. The informal methods used for procurement of property or services at or below the SAT include:

(1) *Micro-purchases* -

(i) ***Distribution.*** The acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (See the definition of *micro-purchase* in [§ 200.1](#)). To the maximum extent practicable, the non-Federal entity should distribute micro-purchases equitably among qualified suppliers.

(ii) ***Micro-purchase awards.*** Micro-purchases may be awarded without soliciting competitive price or rate quotations if the non-Federal entity considers the price to be reasonable based on research, experience, purchase history or other information and documents it files accordingly. Purchase cards can be used for micro-purchases if procedures are documented and approved by the non-Federal entity.

(iii) ***Micro-purchase thresholds.*** The non-Federal entity is responsible for determining and documenting an appropriate micro-purchase threshold based on internal controls, an evaluation of risk, and its documented procurement procedures. The micro-purchase threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations. Non-Federal entities may establish a threshold higher than the Federal threshold established in the Federal Acquisition Regulations (FAR) in accordance with [paragraphs \(a\)\(1\)\(iv\)](#) and [\(v\)](#) of this section.

(iv) ***Non-Federal entity increase to the micro-purchase threshold up to \$50,000.*** Non-Federal entities may establish a threshold higher than the micro-purchase threshold identified in the FAR in accordance with the requirements of this section. The non-Federal entity may self-certify a threshold up to \$50,000 on an annual basis and must maintain documentation to be made available to the Federal awarding agency and auditors in accordance with [§ 200.334](#). The self-

certification must include a justification, clear identification of the threshold, and supporting documentation of any of the following:

- (A) A qualification as a low-risk auditee, in accordance with the criteria in [§ 200.520](#) for the most recent audit;
- (B) An annual internal institutional risk assessment to identify, mitigate, and manage financial risks; or,
- (C) For public institutions, a higher threshold consistent with State law.

(v) **Non-Federal entity increase to the micro-purchase threshold over \$50,000.** Micro-purchase thresholds higher than \$50,000 must be approved by the cognizant agency for indirect costs. The non-federal entity must submit a request with the requirements included in [paragraph \(a\)\(1\)\(iv\)](#) of this section. The increased threshold is valid until there is a change in status in which the justification was approved.

(2) **Small purchases -**

(i) **Small purchase procedures.** The acquisition of property or services, the aggregate dollar amount of which is higher than the micro-purchase threshold but does not exceed the simplified acquisition threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources as determined appropriate by the non-Federal entity.

(ii) **Simplified acquisition thresholds.** The non-Federal entity is responsible for determining an appropriate simplified acquisition threshold based on internal controls, an evaluation of risk and its documented procurement procedures which must not exceed the threshold established in the FAR. When applicable, a lower simplified acquisition threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations.

(b) **Formal procurement methods.** When the value of the procurement for property or services under a Federal financial assistance award exceeds the SAT, or a lower threshold established by a non-Federal entity, formal procurement methods are required. Formal procurement methods require following documented procedures. Formal procurement methods also require public advertising unless a non-competitive procurement can be used in accordance with [§ 200.319](#) or [paragraph \(c\)](#) of this section. The following formal methods of procurement are used for procurement of property or services above the simplified acquisition threshold or a value below the simplified acquisition threshold the non-Federal entity determines to be appropriate:

(1) **Sealed bids.** A procurement method in which bids are publicly solicited and a firm fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bids method is the preferred method for procuring construction, if the conditions.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

- (A) A complete, adequate, and realistic specification or purchase description is available;
- (B) Two or more responsible bidders are willing and able to compete effectively for the business; and
- (C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

- (A) Bids must be solicited from an adequate number of qualified sources, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;
- (B) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;
- (C) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;
- (D) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(E) Any or all bids may be rejected if there is a sound documented reason.

(2) **Proposals.** A procurement method in which either a fixed price or cost-reimbursement type contract is awarded. Proposals are generally used when conditions are not appropriate for the use of sealed bids. They are awarded in accordance with the following requirements:

(i) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Proposals must be solicited from an adequate number of qualified offerors. Any response to publicized requests for proposals must be considered to the maximum extent practical;

(ii) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and making selections;

(iii) Contracts must be awarded to the responsible offeror whose proposal is most advantageous to the non-Federal entity, with price and other factors considered; and

(iv) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby offeror's qualifications are evaluated and the most qualified offeror is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms that are a potential source to perform the proposed effort.

(c) **Noncompetitive procurement.** There are specific circumstances in which noncompetitive procurement can be used. Noncompetitive procurement can only be awarded if one or more of the following circumstances apply:

(1) The acquisition of property or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (see [paragraph \(a\)\(1\)](#) of this section);

(2) The item is available only from a single source;

(3) The public exigency or emergency for the requirement will not permit a delay resulting from publicizing a competitive solicitation;

(4) The Federal awarding agency or pass-through entity expressly authorizes a noncompetitive procurement in response to a written request from the non-Federal entity; or

(5) After solicitation of a number of sources, competition is determined inadequate.

§ 200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in [paragraphs \(b\)\(1\)](#) through [\(5\)](#) of this section.

§ 200.322 Domestic preferences for procurements.

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

§ 200.323 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at [40 CFR part 247](#) that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

§ 200.324 Contract cost and price.

(a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.

(b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under [subpart E of this part](#). The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.

(d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§ 200.325 Federal awarding agency or pass-through entity review.

(a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

- (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
- (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
- (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a “brand name” product;
- (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
- (5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in [paragraph \(b\)](#) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

- (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third-party contracts are awarded on a regular basis;
- (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§ 200.326 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

- (a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.
- (b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.
- (c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

§ 200.327 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in appendix II to this part.

PART 200 - UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200>

Code of Federal Regulations

Subpart D – Post Federal Award Requirements

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- § 200.301 [Performance measurement.](#)
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- § 200.310 [Insurance coverage.](#)
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Appendix C

Texas Government Code Section §2156 Purchasing Methods

GOVERNMENT CODE

TITLE 10. GENERAL GOVERNMENT

SUBTITLE D. STATE PURCHASING AND GENERAL SERVICES

CHAPTER 2156. PURCHASING METHODS

SUBCHAPTER A. CONTRACT PURCHASE PROCEDURE

Sec. 2156.001. CONTRACT PURCHASE PROCEDURE AUTHORIZED. The comptroller may use the contract purchase procedure to purchase goods and services.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 60, eff. September 1, 2019.

Sec. 2156.0011. COMPTROLLER POWERS AND DUTIES. The comptroller has under this chapter the powers and duties described by Section [2151.004](#) (d).

Added by Acts 2007, 80th Leg., R.S., Ch. 937 (H.B. [3560](#)), Sec. 1.18, eff. September 1, 2007.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 60, eff. September 1, 2019.

Sec. 2156.0012. AUTHORITY TO ADOPT RULES. The comptroller may adopt rules to efficiently and effectively administer this chapter. Before adopting a rule under this section, the comptroller must conduct a public hearing regarding the proposed rule regardless of whether the requirements of Section [2001.029](#) (b) are met.

Added by Acts 2007, 80th Leg., R.S., Ch. 937 (H.B. [3560](#)), Sec. 1.18, eff. September 1, 2007.

Sec. 2156.002. SOLICITATION OF BIDS THROUGH PUBLIC NOTICE. (a) A notice inviting bids shall be published at least once in at least one newspaper of general circulation in the state not later than the seventh day before the last day set for the receipt of bids.

(b) The notice must:

(1) include a general description of the items to be purchased;

(2) state the location at which bid forms and specifications may be obtained; and

(3) state the time and place for opening bids.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Sec. 2156.003. SOLICITATION OF BIDS THROUGH BIDDERS LIST; BID INVITATIONS. (a) The comptroller shall electronically maintain a bidders list. If the comptroller determines that it is in the state's best interest, the comptroller may also maintain the list on paper. The comptroller may add or delete names from the list according to applicable standards provided by Section [2156.007](#).

(b) An invitation to bid on an item to be purchased may be sent electronically to a vendor on the bidders list who has expressed a desire to bid on that type of item.

(c) The comptroller may use the bidders list in making a purchase by any purchase method.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 2001, 77th Leg., ch. 1422, Sec. 7.03, eff. Sept. 1, 2001.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 393 (H.B. [1705](#)), Sec. 3.03, eff. September 1, 2009.

Sec. 2156.004. BID DEPOSIT. (a) The comptroller, as considered necessary, may require a bid deposit in an amount determined by the comptroller. The amount of the deposit, if any, must be stated in the public notice and the invitation to bid.

(b) On the award of a bid or the rejection of all bids, the comptroller shall refund the bid deposit of an unsuccessful bidder.

(c) The comptroller may accept from a bidder a bid deposit in the form of a blanket bond.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 2003, 78th Leg., ch. 785, Sec. 35, eff. Sept. 1, 2003.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 60, eff. September 1, 2019.

Sec. 2156.005. BID SUBMISSION AND OPENING; PUBLIC INSPECTION. (a) A bidder must submit a sealed bid to the comptroller or to the state agency making a purchase. The bid must be identified on the envelope as a bid.

(b) Subsection (a) does not apply to bids submitted through the use of facsimile transmission or on-line electronic transmission. The comptroller may adopt rules to ensure the identification, security, and confidentiality of bids submitted through the use of facsimile transmission or on-line electronic transmission.

(c) The comptroller or other state agency making a purchase shall open bids at the time and place stated in the invitation to bid.

(d) The comptroller shall keep a tabulation of all bids received by the comptroller available for public inspection under rules adopted by the comptroller. State agencies making purchases shall adopt the comptroller's rules related to bid opening and tabulation.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 494, Sec. 3, eff. Sept. 1, 1997; Acts 1997, 75th Leg., ch. 1206, Sec. 13, eff. Sept. 1, 1997.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 393 (H.B. [1705](#)), Sec. 3.04, eff. September 1, 2009.

Sec. 2156.006. SUBMISSION OF ADDITIONAL MATERIAL WITH BID. (a) A bidder as an essential element of the materiality of the bid must comply with the specified time limit for the submission of written information, samples, or models at or before the time for bid opening.

(b) The comptroller may waive this requirement if the failure to comply is beyond the bidder's control.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 61, eff. September 1, 2019.

Sec. 2156.007. CONTRACT AWARD. (a) The comptroller or other state agency making a purchase shall award a contract to the bidder offering the best value for the state while conforming to the specifications required.

(b) In determining the bidder offering the best value, the comptroller or other state agency may consider the safety record of the bidder, the entity represented by the bidder, and any person acting for the represented entity only if:

(1) the comptroller or other state agency has adopted a written definition and criteria for accurately determining the safety record of a bidder; and

(2) the comptroller or state agency provided notice in the bid specifications to prospective bidders that a bidder's safety record may be considered in determining the bidder offering the best value for the state.

(c) A determination of a bidder's safety record may not be arbitrary and capricious.

(d) In determining the bidder offering the best value, in addition to price the comptroller or other state agency shall consider:

(1) the quality and availability of the goods or contractual services and their adaptability to the use required;

(2) the scope of conditions attached to the bid;

(3) the bidder's ability, capacity, and skill to perform the contract or provide the service required;

(4) the bidder's ability to perform the contract or provide the service promptly, or in the time required, without delay or interference;

(5) the bidder's character, responsibility, integrity, and experience or demonstrated capability;

(6) the quality of performance of previous contracts or services;

(7) the bidder's previous and existing compliance with laws relating to the contract or service;

(8) the bidder's previous or existing noncompliance with specification requirements relating to the time of submission of specified information, including samples, models, drawings, or certificates;

(9) the sufficiency of the bidder's financial resources and ability to perform the contract or provide the service; and

(10) the bidder's ability to provide future maintenance, repair parts, and service for the use of the contract's subject.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 14, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 62, eff. September 1, 2019.

Sec. 2156.008. REJECTION OF BIDS. (a) The comptroller or other state agency making the purchase shall reject a bid in which there is a material failure to comply with specification requirements.

(b) The comptroller or other state agency may reject all bids or parts of bids if the rejection serves the state's interest.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 14, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 63, eff. September 1, 2019.

Sec. 2156.009. REASONS FOR AWARD. On award of a contract, the division of the comptroller responsible for purchasing or the state agency making the purchase shall prepare and file with other records relating to the transaction a statement of the

reasons for making the award to the successful bidder and the factors considered in determining which bidder offered the best value for the state.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 14, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 63, eff. September 1, 2019.

Sec. 2156.010. TIE BIDS. In the case of tie bids, the value and cost to the state being equal, a contract shall be awarded under comptroller rules.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 14, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 63, eff. September 1, 2019.

Sec. 2156.011. PERFORMANCE BOND. (a) The comptroller may require a performance bond before executing a contract.

(b) The comptroller may require the bond in an amount that the comptroller finds reasonable and necessary to protect the state's interests.

(c) Any bond required shall be issued on the condition that the bidder faithfully execute the terms of the contract.

(d) Any bond required shall be filed with the comptroller.

(e) Recoveries under the bond may continue until the bond is exhausted.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 64, eff. September 1, 2019.

SUBCHAPTER B. OPEN MARKET PURCHASE PROCEDURE

Sec. 2156.061. USE OF OPEN MARKET PURCHASE PROCEDURE. On a comptroller determination that a purchase of goods or services may be made most effectively in the open market, the comptroller may use the open market purchase procedure and the purchase may be made without newspaper advertising.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 65, eff. September 1, 2019.

Sec. 2156.062. MINIMUM NUMBER AND EVALUATION OF BIDS. An open market purchase shall, to the extent possible, be:

(1) based on at least three competitive bids; and

(2) awarded to the bidder offering the best value for the state in accordance with standards set forth in Chapters [2155](#), [2156](#), [2157](#), and [2158](#).

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 15, eff. Sept. 1, 1997.

Sec. 2156.063. SOLICITATION OF BIDS. The comptroller and each state agency making a purchase shall solicit bids under this subchapter by:

- (1) direct mail;
- (2) telephone;
- (3) telegraph;
- (4) facsimile transmission; or
- (5) on-line electronic transmission.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 494, Sec. 4, eff. Sept. 1, 1997; Acts 1997, 75th Leg., ch. 1206, Sec. 15, eff. Sept. 1, 1997.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 393 (H.B. [1705](#)), Sec. 3.05, eff. September 1, 2009.

Sec. 2156.064. RECORDING AND INSPECTION OF BIDS. (a) The comptroller shall keep a record of all open market orders and bids submitted on the orders.

(b) A tabulation of the bids shall be open for public inspection, under rules established by the comptroller.

(c) A tabulation of the bids shall always be open for inspection by the state auditor or the auditor's representative.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 66, eff. September 1, 2019.

Sec. 2156.065. AGENCY REVIEW OF BIDS. (a) On the request of a state agency to review the bids on a purchase administered by the comptroller, the comptroller shall send or make available to the requesting agency copies of each bid received and the comptroller's recommended award.

(b) If, after review of the bids and evaluation of the quality of goods or services offered in the bids, the state agency determines that the bid selected by the comptroller does not offer the best value for the state, the agency may file with the comptroller a written recommendation that the award be made to the bidder who, according to the agency's determination, offers the best value for the state. The agency recommendation must include a justification of the agency's determination.

(c) The comptroller shall consider, but is not bound by, the agency recommendation in making the award.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 16, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.066. STATEMENT OF REASONS FOR AWARD. The division of the comptroller responsible for purchasing or the state agency making a purchase shall prepare and file with other records relating to a transaction under this subchapter a statement of the reasons for placing an order with a successful bidder for the transaction and the factors considered in determining the bid offering the best value for the state.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 16, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

SUBCHAPTER C. COMPETITIVE SEALED PROPOSALS FOR ACQUISITION OF GOODS AND SERVICES

Sec. 2156.121. USE OF COMPETITIVE SEALED PROPOSALS. (a) The comptroller or other state agency may follow a procedure using competitive sealed proposals to acquire goods or services if the comptroller determines that competitive sealed bidding and informal competitive bidding for the purchase or type of purchase are not practical or are disadvantageous to the state.

(b) A state agency shall send its proposal specifications and criteria to the comptroller for approval or request the comptroller to develop the proposal specifications and criteria.

(c) The comptroller shall determine whether to delegate sole oversight of the acquisition to a state agency or to retain oversight of the procurement.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997; Acts 1999, 76th Leg., ch. 426, Sec. 8, eff. June 18, 1999.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.122. SOLICITATION OF PROPOSALS. The comptroller or other state agency shall:

(1) solicit proposals under this subchapter by a request for proposals; and

(2) give public notice of a request for proposals in the manner provided for requests for bids under Subchapter B.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.124 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.123. OPENING AND FILING OF PROPOSALS; PUBLIC INSPECTION. (a) The comptroller or other state agency shall avoid disclosing the contents of each proposal on opening the proposal and during negotiations with competing offerors.

(b) The comptroller or other state agency shall file each proposal in a register of proposals, which, after a contract is awarded, is open for public inspection unless the register contains information that is excepted from required disclosure under Subchapter C, Chapter [552](#).

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.126 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.124. DISCUSSION AND REVISION OF PROPOSALS. (a) As provided in a request for proposals and under rules adopted by the comptroller, the comptroller or other state agency may discuss acceptable or potentially acceptable proposals with offerors to assess an offeror's ability to meet the solicitation requirements. When the comptroller is managing the request for proposals process, it shall invite a requisitioning agency to participate in discussions conducted under this section.

(b) After receiving a proposal but before making an award, the comptroller or other state agency may permit the offeror to revise the proposal to obtain the best final offer.

(c) The comptroller or other state agency may not disclose information derived from proposals submitted from competing offerors in conducting discussions under this section.

(d) The comptroller or other state agency shall provide each offeror an equal opportunity to discuss and revise proposals.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.127 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.125. CONTRACT AWARD. (a) The comptroller or other state agency shall make a written award of a contract to the offeror whose proposal offers the best value for the state, considering price, past vendor performance, vendor experience or demonstrated capability, and the evaluation factors in the request for proposals.

(b) The comptroller or other state agency shall refuse all offers if none of the offers submitted is acceptable.

(c) The comptroller or other state agency shall determine which proposal offers the best value for the state in accordance with Sections [2155.074](#) and [2155.075](#).

(d) The comptroller or other state agency shall state in writing in the contract file the reasons for making an award.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.128 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.126. ADOPTION OF RULES; STATE AGENCY ASSISTANCE. The comptroller may adopt rules and request assistance from other state agencies to perform its responsibilities under this subchapter.

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.129 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

Amended by:

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 67, eff. September 1, 2019.

Sec. 2156.127. COMPETITIVE SEALED PROPOSALS FOR TELECOMMUNICATIONS AND AUTOMATED INFORMATION SYSTEMS NOT AFFECTED. This subchapter does not affect Subchapter C, Chapter [2157](#).

Added by Acts 1995, 74th Leg., ch. 41, Sec. 1, eff. Sept. 1, 1995. Renumbered from Sec. 2156.130 and amended by Acts 1997, 75th Leg., ch. 1206, Sec. 17, eff. Sept. 1, 1997.

SUBCHAPTER D. INTERSTATE COMPACTS PROCEDURE

Sec. 2156.181. INTERSTATE COMPACTS AND COOPERATIVE AGREEMENTS FOR PROCUREMENTS.

(a) The comptroller may enter into one or more compacts, interagency agreements, or cooperative purchasing agreements directly with one or more state governments, agencies of other states, or other governmental entities or may participate in, sponsor, or administer a cooperative purchasing agreement through an entity that facilitates those agreements for the purchase of goods or services if the comptroller determines that the agreement would be in the best interest of the state.

(a-1) A compact or agreement described by this section may not be used to purchase services that are defined as part of the practice of engineering under Section [1001.003](#), Occupations Code, or architecture under Section [1051.001](#), Occupations Code.

(b) The comptroller may adopt rules to implement this section.

Added by Acts 1999, 76th Leg., ch. 426, Sec. 9, eff. June 18, 1999.

Amended by:

Acts 2015, 84th Leg., R.S., Ch. 326 (S.B. [20](#)), Sec. 14, eff. September 1, 2015.

Acts 2015, 84th Leg., R.S., Ch. 582 (H.B. [3342](#)), Sec. 1, eff. September 1, 2015.

Acts 2019, 86th Leg., R.S., Ch. 1071 (H.B. [1524](#)), Sec. 68, eff. September 1, 2019.

Appendix D

Texas Government Code Section §2269 Purchasing Methods

GOVERNMENT CODE

TITLE 10. GENERAL GOVERNMENT

SUBTITLE F. STATE AND LOCAL CONTRACTS AND FUND MANAGEMENT

CHAPTER 2269. CONTRACTING AND DELIVERY PROCEDURES FOR CONSTRUCTION PROJECTS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 2269.001. DEFINITIONS. In this chapter:

- (1) "Architect" means an individual registered as an architect under Chapter [1051](#), Occupations Code.
- (2) "Engineer" means an individual licensed as an engineer under Chapter [1001](#), Occupations Code.
- (3) "Facility" means, unless otherwise specifically provided, an improvement to real property.
- (4) "General conditions" in the context of a contract for the construction, rehabilitation, alteration, or repair of a facility means on-site management, administrative personnel, insurance, bonds, equipment, utilities, and incidental work, including minor field labor and materials.
- (5) "General contractor" means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for constructing, rehabilitating, altering, or repairing all or part of a facility at the contracted price.
- (6) "Public work contract" means a contract for constructing, altering, or repairing a public building or carrying out or completing any public work.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.002. APPLICABILITY OF CHAPTER TO GOVERNMENTAL ENTITIES ENGAGED IN PUBLIC WORKS. This chapter applies to a public work contract made by a governmental entity authorized by state law to make a public work contract, including:

- (1) a state agency as defined by Section [2151.002](#), including the Texas Facilities Commission;
- (2) a local government, including:
 - (A) a county;
 - (B) a municipality;

(C) a school district;

(D) any other special district or authority, including a hospital district, a defense base development authority established under Chapter [379B](#), Local Government Code, and a conservation and reclamation district, including a river authority or any other type of water district; and

(E) any other political subdivision of this state;

(3) a public junior college as defined by Section [61.003](#), Education Code; and

(4) a board of trustees governed by Chapter [54](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.003. CONFLICT OF LAWS; REQUIREMENT TO FOLLOW PROCEDURES OF THIS CHAPTER. (a) Except as provided by this section, this chapter prevails over any other law relating to a public work contract.

(b) This chapter does not prevail over a conflicting provision in a law relating to contracting with a historically underutilized business.

(c) This chapter does not prevail over a conflicting provision in an ordinance or resolution passed by the governing body of a municipally owned electric utility in a procedure described by Section [252.022](#)(c), Local Government Code, that:

(1) requires the use of competitive bidding or competitive sealed proposals; or

(2) prescribes a design-build procurement procedure that conflicts with this chapter.

(d) This chapter does not prevail over any law, rule, or regulation relating to competitive bidding or competitive sealed proposals for construction services, or to procurement of construction services pursuant to Section [49.273](#), Water Code, that applies to a river authority or to a conservation and reclamation district created under Section [59](#), Article XVI, Texas Constitution, unless the governing body of the river authority or conservation and reclamation district elects to permit this chapter to supersede the law, rule, or regulation.

(e) This chapter does not prevail over a conflicting provision in a regulation that prescribes procurement procedures for construction services that is adopted by the governing board of a river authority or of a conservation and reclamation district created pursuant to Section [59](#), Article XVI, Texas Constitution, that owns electric generation capacity in excess of 2,500 megawatts, except with respect to Subchapter H.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.004. EXEMPTION: TEXAS DEPARTMENT OF TRANSPORTATION; HIGHWAY PROJECTS. This chapter does not apply to:

- (1) a contract entered into by the Texas Department of Transportation; or
- (2) a project that receives money from a state or federal highway fund.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.005. APPLICABILITY: INSTITUTIONS OF HIGHER EDUCATION. (a) In this section, "institution of higher education," "public junior college," and "university system" have the meanings assigned by Section [61.003](#), Education Code.

(b) This chapter applies to a public junior college but does not apply to:

- (1) any other institution of higher education; or
- (2) a university system.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.006. EXEMPTION: REGIONAL TOLLWAY AUTHORITIES. This chapter does not apply to a regional tollway authority under Chapter [366](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.007. EXEMPTION: CERTAIN LOCAL GOVERNMENT CORPORATION IMPROVEMENT PROJECTS. This chapter does not apply to an improvement project undertaken by or through a local government corporation exempt from competitive bidding requirements or restrictions under Section [431.110](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.008. EXEMPTION: REGIONAL MOBILITY AUTHORITIES. This chapter does not apply to a regional mobility authority under Chapter [370](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.009. EXEMPTION: COUNTY TOLL AUTHORITIES. This chapter does not apply to a project of a county under Chapter [284](#), Transportation Code, unless the county adopts an order electing to be governed by this chapter for a project to be developed by the county under Chapter 284.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.010. EXEMPTION: COORDINATED COUNTY TRANSPORTATION AUTHORITY. This chapter does not apply to a coordinated county transportation authority under Chapter [460](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER B. GENERAL POWERS AND DUTIES

Sec. 2269.051. RULES. A governmental entity may adopt rules as necessary to implement this chapter.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.052. NOTICE REQUIREMENTS. (a) A governmental entity shall advertise or publish notice of requests for bids, proposals, or qualifications in a manner prescribed by law.

(b) For a contract entered into by a governmental entity under a method provided by this chapter, the governmental entity shall publish notice of the time and

place the bid or proposal or request for qualifications will be received and opened in a manner prescribed by law.

(c) For a contract entered into by a municipality, river authority, conservation and reclamation district created pursuant to Section [59](#), Article XVI, Texas Constitution, and located in a county with a population of more than 250,000, or defense base development authority under any of the methods provided by this chapter, the municipality, river authority, conservation and reclamation district created pursuant to Section [59](#), Article XVI, Texas Constitution, and located in a county with a population of more than 250,000, or defense base development authority shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper of general circulation in the county in which the defense base development authority's or municipality's central administrative office is located or the county in which the greatest amount of the river authority's or such conservation and reclamation district's territory is located once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in that county, the notice shall be published in a newspaper of general circulation in the county nearest the county seat of the county in which the defense base development authority's or municipality's central administrative office is located or the county in which the greatest amount of the river authority's or such conservation and reclamation district's territory is located. In a two-step procurement process, the time and place the second step bids, proposals, or responses will be received are not required to be published separately.

(d) For a contract entered into by a county under any of the methods provided by this chapter, the county shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper of general circulation in the county once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in the county, the notice shall be:

(1) posted at the courthouse door of the county; and

(2) published in a newspaper of general circulation in the nearest county.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.053. DELEGATION OF AUTHORITY. (a) The governing body of a governmental entity may delegate its authority under this chapter regarding an action authorized or required by this chapter to a designated representative, committee, or other person.

(b) The governmental entity shall provide notice of the delegation, the limits of the delegation, and the name or title of each person designated under Subsection (a) by rule or in the request for bids, proposals, or qualifications or in an addendum to the request.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.054. RIGHT TO WORK. (a) This section applies to a governmental entity when the governmental entity is engaged in:

- (1) procuring goods or services under this chapter;
- (2) awarding a contract under this chapter; or
- (3) overseeing procurement or construction for a public work or public improvement under this chapter.

(b) In engaging in an activity to which this section applies, a governmental entity:

- (1) may not consider whether a person is a member of or has another relationship with any organization; and
- (2) shall ensure that its bid specifications and any subsequent contract or other agreement do not deny or diminish the right of a person to work because of the person's membership or other relationship status with respect to an organization.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.0541. AGREEMENT WITH COLLECTIVE BARGAINING ORGANIZATION. (a) A governmental entity awarding a public work contract funded with state money, including the issuance of debt guaranteed by this state, may not:

- (1) prohibit, require, discourage, or encourage a person bidding on the public work contract, including a contractor or subcontractor, from entering into or adhering to an agreement with a collective bargaining organization relating to the project; or
- (2) discriminate against a person described by Subdivision (1) based on the person's involvement in the agreement, including the person's:
 - (A) status or lack of status as a party to the agreement; or
 - (B) willingness or refusal to enter into the agreement.

(b) This section may not be construed to:

- (1) prohibit activity protected by the National Labor Relations Act (29 U.S.C. Section 151 et seq.), including entering into an agreement with a collective bargaining organization relating to the project; or
- (2) permit conduct prohibited under the National Labor Relations Act (29 U.S.C. Section 151 et seq.).

Added by Acts 2019, 86th Leg., R.S., Ch. 366 (H.B. [985](#)), Sec. 2, eff. September 1, 2019.

Sec. 2269.055. CRITERIA TO CONSIDER. (a) In determining the award of a contract under this chapter, the governmental entity may consider:

- (1) the price;
- (2) the offeror's experience and reputation;
- (3) the quality of the offeror's goods or services;
- (4) the impact on the ability of the governmental entity to comply with rules relating to historically underutilized businesses;
- (5) the offeror's safety record;
- (6) the offeror's proposed personnel;
- (7) whether the offeror's financial capability is appropriate to the size and scope of the project; and
- (8) any other relevant factor specifically listed in the request for bids, proposals, or qualifications.

(b) In determining the award of a contract under this chapter, the governmental entity shall:

- (1) consider and apply any existing laws, including any criteria, related to historically underutilized businesses; and
- (2) consider and apply any existing laws, rules, or applicable municipal charters, including laws applicable to local governments, related to the use of women, minority, small, or disadvantaged businesses.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.056. USING METHOD OTHER THAN COMPETITIVE BIDDING FOR CONSTRUCTION SERVICES; EVALUATION OF PROPOSALS; CRITERIA. (a) The governing body of a governmental entity that considers a construction contract using a method authorized by this chapter other than competitive bidding must, before advertising, determine which method provides the best value for the governmental entity.

(b) The governmental entity shall base its selection among offerors on applicable criteria listed for the particular method used. The governmental entity shall publish in the request for proposals or qualifications:

- (1) the criteria that will be used to evaluate the offerors;
- (2) the applicable weighted value for each criterion; and
- (3) a detailed methodology for scoring each criterion.

(c) The governmental entity shall document the basis of its selection and shall make the evaluations public not later than the seventh day after the date the contract is awarded.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2017, 85th Leg., R.S., Ch. 556 (S.B. [533](#)), Sec. 13, eff. September 1, 2017.

Acts 2021, 87th Leg., R.S., Ch. 702 (H.B. [2581](#)), Sec. 1, eff. September 1, 2021.

Sec. 2269.057. ARCHITECT OR ENGINEER SERVICES. (a) An architect or engineer required to be selected or designated under this chapter has full responsibility for complying with Chapter [1051](#) or [1001](#), Occupations Code, as applicable.

(b) If the selected or designated architect or engineer is not a full-time employee of the governmental entity, the governmental entity shall select the architect or engineer on the basis of demonstrated competence and qualifications as provided by Section [2254.004](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.058. USE OF OTHER PROFESSIONAL SERVICES. (a) Independently of the contractor, construction manager-at-risk, or design-build firm, the governmental entity shall provide or contract for the construction materials engineering, testing, and inspection services and the verification testing services necessary for acceptance of the facility by the governmental entity.

(b) The governmental entity shall select the services for which it contracts under this section in accordance with Section [2254.004](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.059. SEALED BIDS, PROPOSALS, OR QUALIFICATIONS REQUIRED. A person who submits a bid, proposal, or qualification to a governmental entity shall seal it before delivery.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.060. DOCUMENTS RELATED TO EVALUATION AND RANKING. (a) An offeror who submits a bid, proposal, or response to a request for qualifications for a construction contract under this chapter may, after the contract is awarded, make a

request in writing to the governmental entity to provide documents related to the evaluation of the offeror's submission.

(b) Not later than the 30th day after the date a request is made under Subsection (a), the governmental entity shall deliver to the offeror the documents relating to the evaluation of the submission including, if applicable, its ranking of the submission.

Added by Acts 2021, 87th Leg., R.S., Ch. 702 (H.B. [2581](#)), Sec. 2, eff. September 1, 2021.

SUBCHAPTER C. COMPETITIVE BIDDING METHOD

Sec. 2269.101. CONTRACTS FOR FACILITIES: COMPETITIVE BIDDING. (a) In this chapter, "competitive bidding" is a procurement method by which a governmental entity contracts with a contractor for the construction, alteration, rehabilitation, or repair of a facility by awarding the contract to the lowest responsible bidder.

(b) Except as otherwise provided by this chapter or other law, a governmental entity may contract for the construction, alteration, rehabilitation, or repair of a facility only after the entity advertises for bids for the contract in a manner prescribed by law, receives competitive bids, and awards the contract to the lowest responsible bidder.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.102. USE OF ARCHITECT OR ENGINEER. The governmental entity shall select or designate an architect or engineer in accordance with Chapter [1051](#) or [1001](#), Occupations Code, as applicable, to prepare the construction documents required for a project to be awarded by competitive bidding.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.103. PREPARATION OF REQUEST. The governmental entity shall prepare a request for competitive bids that includes construction documents, estimated budget, project scope, estimated project completion date, and other information that a contractor may require to submit a bid.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.104. EVALUATION OF OFFERORS. The governmental entity shall receive, publicly open, and read aloud the names of the offerors and their bids.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.105. SELECTION OF OFFEROR. Not later than the seventh day after the date the contract is awarded, the governmental entity shall document the basis of its selection and shall make the evaluations public.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.106. APPLICABILITY OF OTHER COMPETITIVE BIDDING LAW TO CERTAIN LOCAL GOVERNMENTAL ENTITIES. Except as otherwise specifically provided by this section, Subchapter [B](#), Chapter [271](#), Local Government Code, does not apply to a competitive bidding process conducted under this chapter. Sections [271.026](#), [271.027](#)(a), and [271.0275](#), Local Government Code, apply to a competitive bidding process conducted under this chapter by a governmental entity as defined by Section [271.021](#), Local Government Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER D. COMPETITIVE SEALED PROPOSAL METHOD

Sec. 2269.151. CONTRACTS FOR FACILITIES: COMPETITIVE SEALED PROPOSALS. (a) In this chapter, "competitive sealed proposals" is a procurement method by which a governmental entity requests proposals, ranks the offerors, negotiates as prescribed, and then contracts with a general contractor for the construction, rehabilitation, alteration, or repair of a facility.

(b) In selecting a contractor through competitive sealed proposals, a governmental entity shall follow the procedures provided by this subchapter.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.152. USE OF ARCHITECT OR ENGINEER. The governmental entity shall select or designate an architect or engineer to prepare construction documents for the project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.153. PREPARATION OF REQUEST. (a) In this section, "civil works project" has the meaning assigned by Section [2269.351](#).

(b) The governmental entity shall prepare a request for competitive sealed proposals that includes construction documents, selection criteria and the weighted value for each criterion, estimated budget, project scope, estimated project completion date, and other information that a contractor may require to respond to the request.

(c) Except as provided by Subsection (d), for civil works projects, the weighted value assigned to price must be at least 50 percent of the total weighted value of all selection criteria.

(d) If the governing body of a governmental entity determines that assigning a lower weighted value to price is in the public interest, the governmental entity may assign to price a weighted value of not less than 36.9 percent of the total weighted value of all selection criteria.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2021, 87th Leg., R.S., Ch. 702 (H.B. [2581](#)), Sec. 3, eff. September 1, 2021.

Sec. 2269.154. EVALUATION OF OFFERORS. (a) The governmental entity shall receive, publicly open, and read aloud the names of the offerors and any monetary proposals made by the offerors.

(b) Not later than the 45th day after the date on which the proposals are opened, the governmental entity shall evaluate and rank each proposal submitted in relation to the published selection criteria.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.155. SELECTION OF OFFEROR. (a) The governmental entity shall select the offeror that submits the proposal that offers the best value for the governmental entity based on:

(1) the selection criteria in the request for proposal and the weighted value for those criteria in the request for proposal; and

(2) its ranking evaluation.

(b) The governmental entity shall first attempt to negotiate a contract with the selected offeror. The governmental entity and its architect or engineer may discuss with the selected offeror options for a scope or time modification and any price change associated with the modification.

(c) If the governmental entity is unable to negotiate a satisfactory contract with the selected offeror, the governmental entity shall, formally and in writing, end negotiations with that offeror and proceed to the next offeror in the order of the selection ranking until a contract is reached or all proposals are rejected.

(d) Not later than the seventh business day after the date the contract is awarded, the governmental entity shall make the evaluations, including any scores, public and provide them to all offerors.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2021, 87th Leg., R.S., Ch. 702 (H.B. [2581](#)), Sec. 4, eff. September 1, 2021.

SUBCHAPTER E. CONSTRUCTION MANAGER-AGENT METHOD

Sec. 2269.201. CONTRACTS FOR FACILITIES: CONSTRUCTION MANAGER-AGENT. (a) In this chapter, the "construction manager-agent method" is a delivery method by which a governmental entity contracts with a construction manager-agent to provide consultation or administrative services during the design and construction phase and to manage multiple contracts with various construction prime contractors.

(b) A construction manager-agent is a sole proprietorship, partnership, corporation, or other legal entity that serves as the agent for the governmental entity by providing construction administration and management services described by Subsection (a) for the construction, rehabilitation, alteration, or repair of a facility.

(c) A governmental entity may retain a construction manager-agent for assistance in the construction, rehabilitation, alteration, or repair of a facility only as provided by this subchapter.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.202. CONTRACT PROVISIONS OF CONSTRUCTION MANAGER-AGENT. The contract between the governmental entity and the construction manager-agent may require the construction manager-agent to provide:

- (1) administrative personnel;
- (2) equipment necessary to perform duties under this subchapter;
- (3) on-site management; and
- (4) other services specified in the contract.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.203. LIMITS ON CONSTRUCTION MANAGER-AGENT. A construction manager-agent may not:

- (1) self-perform any aspect of the construction, rehabilitation, alteration, or repair of the facility;
- (2) be a party to a construction subcontract for the construction, rehabilitation, alteration, or repair of the facility; or
- (3) provide or be required to provide performance and payment bonds for the construction, rehabilitation, alteration, or repair of the facility.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.204. FIDUCIARY CAPACITY OF CONSTRUCTION MANAGER-AGENT. A construction manager-agent represents the governmental entity in a fiduciary capacity.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.205. USE OF ARCHITECT OR ENGINEER. (a) On or before the selection of a construction manager-agent, the governmental entity shall select or designate an

architect or engineer in accordance with Chapter [1051](#) or [1001](#), Occupations Code, as applicable, to prepare the construction documents for the project.

(b) The governmental entity's architect or engineer may not serve, alone or in combination with another person, as the construction manager-agent unless the architect or engineer is hired to serve as the construction manager-agent under a separate or concurrent selection process conducted in accordance with this subchapter. This subsection does not prohibit the governmental entity's architect or engineer from providing customary construction phase services under the architect's or engineer's original professional service agreement in accordance with applicable licensing laws.

(c) To the extent that the construction manager-agent's services are defined as part of the practice of architecture or engineering under Chapter [1051](#) or [1001](#), Occupations Code, those services must be conducted by a person licensed under the applicable chapter.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.206. SELECTION OF CONTRACTORS. A governmental entity using the construction manager-agent method shall procure, in accordance with applicable law and in any manner authorized by this chapter, a general contractor or trade contractors who will serve as the prime contractor for their specific portion of the work and provide performance and payment bonds to the governmental entity in accordance with applicable laws.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.207. SELECTION OF CONSTRUCTION MANAGER-AGENT. A governmental entity shall select a construction manager-agent on the basis of demonstrated competence and qualifications in the same manner that an architect or engineer is selected under Section [2254.004](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.208. INSURANCE. A construction manager-agent selected under this subchapter shall maintain professional liability or errors and omissions insurance in the amount of at least \$1 million for each occurrence.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER F. CONSTRUCTION MANAGER-AT-RISK METHOD

Sec. 2269.251. CONTRACTS FOR FACILITIES: CONSTRUCTION MANAGER-AT-RISK. (a) In this chapter, the "construction manager-at-risk method" is a delivery method by which a governmental entity contracts with an architect or engineer for design and construction phase services and contracts separately with a construction manager-at-risk to serve as the general contractor and to provide consultation during the design and construction, rehabilitation, alteration, or repair of a facility.

(b) A construction manager-at-risk is a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for construction, rehabilitation, alteration, or repair of a facility at the contracted price as a general contractor and provides consultation to the governmental entity regarding construction during and after the design of the facility. The contracted price may be a guaranteed maximum price.

(c) A governmental entity may use the construction manager-at-risk method in selecting a general contractor for the construction, rehabilitation, alteration, or repair of a facility only as provided by this subchapter.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.252. USE OF ARCHITECT OR ENGINEER. (a) On or before the selection of a construction manager-at-risk, the governmental entity shall select or designate an architect or engineer to prepare the construction documents for the project.

(b) The governmental entity's architect or engineer for a project, or an entity related to the governmental entity's architect or engineer, may not serve, alone or in combination with another person, as the construction manager-at-risk. This subsection does not prohibit the governmental entity's architect or engineer from providing customary construction phase services under the architect's or engineer's original professional service agreement in accordance with applicable licensing laws.

(c) For purposes of Subsection (b), an entity is related to the governmental entity's architect or engineer if the entity is a sole proprietorship, corporation, partnership, limited liability company, or other entity that is a subsidiary, parent corporation, or partner or has any other relationship in which the governmental entity's architect or engineer has an ownership interest, or is subject to common ownership or control, or is party to an agreement by which it will receive any proceeds of the construction manager-at-risk's payments from the governmental entity.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2015, 84th Leg., R.S., Ch. 788 (H.B. [2634](#)), Sec. 1, eff. September 1, 2015.

Sec. 2269.253. SELECTION PROCESS. (a) The governmental entity shall select the construction manager-at-risk in a one-step or two-step process.

(b) The governmental entity shall prepare a single request for proposals, in the case of a one-step process, and an initial request for qualifications, in the case of a two-step process, that includes:

(1) a statement as to whether the selection process is a one-step or two-step process;

(2) general information on the project site, project scope, schedule, selection criteria and the weighted value for each criterion, and estimated budget and the time and place for receipt of the proposals or qualifications; and

(3) other information that may assist the governmental entity in its selection of a construction manager-at-risk.

(c) The governmental entity shall state the selection criteria in the request for proposals or qualifications.

(d) If a one-step process is used, the governmental entity may request, as part of the offeror's proposal, proposed fees and prices for fulfilling the general conditions.

(e) If a two-step process is used, the governmental entity may not request fees or prices in step one. In step two, the governmental entity may request that five or fewer offerors, selected solely on the basis of qualifications, provide additional information, including the construction manager-at-risk's proposed fee and prices for fulfilling the general conditions.

(f) At each step, the governmental entity shall receive, publicly open, and read aloud the names of the offerors. At the appropriate step, the governmental entity shall also read aloud the fees and prices, if any, stated in each proposal as the proposal is opened.

(g) Not later than the 45th day after the date on which the final proposals are opened, the governmental entity shall evaluate and rank each proposal submitted in relation to the criteria set forth in the request for proposals.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Sec. 2269.254. SELECTION OF OFFEROR. (a) The governmental entity shall select the offeror that submits the proposal that offers the best value for the governmental entity based on the published selection criteria and on its ranking evaluation.

(b) The governmental entity shall first attempt to negotiate a contract with the selected offeror.

(c) If the governmental entity is unable to negotiate a satisfactory contract with the selected offeror, the governmental entity shall, formally and in writing, end negotiations with that offeror and proceed to negotiate with the next offeror in the order of the selection ranking until a contract is reached or negotiations with all ranked offerors end.

(d) Not later than the seventh day after the date the contract is awarded, the governmental entity shall make the rankings determined under Section [2269.253](#)(g) public.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(11), eff. September 1, 2013.

Sec. 2269.255. PERFORMANCE OF WORK. (a) A construction manager-at-risk shall publicly advertise for bids or proposals and receive bids or proposals from trade contractors or subcontractors for the performance of all major elements of the work other than the minor work that may be included in the general conditions.

(b) A construction manager-at-risk may seek to perform portions of the work itself if:

(1) the construction manager-at-risk submits its bid or proposal for those portions of the work in the same manner as all other trade contractors or subcontractors; and

(2) the governmental entity determines that the construction manager-at-risk's bid or proposal provides the best value for the governmental entity.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.256. REVIEW OF BIDS OR PROPOSALS. (a) The construction manager-at-risk shall review all trade contractor or subcontractor bids or proposals in a manner that does not disclose the contents of the bid or proposal during the selection process to a person not employed by the construction manager-at-risk, architect, engineer, or governmental entity. All bids or proposals shall be made available to the governmental entity on request and to the public after the later of the award of the contract or the seventh day after the date of final selection of bids or proposals.

(b) If the construction manager-at-risk reviews, evaluates, and recommends to the governmental entity a bid or proposal from a trade contractor or subcontractor but the governmental entity requires another bid or proposal to be accepted, the governmental entity shall compensate the construction manager-at-risk by a change in price, time, or guaranteed maximum cost for any additional cost and risk that the construction manager-at-risk incurs because of the governmental entity's requirement that another bid or proposal be accepted.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.257. DEFAULT; PERFORMANCE OF WORK. If a selected trade contractor or subcontractor defaults in the performance of its work or fails to execute a subcontract after being selected in accordance with this subchapter, the construction manager-at-risk may itself fulfill, without advertising, the contract requirements or select a replacement trade contractor or subcontractor to fulfill the contract requirements.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.258. PERFORMANCE OR PAYMENT BOND. (a) If a fixed contract amount or guaranteed maximum price has not been determined at the time the contract is awarded, the penal sums of the performance and payment bonds delivered to the governmental entity must each be in an amount equal to the construction budget, as specified in the request for proposals or qualifications.

(b) The construction manager-at-risk shall deliver the bonds not later than the 10th day after the date the construction manager-at-risk executes the contract unless the construction manager-at-risk furnishes a bid bond or other financial security acceptable to the governmental entity to ensure that the construction manager will furnish the required performance and payment bonds when a guaranteed maximum price is established.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER G. BUILDING USING DESIGN-BUILD METHOD

Sec. 2269.301. CONTRACTS FOR FACILITIES: DESIGN-BUILD. In this chapter, "design-build" is a project delivery method by which a governmental entity contracts with a single entity to provide both design and construction services for the construction, rehabilitation, alteration, or repair of a facility.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.302. APPLICABILITY OF SUBCHAPTER TO BUILDINGS; EXCEPTIONS. This subchapter applies only to a facility that is a building or an associated structure, including an electric utility structure. This subchapter does not apply to:

(1) a highway, road, street, bridge, underground utility, water supply project, water plant, wastewater plant, water and wastewater distribution or conveyance facility, wharf, dock, airport runway or taxiway, drainage project, or related type of project associated with civil engineering construction; or

(2) a building or structure that is incidental to a project that is primarily a civil engineering construction project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.303. CONTRACTS FOR BUILDINGS: DESIGN-BUILD. A governmental entity may use the design-build method for the construction, rehabilitation, alteration, or repair of a building or associated structure only as provided by this subchapter. In using that method, the governmental entity shall enter into a single contract with a design-build firm for the design and construction of the building or associated structure.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.304. DESIGN-BUILD FIRMS. A design-build firm under this subchapter must be a sole proprietorship, partnership, corporation, or other legal entity or team that includes an architect or engineer and a construction contractor.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.305. USE OF ARCHITECT OR ENGINEER AS INDEPENDENT REPRESENTATIVE. The governmental entity shall select or designate an architect or engineer independent of the design-build firm to act as the governmental entity's representative for the duration of the project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.306. PREPARATION OF REQUEST. (a) The governmental entity shall prepare a request for qualifications that includes general information on the project site, project scope, budget, special systems, selection criteria and the weighted value for each criterion, and other information that may assist potential design-build firms in submitting proposals for the project.

(b) The governmental entity shall also prepare the design criteria package that includes more detailed information on the project. If the preparation of the design criteria package requires architectural or engineering services that constitute the practice of architecture within the meaning of Chapter [1051](#), Occupations Code, or the practice of engineering within the meaning of Chapter [1001](#), Occupations Code, those services shall be provided in accordance with the applicable law.

(c) The design criteria package must include a set of documents that provides sufficient information, including criteria for selection, to permit a design-build firm to prepare a response to the governmental entity's request for qualifications and to provide any additional information requested. The design criteria package must specify criteria the governmental entity considers necessary to describe the project and may include, as appropriate, the legal description of the site, survey information concerning the site, interior space requirements, special material requirements, material quality standards, conceptual criteria for the project, special equipment requirements, cost or budget estimates, time schedules, quality assurance and quality control requirements, site development requirements, applicable codes and ordinances, provisions for utilities, parking requirements, and any other requirement.

(d) The governmental entity may not require offerors to submit architectural or engineering designs as part of a proposal or a response to a request for qualifications.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.307. EVALUATION OF DESIGN-BUILD FIRMS. (a) For each design-build firm that responded to the request for qualifications, the governmental entity shall evaluate the firm's experience, technical competence, and capability to perform, the past performance of the firm and members of the firm, and other appropriate factors submitted by the firm in response to the request for qualifications, except that cost-related or price-related evaluation factors are not permitted.

(b) Each firm must certify to the governmental entity that each architect or engineer that is a member of the firm was selected based on demonstrated competence and qualifications, in the manner provided by Section [2254.004](#).

(c) The governmental entity shall qualify a maximum of five responders to submit proposals that contain additional information and, if the governmental entity chooses, to interview for final selection.

(d) The governmental entity shall evaluate the additional information submitted by the offerors on the basis of the selection criteria stated in the request for qualifications and the results of any interview.

(e) The governmental entity may request additional information regarding demonstrated competence and qualifications, considerations of the safety and long-term durability of the project, the feasibility of implementing the project as proposed, the ability of the offeror to meet schedules, or costing methodology. As used in this subsection, "costing methodology" means an offeror's policies on subcontractor markup, definition of general conditions, range of cost for general conditions, policies on retainage, policies on contingencies, discount for prompt payment, and expected staffing for administrative duties. The term does not include a guaranteed maximum price or bid for overall design or construction.

(f) The governmental entity shall rank each proposal submitted on the basis of the criteria set forth in the request for qualifications.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.308. SELECTION OF DESIGN-BUILD FIRM. (a) The governmental entity shall select the design-build firm that submits the proposal offering the best value for the governmental entity on the basis of the published selection criteria and on its ranking evaluations.

(b) The governmental entity shall first attempt to negotiate a contract with the selected firm.

(c) If the governmental entity is unable to negotiate a satisfactory contract with the selected firm, the governmental entity shall, formally and in writing, end all negotiations with that firm and proceed to negotiate with the next firm in the order of the selection ranking until a contract is reached or negotiations with all ranked firms end.

(d) Not later than the seventh day after the date the contract is awarded, the governmental entity shall make the rankings determined under Section [2269.307](#) (f) public.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(12), eff. September 1, 2013.

Sec. 2269.309. SUBMISSION OF DESIGN AFTER SELECTION. After selection of the design-build firm, that firm's architects or engineers shall submit all design elements for review and determination of scope compliance to the governmental entity or the governmental entity's architect or engineer before or concurrently with construction.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.310. FINAL CONSTRUCTION DOCUMENTS. The design-build firm shall supply a set of construction documents for the completed project to the governmental entity at the conclusion of construction. The documents must note any changes made during construction.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.311. PERFORMANCE OR PAYMENT BOND. (a) A payment or performance bond is not required and may not provide coverage for the design portion of the design-build contract with the design-build firm under this subchapter.

(b) If a fixed contract amount or guaranteed maximum price has not been determined at the time the design-build contract is awarded, the penal sums of the performance and payment bonds delivered to the governmental entity must each be in an amount equal to the construction budget, as specified in the design criteria package.

(c) The design-build firm shall deliver the bonds not later than the 10th day after the date the design-build firm executes the contract unless the design-build firm furnishes a bid bond or other financial security acceptable to the governmental entity to ensure that the design-build firm will furnish the required performance and payment bonds before construction begins.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER H. DESIGN-BUILD PROCEDURES FOR CERTAIN CIVIL WORKS PROJECTS

Sec. 2269.351. DEFINITIONS. In this subchapter:

(1) "Civil works project" means:

(A) roads, streets, bridges, utilities, water supply projects, water plants, wastewater plants, water distribution and wastewater conveyance facilities, desalination projects, wharves, docks, airport runways and taxiways, storm drainage and flood control projects, or transit projects;

(B) types of projects or facilities related to those described by Paragraph (A) and associated with civil engineering construction; and

(C) buildings or structures that are incidental to projects or facilities that are described by Paragraphs (A) and (B) and that are primarily civil engineering construction projects.

(2) "Design-build firm" means a partnership, corporation, or other legal entity or team that includes an engineer and a construction contractor qualified to engage in civil works construction in Texas.

(3) "Design criteria package" means a set of documents that:

(A) provides sufficient information to convey the intent, goals, criteria, and objectives of the civil works project; and

(B) permits a design-build firm to:

(i) assess the scope of work and the risk involved; and

(ii) submit a proposal on the project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.352. APPLICABILITY. This subchapter applies to a governmental entity that:

(1) has a population of more than 100,000 within the entity's geographic boundary or service area; or

(2) is a board of trustees governed by Chapter [54](#), Transportation Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.353. CONTRACTS FOR CIVIL WORKS PROJECTS: DESIGN-BUILD. (a) A governmental entity may use the design-build method for the construction, rehabilitation, alteration, or repair of a civil works project. In using this method and in entering into a contract for the services of a design-build firm, the contracting governmental entity and the design-build firm shall follow the procedures provided by this subchapter.

(b) A contract for a project under this subchapter may cover only a single integrated project. A governmental entity may not enter into a contract for aggregated projects at multiple locations. For purposes of this subsection:

(1) if a metropolitan transit authority created under Chapter [451](#), Transportation Code, enters into a contract for a project involving a linear transit project with multiple stops along the project route for boarding passengers, created under Chapter [451](#), Transportation Code, the linear transit project is a single integrated project; and

(2) a water treatment plant, including a desalination plant, that includes treatment facilities, well fields, and pipelines is a single integrated project.

(c) A governmental entity shall use the following criteria as a minimum basis for determining the circumstances under which the design-build method is appropriate for a project:

- (1) the extent to which the entity can adequately define the project requirements;
- (2) the time constraints for the delivery of the project;
- (3) the ability to ensure that a competitive procurement can be held; and
- (4) the capability of the entity to manage and oversee the project, including the availability of experienced personnel or outside consultants who are familiar with the design-build method of project delivery.

(d) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 1127 (H.B. [1050](#)), Sec. 11, eff. September 1, 2013.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(13), eff. September 1, 2013.

Acts 2013, 83rd Leg., R.S., Ch. 1127 (H.B. [1050](#)), Sec. 3, eff. September 1, 2013.

Acts 2013, 83rd Leg., R.S., Ch. 1127 (H.B. [1050](#)), Sec. 11, eff. September 1, 2013.

Sec. 2269.354. LIMITATION ON NUMBER OF PROJECTS. (a) After August 31, 2013:

(1) a governmental entity with a population of 500,000 or more within the entity's geographic boundary or service area may, under this subchapter, enter into contracts for not more than six projects in any fiscal year;

(2) a municipally owned water utility with a separate governing board appointed by the governing body of a municipality with a population of 500,000 or more may:

(A) independently enter into contracts for not more than two civil works projects in any fiscal year; and

(B) enter into contracts for additional civil works projects in any fiscal year, but not more than the number of civil works projects prescribed by the limit in Subdivision (1) for the municipality, provided that:

(i) the additional contracts for the civil works projects entered into by the utility under this paragraph are allocated to the number of contracts the municipality that appoints the utility's governing board may enter under Subdivision (1); and

(ii) the governing body of the municipality must approve the contracts; and

(3) a governmental entity that has a population of 100,000 or more but less than 500,000 or is a board of trustees governed by Chapter [54](#), Transportation Code, may enter into contracts under this subchapter for not more than four projects in any fiscal year.

(b) For purposes of determining the number of eligible projects under this section, a municipally owned water utility with a separate governing board appointed by the governing body of the municipality is considered part of the municipality.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 1127 (H.B. [1050](#)), Sec. 4, eff. September 1, 2013.

Acts 2013, 83rd Leg., R.S., Ch. 1356 (S.B. [1430](#)), Sec. 1, eff. June 14, 2013.

Sec. 2269.355. USE OF ENGINEER. (a) The governmental entity shall select or designate an engineer who is independent of the design-build firm to act as its representative for the procurement process and for the duration of the work on the civil works project. The selected or designated engineer has full responsibility for complying with Chapter [1001](#), Occupations Code.

(b) If the engineer is not a full-time employee of the governmental entity, the governmental entity shall select the engineer on the basis of demonstrated competence and qualifications as provided by Section [2254.004](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Sec. 2269.356. USE OF OTHER PROFESSIONAL SERVICES. (a) The governmental entity shall provide or contract for, independently of the design-build firm, the following services as necessary for the acceptance of the civil works project by the entity:

- (1) inspection services;
- (2) construction materials engineering and testing; and
- (3) verification testing services.

(b) The governmental entity shall select the services for which it contracts under this section in accordance with Section [2254.004](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Sec. 2269.357. REQUEST FOR QUALIFICATIONS. (a) The governmental entity shall prepare a request for qualifications that includes:

- (1) information on the civil works project site;
- (2) project scope;
- (3) project budget;
- (4) project schedule;
- (5) criteria for selection under Section [2269.359](#) and the weighting of the criteria; and
- (6) other information that may assist potential design-build firms in submitting proposals for the project.

(b) The governmental entity shall also prepare a design criteria package as described by Section [2269.358](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(14), eff. September 1, 2013.

Sec. 2269.358. CONTENTS OF DESIGN CRITERIA PACKAGE. A design criteria package may include, as appropriate:

- (1) budget or cost estimates;
- (2) information on the site;
- (3) performance criteria;
- (4) special material requirements;
- (5) initial design calculations;
- (6) known utilities;
- (7) capacity requirements;
- (8) quality assurance and quality control requirements;
- (9) the type, size, and location of structures; and
- (10) notice of any ordinances, rules, or goals adopted by the governmental entity relating to awarding contracts to historically underutilized businesses.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.359. EVALUATION OF DESIGN-BUILD FIRMS. (a) The governmental entity shall receive proposals and shall evaluate each offeror's experience, technical competence, and capability to perform, the past performance of the offeror's team and members of the team, and other appropriate factors submitted by the team or firm in response to the request for qualifications, except that cost-related or price-related evaluation factors are not permitted at this stage.

(b) Each offeror must:

(1) select or designate each engineer that is a member of its team based on demonstrated competence and qualifications, in the manner provided by Section [2254.004](#); and

(2) certify to the governmental entity that each selection or designation was based on demonstrated competence and qualifications, in the manner provided by Section [2254.004](#).

(c) The governmental entity shall qualify offerors to submit additional information and, if the entity chooses, to interview for final selection.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.360. SELECTION OF DESIGN-BUILD FIRM. The governmental entity shall select a design-build firm using a combination of technical and cost proposals as provided by Section [2269.361](#).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(15), eff. September 1, 2013.

Sec. 2269.361. PROCEDURES FOR COMBINATION OF TECHNICAL AND COST PROPOSALS. (a) A governmental entity shall request proposals from design-build firms identified under Section [2269.359](#)(c). A response to a request for detailed proposals must be submitted on or before the earlier of the time for submission requested by the governmental entity or the 180th day after the date the governmental entity makes a public request for the proposals from the selected firms. The request for proposals must include:

(1) a design criteria package;

(2) if the project site is identified, a geotechnical baseline report or other information that provides the design-build firm minimum geotechnical design parameters to submit a proposal;

(3) detailed instructions for preparing the technical proposal and the items to be included, including a description of the form and level of completeness of drawings expected; and

(4) the relative weighting of the technical and price proposals and the formula by which the proposals will be evaluated and ranked.

(b) The technical proposal is a component of the proposal under this section.

(c) Each proposal must include a sealed technical proposal and a separate sealed cost proposal.

(d) The technical proposal must address:

- (1) project approach;
- (2) anticipated problems;
- (3) proposed solutions to anticipated problems;
- (4) ability to meet schedules;
- (5) conceptual engineering design; and
- (6) other information requested by the governmental entity.

(e) The governmental entity shall first open, evaluate, and score each responsive technical proposal submitted on the basis of the criteria described in the request for proposals and assign points on the basis of the weighting specified in the request for proposals. The governmental entity may reject as nonresponsive any firm that makes a significant change to the composition of its firm as initially submitted. The governmental entity shall subsequently open, evaluate, and score the cost proposals from firms that submitted a responsive technical proposal and assign points on the basis of the weighting specified in the request for proposals. The governmental entity shall select the design-build firm in accordance with the formula provided in the request for proposals.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(16), eff. September 1, 2013.

Acts 2017, 85th Leg., R.S., Ch. 556 (S.B. [533](#)), Sec. 14, eff. September 1, 2017.

Sec. 2269.3615. IDENTIFICATION OF PROJECT TEAM. (a) A governmental entity may require a design-build firm responding to a request for detailed proposals to identify companies that will:

- (1) fill key project roles, including project management, lead design firm, quality control management, and quality assurance management; and
- (2) serve as key task leaders for geotechnical, hydraulics and hydrology, structural, environmental, utility, and right-of-way issues.

(b) If a design-build firm required to identify companies under Subsection (a) is selected for a design-build agreement, the firm may not make changes to the identified companies unless an identified company:

- (1) is no longer in business, is unable to fulfill its legal, financial, or business obligations, or can no longer meet the terms of the teaming agreement with the design-build firm;
- (2) voluntarily removes itself from the team;

(3) fails to provide a sufficient number of qualified personnel to fulfill the duties identified during the proposal stage; or

(4) fails to negotiate in good faith in a timely manner in accordance with provisions established in the teaming agreement proposed for the project.

(c) If the design-build firm makes team changes in violation of Subsection (b), any cost savings resulting from the change accrue to the governmental entity and not to the design-build firm.

Added by Acts 2013, 83rd Leg., R.S., Ch. 1127 (H.B. [1050](#)), Sec. 5(b), eff. September 1, 2013.

Sec. 2269.362. NEGOTIATION. After selecting the highest-ranked design-build firm under Section [2269.361](#), the governmental entity shall first attempt to negotiate a contract with the selected firm. If the governmental entity is unable to negotiate a satisfactory contract with the selected firm, the entity shall, formally and in writing, end all negotiations with that firm and proceed to negotiate with the next firm in the order of the selection ranking until a contract is reached or negotiations with all ranked firms end.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(17), eff. September 1, 2013.

Sec. 2269.363. ASSUMPTION OF RISKS. The governmental entity shall assume:

(1) all risks and costs associated with:

(A) scope changes and modifications, as requested by the governmental entity;

(B) unknown or differing site conditions unless otherwise provided by the governmental entity in the request for proposals and final contract;

(C) regulatory permitting, if the governmental entity is responsible for those risks and costs by law or contract; and

(D) natural disasters and other force majeure events unless otherwise provided by the governmental entity in the request for proposals and final contract; and

(2) all costs associated with property acquisition, excluding costs associated with acquiring a temporary easement or work area associated with staging or construction for the project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.364. STIPEND AMOUNT FOR UNSUCCESSFUL OFFERORS. (a) Unless a stipend is paid under Subsection (c), the design-build firm retains all rights to the work product submitted in a proposal. The governmental entity may not release or disclose to any person, including the successful offeror, the work product contained in an unsuccessful proposal. The governmental entity shall return all copies of the proposal and other information submitted to an unsuccessful offeror. The governmental entity or its agents may not make use of any unique or nonordinary design element, technique, method, or process contained in the unsuccessful proposal that was not also contained in the successful proposal at the time of the original submittal, unless the entity acquires a license from the unsuccessful offeror.

(b) A violation of this section voids the contract for the project entered into by the governmental entity. The governmental entity is liable to any unsuccessful offeror, or any member of the design-build team or its assignee, for one-half of the cost savings associated with the unauthorized use of the work product of the unsuccessful offeror. Any interested party may bring an action for an injunction, declaratory relief, or damages for a violation of this section. A party who prevails in an action under this subsection is entitled to reasonable attorney's fees as approved by the court.

(c) The governmental entity may offer an unsuccessful design-build firm that submits a response to the entity's request for additional information under Section [2269.361](#) a stipend for preliminary engineering costs associated with the development of the proposal. The stipend must be one-half of one percent of the contract amount and must be specified in the initial request for proposals. If the offer is accepted and paid, the governmental entity may make use of any work product contained in the proposal, including the techniques, methods, processes, and information contained in the proposal. The use by the governmental entity of any design element contained in an unsuccessful proposal is at the sole risk and discretion of the entity and does not confer liability on the recipient of the stipend under this subsection.

(d) Notwithstanding other law, including Chapter [552](#), work product contained in an unsuccessful proposal submitted and rejected under this subchapter is confidential and may not be released unless a stipend offer has been accepted and paid as provided by Subsection (c).

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(18), eff. September 1, 2013.

Sec. 2269.365. COMPLETION OF DESIGN. (a) Following selection of a design-build firm under this subchapter, the firm's engineers shall submit all design elements for review and determination of scope compliance to the governmental entity before or concurrently with construction.

(b) An appropriately licensed design professional shall sign and seal construction documents before the documents are released for construction.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.366. FINAL CONSTRUCTION DOCUMENTS. At the conclusion of construction, the design-build firm shall supply to the governmental entity a record set of construction documents for the project prepared as provided by Chapter [1001](#), Occupations Code.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.367. PERFORMANCE OR PAYMENT BOND. (a) A performance or payment bond is not required for the portion of a design-build contract under this section that includes design services only.

(b) If a fixed contract amount or guaranteed maximum price has not been determined at the time a design-build contract is awarded, the penal sums of the performance and payment bonds delivered to the governmental entity must each be in an amount equal to the construction budget, if commercially available and practical, as specified in the design criteria package.

(c) If the governmental entity awards a design-build contract under Section [2269.362](#), the design-build firm shall deliver the bonds not later than the 10th day after the date the design-build firm executes the contract unless the design-build firm furnishes a bid bond or other financial security acceptable to the governmental entity to ensure that the design-build firm will furnish the required performance and payment bonds before the commencement of construction.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.002(19), eff. September 1, 2013.

SUBCHAPTER I. JOB ORDER CONTRACTS METHOD

Sec. 2269.401. JOB ORDER CONTRACTING. In this chapter, "job order contracting" is a procurement method used for maintenance, repair, alteration, renovation, remediation, or minor construction of a facility when the work is of a recurring nature but the delivery times, type, and quantities of work required are indefinite.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.402. APPLICABILITY OF SUBCHAPTER TO BUILDINGS; EXCEPTIONS. This subchapter applies only to a facility that is a building, the design and construction of which is governed by accepted building codes, or a structure or land, whether improved or unimproved, that is associated with a building. This subchapter does not apply to:

(1) a highway, road, street, bridge, utility, water supply project, water plant, wastewater plant, water and wastewater distribution or conveyance facility, wharf, dock, airport runway or taxiway, drainage project, or related type of project associated with civil engineering construction; or

(2) a building or structure that is incidental to a project that is primarily a civil engineering construction project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.403. REQUIREMENTS FOR JOB ORDER CONTRACTS FOR FACILITIES. (a) A governmental entity may award job order contracts for the maintenance, repair, alteration, renovation, remediation, or minor construction of a facility if:

(1) the work is of a recurring nature but the delivery times are indefinite; and

(2) indefinite quantities and orders are awarded substantially on the basis of predescribed and prepriced tasks.

(b) The governmental entity shall establish the maximum aggregate contract price when it advertises the proposal.

(c) The governing body of a governmental entity shall approve each job, task, or purchase order that exceeds \$500,000.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.404. CONTRACTUAL UNIT PRICES. The governmental entity may establish contractual unit prices for a job order contract by:

(1) specifying one or more published construction unit price books and the applicable divisions or line items; or

(2) providing a list of work items and requiring the offerors to propose one or more coefficients or multipliers to be applied to the price book or prepriced work items as the price proposal.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.405. COMPETITIVE SEALED PROPOSAL METHOD. (a) A governmental entity may use the competitive sealed proposal method under Subchapter D for job order contracts.

(b) The governmental entity shall advertise for, receive, and publicly open sealed proposals for job order contracts.

(c) The governmental entity may require offerors to submit information in addition to rates, including experience, past performance, and proposed personnel and methodology.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.406. AWARDING OF JOB ORDER CONTRACTS. The governmental entity may award job order contracts to one or more job order contractors in connection with each solicitation of proposals.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.407. USE OF JOB ORDER CONTRACT. A job order contract may be used to accomplish work only for the governmental entity that awards the contract unless:

(1) the solicitation for the job order contract and the contract specifically provide for use by other persons; or

(2) the governmental entity enters into an interlocal agreement that provides otherwise.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.408. USE OF ARCHITECT OR ENGINEER. (a) If a job order contract or an order issued under the contract requires architectural or engineering services that constitute the practice of architecture within the meaning of Chapter [1051](#), Occupations Code, or the practice of engineering within the meaning of Chapter [1001](#), Occupations Code, the governmental entity shall select or designate an architect or engineer to prepare the construction documents for the project.

(b) Subsection (a) does not apply to a job order contract or an order issued under the contract for industrialized housing, industrialized buildings, or relocatable educational facilities subject to and approved under Chapter [1202](#), Occupations Code, if the contractor employs the services of an architect or engineer who approves the documents for the project.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.409. JOB ORDER CONTRACT TERM. The base term for a job order contract may not exceed two years. The governmental entity may renew the contract annually for not more than three additional years.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.410. JOB ORDERS. (a) An order for a job or project under a job order contract must be signed by the governmental entity's representative and the contractor.

(b) The order may be:

- (1) a fixed price, lump-sum contract based substantially on contractual unit pricing applied to estimated quantities; or
- (2) a unit price order based on the quantities and line items delivered.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.411. PAYMENT AND PERFORMANCE BONDS. The contractor shall provide payment and performance bonds, if required by law, based on the amount or estimated amount of any order.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

SUBCHAPTER J. ENFORCEMENT

Sec. 2269.451. VOID CONTRACT. A contract, including a job order, entered into in violation of this chapter is voidable as against public policy.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. 22.001(23), eff. September 1, 2013.

Sec. 2269.452. DECLARATORY OR INJUNCTIVE RELIEF. (a) This chapter may be enforced through an action for declaratory or injunctive relief filed not later than the 15th calendar day after the date on which the contract is awarded.

(b) This section does not apply to enforcement of a contract entered into by a state agency. In this subsection, "state agency" has the meaning assigned by Section [2151.002](#). The term includes the Texas Facilities Commission.

Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. [628](#)), Sec. 2.08, eff. September 1, 2011.

Redesignated from Government Code, Chapter [2267](#) by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. [1093](#)), Sec. [22.001](#)(23), eff. September 1, 2013.

Amended by:

Acts 2021, 87th Leg., R.S., Ch. 702 (H.B. [2581](#)), Sec. 5, eff. September 1, 2021.

XII PROCUREMENTS SUBJECT TO FEDERAL FUNDING

12.01 Additional Standards. In addition to the procedures specified elsewhere in this Purchasing Manual, which are incorporated herein by reference, the County shall abide by the following purchasing procedures applicable to procurements that are subject to federal funding as referenced in 2 CFR 200: Uniform Administrative Requirements, Costs Principles and Audit Requirements for Federal Awards (Uniform Guidance), which is hereby incorporated by reference. These procedures are in addition to all other relevant procedures in this Purchasing Manual, except that in the event of a conflict these procedures will control if a purchase is made using federal funds.

12.02 Background. The United States Office of Management and Budget (OMB) Issued the Uniform Guidance, which reforms rules applicable to entities receiving federal grant funding by streamlining and superseding eight OMB circulars (A-21, A-87, A-122, A-110, A-102, A-133, A-50 and A-89). The new procurement standards are found in Subpart D: Post Federal Award Requirements: 2 CFR §200.317 through §200.327

12.03 Compliance Requirements -Procurement. The following is an overview of the procurement standards and procedures applicable when procuring property and services under a Federal award in accordance with 1 CFR §200.317 through §200.327, which are hereby incorporated by reference.

12.03.1 The County, as a non-Federal entity other than a State, will follow §§ 200.318 General procurement standards through 200.327 Contract provisions. [See §200.317].

12.03.2 Procurement Procedures: The County will use its own documented procurement procedures which reflect applicable State and local laws and regulations, provided that the procurement conform to applicable Federal statutes and the procurement requirements identified in 2 CFR part 200. [See §200.318(a)] When preparing a federally funded contract, the County Purchasing Dept, Planning Dept., and County Attorney will review the required federal clauses in Appendix II and make sure that all clauses required for the contract is included.

12.03.3 Conflicts of Interest/Standards of Conduct: The County will maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, awarded and administration of contracts. In addition to the following the County incorporates standards referenced above and Standards of Conduct in applicable County Personnel Manuals. [See §200.318(c)].

a No employee, officer, or agent may participate in the selection, award, or administration of contracts supported by Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. Addressed in County's Bids, RFP's, RFQ's (Attachment B -No*Collusion Affidavit), (Attachment G -Conflict of Interest Questionnaire) Purchasing Manual (Ethics Policy) [See §200.318(c)(J)].

b. Officers, employees, and agents of the County may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, the County may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. If this is done these standards will be promulgated like other County policies and procedures. Addressed in County's Bids, RFP's, RFQ's (Attachment B -Non-Collusion Affidavit), (Attachment G –Conflict of Interest Questionnaire, Attachment H- Disclosure of Interest Questionnaire) Purchasing Manual (Ethics Policy) {See §200.318(c)(I)}.

c. If the County has an affiliate or subsidiary organization that is not a government entity, the County will also maintain written standards of conduct concerning organizational conflicts of interest arising from its relationship with the affiliate or subsidiary.

d The County will disclose any potential conflicts of interest in writing to the Federal awarding agency or pass-through entity in accordance with applicable Federal awarding agency policy. [See 2 CFR §200.112]. Additionally, the County will disclose in a timely manner, in writing to the Federal awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Further, if applicable, the County will make post-award reports as provided by Appendix XII to Part 200.

e. Violations of this policy may result in disciplinary action consistent with County disciplinary policy, including but not limited to dismissal. Further, violations may be referred to the appropriate law enforcement agency for investigation and possible prosecution.

12.03.4 Oversight: Once the Contract is awarded, oversight must be maintained to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders. County Contract monitor will be utilized to track and perform quantity and quality control responsibilities in monitoring role towards compliance verification. [See §200.3J8(b)].

12.03.5 All proposed procurement actions shall be reviewed to avoid the purchase of unnecessary or duplicative items as stated in Independent Procedure IP "Prevention of Unnecessary and Duplicative Purchases".

Where applicable, consideration will be given to consolidating or breaking out procurements to obtain a more economical purchase. Review of all potentially related consolidation in sourcing of items towards economy of scale.

Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach County will consider leasing of items whenever determined to be more cost effective versus purchase of items which are not necessarily required beyond the immediate or project related intended use. [See §200.318MJ

12.03.06 The County may enter into state and local intergovernmental agreement. or inter-entity agreements where appropriate for procurement or use of common or shared goods and services. County will explore interlocal agreement option with other entities towards sharing of goods and services in an effort to reduce overall cost. The County also approved Resolution 20/9R2007 on February 5, 2019. [See §200.318(e)]

12.03.07 Federal excess and surplus property may be used in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs. State and Federal Surplus sites will be reviewed for potential adaptations to meet project needs. [See §200.318(f)]

12.03.08 Deliberately omitted.

12.03.09 Contracts should be awarded only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources, as well as whether the contractor is suspended or debarred receiving federal funds. (See Bids, RFP's, RFQ's Attachment F- Certificate Regarding Debarment, Suspension Ineligibility, Attachment F-2-Sworn Statement of Debarment, Attachment F-3 -Architects, Engineers, Construction Performance, Attachment I-House Bill 89 Verification, Texas Ethics Commission Form 1295)[See §200.318(h)].

12.03.10 The County will maintain records sufficient to detail the history of procurement. The County's Records Retention Policy as adopted by Commissioners Court and presented by the County Clerks Dept. (Official Records Manager for the County) - Purchasing Bids, RFP's, RFQ's, and contracts is five (5) years (in accordance with §200.318(i)).

12.03.11 The County may not enter a contract with time and materials based pricing unless there is a not-to-exceed clause and the Purchaser determines that other fee structures are not suitable.

12.03.12 The County alone shall be responsible for all contractual and administrative issues arising out of procurements in accordance with good administrative practice and sound business judgment. County Civil legal Division will coordinate these matters as they arise. County protest procedures apply to Bid, RFP's, RFQ's and written quotations. Once a contract has been executed, any disputes are dealt with at the time they arise. County Civil legal Department addresses contract disputes on behalf of the County.

12.3.13 Discounts, transportation costs, or life cycle costs will only be considered when they are specified in the bidding documents. These will only be considered when specified in the bidding documents. These are not considered if not specified in the Bid /RFP documents.

12.04 Competition. All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of 2 CFR §200.319. Note 12.06 below identifies sources towards maximizing competitive solicitations. Purchasers will review all Bid specifications and requirements towards eliminating unduly restrictive requirements.

12.04.01.01 In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals will be excluded from competing for such procurements.

12.04.01.02 The County will avoid the following actions in procurement of goods and services:

- (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
- (2) Requiring unnecessary experience and excessive bonding;
- (3) Noncompetitive pricing practices between firms or between affiliated companies;
- (4) Noncompetitive contracts to consultants that are on retainer contracts;

- (5) Organizational conflicts of interest;
- (6) Except where required and justified as a sole source purchase, Specifying only a "brand name" product instead of allowing "an equal" product to be offered and describing the performance or other relevant requirements of the procurement; and
- (7) Any arbitrary action in the procurement process . §200.319(a)

12.04.02 Geographical Limitation: Unless specifically excepted as provided in 2 CFR §200.319(b), the County will not impose state or local geographical preferences in the evaluation of bids or proposals for federally funded contracts.

12.04.03.01 Contract solicitations: Purchaser shall incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Detailed specifications and materials product description must be clearly identified.

12.04.03.02 Contract solicitations shall specify all requirements which the potential vendors must fulfill to submit bids or proposals, and identify all other factors to be used in evaluating bids or proposals. Scoring criteria shall be utilized in evaluation and analysis of Proposals.

12.04.04 All prequalified lists of persons, firms, or products which are used in acquiring goods and services shall be kept current and include enough qualified sources to ensure minimum open and free competition, and potential bidders will not be precluded from qualifying during the solicitation period [See §200.319(d)]. County Purchasing Department are // and updated Bidders /list See 12.06 below.

12.05 Methods of Procurement with Federal Funds. The County will use one of the following five procurement methods as discussed in 2 CFR §200.320 when making purchases with federal funds. Should State or local procurement requirements applicable to a purchase being made with federal funds be more restrictive than Federal requirements, the more restrictive requirements or methods will be followed. The type of procurement process to use will depend on the cost and type of services or item(s) being purchased.

Micro-purchase = County under \$500 - No quotations or competitive process required – Vendors for purchases under \$500 shall be rotated – requisition and Purchase Order required. (Travel regulations and Gas purchases included..)

Small purchase procedures - informal Bids = County \$500 to \$14,999 and Commissioners Court approval \$15,000 to \$24,999 - Three written quotations required, requisition, Purchase Order.

Sealed Formal Bids = \$25,000 and more unless exception applies

Competitive proposals = County proposal process for Professional Services, IT & High Tech and Commissioners Court approved instances of projects not suitable for detailed specifications.

Request for Qualifications = Qualifications based on price proposals (Engineering & Architecture, Land Surveying, Professional services. Cameron County follows the Professional Services Procurement Act Govt. Code ch 2254 Subch A

Non-competitive proposals Sole Source - under \$15,000 Sole Source letter Department Head, Vendor, Purchasing Agent. Commissioners Court approval required \$15,000 to include Sole Source letter Department Head, Vendor, Purchasing Agent.

Emergency Purchases over \$15,000 requires Commissioners Court approval/ratification whenever time is crucial in preventing an escalating health and safety concern or preventing a crucial incident as per Texas State Statute 262.024

Special & Discretionary Purchases as per Texas State Statute 262.024. For procurement of Federally funded land surveying Cameron County will contact the federal awarding agency or pass-through entity (TCEQ), for RESTORE projects to request authorization for noncompetitive procurement under 2 CFR 200.320(c)(4).

Personal service - as per

Under the Micro-Purchase dollar threshold rotation of available vendors will be utilized

Over the Micro-Purchase dollar threshold will comply with State of Texas, Local Government Code Ch 262.024 (a) (4).

12.06 Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms. The County takes all necessary affirmative steps (and will include in all related contracts language towards Contractor Certification of Small, Minority, or Women Business ownership - when possible) as described in §200.321 to assure minority businesses, Women's Business Enterprises, and labor surplus are used when possible. The County utilizes the following sites towards outreach for County Bidding opportunities for Small, Minority, Women Businesses: U.S. Small Business Administration, ESBD State of Texas Bid Posting Site, Associated General Contractors, Dodge Reports, Reed Construction Data, Texas Smart Buy Electronic State Business Daily Search (ESBD). Bk/Net, MWBE@texas.agriculture.gov, Coop Vendors list, County Current Bidders list. (County will require Prime Contractors to follow all of the affirmative steps when Prime Contractor will be letting subcontracts. The requirements for Prime Contractors as laid out by the County will be targeted towards creating maximum participation for small, minority, and women's business enterprises as follows: will be on the solicitation list and will be notified when they are potential sources, will divide total requirements when economically feasible into smaller tasks or quantities, establish delivery schedules as requirements permit, contact the agencies as listed above as an outreach network towards attracting these types of businesses. This information will also be included in all contracts.) County utilization of/Section 3/ HUD (see Purchasing Website) addresses Davis-Bacon, Equal Employment, Vicinity Hiring Preference, Economic Opportunities, HUB, SBA, Local Vendor, and MWBE requirements.

12.07 Procurement of Recovered Materials. The County and (where applicable) its contractors will comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. {See §200.322}.

County will (as per EPA 40CFR part 247) procure only items containing highest percentage of recovered materials practicable and allow for satisfactory competition based on the \$10,000 year threshold. County will establish affirmative procurement program for recovered materials.

12.08 Contract Cost and Price. The County will abide by the provisions of §200.324 (as required under County Resolution #20/90R2009), including, but not limited to performing a cost or price analysis and negotiating profit as discussed therein

12.8.1 Negotiation Based on Cost Estimates; Negotiation of Profit. In negotiating a contract price based on a cost analysis, the County will require that all estimated costs used to develop the negotiated price must be allowable costs under 2 CFR Part 200. Subpart E. A comparison between estimated costs and current customary market pricing will be analyzed in an effort to establish allowable cost and ultimately establish negotiated pricing. The County will also require that the profit element be negotiated separately, whether it is included as a separate price element or whether it is rolled into a lump sum price (or similar fixed price). Profit margin will also be compared relative to comparable current market rates to assess potential variances. This cost analysis will be achieved through verification of previous similar purchases, comparison with other public entities, recommendations from professional consultants or project Engineer, or data research (ie: Smart Procure) similar to the specific type of procurement. In addition and in order to establish a fair and reasonable profit, the County will also consider the contractor's risk and investment, complexity of work to be performed at a level of subcontracting, quality and track record of previous performance, and industry profit rates in the approximate SMSA /geographic area/or similar work. At the outset independent estimates will be obtained by the County before receiving Bids or Proposal this also applies to all sole source purchases. All estimates must be allowable subject to analysis as per conditions noted above.

12.8.2 Cost Plus Percentage of Cost Prohibited. The County will not enter into a cost plus percentage of cost contract, or a cost plus percentage of construction cost contract. (as per 200.324 d) Engineer and County will examine all Change order pricing as submitted. Profit margin will not be determined based on a percentage of cost and percentage of construction cost methods of contracting must not be used. Costs based on estimated costs of contracts under Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under Subpart E Cost Principles of this part. County will reimburse Contractor's Direct and indirect Costs plus a Fixed fee for the project.

12.9 Contract Provisions. Pursuant to §200.327 the County will include in all federally-funded contracts, the applicable provisions described in Appendix 11 to 2 CFR Part 200 - Contract Provisions for non-Federal Entity Contracts under Federal Awards. When preparing a federally funded contract the County Purchasing Dept., Planning Dept., and County Attorney will review the required federal clauses in Appendix 11 and make sure that all clauses required/or the contract is included.

12.10 Personnel Cost Calculation Pursuant to 2 Code of Federal Regulations (CFR) Part 200, Subpart E the County adopted Resolution # 2019R02008 on February 5, 2019 - Policy and Procedure to Ensure Accurate Completion of Personnel Cost Calculation.

12.11 Cost Price Analysis Pursuant to 2 Code of Federal Regulations (CFR) Part 200, the County adopted Resolution # 2019R02009 on February 5, 2019 - Policy and Procedure to Ensure Cost Price Analysis requirement.

12.12 Debarment Check Pursuant to 2 Code of Federal Regulations (CFR) Part 200.318, the County adopted Resolution # 2019R02010 on February 5, 2019 - Policy and Procedure to Ensure Debarment Check is adequately performed.

12.13 Single Proposal requirements Proposal is reviewed for compliance. Determination is made by County as to benefit of resolution or RFP towards a more competitive solicitation. Pricing is reviewed relative to current market costs for comparison. If all is determined to be cost effective and advantageous to County, recommendation is made by Evaluation Committee to Commissioners Court for award. Commissioners Court must make a determination that price is fair and reasonable prior to awarding RFP. Prior to Court award of sole Bid, RFP, or RFQ County Purchasing Dept. will contact the federal awarding agency or pass-through entity (TCEQ for RESTORE projects) to request authorization for noncompetitive procurement under 2 CFR 200.320(c)(2) to proceed towards Commissioners Court approval. Informal Bids not exceeding \$14,999 will require at least 3 informal Bids for comparative competitive purposes. If the County is unable to obtain at least 3 competitive Bids or Proposals, it is unable to obtain more than one (1) Bid or Proposal the County Purchasing Dept. will review pricing relative to current market costs for comparison purposes (utilizing comparable bid results, engineer recent historic data, Smart Procure comparable data) will contact the federal awarding agency or pass-through entity (TCEQ, for RESTORE projects) to request authorization for noncompetitive procurement under 2 CFR 200.320(c)(2) prior to proceeding with Agenda towards Commissioners Court approval.

12.14 Domestic Preferences for Procurement County will (in awards of iron, aluminum, steel, cement and other goods / manufactured products produced in the United States) utilize and purchase from these suppliers and subawards with a preference towards purchases from these Companies. (see 200.322)

12.15 Bid Bonds Will always be required for construction contracts:

County Purchasing Act: Required

Payment Bond - \$25,000 + (2253.21)

Performance Bond - \$100,000 + (2253.21)

Bid Bond - a) If the contract is for the construction of public works or is under a contract exceeding \$100,000, the bid specifications or request for proposals may require the bidder to furnish a good and sufficient bid bond in **the amount of five percent of the total contract (262.032)**

Federal funded projects: exceeding \$150,000 (on exception sought from the federal awarding agency. For all Federal funded projects \$150,000 and over Bid Bonds will be mandatory equivalent to five percent of the bid price. A performance bond and payment bond will also be required - both at 100 percent of contract price.

12.16 Telecommunications and Surveillance Services or Equipment Proposal is reviewed for compliance with 2 CFR Appendix II (K) 200-216 prior to proceeding with Agenda towards Commissioners Court approval. Determination is made by County as to ensure that neither loan or grant funds will be utilized for the purchase or obtaining Telecommunications and Surveillance Services or Equipment from one of the following Vendors or any of their subsidiaries or affiliates :

Huawei Technologies Co.

ZTE Corp.

Hytera Communications Corp.

Hangzhou Hikvision Digital Technology Co.

Dahua Technology Co.

as well as related services (Telecomm. or Video Surveillance provided by entities or using these Companies equipment. Additional Companies determined as by the Secretary of Defense, FBI, National Intelligence are to also be added to the restricted list of firms.

In addition, the vendors listed above will be identified to verify that these firms will not be utilized for contract extension/ renewal, essential components, critical technology, or components of a system.

Proposals will be reviewed for compliance with 2 CFR 200-471 prior to proceeding with Agenda towards Commissioners Court approval prior to obligating or expending funds. County will review all proposals related to Telecommunication and/or video surveillance equipment or service related costs in order to verify that costs associated with procuring, obtaining, extending, entering into, or renewing a contract for equipment, services, or systems are not utilized.

Compliance and Reporting Guidance

State and Local Fiscal Recovery Funds



June 24, 2021

Version: 1.1



Coronavirus State and Local Fiscal Recovery Funds Guidance on Recipient Compliance and Reporting Responsibilities

On March 11, 2021, the American Rescue Plan Act was signed into law, and established the Coronavirus State Fiscal Recovery Fund and Coronavirus Local Fiscal Recovery Funds, which together make up the Coronavirus State and Local Fiscal Recovery Funds (“SLFRF”) program. This program is intended to provide support to State, territorial, local, and Tribal governments in responding to the economic and public health impacts of COVID-19 and in their efforts to contain impacts on their communities, residents, and businesses.

This guidance provides additional detail and clarification for each recipient’s compliance and reporting responsibilities under the SLFRF program, and should be read in concert with the Award Terms and Conditions, the authorizing statute, the [SLFRF implementing regulation](#), and other regulatory and statutory requirements, including regulatory requirements under [the Uniform Guidance \(2 CFR Part 200\)](#). Please see the [Assistance Listing](#) in SAM.gov under assistance listing number (formerly known as CFDA number), 21.027 for more information.

Please Note: This guidance document applies to the SLFRF program only and does not change nor impact reporting and compliance requirements for the Coronavirus Relief Fund (“CRF”) established by the CARES Act.

This guidance includes two parts:

Part 1: General Guidance

This section provides an orientation to recipients’ compliance responsibilities and the U.S. Department of the Treasury’s (“Treasury”) expectations and recommends best practices where appropriate under the SLFRF Program.

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Part 2: Reporting Requirements

This section provides information on the reporting requirements for the SLFRF program.

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Part 1: General Guidance

This section provides an orientation on recipients' compliance responsibilities and Treasury's expectations and recommended best practices where appropriate under the SLFRF program.

Recipients under the SLFRF program are the eligible entities identified in sections 602 and 603 of the Social Security Act as added by section 9901 of the American Rescue Plan Act of 2021 (the "SLFRF statute") that receive a SLFRF award. Subrecipients under the SLFRF program are entities that receive a subaward from a recipient to carry out the purposes (program or project) of the SLFRF award on behalf of the recipient.

Recipients are accountable to Treasury for oversight of their subrecipients, including ensuring their subrecipients comply with the SLFRF statute, SLFRF Award Terms and Conditions, Treasury's Interim Final Rule, and reporting requirements, as applicable.

A. Key Principles

There are several guiding principles for developing your own effective compliance regimes:

- Recipients and subrecipients are the first line of defense, and responsible for ensuring the SLFRF award funds are not used for ineligible purposes, and there is no fraud, waste, and abuse associated with their SLFRF award;
- Many SLFRF-funded projects respond to the COVID-19 public health emergency and meet urgent community needs. Swift and effective implementation is vital, and recipients must balance facilitating simple and rapid program access widely across the community and maintaining a robust documentation and compliance regime;
- SLFRF-funded projects should advance shared interests and promote equitable delivery of government benefits and opportunities to underserved communities, as outlined in [Executive Order 13985, On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#); and
- Transparency and public accountability for SLFRF award funds and use of such funds are critical to upholding program integrity and trust in all levels of government, and SLFRF award funds should be managed consistent with Administration guidance per [Memorandum M-21-20](#) and [Memorandum M-20-21](#).

B. Statutory Eligible Uses

As a recipient of an SLFRF award, your organization has substantial discretion to use the award funds in the ways that best suit the needs of your constituents – as long as such use fits into one of the following four statutory categories:

1. To respond to the COVID-19 public health emergency or its negative economic impacts;
2. To respond to workers performing essential work during the COVID-19 public health emergency by providing premium pay to such eligible workers of the recipient, or by providing grants to eligible employers that have eligible workers who performed essential work;
3. For the provision of government services, to the extent of the reduction in revenue of such recipient due to the COVID-19 public health emergency, relative to revenues collected in the most recent full fiscal year of the recipient prior to the emergency; and
4. To make necessary investments in water, sewer, or broadband infrastructure.



Treasury adopted an [Interim Final Rule](#) to implement these eligible use categories and other restrictions on the use of funds under the SLFRF program.¹ It is the recipient's responsibility to ensure all SLFRF award funds are used in compliance with these requirements. In addition, recipients should be mindful of any additional compliance obligations that may apply – for example, additional restrictions imposed upon other sources of funds used in conjunction with SLFRF award funds, or statutes and regulations that may independently apply to water, broadband, and sewer infrastructure projects. Recipients should ensure they maintain proper documentation supporting determinations of costs and applicable compliance requirements, and how they have been satisfied as part of their award management, internal controls, and subrecipient oversight and management.

C. Treasury's Rule

Treasury's [Interim Final Rule](#) details recipients' compliance responsibilities and provides additional information on eligible and restricted uses of SLFRF award funds and reporting requirements. Your organization should review and comply with the information contained in Treasury's Interim Final Rule, and any subsequent final rule when building appropriate controls for SLFRF award funds.

1. Eligible and Restricted Uses of SLFRF Funds. As described in the SLFRF statute and summarized above, there are four enumerated eligible uses of SLFRF award funds. As a recipient of an award under the SLFRF program, your organization is responsible for complying with requirements for the use of funds. In addition to determining a given project's eligibility, recipients are also responsible for determining subrecipient's or beneficiaries' eligibility and must monitor use of SLFRF award funds.

To help recipients build a greater understanding of eligible uses, Treasury's Interim Final Rule establishes a framework for determining whether a specific project would be eligible under the SLFRF program, including some helpful definitions. For example, Treasury's Interim Final Rule establishes:

- A framework for determining whether a project "responds to" a "negative economic impact" caused by the COVID-19 public health emergency;
- Definitions of "eligible employers", "essential work," "eligible workers", and "premium pay" for cases where premium pay is an eligible use;
- A definition of "general revenue" and a formula for calculating revenue lost due to the COVID-19 public health emergency;
- A framework for eligible water and sewer infrastructure projects that aligns eligible uses with projects that are eligible under the Environmental Protection Agency's Drinking Water and Clean Water State Revolving Funds; and
- A framework for eligible broadband projects designed to provide service to unserved or underserved households, or businesses at speeds sufficient to enable users to generally meet household needs, including the ability to support the simultaneous use of work, education, and health applications, and also sufficiently robust to meet increasing household demands for bandwidth.

Treasury's Interim Final Rule also provides more information on four important restrictions on use of SLFRF award funds: recipients may not deposit SLFRF funds into a pension fund; recipients that are States or territories may not use SLFRF funds to offset a reduction in net tax revenue caused by the recipient's change in law, regulation, or administrative

¹ Treasury's Interim Final Rule is effective as of May 17, 2021, and public comments are due July 16, 2021. This guidance may be clarified consistent with the final rule.
<https://www.govinfo.gov/content/pkg/FR-2021-05-17/pdf/2021-10283.pdf>



interpretation; and, recipients may not use SLFRF funds as non-Federal match where prohibited. In addition, the Interim Final Rule clarifies certain uses of SLFRF funds outside the scope of eligible uses, including that recipients generally may not use SLFRF funds directly to service debt, satisfy a judgment or settlement, or contribute to a “rainy day” fund. Recipients should refer to Treasury’s Interim Final Rule for more information on these restrictions.

2. **Eligible Costs Timeframe.** Your organization, as a recipient of an SLFRF award, may use SLFRF funds to cover eligible costs that your organization incurred during the period that begins on March 3, 2021 and ends on December 31, 2024, as long as the award funds for the obligations incurred by December 31, 2024 are expended by December 31, 2026. Costs for projects incurred by the recipient State, territorial, local, or Tribal government prior to March 3, 2021 are not eligible, as provided for in Treasury’s Interim Final Rule.

Recipients may use SLFRF award funds to provide assistance to households, businesses, and individuals within the eligible use categories described in Treasury’s Interim Final Rule for costs that those households, businesses and individuals incurred prior to March 3, 2021. For example,

- a. **Public Health/Negative Economic Impacts:** Recipients may use SLFRF award funds to provide assistance to households – such as rent, mortgage, or utility assistance – for costs incurred by the household prior to March 3, 2021, provided that the recipient State, territorial, local or Tribal government did not incur the cost of providing such assistance prior to March 3, 2021.
- b. **Premium Pay:** Recipients may provide premium pay retrospectively for work performed at any time since the start of the COVID-19 public health emergency. Such premium pay must be “in addition to” wages and remuneration already received and the obligation to provide such pay must not have been incurred by the recipient prior to March 3, 2021.
- c. **Revenue Loss:** Treasury’s Interim Final Rule gives recipients broad latitude to use funds for the provision of government services to the extent of reduction in revenue. While calculation of lost revenue begins with the recipient’s revenue in the last full fiscal year prior to the COVID-19 public health emergency and includes the 12-month period ending December 31, 2020, use of funds for government services must be forward looking for costs incurred by the recipient after March 3, 2021.
- d. **Investments in Water, Sewer, and Broadband:** Recipients may use SLFRF award funds to make necessary investments in water, sewer, and broadband. Recipients may use SLFRF award funds to cover costs incurred for eligible projects planned or started prior to March 3, 2021, provided that the project costs covered by the SLFRF award funds were incurred after March 3, 2021.

Any funds not obligated or expended for eligible uses by the timelines above must be returned to Treasury, including any unobligated or unexpended funds that have been provided to subrecipients and contractors. For the purposes of determining expenditure eligibility, Treasury’s Interim Final Rule provides that “incurred” has the same meaning given to “financial obligation” in 2 CFR § 200.1.

3. **Reporting.** Generally, recipients must submit one initial interim report, quarterly or annual Project and Expenditure reports which include subaward reporting, and in some cases annual Recovery Plan reports. Treasury’s Interim Final Rule and Part 2 of this guidance provide more detail around SLFRF reporting requirements.



Assistance Listing

The [Assistance Listing](#) for the Coronavirus State and Local Fiscal Recovery Funds (CSLFRF) was published May 28, 2021 on SAM.gov under Assistance Listing Number (“ALN”), formerly known as CFDA Number, **21.027**.

The assistance listing includes helpful information including program purpose, statutory authority, eligibility requirements, and compliance requirements for recipients. The ALN is the unique 5-digit number assigned to identify a federal assistance listing, and can be used to search for federal assistance program information, including funding opportunities, spending on USASpending.gov, or audit results through the Federal Audit Clearinghouse.

To expedite payments and meet statutory timelines Treasury issued initial payments under an existing ALN, 21.019, assigned to the CRF. If you have already received funds or captured the initial number in your records, please update your systems and reporting to reflect the new ALN 21.027 for the SLFRF program. **Recipients must use ALN 21.027 for all financial accounting, subawards, and associated program reporting requirements for the SLFRF awards.**

D. Uniform Administrative Requirements

The SLFRF awards are generally subject to the requirements set forth in the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, [2 CFR Part 200](#) (the “Uniform Guidance”). In all instances, your organization should review the Uniform Guidance requirements applicable to your organization’s use of SLFRF funds, and SLFRF-funded projects. Recipients should consider how and whether certain aspects of the Uniform Guidance apply.

The following sections provide a general summary of your organization’s compliance responsibilities under applicable statutes and regulations, including the Uniform Guidance, as described in the [2020 OMB Compliance Supplement Part 3. Compliance Requirements \(issued August 18, 2020\)](#). Note that the descriptions below are only general summaries and all recipients and subrecipients are advised to carefully review the Uniform Guidance requirements and any additional regulatory and statutory requirements applicable to the program.

- 1. Allowable Activities.** Each recipient should review program requirements, including Treasury’s Interim Final Rule and the recipient’s Award Terms and Conditions, to determine and record eligible uses of SLFRF funds. Per 2 CFR 200.303, your organization must develop and implement effective internal controls to ensure that funding decisions under the SLFRF award constitute eligible uses of funds, and document determinations.
- 2. Allowable Costs/Cost Principles.** As outlined in the Uniform Guidance at 2 CFR Part 200, Subpart E regarding Cost Principles, allowable costs are based on the premise that a recipient is responsible for the effective administration of Federal awards, application of sound management practices, and administration of Federal funds in a manner consistent with the program objectives and terms and conditions of the award. Recipients must implement robust internal controls and effective monitoring to ensure compliance with the Cost Principles, which are important for building trust and accountability.



SLFRF Funds may be, but are not required to be, used along with other funding sources for a given project. Note that SLFRF Funds may not be used for a non-Federal cost share or match where prohibited by other Federal programs, e.g., funds may not be used for the State share for Medicaid.²

Treasury's Interim Final Rule and guidance and the Uniform Guidance outline the types of costs that are allowable, including certain audit costs. For example, per 2 CFR 200.425, a reasonably proportionate share of the costs of audits required by the Single Audit Act Amendments of 1996 are allowable; however, costs for audits that were not performed, or not in accordance with 2 CFR Part 200, Subpart F are not allowable. Please see 2 CFR Part 200, Subpart E regarding the Cost Principles for more information.

- a. **Administrative costs:** Recipients may use funds for administering the SLFRF program, including costs of consultants to support effective management and oversight, including consultation for ensuring compliance with legal, regulatory, and other requirements.³ Further, costs must be reasonable and allocable as outlined in 2 CFR 200.404 and 2 CFR 200.405. Pursuant to the SLFRF Award Terms and Conditions, recipients are permitted to charge both direct and indirect costs to their SLFRF award as administrative costs. Direct costs are those that are identified specifically as costs of implementing the SLFRF program objectives, such as contract support, materials, and supplies for a project. Indirect costs are general overhead costs of an organization where a portion of such costs are allocable to the SLFRF award such as the cost of facilities or administrative functions like a director's office.⁴⁵ Each category of cost should be treated consistently in like circumstances as direct or indirect, and recipients may not charge the same administrative costs to both direct and indirect cost categories, or to other programs. If a recipient has a current Negotiated Indirect Costs Rate Agreement (NICRA) established with a Federal cognizant agency responsible for reviewing, negotiating, and approving cost allocation plans or indirect cost proposals, then the recipient may use its current NICRA. Alternatively, if the recipient does not have a NICRA, the recipient may elect to use the de minimis rate of 10 percent of the modified total direct costs pursuant to 2 CFR 200.414(f).
- b. **Salaries and Expenses:** In general, certain employees' wages, salaries, and covered benefits are an eligible use of SLFRF award funds. Please see Treasury's Interim Final Rule for details.

3. Cash Management. SLFRF payments made to recipients are not subject to the requirements of the Cash Management Improvement Act and Treasury's implementing regulations at 31 CFR part 205 or 2 CFR 200.305(b)(8)-(9).

As such, recipients can place funds in interest-bearing accounts, do not need to remit interest to Treasury, and are not limited to using that interest for eligible uses under the SLFRF award.

4. Eligibility. Under this program, recipients are responsible for ensuring funds are used for eligible purposes. Generally, recipients must develop and implement policies and procedures, and record retention, to determine and monitor implementation of criteria for

² See 42 CFR 433.51 and 45 CFR 75.306.

³ Recipients also may use SLFRF funds directly for administrative costs to improve efficacy of programs that respond to the COVID-19 public health emergency. 31 CFR 35.6(b)(10).

⁴ 2 CFR 200.413 Direct Costs.

⁵ 2 CFR 200.414 Indirect Costs.



determining the eligibility of beneficiaries and/or subrecipients. Your organization, and if applicable, the subrecipient(s) administering a program on behalf of your organization, will need to maintain procedures for obtaining information evidencing a given beneficiary, subrecipient, or contractor's eligibility including a valid SAM.gov registration. Implementing risk-based due diligence for eligibility determinations is a best practice to augment your organization's existing controls.

- 5. Equipment and Real Property Management.** Any purchase of equipment or real property with SLFRF funds must be consistent with the Uniform Guidance at 2 CFR Part 200, Subpart D. Equipment and real property acquired under this program must be used for the originally authorized purpose. Consistent with 2 CFR 200.311 and 2 CFR 200.313, any equipment or real property acquired using SLFRF funds shall vest in the non-Federal entity. Any acquisition and maintenance of equipment or real property must also be in compliance with relevant laws and regulations.
- 6. Matching, Level of Effort, Earmarking.** There are no matching, level of effort, or earmarking compliance responsibilities associated with the SLFRF award. SLFRF funds may only be used for non-Federal match in other programs where costs are eligible under both SLFRF and the other program and use of such funds is not prohibited by the other program.
- 7. Period of Performance.** Your organization should also develop and implement internal controls related to activities occurring outside the period of performance. For example, each recipient should articulate each project's policy on allowability of costs incurred prior to award or start of the period of performance. All funds remain subject to statutory requirements that they must be used for costs incurred by the recipient during the period that begins on March 3, 2021, and ends on December 31, 2024, and that award funds for the financial obligations incurred by December 31, 2024 must be expended by December 31, 2026. Any funds not used must be returned to Treasury.
- 8. Procurement, Suspension & Debarment.** Recipients are responsible for ensuring that any procurement using SLFRF funds, or payments under procurement contracts using such funds are consistent with the procurement standards set forth in the Uniform Guidance at 2 CFR 200.317 through 2 CFR 200.327, as applicable. The Uniform Guidance establishes in 2 CFR 200.319 that all procurement transactions for property or services must be conducted in a manner providing full and open competition, consistent with standards outlined in 2 CFR 200.320, which allows for non-competitive procurements only in circumstances where at least one of the conditions below is true: the item is below the micro-purchase threshold; the item is only available from a single source; the public exigency or emergency will not permit a delay from publicizing a competitive solicitation; or after solicitation of a number of sources, competition is determined inadequate.⁶ Recipients must have and use documented procurement procedures that are consistent with the standards outlined in 2 CFR 200.317 through 2 CFR 200.320. The Uniform Guidance requires an infrastructure for competitive bidding and contractor oversight, including maintaining written standards of conduct and prohibitions on dealing with suspended or debarred parties. Your organization must ensure adherence to all applicable local, State, and federal procurement laws and regulations.
- 9. Program Income.** Generally, program income includes, but is not limited to, income from fees for services performed, the use or rental of real or personal property acquired under Federal awards and principal and interest on loans made with Federal award funds. Program income does not include interest earned on advances of Federal funds, rebates, credits, discounts, or interest on rebates, credits, or discounts. Recipients of SLFRF funds

⁶ 2 CFR 200.320(c)(1)-(3) and (5)



should calculate, document, and record the organization's program income. Additional controls that your organization should implement include written policies that explicitly identify appropriate allocation methods, accounting standards and principles, compliance monitoring checks for program income calculations, and records.

The Uniform Guidance outlines the requirements that pertain to program income at 2 CFR 200.307. Treasury intends to provide additional guidance regarding program income and the application of 2 CFR 200.307(e)(1), including with respect to lending programs.

10. Reporting. All recipients of federal funds must complete financial, performance, and compliance reporting as required and outlined in Part 2 of this guidance. Expenditures may be reported on a cash or accrual basis, as long as the methodology is disclosed and consistently applied. Reporting must be consistent with the definition of expenditures pursuant to 2 CFR 200.1. Your organization should appropriately maintain accounting records for compiling and reporting accurate, compliant financial data, in accordance with appropriate accounting standards and principles.

In addition, where appropriate, your organization needs to establish controls to ensure completion and timely submission of all mandatory performance and/or compliance reporting. See Part 2 of this guidance for a full overview of recipient reporting responsibilities.

11. Subrecipient Monitoring. SLFRF recipients that are pass-through entities as defined under 2 CFR 200.1 are required to manage and monitor their subrecipients to ensure compliance with requirements of the SLFRF award pursuant to 2 CFR 200.332 regarding requirements for pass-through entities.

First, your organization must clearly identify to the subrecipient: (1) that the award is a subaward of SLFRF funds; (2) any and all compliance requirements for use of SLFRF funds; and (3) any and all reporting requirements for expenditures of SLFRF funds.

Next, your organization will need to evaluate each subrecipient's risk of noncompliance based on a set of common factors. These risk assessments may include factors such as prior experience in managing Federal funds, previous audits, personnel, and policies or procedures for award execution and oversight. Ongoing monitoring of any given subrecipient should reflect its assessed risk and include monitoring, identification of deficiencies, and follow-up to ensure appropriate remediation.

Accordingly, your organization should develop written policies and procedures for subrecipient monitoring and risk assessment and maintain records of all award agreements identifying or otherwise documenting subrecipients' compliance obligations.

12. Special Tests and Provisions. Treasury has set a deadline of July 16, 2021, for receipt of public comment on its Interim Final Rule and will adopt a final rule responding to these comments. In addition, Treasury may add clarifications to the implementing guidance.

Across each of the compliance requirements above, Treasury described some best practices for development of internal controls. The table below provides a brief description and example of each best practice.

**Table 1: Internal controls best practices**

Best Practice	Description	Example
Written policies and procedures	Formal documentation of recipient policies and procedures	Documented procedure for determining worker eligibility for premium pay
Written standards of conduct	Formal statement of mission, values, principles, and professional standards	Documented code of conduct / ethics for subcontractors
Risk-based due diligence	Pre-payment validations conducted according to an assessed level of risk	Enhanced eligibility review of subrecipient with imperfect performance history
Risk-based compliance monitoring	Ongoing validations conducted according to an assessed level of risk	Higher degree of monitoring for projects that have a higher risk of fraud, given program characteristics
Record maintenance and retention	Creation and storage of financial and non-financial records.	Storage of all subrecipient payment information.

E. Award Terms and Conditions

The Award Terms and Conditions of the SLFRF financial assistance agreement sets forth the compliance obligations for recipients pursuant to the SLFRF statute, the Uniform Guidance, and Treasury’s Interim Final Rule. Recipients should ensure they remain in compliance with all Award Terms and Conditions. These obligations include the following items in addition to those described above:

- 1. SAM.gov Requirements.** All eligible recipients are also required to have an active registration with the System for Award Management (SAM) (<https://www.sam.gov>). To ensure timely receipt of funding, Treasury has stated that Non-entitlement Units of Government (NEUs) who have not previously registered with SAM.gov may do so after receipt of the award, but before the submission of mandatory reporting.⁷
- 2. Recordkeeping Requirements.** Generally, your organization must maintain records and financial documents for five years after all funds have been expended or returned to Treasury, as outlined in paragraph 4.c. of the Award Terms and Conditions. Treasury may request transfer of records of long-term value at the end of such period. Wherever practicable, such records should be collected, transmitted, and stored in open and machine-readable formats.

Your organization must agree to provide or make available such records to Treasury upon request, and to any authorized oversight body, including but not limited to the Government Accountability Office (“GAO”), Treasury’s Office of Inspector General (“OIG”), and the Pandemic Relief Accountability Committee (“PRAC”).

- 3. Single Audit Requirements.** Recipients and subrecipients that expend more than \$750,000 in Federal awards during their fiscal year will be subject to an audit under the Single Audit Act and its implementing regulation at 2 CFR Part 200, Subpart F regarding audit requirements.⁸ Recipients and subrecipients may also refer to the [Office of](#)

⁷ See flexibility provided in https://www.whitehouse.gov/wp-content/uploads/2021/03/M_21_20.pdf.

⁸ For-profit entities that receive SLFRF subawards are not subject to Single Audit requirements. However, they are subject to other audits as deemed necessary by authorized governmental entities, including Treasury, the GAO, the PRAC and the Treasury’s OIG.



[Management and Budget \(OMB\) Compliance Supplements for audits of federal funds and related guidance](#) and the [Federal Audit Clearinghouse](#) to see examples and single audit submissions.

- 4. Civil Rights Compliance.** Recipients of Federal financial assistance from the Treasury are required to meet legal requirements relating to nondiscrimination and nondiscriminatory use of Federal funds. Those requirements include ensuring that entities receiving Federal financial assistance from the Treasury do not deny benefits or services, or otherwise discriminate on the basis of race, color, national origin (including limited English proficiency), disability, age, or sex (including sexual orientation and gender identity), in accordance with the following authorities: Title VI of the Civil Rights Act of 1964 (Title VI) Public Law 88-352, 42 U.S.C. 2000d-1 et seq., and the Department's implementing regulations, 31 CFR part 22; Section 504 of the Rehabilitation Act of 1973 (Section 504), Public Law 93-112, as amended by Public Law 93-516, 29 U.S.C. 794; Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. 1681 et seq., and the Department's implementing regulations, 31 CFR part 28; Age Discrimination Act of 1975, Public Law 94-135, 42 U.S.C. 6101 et seq., and the Department implementing regulations at 31 CFR part 23.

In order to carry out its enforcement responsibilities under Title VI of the Civil Rights Act, Treasury will collect and review information from recipients to ascertain their compliance with the applicable requirements before and after providing financial assistance. Treasury's implementing regulations, 31 CFR part 22, and the Department of Justice (DOJ) regulations, [Coordination of Non-discrimination in Federally Assisted Programs, 28 CFR part 42](#), provide for the collection of data and information from recipients (see 28 CFR 42.406). Treasury may request that recipients submit data for post-award compliance reviews, including information such as a narrative describing their Title VI compliance status.



Part 2: Reporting Guidance

There are three types of reporting requirements for the SLFRF program.

- **Interim Report:** Provide initial overview of status and uses of funding. This is a one-time report. **See Section A, page 13.**
- **Project and Expenditure Report:** Report on projects funded, expenditures, and contracts and subawards over \$50,000, and other information. **See Section B, page 15.**
- **Recovery Plan Performance Report:** The Recovery Plan Performance Report (the “Recovery Plan”) will provide information on the projects that large recipients are undertaking with program funding and how they plan to ensure program outcomes are achieved in an effective, efficient, and equitable manner. It will include key performance indicators identified by the recipient and some mandatory indicators identified by Treasury. The Recovery Plan will be posted on the website of the recipient as well as provided to Treasury. **See Section C, page 23.**

Table 2: Reporting requirements by recipient type

Recipient	Interim Report	Project and Expenditure Report	Recovery Plan Performance Report
States, U.S. territories, metropolitan cities and counties with a population that exceeds 250,000 residents	By August 31, 2021, with expenditures by category	By October 31, 2021, and then 30 days after the end of each quarter thereafter ⁹	By August 31, 2021, and annually thereafter by July 31 ¹⁰
Metropolitan cities and counties with a population below 250,000 residents which received more than \$5 million in SLFRF funding			Not required
Tribal Governments		By October 31, 2021, and then annually thereafter ¹¹	Not required
Metropolitan cities and counties with a population below 250,000 residents which received less than \$5 million in SLFRF funding	Not required		
NEUs		Not required	Not required

The remainder of this document describes these reporting requirements. A users’ guide will be provided with additional information on how and where to submit required reports.

⁹ Interim Final Rule Page 111

¹⁰ Interim Final Rule page 112

¹¹ Interim Final Rule Page 111



Comparison to reporting for the CRF

This guidance does not change the reporting or compliance requirements pertaining to the CRF. Reporting and compliance requirements for the SLFRF are separate from CRF reporting requirements. Changes from CRF to SLFRF include:

- **Project, Expenditure, and Subaward Reporting:** The SLFRF reporting requirements leverage the existing reporting regime used for CRF to foster continuity and provide many recipients with a familiar reporting mechanism. The data elements for the Project and Expenditure Report will largely mirror those used for CRF, with some minor exceptions noted in this guidance. The users' guide will describe how reporting for CRF funds will relate to reporting for the SLFRF.
- **Timing of Reports:** CRF reports were due within 10 days of each calendar quarter. SLFRF quarterly reporting will be due 30 days from quarter end.
- **Program and Performance Reporting:** The CRF reporting did not include any program or performance reporting. To build public awareness and accountability and allow Treasury to monitor compliance with eligible uses, some program and performance reporting is required.

A. Interim Report

States, U.S. territories, metropolitan cities, counties, and Tribal governments are required to submit a one-time interim report with expenditures¹² by Expenditure Category from the date of award to July 31, 2021. The recipient will be required to enter obligations¹³ and expenditures and, for each, select the specific expenditure category from the available options. See Appendix 1 for Expenditure Categories (EC).

1. Required Programmatic Data

Recipients will also be required to provide the following information if they have or plan to have expenditures in the following Expenditure Categories.

- a. **Revenue replacement (EC 6.1¹⁴):** Key inputs into the revenue replacement formula in the Interim Final Rule and estimated revenue loss due to the Covid-19 public health emergency calculated using the formula in the Interim Final Rule as of December 31, 2020.
 - Base year general revenue (e.g., revenue in the last full fiscal year prior to the public health emergency)
 - Fiscal year end date
 - Growth adjustment used (either 4.1 percent or average annual general revenue growth over 3 years prior to pandemic)
 - Actual general revenue as of the twelve months ended December 31, 2020
 - Estimated revenue loss due to the Covid-19 public health emergency as of December 31, 2020
 - An explanation of how revenue replacement funds were allocated to government services (Note: additional instructions and/or template to be provided in users' guide)

¹² For purposes of reporting in the SLFRF portal, an expenditure is the amount that has been incurred as a liability of the entity (the service has been rendered or the good has been delivered to the entity).

¹³ For purposes of reporting in the SLFRF portal, an obligation is an order placed for property and services, contracts and subawards made, and similar transactions that require payment.

¹⁴ See Appendix 1 for the full Expenditure Category (EC) list. References to Expenditure Categories are identified by "EC" followed by numbers from the table in Appendix 1.



In calculating general revenue and the other items discussed above, recipients should use audited data if it is available. When audited data is not available, recipients are not required to obtain audited data if substantially accurate figures can be produced on an unaudited basis. Recipients should use their own data sources to calculate general revenue, and do not need to rely on revenue data published by the Census Bureau. Treasury acknowledges that due to differences in timing, data sources, and definitions, recipients' self-reported general revenue figures may differ from those published by the Census Bureau. Recipients may provide data on a cash, accrual, or modified accrual basis, provided that recipients are consistent in their choice of methodology throughout the covered period and until reporting is no longer required. Recipients' reporting should align with their own financial reporting.

In calculating general revenue, recipients should exclude all intergovernmental transfers from the federal government. This includes, but is not limited to, federal transfers made via a State to a locality pursuant to the CRF or SLFRF. To the extent federal funds are passed through States or other entities or intermingled with other funds, recipients should attempt to identify and exclude the federal portion of those funds from the calculation of general revenue on a best-efforts basis.

Consistent with the broad latitude provided to recipients to use funds for government services to the extent of reduction in revenue, recipients will be required to submit a description of services provided. This description may be in narrative or in another form, and recipients are encouraged to report based on their existing budget processes and to minimize administrative burden. For example, a recipient with \$100 in revenue replacement funds available could indicate that \$50 were used for law enforcement operating expenses and \$50 were used for pay-go building of sidewalk infrastructure. As discussed in the Interim Final Rule, these services can include a broad range of services but may not be used directly for pension deposits or debt service.

Reporting requirements will not require tracking the indirect effects of Fiscal Recovery Funds, apart from the restrictions on use of Fiscal Recovery Funds to offset a reduction in net tax revenue. In addition, recipients must indicate that Fiscal Recovery Funds were not used to make a deposit in a pension fund.

- b. Distributions to NEUs - States and territories only (EC 7.4): Information on SLFRF distributions to eligible NEUs. Each State and territory will be asked to provide an update on distributions to individual NEUs, including whether the NEU has (1) received funding; (2) declined funding and requested a transfer to the State under Section 603(c)(4) of the Act; or (3) not taken action on its funding. States and territories should be prepared to report on their information, including the following:
- NEU name
 - NEU DUNS number
 - NEU Taxpayer Identification Number (TIN)
 - NEU Recipient Number (a unique identification code for each NEU assigned by the State to the NEU as part of the request for funding)
 - NEU contact information (e.g., address, point of contact name, point of contact email address, and point of contact phone number)
 - NEU authorized representative name and email address
 - Initial allocation and, if applicable, subsequent allocation to the NEU (before application of the 75 percent cap)
 - Total NEU reference budget (as submitted by the NEU to the State as part of the request for funding)



- Amount of the initial and, if applicable, subsequent allocation above 75 percent of the NEU’s reference budget which will be returned to Treasury
- Payment amount(s)
- Payment date(s)

For each eligible NEU that declined funding and requested a transfer to the State under Section 603(c)(4), the State must also attach a form signed by the NEU, as detailed in the [Guidance on Distributions of Funds to Non-Entitlement Units of Local Government](#).

States with “weak” minor civil divisions (i.e., Illinois, Indiana, Kansas, Missouri, Nebraska, North Dakota, Ohio, and South Dakota) should also list any minor civil divisions that the State deemed ineligible.

B. Project and Expenditure Report

All recipients are required to submit Project and Expenditure Reports.

1. Quarterly Reporting

The following recipients are required to submit quarterly Project and Expenditure Reports:

- States, U.S. territories, and Tribal governments
- Metropolitan cities and counties that received more than \$5 million in SLFRF funding

For these recipients, the initial quarterly Project and Expenditure Report will cover two calendar quarters from the date of award to September 30, 2021 and must be submitted to Treasury by October 31, 2021. The subsequent quarterly reports will cover one calendar quarter and must be submitted to Treasury within 30 calendar days after the end of each calendar quarter. Quarterly reports are not due concurrently with applicable annual reports. The table below summarizes the quarterly report timelines:

Report	Year	Quarter	Period Covered	Due Date
1	2021	2 and 3	Award Date – September 30	October 31, 2021
2	2021	4	October 1 – December 31	January 31, 2022
3	2022	1	January 1 – March 31	April 30, 2022
4	2022	2	April 1 – June 30	July 31, 2022
5	2022	3	July 1 – September 30	October 31, 2022
6	2022	4	October 1 – December 31	January 31, 2023
7	2023	1	January 1 – March 31	April 30, 2023
8	2023	2	April 1 – June 30	July 31, 2023
9	2023	3	July 1 – September 30	October 31, 2023
10	2023	4	October 1 – December 31	January 31, 2024
11	2024	1	January 1 – March 31	April 30, 2024
12	2024	2	April 1 – June 30	July 31, 2024
13	2024	3	July 1 – September 30	October 31, 2024
14	2024	4	October 1 – December 31	January 31, 2025
15	2025	1	January 1 – March 31	April 30, 2025
16	2025	2	April 1 – June 30	July 31, 2025
17	2025	3	July 1 – September 30	October 31, 2025
18	2025	4	October 1 – December 31	January 31, 2026
19	2026	1	January 1 – March 31	April 30, 2026
20	2026	2	April 1 – June 30	July 31, 2026



Report	Year	Quarter	Period Covered	Due Date
21	2026	3	July 1 – September 30	October 31, 2026
22	2026	4	October 1 – December 31	March 31, 2027

2. Annual Reporting

The following recipients are required to submit annual Project and Expenditure Reports:

- Metropolitan cities and counties that received less than \$5 million in SLFRF funding.
- NEUs. To facilitate reporting, each NEU will need a NEU Recipient Number. This is a unique identification code for each NEU assigned by the State to the NEU as part of its request for funding.

For these recipients, the initial Project and Expenditure Report will cover from the date of award to September 30, 2021 and must be submitted to Treasury by October 31, 2021. The subsequent annual reports will cover one calendar year and must be submitted to Treasury by October 31. The table below summarizes the report timelines:

Report	Period Covered	Due Date
1	Award Date – September 30, 2021	October 31, 2021
2	October 1, 2021 – September 30, 2022	October 31, 2022
3	October 1, 2022 – September 30, 2023	October 31, 2023
4	October 1, 2023 – September 30, 2024	October 31, 2024
5	October 1, 2024 – September 30, 2025	October 31, 2025
6	October 1, 2025 – September 30, 2026	October 31, 2026
7	October 1, 2026 – December 31, 2026	March 31, 2027

3. Required Information

The following information will be required in Project and Expenditure Reports:

- a. **Projects:** Provide information on all SLFRF funded projects. Projects are new or existing eligible government services or investments funded in whole or in part by SLFRF funding. For each project, the recipient will be required to enter the project name, identification number (created by the recipient), project expenditure category (see Appendix 1), description, and status of completion. Project descriptions must describe the project in sufficient detail to provide understanding of the major activities that will occur, and will be required to be between 50 and 250 words. Projects should be defined to include only closely related activities directed toward a common purpose. In particular, recipients should review the Required Programmatic Data described below and define their projects at a sufficient level of granularity to report these metrics for a reasonably specific activity or set of activities in each project.

Note: For each project, the recipient will be asked to select the appropriate Expenditure Category based on the scope of the project (see Appendix 1). Projects should be scoped to align to a single Expenditure Category. For select Expenditure Categories, the recipient will also be asked to provide additional programmatic data (described further below).

- b. **Expenditures:** Once a project is entered the recipient will be able to report on the project's obligations and expenditures. Recipients will be asked to report:
- Current period obligation
 - Cumulative obligation
 - Current period expenditure
 - Cumulative expenditure



- c. **Project Status:** Once a project is entered the recipient will be asked to report on project status each reporting period, in four categories:
- Not Started
 - Completed less than 50 percent
 - Completed 50 percent or more
 - Completed
- d. **Project Demographic Distribution:** Recognizing the disproportionate impact of the pandemic-related recession on low-income communities, recipients must report whether certain types of projects¹⁵ are targeted to economically disadvantaged communities, as defined by HUD's [Qualified Census Tract](#).¹⁶ Recipients will be asked to identify whether or not the project is serving an economically disadvantaged community. To minimize the administrative burden on recipients while ensuring that this important aspect of program performance is tracked, recipients may assume that the funds for a project count as being targeted towards economically disadvantaged communities if the project funds are spent on:
- A program or service is provided at a physical location in a Qualified Census Tract (for multi-site projects, if a majority of sites are within Qualified Census Tracts);
 - A program or service where the primary intended beneficiaries live within a Qualified Census Tract;
 - A program or service for which the eligibility criteria are such that the primary intended beneficiaries earn less than 60 percent of the median income for the relevant jurisdiction (e.g., State, county, metropolitan area, or other jurisdiction); or
 - A program or service for which the eligibility criteria are such that over 25 percent of intended beneficiaries are below the federal poverty line.

Recipients may use reasonable estimates to determine if a project meets one of these criteria, including identifying the intended beneficiaries of a program or service in terms of income characteristics, geographic location, or otherwise estimating the beneficiaries of a program based on its eligibility criteria. Recipients do not need to track information on each individual beneficiary to make the determination of whether or not the project is serving an economically disadvantaged community. If a recipient is unable to measure economic characteristics of the primary intended beneficiaries of a program or service due to data limitations or for other reasons, that program or service may not be counted as targeted to economically disadvantaged communities. Treasury recognizes that in some circumstances, recipients may fund eligible programs or services that benefit economically disadvantaged communities but may lack adequate data to assess conclusively that such a program or service is targeted to economically disadvantaged communities based on the criteria described above.

- e. **Subawards:** Each recipient shall also provide detailed obligation and expenditure information for any contracts and grants awarded, loans issued, transfers made to other government entities, and direct payments made by the recipient that are greater than or equal to \$50,000.

¹⁵ Specifically recipients must report this information for projects in the Expenditure Categories that are marked with “^” in the expenditure category listing in Appendix 1 of this guidance

¹⁶ HUD defines as a QCT as having “50 percent of households with incomes below 60 percent of the Area Median Gross Income (AMGI) or have a poverty rate of 25 percent or more.” To view median income area for their jurisdiction, recipients may visit the U.S. Census [website](#) on median incomes and select the geography for their jurisdiction and relevant unit of measurement (household or individual) for the project.



Recipients do not also need to submit separate monthly subaward reports to FSRS.gov as required pursuant to the 2 CFR Part 170, Appendix A award term regarding reporting subaward and executive compensation, which is included in the SLFRF Award Terms and Conditions. Treasury will submit this reporting on behalf of recipients using the \$50,000 reporting threshold, timing, and data elements discussed in this guidance. If recipients choose to continue reporting to FSRS.gov in addition to reporting directly to Treasury on these funds, they may do so and will be asked to notify Treasury as part of their quarterly submission.

In general, recipients will be asked to provide the following information for each Contract, Grant, Loan, Transfer, or Direct Payment greater than or equal to \$50,000:

- Subrecipient identifying and demographic information (e.g., DUNS number and location)
- Award number (e.g., Award number, Contract number, Loan number)
- Award date, type, amount, and description
- Award payment method (reimbursable or lump sum payment(s))
- For loans, expiration date (date when loan expected to be paid in full)
- Primary place of performance
- Related project name(s)
- Related project identification number(s) (created by the recipient)
- Period of performance start date
- Period of performance end date
- Quarterly obligation amount
- Quarterly expenditure amount
- Project(s)
- Additional programmatic performance indicators for select Expenditure Categories (see below)

Aggregate reporting is required for contracts, grants, transfers made to other government entities, loans, direct payments, and payments to individuals that are below \$50,000. This information will be accounted for by expenditure category at the project level.

As required by the 2 CFR Part 170, Appendix A award term regarding reporting subaward and executive compensation, recipients must also report the names and total compensation of their five most highly compensated executives and their subrecipients' executives for the preceding completed fiscal year if (1) the recipient received 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards), and received \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act (and subawards), and (2) if the information is not otherwise public. In general, most SLFRF Recipients are governmental entities with executive salaries that are already disclosed, so no additional information must be reported. The recipient is responsible for the subrecipients' compliance with registering and maintaining an updated profile on SAM.gov.

- f. Civil Rights Compliance: Treasury will request information on recipients' compliance with Title VI of the Civil Rights Act of 1964 on an annual basis. This information may include a narrative describing the recipient's compliance with Title VI, along with other questions and assurances.



- g. Required Programmatic Data (other than infrastructure projects): For all projects listed under the following Expenditure Categories (see Appendix 1), the information listed must be provided in each report.
1. Payroll for Public Health and Safety Employees (EC 1.9):
 - Number of government FTEs responding to COVID-19 supported under this authority
 2. Household Assistance (EC 2.1-2.5):
 - Brief description of structure and objectives of assistance program(s) (e.g., nutrition assistance for low-income households)
 - Number of individuals served (by program if recipient establishes multiple separate household assistance programs)
 - Brief description of recipient's approach to ensuring that aid to households responds to a negative economic impact of Covid-19, as described in the Interim Final Rule
 3. Small Business Economic Assistance (EC 2.9):
 - Brief description of the structure and objectives of assistance program(s) (e.g., grants for additional costs related to Covid-19 mitigation)
 - Number of small businesses served (by program if recipient establishes multiple separate small businesses assistance programs)
 - Brief description of recipient's approach to ensuring that aid to small businesses responds to a negative economic impact of COVID-19, as described in the Interim Final Rule
 4. Aid to Travel, Tourism, and Hospitality or Other Impacted Industries (EC 2.11-2.12):
 - If aid is provided to industries other than travel, tourism, and hospitality (EC 2.12), a description of pandemic impact on the industry and rationale for providing aid to the industry
 - Brief narrative description of how the assistance provided responds to negative economic impacts of the COVID-19 pandemic
 - For each subaward:
 - Sector of employer (Note: additional detail, including list of sectors to be provided in a users' guide)
 - Purpose of funds (e.g., payroll support, safety measure implementation)
 5. Rehiring Public Sector Staff (EC 2.14):
 - Number of FTEs rehired by governments under this authority
 6. Education Assistance (EC 3.1-3.5):
 - The National Center for Education Statistics ("NCES") School ID or NCES District ID. List the School District if all schools within the school district received some funds. If not all schools within the school district received funds, list the School ID of the schools that received funds. These can allow evaluators to link data from the NCES to look at school-level demographics and, eventually, student performance.¹⁷

¹⁷ For more information on NCES identification numbers see <https://nces.ed.gov/ccd/districtsearch/> (districts) and <https://nces.ed.gov/ccd/schoolsearch/> (schools).



7. Premium Pay (both Public Sector EC 4.1 and Private Sector EC 4.2):

- List of sectors designated as critical to the health and well-being of residents by the chief executive of the jurisdiction, if beyond those included in the Interim Final Rule (Note: a list of sectors will be provided in the forthcoming users' guide).
- Number of workers to be served
- Employer sector for all subawards to third-party employers (i.e., employers other than the State, local, or Tribal government) (Note: a list of sectors will be provided in the forthcoming users' guide).
- For groups of workers (e.g., an operating unit, a classification of worker, etc.) or, to the extent applicable, individual workers, for whom premium pay would increase total pay above 150 percent of their residing State's average annual wage, or their residing county's¹⁸ average annual wage, whichever is higher, on an annual basis:
 - A brief written narrative justification of how the premium pay or grant is responsive to workers performing essential work during the public health emergency. This could include a description of the essential workers' duties, health or financial risks faced due to COVID-19, and why the recipient government determined that the premium pay was responsive to workers performing essential work during the pandemic. This description should not include personally identifiable information; when addressing individual workers, recipients should be careful not to include this information. Recipients may consider describing the workers' occupations and duties in a general manner as necessary to protect privacy.

8. Revenue replacement (EC 6.1):

Under the Interim Final Rule, recipients calculate revenue loss using data as of four discrete points during the program: December 31, 2020, December 31, 2021, December 31, 2022, and December 31, 2023. Revenue loss calculated as of December 31, 2020 will be reported in the Interim Report, as described above. For future calculation dates, revenue loss will be reported only in the Quarter 4 reports due January 31, 2022, January 31, 2023, and January 31, 2024. Reporting on revenue loss should include:

- General revenue collected over the past 12 months as of the most recent calculation date, as outlined in the Interim Final Rule (for example, for the January 31, 2022 report, recipients should provide 12 month general revenue as of December 31, 2021);
- Calculated revenue loss due to the Covid-19 public health emergency; and
- An explanation of how the revenue replacement funds were allocated to government services (note: additional instructions and/or template to be provided in user guide).

In calculating general revenue and the revenue loss due to the COVID-19 public health emergency, recipients should follow the same guidance as described above for the Interim Report.

- h. Required Programmatic Data for Infrastructure Projects (EC 5): For all projects listed under the Water, Sewer, and Broadband Expenditure Categories (see Appendix 1), more detailed project-level information is required. Each project will be required to report expenditure data as described above, but will also report the following information:

¹⁸ *County* means a county, parish, or other equivalent county division (as defined by the Census Bureau). See 31 CFR 35.3.



1. All infrastructure projects (EC 5):

- Projected/actual construction start date (month/year)
- Projected/actual initiation of operations date (month/year)
- Location (for broadband, geospatial location data)
- For projects over \$10 million:
 - a. A recipient may provide a certification that, for the relevant project, all laborers and mechanics employed by contractors and subcontractors in the performance of such project are paid wages at rates not less than those prevailing, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State (or the District of Columbia) in which the work is to be performed, or by the appropriate State entity pursuant to a corollary State prevailing-wage-in-construction law (commonly known as “baby Davis-Bacon Acts”). If such certification is not provided, a recipient must provide a project employment and local impact report detailing:
 - The number of employees of contractors and sub-contractors working on the project;
 - The number of employees on the project hired directly and hired through a third party;
 - The wages and benefits of workers on the project by classification; and
 - Whether those wages are at rates less than those prevailing.¹⁹
Recipients must maintain sufficient records to substantiate this information upon request.
 - b. A recipient may provide a certification that a project includes a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the recipient does not provide such certification, the recipient must provide a project workforce continuity plan, detailing:
 - How the recipient will ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure high-quality construction throughout the life of the project;
 - How the recipient will minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the project; and
 - How the recipient will provide a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities;
 - Whether workers on the project will receive wages and benefits that will secure an appropriately skilled workforce in the context of the local or regional labor market; and
 - Whether the project has completed a project labor agreement.
 - c. Whether the project prioritizes local hires.
 - d. Whether the project has a Community Benefit Agreement, with a description of any such agreement.

¹⁹ As determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State (or the District of Columbia) in which the work is to be performed.



2. Water and sewer projects (EC 5.1-5.15):

- National Pollutant Discharge Elimination System (NPDES) Permit Number (if applicable; for projects aligned with the Clean Water State Revolving Fund)
- Public Water System (PWS) ID number (if applicable; for projects aligned with the Drinking Water State Revolving Fund)

3. Broadband projects (EC 5.16-5.17):

- Speeds/pricing tiers to be offered, including the speed/pricing of its affordability offering
 - Technology to be deployed
 - Miles of fiber
 - Cost per mile
 - Cost per passing
 - Number of households (broken out by households on Tribal lands and those not on Tribal lands) projected to have increased access to broadband meeting the minimum speed standards in areas that previously lacked access to service of at least 25 Mbps download and 3 Mbps upload
 - Number of households with access to minimum speed standard of reliable 100 Mbps symmetrical upload and download
 - Number of households with access to minimum speed standard of reliable 100 Mbps download and 20 Mbps upload
 - Number of institutions and businesses (broken out by institutions on Tribal lands and those not on Tribal lands) projected to have increased access to broadband meeting the minimum speed standards in areas that previously lacked access to service of at least 25 Mbps download and 3 Mbps upload, in each of the following categories: business, small business, elementary school, secondary school, higher education institution, library, healthcare facility, and public safety organization
 - Specify the number of each type of institution with access to the minimum speed standard of reliable 100 Mbps symmetrical upload and download; and
 - Specify the number of each type of institution with access to the minimum speed standard of reliable 100 Mbps download and 20 Mbps upload
- i. Distributions to NEUs - States and territories only (EC 7.4): Information on SLFRF distributions to eligible NEUs. Each State and territory will be asked to provide an update on distributions to individual NEUs, including whether the NEU has (1) received funding; (2) declined funding and requested a transfer to the State under Section 603(c)(4) of the Act; or (3) not taken action on its funding. States and territories should be prepared to report on their information, including the following:
- NEU name
 - NEU DUNS number
 - NEU Taxpayer Identification Number (TIN)
 - NEU Recipient Number (a unique identification code for each NEU assigned by the State to the NEU as part of the request for funding)
 - NEU contact information (e.g., address, point of contact name, point of contact email address, and point of contact phone number)
 - NEU authorized representative name and email address
 - Initial allocation and, if applicable, subsequent allocation to the NEU (before application of the 75 percent cap)
 - Total NEU reference budget (as submitted by the NEU to the State as part of the request for funding)
 - Amount of the initial and, if applicable, subsequent allocation above 75 percent of the NEU's reference budget which will be returned to Treasury
 - Payment amount(s)
 - Payment date(s)

For each eligible NEU that declined funding and requested a transfer to the State under Section 603(c)(4), the State must also attach a form signed by the NEU, as detailed in the [Guidance on Distributions of Funds to Non-Entitlement Units of Local Government](#).

States with “weak” minor civil divisions (i.e., Illinois, Indiana, Kansas, Missouri, Nebraska, North Dakota, Ohio, and South Dakota) should also list any minor civil divisions that the State deemed ineligible.

- j. **NEU Documentation (NEUs only):** Each NEU will also be asked to provide the following information with their first report submitted by October 31, 2021:
- Copy of the signed award terms and conditions agreement (which was signed and submitted to the State as part of the request for funding)
 - Copy of the signed assurances of compliance with Title VI of the Civil Rights Act of 1964 (which was signed and submitted to the State as part of the request for funding)
 - Copy of actual budget documents validating the top-line budget total provided to the State as part of the request for funding

C. Recovery Plan Performance Report

States, territories, metropolitan cities, and counties with a population that exceeds 250,000 residents will also be required to publish and submit to Treasury a Recovery Plan performance report (“Recovery Plan”). Each Recovery Plan must be posted on the public-facing website of the recipient by the same date the recipient submits the report to Treasury. This reporting requirement includes uploading a link to the publicly available document report along with providing data in the Treasury reporting portal.

The Recovery Plan will provide the public and Treasury information on the projects recipients are undertaking with program funding and how they are planning to ensure program outcomes are achieved in an effective, efficient, and equitable manner. While this guidance outlines some minimum requirements for the Recovery Plan, each recipient is encouraged to add information to the plan they feel is appropriate to provide information to their constituents on efforts they are taking to respond to the pandemic and promote economic recovery. Each jurisdiction may determine the general form and content of the Recovery Plan, as long as it includes the minimum information determined by Treasury. Treasury will provide a recommended template but recipients may modify this template as appropriate for their jurisdiction. The Recovery Plan will include key performance indicators identified by the recipient and some mandatory indicators identified by Treasury.

The initial Recovery Plan will cover the period from the date of award to July 31, 2021 and must be submitted to Treasury by August 31, 2021. Thereafter, the Recovery Plan will cover a 12-month period and recipients will be required to submit the report to Treasury within 30 days after the end of the 12-month period (by July 31). The table below summarizes the report timelines:

Annual Report	Period Covered	Due Date
1	Award Date – July 31, 2021	August 31, 2021
2	July 1, 2021 – June 30, 2022	July 31, 2022
3	July 1, 2022 – June 30, 2023	July 31, 2023
4	July 1, 2023 – June 30, 2024	July 31, 2024
5	July 1, 2024 – June 30, 2025	July 31, 2025
6	July 1, 2025 – June 30, 2026	July 31, 2026
7	July 1, 2026 – December 31, 2026	March 31, 2027



The Recovery Plan will include, at a minimum, the following information:

1. Executive Summary

Provide a high-level overview of the jurisdiction's intended and actual uses of funding including, but not limited to: the jurisdiction's plan for use of funds to promote a response to the pandemic and economic recovery, key outcome goals, progress to date on those outcomes, and any noteworthy challenges or opportunities identified during the reporting period.

2. Uses of Funds

Describe in further detail your jurisdiction's intended and actual uses of the funds, such as how your jurisdiction's approach would help support a strong and equitable recovery from the COVID-19 pandemic and economic downturn. Describe any strategies employed to maximize programmatic impact and effective, efficient, and equitable outcomes. Given the broad eligible uses of funds and the specific needs of the jurisdiction, please also explain how the funds would support the communities, populations, or individuals in your jurisdiction. Your description should address how you are promoting each of the following, to the extent they apply:

- a. Public Health (EC 1): As relevant, describe how funds are being used to respond to COVID-19 and the broader health impacts of COVID-19 and the COVID-19 public health emergency.
- b. Negative Economic Impacts (EC 2): As relevant, describe how funds are being used to respond to negative economic impacts of the COVID-19 public health emergency, including to households and small businesses.
- c. Services to Disproportionately Impacted Communities (EC 3): As relevant, describe how funds are being used to provide services to communities disproportionately impacted by the COVID-19 public health emergency.
- d. Premium Pay (EC 4): As relevant, describe the approach, goals, and sectors or occupations served in any premium pay program. Describe how your approach prioritizes low-income workers.
- e. Water, sewer, and broadband infrastructure (EC 5): Describe the approach, goals, and types of projects being pursued, if pursuing.
- f. Revenue Replacement (EC 6): Describe the loss in revenue due to the COVID-19 public health emergency and how funds have been used to provide government services.

Where appropriate, recipients should also include information on your jurisdiction's use (or planned use) of other federal recovery funds including other programs under the American Rescue Plan such as the Emergency Rental Assistance, Housing Assistance, and so forth, to provide broader context on the overall approach for pandemic recovery.

3. Promoting equitable outcomes

Describe efforts to promote equitable outcomes, including how programs were designed with equity in mind. Please include in your description how your jurisdiction will consider and measure equity at the various stages of the program, including:

- a. Goals: Are there particular historically underserved, marginalized, or adversely affected groups that you intend to serve within your jurisdiction?
- b. Awareness: How equal and practical is the ability for residents or businesses to become aware of the services funded by the SLFRF?
- c. Access and Distribution: Are there differences in levels of access to benefits and services across groups? Are there administrative requirements that result in disparities in ability to complete applications or meet eligibility criteria?



- d. **Outcomes:** Are intended outcomes focused on closing gaps, reaching universal levels of service, or disaggregating progress by race, ethnicity, and other equity dimensions where relevant for the policy objective?

Treasury encourages uses of funds that promote strong, equitable growth, including racial equity. Please describe how your jurisdiction's planned or current use of funds prioritizes economic and racial equity as a goal, names specific targets intended to produce meaningful equity results at scale, and articulates the strategies to achieve those targets. In addition, please explain how your jurisdiction's overall equity strategy translates into the specific services or programs offered by your jurisdiction in the following Expenditure Categories:

- a. **Negative Economic Impacts (EC 2):** assistance to households, small businesses, and non-profits to address impacts of the pandemic, which have been most severe among low-income populations. This includes assistance with food, housing, and other needs; employment programs for people with barriers to employment who faced negative economic impacts from the pandemic (such as residents of low-income neighborhoods, minorities, disconnected youth, the unemployed, formerly incarcerated people, veterans, and people with disabilities); and other strategies that provide disadvantaged groups with access to education, jobs, and opportunity.
- b. **Services to Disproportionately Impacted Communities (EC 3):** services to address health disparities and the social determinants of health, build stronger neighborhoods and communities (e.g., affordable housing), address educational disparities (e.g., evidence-based tutoring, community schools, and academic, social-emotional, and mental health supports for high poverty schools), and promote healthy childhood environments (e.g., home visiting, child care).

The initial report must describe efforts to date and intended outcomes to promote equity. Each annual report thereafter must provide an update, using qualitative and quantitative data, on how the recipients' approach achieved or promoted equitable outcomes or progressed against equity goals during the performance period. Please also describe any constraints or challenges that impacted project success in terms of increasing equity. In particular, this section must describe the geographic and demographic distribution of funding, including whether it is targeted toward traditionally marginalized communities.

For the purposes of the SLFRF, equity is defined in the [Executive Order 13985 On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#), as issued on January 20, 2021.

4. Community Engagement

Please describe how your jurisdiction's planned or current use of funds incorporates written, oral, and other forms of input that capture diverse feedback from constituents, community-based organizations, and the communities themselves. Where relevant, this description must include how funds will build the capacity of community organizations to serve people with significant barriers to services, including people of color, people with low incomes, limited English proficient populations, and other traditionally underserved groups.

5. Labor Practices

Describe workforce practices on any infrastructure projects being pursued (EC 5). How are projects using strong labor standards to promote effective and efficient delivery of high-quality infrastructure projects while also supporting the economic recovery through strong employment opportunities for workers? For example, report whether any of the following practices are being utilized: project labor agreements, community benefits agreements, prevailing wage requirements, and local hiring.



6. Use of Evidence

The Recovery Plan should identify whether SLFRF funds are being used for evidence-based interventions²⁰ and/or if projects are being evaluated through rigorous program evaluations that are designed to build evidence. Recipients must briefly describe the goals of the project, and the evidence base for the interventions funded by the project. Recipients must specifically identify the dollar amount of the total project spending that is allocated towards evidence-based interventions for each project in the Public Health (EC 1), Negative Economic Impacts (EC 2), and Services to Disproportionately Impacted Communities (EC 3) Expenditure Categories.²¹

Recipients are exempt from reporting on evidence-based interventions in cases where a program evaluation is being conducted. Recipients are encouraged to use relevant evidence Clearinghouses, among other sources, to assess the level of evidence for their interventions and identify evidence-based models that could be applied in their jurisdiction; such evidence clearinghouses include the U.S. Department of Education's [What Works Clearinghouse](#), the U.S. Department of Labor's [CLEAR](#), and the [Childcare & Early Education Research Connections and the Home Visiting Evidence of Effectiveness](#) clearinghouses from Administration for Children and Families, as well as other clearinghouses relevant to particular projects conducted by the recipient. In such cases where a recipient is conducting a program evaluation in lieu of reporting the amount of spending on evidence-based interventions, they must describe the evaluation design including whether it is a randomized or quasi-experimental design; the key research questions being evaluated; whether the study has sufficient statistical power to disaggregate outcomes by demographics; and the timeframe for the completion of the evaluation (including a link to completed evaluation if relevant).²² Once the evaluation has been completed, recipients must post the evaluation publicly and link to the completed evaluation in the Recovery Plan. Once an evaluation has been completed (or has sufficient interim findings to determine the efficacy of the intervention), recipients should determine whether the spending for the evaluated interventions should be counted towards the dollar amount categorized as evidence-based for the relevant project.

For all projects, recipients may be selected to participate in a national evaluation, which would study their project along with similar projects in other jurisdictions that are focused on the same set of outcomes. In such cases, recipients may be asked to share information and data that is needed for the national evaluation.

Recipients are encouraged to consider how a Learning Agenda, either narrowly focused on SLFRF or broadly focused on the recipient's broader policy agenda, could support their overarching evaluation efforts in order to create an evidence-building strategy for their jurisdiction.²³

Appendix 2 contains additional information on evidence-based interventions for the purposes of the Recovery Plan.

²⁰As noted in Appendix 2, evidence-based refers to interventions with strong or moderate levels of evidence.

²¹ Of note, recipients are only required to report the amount of the total funds that are allocated to evidence-based interventions in the areas of Public Health, Negative Economic Impacts, and Services to Disproportionately Impacted Communities that are marked by an asterisk in Appendix 1: Expenditure Categories.

²² For more information on the required standards for program evaluation, see [OMB M-20-12](#).

²³ For more information on learning agendas, please see [OMB M-19-23](#)



7. Table of Expenses by Expenditure Category

Please include a table listing the amount of funds used in each Expenditure Category (See Appendix 1). The table should include cumulative expenses to date within each category, and the additional amount spent within each category since the last annual Recovery Plan.

8. Project Inventory

List the name and provide a brief description of all SLFRF funded projects. Projects are new or existing eligible government services or investments funded in whole or in part by SLFRF funding. For each project, include the project name, funding amount, identification number (created by the recipient and used thereafter in the quarterly Program and Expenditure Report), project Expenditure Category (see Appendix 1), and a description of the project which includes an overview of the main activities of the project, the approximate timeline, primary delivery mechanisms and partners, if applicable, and intended outcomes. Include a link to the website of the project if available. This information will provide context and additional detail for the information reported quarterly in the Project and Expenditure Report.

For infrastructure investment projects (EC 5), project-level reporting will be more detailed, as described for the Project and Expenditure Report above. Projects in this area may be grouped by Expenditure Category if needed, with further detail (such as the specific project name and identification number) provided in the Project and Expenditure Report. For infrastructure projects, descriptions should note how the project contributes to addressing climate change.

9. Performance Report

The Recovery Plan must include key performance indicators for the major SLFRF funded projects undertaken by the recipient. The recipient has flexibility in terms of how this information is presented in the Recovery Plan, and may report key performance indicators for each project, or may group projects with substantially similar goals and the same outcome measures. In some cases, the recipient may choose to include some indicators for each individual project as well as crosscutting indicators.

Performance indicators should include both output and outcome measures. Output measures, such as number of students enrolled in an early learning program, provide valuable information about the early implementation stages of a project. Outcome measures, such as the percent of students reading on grade level, provide information about whether a project is achieving its overall goals. Recipients are encouraged to use logic models²⁴ to identify their output and outcome measures. While the initial report will focus heavily on early output goals, recipients must include the related outcome goal for each project and provide updated information on achieving these outcome goals in annual reports. In cases where recipients are conducting a program evaluation for a project (as described above), the outcome measures in the performance report should be aligned with those being evaluated in the program. To support their performance measurement and program improvement efforts, recipients are permitted to use funds to make improvements to data or technology infrastructure and data analytics, as well as program evaluations.

10. Required Performance Indicators and Programmatic Data

While recipients have discretion on the full suite of performance indicators to include, a number of mandatory performance indicators and programmatic data must be included. These are necessary to allow Treasury to conduct oversight as well as understand and aggregate program outcomes across recipients. This section provides an overview of the mandatory performance indicators and programmatic data. This information may be included in each recipient's Recovery Plan as they determine most appropriate, including combining with the

²⁴ A logic model is a tool that depicts the intended links between program investments and outcomes, specifically the relationships among the resources, activities, outputs, outcomes, and impact of a program.



section above, but this data will also need to be entered directly into the Treasury reporting portal. Below is a list of required data for each Expenditure Category:

- a. Household Assistance (EC 2.2 & 2.5) and Housing Support (EC 3.10-3.12):
 - Number of people or households receiving eviction prevention services (including legal representation)
 - Number of affordable housing units preserved or developed
- b. Negative Economic Impacts (EC 2):
 - Number of workers enrolled in sectoral job training programs
 - Number of workers completing sectoral job training programs
 - Number of people participating in summer youth employment programs
- c. Education Assistance (EC 3.1-3.5):
 - Number of students participating in evidence-based tutoring programs²⁵
- d. Healthy Childhood Environments (EC 3.6-3.9):
 - Number of children served by childcare and early learning (pre-school/pre-K/ages 3-5)
 - Number of families served by home visiting

The initial report should include the key indicators above. Each annual report thereafter should include updated data for the performance period as well as prior period data, and a brief narrative adding any additional context to help the reader interpret the results and understand the any changes in performance indicators over time. To the extent possible, Treasury also encourages recipients to provide data disaggregated by race, ethnicity, gender, income, and other relevant factors.

11. Ineligible Activities: Tax Offset Provision (States and territories only)

The following information is required for Treasury to ensure SLFRF funding is not used for ineligible activities.

In each reporting year, States and territories will report certain items related to the Tax Offset Provision 31 CFR 35.8, as detailed below. As indicated in the Interim Final Rule, Treasury is seeking comment on reporting requirements related to the Tax Offset Provision, including ways to better rely on information already produced by States and territories and to minimize burden.

The terms “reporting year,” “baseline,” “covered change,” “net reduction in total spending,” and “tax revenue” are defined in the Interim Final Rule, 31 CFR 35.3. For purposes of calculating a net reduction in total spending, total spending for the fiscal year ending 2019 should be reported on an inflation-adjusted basis, consistent with the Interim Final Rule, 31 CFR 35.3. Similarly, for purposes of calculating baseline, tax revenue for the fiscal year 2019 should be reported on an inflation-adjusted basis, consistent with the Interim Final Rule, 31 CFR 35.3.

For purposes of reporting actual tax revenue and calculating tax revenue for the fiscal year ending 2019,²⁶ (a) if available, recipients should report information using audited financials and (b) recipients may provide data on a cash, accrual, or modified accrual basis, but must be consistent in their approach across all reporting periods. Similarly, for purposes of calculating

²⁵ For more information on evidence-based tutoring programs, refer to the U.S. Department of Education’s [2021 ED COVID-19 Handbook \(Volume 2\)](#), which summarizes research on evidence-based tutoring programs (see the bottom of page 20).

²⁶ Tax revenue for fiscal year ending 2019 is relevant for calculating the recipient’s baseline.



a net reduction in total spending, recipients should report data using audited financials where available.

a. Revenue-reducing Covered Changes:

For each reporting year, a recipient must report the value of covered changes that the recipient predicts will have the effect of reducing tax revenue in a given reporting year (revenue-reducing covered changes), similar to the way it would in the ordinary course of its budgeting process. The value of these covered changes may be reported based on estimated values produced by a budget model, incorporating reasonable assumptions, that aligns with the recipient government's existing approach for measuring the effects of fiscal policies, and that measures relative to a current law baseline. The covered changes may also be reported based on actual values using a statistical methodology to isolate the change in year-over-year revenue attributable to the covered change(s), relative to the current law baseline prior to the change(s). Estimation approaches should not use dynamic methodologies that incorporate the projected effects of the policies on macroeconomic growth. In general and where possible, reported values should be produced by the agency of the recipient government responsible for estimating the costs and effects of fiscal policy changes. Recipients must maintain records regarding the identification and predicted effects of revenue-reducing covered changes.

b. Baseline Revenue:

Baseline has the meaning defined in the Interim Final Rule, 31 CFR 35.3.

Whether the revenue-reducing covered changes are in excess of the *de minimis*. Recipients must determine whether the aggregate value of the revenue-reducing covered changes in the reporting year is less than one percent of baseline revenue.

c. Actual Tax Revenue:

Actual tax revenue means the actual tax revenue received by the recipient government in the reporting year. Tax revenue has the meaning defined in the Interim Final Rule, 31 CFR 35.3.

d. Reduction in Net Tax Revenue:

The reduction in net tax revenue is equal to baseline revenue minus actual tax revenue in each reporting year. If this value is zero or negative, there is no reduction in net tax revenue.

e. Any revenue-increasing covered changes:

A recipient must report the value of covered changes that have had or that the recipient predicts will have the effect of increasing tax revenue in a given reporting year (revenue-increasing covered changes), similar to the way it would in the ordinary course of its budgeting process. The value of these covered changes may be reported based on estimated values produced by a budget model, incorporating reasonable assumptions, that aligns with the recipient's existing approach for measuring the effects of fiscal policies, and that measures relative to a current law baseline. The covered changes may also be reported based on actual values using a statistical methodology to isolate the change in year-over-year revenue attributable to the covered change(s), relative to the current law baseline prior to the change(s). Estimation approaches should not use dynamic methodologies that incorporate the projected effects of the policies on macroeconomic growth. In general and where possible, reporting should be produced by the agency of the recipient responsible for estimating the costs and effects of fiscal policy changes.



Recipients should maintain records regarding revenue-reducing covered changes and estimates of such changes.

f. Net reduction in total spending, and tables of specific spending cuts:

Recipients must report on spending cuts. To calculate the amount of spending cuts that are available to offset a reduction in tax revenue, the recipient must first consider whether there has been a reduction in total net spending, excluding Fiscal Recovery Funds (net reduction in total spending). As in the Interim Final Rule, 35 CFR 35.3, net reduction in total spending is measured as the recipient government's total spending for a given reporting year excluding Fiscal Recovery Funds, subtracted from its total spending for its fiscal year ending in 2019, adjusted for inflation using the Bureau of Economic Analysis's Implicit Price Deflator for the gross domestic product of the United States. If that subtraction yields a positive value, there has been a net reduction; if it yields zero or a negative value, there has not been a net reduction. If there has been no net reduction in total spending, a recipient will have no spending cuts to offset a reduction in net tax revenue.

Next, a recipient must determine and aggregate the value of spending cuts in each "reporting unit," as defined below. For each reporting unit, the recipient must report (1) the amount of the reduction in spending in the reporting unit relative to its inflation-adjusted FY 2019 level, (2) the amount of any Fiscal Recovery Funds spent in the reporting unit, and (3) the amount by which the reduction in spending exceeds the Fiscal Recovery funds spent in the reporting unit. If a recipient has not spent amounts received from the Fiscal Recovery Funds in a reporting unit, the full amount of the reduction in spending counts as a covered spending cut and may be included in aggregate spending cuts. If the recipient has spent amounts received from the Fiscal Recovery Funds, such amounts generally would be deemed to have replaced the amount of spending cut, and only reductions in spending above the amount of Fiscal Recovery Funds spent on the reporting unit would be eligible to offset a reduction in net tax revenue. Only such amounts above the amount of Fiscal Recovery Funds spent on the reporting unit should be included in the aggregate of spending cuts.

To align with existing reporting and accounting, the Interim Final Rule considers the department, agency, or authority from which spending has been cut and whether the recipient government has spent amounts received from the Fiscal Recovery Funds on that same department, agency, or authority. Recipients may also choose to report at a more granular sub-department level. Recipients are encouraged to define and report spending in departments, sub-departments (e.g., bureaus), agencies, or authorities (each a "reporting unit") in a manner consistent with their existing budget process and should, to the extent possible, report using the same reporting unit in each reporting year. For example, if a State health department maintains separate budgets for different units (e.g., medical and public health units), those units may be reported and considered separately. Spending cuts must be reported relative to FY 2019 spending levels, adjusted for inflation, and excluding Fiscal Recovery Funds from reporting year spending levels.

Recipients should maintain records regarding spending cuts. As discussed in the Interim Final Rule, in order to help ensure governments use Fiscal Recovery Funds in a manner consistent with the prescribed eligible uses and do not use Fiscal Recovery Funds to indirectly offset a reduction in net tax revenue resulting from a covered change, Treasury will monitor changes in spending throughout the covered period. Evasions of the Tax Offset Provision may be subject to recoupment.



Appendix 1: Expenditure Categories

The Expenditure Categories (EC) listed below must be used to categorize each project as noted in Part 2 above. The term “Expenditure Category” refers to the detailed level (e.g., 1.1 COVID-10 Vaccination). When referred to as a category (e.g., EC 1) it includes all Expenditure Categories within that level.

1: Public Health	
1.1	COVID-19 Vaccination ^
1.2	COVID-19 Testing ^
1.3	COVID-19 Contact Tracing
1.4	Prevention in Congregate Settings (Nursing Homes, Prisons/Jails, Dense Work Sites, Schools, etc.)*
1.5	Personal Protective Equipment
1.6	Medical Expenses (including Alternative Care Facilities)
1.7	Capital Investments or Physical Plant Changes to Public Facilities that respond to the COVID-19 public health emergency
1.8	Other COVID-19 Public Health Expenses (including Communications, Enforcement, Isolation/Quarantine)
1.9	Payroll Costs for Public Health, Safety, and Other Public Sector Staff Responding to COVID-19
1.10	Mental Health Services*
1.11	Substance Use Services*
1.12	Other Public Health Services
2: Negative Economic Impacts	
2.1	Household Assistance: Food Programs* ^
2.2	Household Assistance: Rent, Mortgage, and Utility Aid* ^
2.3	Household Assistance: Cash Transfers* ^
2.4	Household Assistance: Internet Access Programs* ^
2.5	Household Assistance: Eviction Prevention* ^
2.6	Unemployment Benefits or Cash Assistance to Unemployed Workers*
2.7	Job Training Assistance (e.g., Sectoral job-training, Subsidized Employment, Employment Supports or Incentives)* ^
2.8	Contributions to UI Trust Funds
2.9	Small Business Economic Assistance (General)* ^
2.10	Aid to Nonprofit Organizations*
2.11	Aid to Tourism, Travel, or Hospitality
2.12	Aid to Other Impacted Industries
2.13	Other Economic Support* ^
2.14	Rehiring Public Sector Staff
3: Services to Disproportionately Impacted Communities	
3.1	Education Assistance: Early Learning* ^
3.2	Education Assistance: Aid to High-Poverty Districts ^
3.3	Education Assistance: Academic Services* ^
3.4	Education Assistance: Social, Emotional, and Mental Health Services* ^
3.5	Education Assistance: Other* ^
3.6	Healthy Childhood Environments: Child Care* ^
3.7	Healthy Childhood Environments: Home Visiting* ^
3.8	Healthy Childhood Environments: Services to Foster Youth or Families Involved in Child Welfare System* ^



3.9	Healthy Childhood Environments: Other* ^
3.10	Housing Support: Affordable Housing* ^
3.11	Housing Support: Services for Unhoused Persons* ^
3.12	Housing Support: Other Housing Assistance* ^
3.13	Social Determinants of Health: Other* ^
3.14	Social Determinants of Health: Community Health Workers or Benefits Navigators* ^
3.15	Social Determinants of Health: Lead Remediation ^
3.16	Social Determinants of Health: Community Violence Interventions* ^
4: Premium Pay	
4.1	Public Sector Employees
4.2	Private Sector: Grants to Other Employers
5: Infrastructure²⁷	
5.1	Clean Water: Centralized Wastewater Treatment
5.2	Clean Water: Centralized Wastewater Collection and Conveyance
5.3	Clean Water: Decentralized Wastewater
5.4	Clean Water: Combined Sewer Overflows
5.5	Clean Water: Other Sewer Infrastructure
5.6	Clean Water: Stormwater
5.7	Clean Water: Energy Conservation
5.8	Clean Water: Water Conservation
5.9	Clean Water: Nonpoint Source
5.10	Drinking water: Treatment
5.11	Drinking water: Transmission & Distribution
5.12	Drinking water: Transmission & Distribution: Lead Remediation
5.13	Drinking water: Source
5.14	Drinking water: Storage
5.15	Drinking water: Other water infrastructure
5.16	Broadband: “Last Mile” projects
5.17	Broadband: Other projects
6: Revenue Replacement	
6.1	Provision of Government Services
7: Administrative	
7.1	Administrative Expenses
7.2	Evaluation and Data Analysis
7.3	Transfers to Other Units of Government
7.4	Transfers to Non-entitlement Units (States and territories only)

*Denotes areas where recipients must identify the amount of the total funds that are allocated to evidence-based interventions (see Use of Evidence section above for details)

^Denotes areas where recipients must report on whether projects are primarily serving disadvantaged communities (see Project Demographic Distribution section above for details)

²⁷ Definitions for water and sewer Expenditure Categories can be found in the EPA’s handbooks. For “clean water” expenditure category definitions, please see: <https://www.epa.gov/sites/production/files/2018-03/documents/cwdefinitions.pdf>. For “drinking water” expenditure category definitions, please see: <https://www.epa.gov/dwsrf/drinking-water-state-revolving-fund-national-information-management-system-reports>.



Appendix 2: Evidenced-Based Intervention Additional Information

What is evidence-based?

For the purposes of the SLFRF, evidence-based refers to interventions with strong or moderate evidence as defined below:

Strong evidence means the evidence base that can support causal conclusions for the specific program proposed by the applicant with the highest level of confidence. This consists of one or more well-designed and well-implemented experimental studies conducted on the proposed program with positive findings on one or more intended outcomes.

Moderate evidence means that there is a reasonably developed evidence base that can support causal conclusions. The evidence base consists of one or more quasi-experimental studies with positive findings on one or more intended outcomes OR two or more non-experimental studies with positive findings on one or more intended outcomes. Examples of research that meet the standards include: well-designed and well-implemented quasi-experimental studies that compare outcomes between the group receiving the intervention and a matched comparison group (i.e., a similar population that does not receive the intervention).

Preliminary evidence means that the evidence base can support conclusions about the program's contribution to observed outcomes. The evidence base consists of at least one non-experimental study. A study that demonstrates improvement in program beneficiaries over time on one or more intended outcomes OR an implementation (process evaluation) study used to learn and improve program operations would constitute preliminary evidence. Examples of research that meet the standards include: (1) outcome studies that track program beneficiaries through a service pipeline and measure beneficiaries' responses at the end of the program; and (2) pre- and post-test research that determines whether beneficiaries have improved on an intended outcome.



Revision Log

Version	Date Published	Summary of changes
1.0	June 17, 2021	Initial publication
1.1	June 24, 2021	<ul style="list-style-type: none">• Pg. 12, removed references to “summary” level with respect to reporting by Expenditure Categories in the Interim Report to avoid confusion.• Pg. 13, revised the coverage period end date for the Interim Report from June 30, 2021 to July 31, 2021 to align with the IFR.• Pg. 13, removed references to “summary” level with respect to reporting by Expenditure Categories in the Interim Report to avoid confusion.• Pg. 31, removed references to “summary level” with respect to Expenditure Categories in Appendix 1 to avoid confusion.



SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Phased construction.
 - 4. Work by Owner.
 - 5. Work under separate contracts.
 - 6. Future work.
 - 7. Purchase contracts.
 - 8. Owner-furnished products.
 - 9. Contractor-furnished, Owner-installed products.
 - 10. Access to site.
 - 11. Coordination with occupants.
 - 12. Work restrictions.
 - 13. Specification and drawing conventions.
 - 14. Miscellaneous provisions.

1.3 PROJECT INFORMATION

- A. Project Identification: [Cameron County, 835 East Levee & San Benito Annex Building Standby Power Upgrades](#).
 - 1. Project Location: See Drawings.
 - 2. Owner: Cameron County.
- B. Engineer: Ethos Engineering, 1126 South Commerce, Harlingen, Texas 78550.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The following Summary of Work is intended as an aid to achieve an understanding of the various elements of work included in the project, as is not intended to be all-inclusive. Detailed descriptions of work and requirements are given in drawings and specifications.
- B. Specification division numbers are not intended to dictate WHO will be doing the work. The following scope of mechanical work includes work specified in drawings and specifications. All the work must be done and coordinated, regardless of whether it is done under the Sub Contractor or by the General Contractor.

SECTION 011000 - SUMMARY

- C. Scope of Work: Provide all materials and labor associated with complete operational systems. Major items of work include, but are not limited to:
1. General:
 - a. See drawings for scope of work and limits of construction showing areas in the building that will be affected.
 - b. See drawings and specifications for details.
 2. Demolition Work:
 - a. Remove and dispose of existing electrical equipment. See drawings for removal or associated materials such as hangers, support assembly, mounting hardware, controls, and devices associated with demolished equipment, including but not limited to, conduit & power wiring, etc. Clear area and prepare for new work.
 - b. Where indicated, save existing power wiring, conduit and circuit breakers for reuse. Demolish electrical equipment, circuit breakers, disconnects and other miscellaneous materials as noted in the drawings.
 3. Sequence of Construction:
 - a. Coordinate with Cameron County Staff the 835 East Levee existing generator removal for relocation to the San Benito Annex Building.
 - b. San Benito Annex electrical service: coordinate work with AEP personnel and CC staff.
 - c. Include in the bid proposal the rental of a temporary generator of 300KW for 30 day duration.
 4. HVAC Work: Provide all materials and labor associated with new fully operational mechanical and controls systems, including but not limited to the following:
 - a. Provide controls to adjust start up delays on each system individually to ensure indicated units start-up staggered and in an orderly fashion during, and after, a power outage.
 - b. Test all timer delays for functionality and document successful achievement of stagger start-ups of equipment.
 - c. Perform startup services to demonstrate proper operation of installed devices and train owner's maintenance personnel to adjust, operate, and maintain.
 5. Electrical: Provide all materials and labor associated with complete operational electrical distribution system. Major items of work include, but are not limited to:
 - a. Electrical service: To remain as is with modifications.
 - b. Demolition: Disconnect and remove existing standby generator along with related transfer switch, feeders, controls, etc.
 - c. Power systems: Provide new standby generator, transfer switch, feeders, controls, etc.
 - d. HVAC Controls: Deprogram/Reprogram equipment for start-up time delay.
 - e. Elevator Controls: Deprogram/Reprogram/Modify for existing elevators start-up time delay.
 6. Provide wind restraints for exterior work, installed on grade.
 7. Allowances: The owner has set aside allowances for unforeseen circumstances. See Section 012100.

SECTION 011000 - SUMMARY

- D. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.5 PHASED CONSTRUCTION

- A. The Work shall be conducted in one phase.
- B. Before commencing Work, submit an updated copy of Contractor's construction schedule showing the sequence, commencement and completion dates for all phases of the Work.

1.6 WORK BY OWNER

- A. Not Applicable.

1.7 WORK UNDER SEPARATE CONTRACTS

- A. Not Applicable.

1.8 FUTURE WORK

- A. Not Applicable.

1.9 PURCHASE CONTRACTS

- A. Not Applicable.

1.10 OWNER-FURNISHED PRODUCTS

- A. Not Applicable.

1.11 CONTRACTOR-FURNISHED, OWNER-INSTALLED PRODUCTS

- A. Not Applicable.

1.12 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
 - 1. This is a secure facility. Access to areas may be restricted and controlled.
 - 2. Coordinate work hours, access, and security related details with Owner and Engineer.
- B. Use of the Site: Limit use of the premises to work in areas indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.

SECTION 011000 - SUMMARY

2. Limits: Confine operations to areas within contract limits indicated.
 3. Driveways, Walkways and Entrances: Keep driveways parking garage, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weather-tight condition throughout construction period. Repair damage caused by construction operations.
- D. Site Safety: Take every precaution to ensure the site does not present a threat to the safety of occupants and/or workers. Minimal safety requirements include, but are not limited to the following:
1. Temporary fencing around construction areas, and around equipment while site work is in progress.
 2. Yellow caution tape and construction barricades along open trenches during the day. Trenches shall be covered at night and warning lights provided on construction barricades.
 3. Work shall take place with minimal disruption to Owner's operations in areas surrounding the job site.

1.13 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
1. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.
 2. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.

1.14 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Schedule activities in close coordination with Owner. [When the building is in session, limit work in the existing building to breaks, afterhours and weekends, unless otherwise indicated.](#)

SECTION 011000 - SUMMARY

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- E. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- F. Controlled Substances: Use of tobacco products and other controlled substances within the existing building is not permitted.
- G. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- H. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.15 WORK SEQUENCE AND DEADLINES

- A. **The Bid requires that the project be certified Finally Complete within the time limits imposed in the Bid Form.** Failure to comply with contract completion dates will result in assessment of liquidated damages.
- B. **Extended power or air conditioning outages, and disruptive indoor work must take place only during unoccupied hours or on weekends.** All electrical, HVAC systems shall be operational by the next occupancy period.

1.16 COORDINATION

- A. All questions, requests for information, submittals, and correspondence from the Contractor shall be submitted via the General Contractor, who will forward to the Engineer.
- B. Contractor shall not make any changes to design without written authorization from the Engineer. If changes are requested by the Owner, Engineer, General Contractor, Suppliers, Manufacturers, or any others, Contractor should issue a written RFI for response by the Engineer.
- C. Contractor shall issue seven (7) days written notice prior to any activities that require the presence of the Engineer at the job-site. This applies to all inspections required by specifications, and particularly to those where work will be covered (below grade).

SECTION 011000 - SUMMARY

- D. Issue written notification of the following tasks and allow five (5) days for Engineer to respond and schedule an inspection as required:
1. Electrical:
 - a. Upon completion of pulling all wiring, making all terminations, labeling and color-coding wires at the panel-boards and prior to installing their covers.
 2. When ready for Substantial Completion Inspection.
 3. When ready for Final Inspection.
 4. Failure to issue written notification may result in work having to be redone to allow for proper inspection. It is this contractor's responsibility to make sure Engineer receives notification.
- E. Construction Coordination:
1. The contractor shall supply a complete and comprehensive construction schedule for the project. This schedule shall include durations for the specific tasks required, and shall demonstrate a construction process chain of events, organized to create minimum disruption and minimum inconvenience to building occupants.
 2. Contractor shall organize daily work schedules to accommodate the building occupants' functions, comfort, and work schedules. Mandatory achievement of a non-disruptive environment shall be the sole responsibility of the Contractor, and shall at no time incur additional charges for Owner. This shall include weekend and evening work hours, if necessary, to accomplish non-disruptive requirement, and on-schedule completion.
 3. A non-disruptive environment shall be defined as: an environment where large-scale activities, or activities causing extreme noise and/or inconvenience are minimal in occupied areas during occupied times. When disruptive tasks must occur during occupied hours, such activities shall be coordinated with Owner's personnel a minimum of one week in advance.
- F. Waste Material and Debris: All waste material and debris from this project shall become the property of the contractor and shall be removed from the site. Exterior of the site shall be kept clean and free of material and debris from this project at all times. All waste material and debris generated by any work under this contract shall be handled, transported, stored, and disposed by the contractor and by his subcontractors in accordance with all applicable Federal, State, and local laws, ordinances, regulations, court orders, or other types of rules or rulings having the effect of law including, but not limited to, Executive Order 11752, 17 December 1978; the Federal Water Pollution Control Act, as amended, 33 USC, Sec. 1251 et seq; the Clean Air Act, as amended, 42 USC, Sec. 7401 et seq; the Solid Waste Disposal Act, as amended, 41 USC sec 136 et seq; the Endangered Species Act of 1973, as amended, 16 USC, Sec 153 et seq; and the Environmental Protection Agency guidelines on thermal processing and land disposal of solid waste (40 CFR 240 and 241).

1.17 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

SECTION 011000 - SUMMARY

2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

1.18 SUBMITTALS

- A. Manufacturer's standard dimensioned drawings, performance and product data shall be edited to delete reference to equipment, features, or information, which is not applicable to the equipment being supplied for this project.
- B. Faxes and copies of faxes are not acceptable.
- C. Provide sufficient copies of approved data, with the engineer's approved stamp, for inclusion in the operations and maintenance manuals.
- D. Electrical Submittals shall be submitted in no more than one three ring binder.
- E. Partial submittals shall not be reviewed until a complete bound submittal package is received.
- F. Allow two weeks for initial submittal review by Engineer, from the day it is received at the Engineer's office.
- G. Allow one week for review of resubmittals by Engineer.
- H. All submittal review comments shall be forwarded by Engineer to Engineer, who will then distribute as per Division 1.

1.19 SCHEDULE OF VALUES

- A. Schedule of Values shall be included with bound submittals. Submittals without a Schedule of Values **shall not** be reviewed.
- B. Contractor shall submit a Schedule of Values reflecting the total value of Work in the Contract and broken down into the following items as a minimum, with a line item for Materials/Equipment and another for Labor.
 1. Structural
 2. Concrete
 3. HVAC
 4. Electrical
 5. Controls
 6. Allowances
 7. Miscellaneous.
 8. Administrative and project management.

1.20 MISCELLANEOUS PROVISIONS

- A. Code Compliance:

SECTION 011000 - SUMMARY

1. Occupational Safety and Health Act (OSHA)
2. National Electric Code (NEC)
3. National Fire Code
4. International Building Code
5. UL 916
6. Local ordinances

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Engineer of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Engineer's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Engineer from the designated supplier.

1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

SECTION 012100 - ALLOWANCES

1.6 COORDINATION

- A. Coordinate allowance items with other portions of the Work.

1.7 ALLOWANCES

- A. Use the allowance only as directed by Engineer for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contract Sum shall include **Contractor's overhead and profit, insurance and bonding** for the Contingency and other specific Allowances.
- C. Change Orders or Allowance Expenditures authorizing use of funds from the Contingency or other specific Allowances will not include Contractor's overhead and profit, nor insurance and bonding. Other related costs such as equipment rental, delivery charges, etc. can be included in these costs, but all costs must be submitted by the general contractor with itemized (or unit) pricing from the subcontractor(s) and/or material supplier(s).
- D. At Project closeout, credit unused amounts remaining in allowances to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Include listed Owner's Contingency Allowance for additional work and unforeseen circumstances. Allowance will be used only as directed by Owner and Engineer with a written consent.
 - 1. **Contingency Allowance Bid Item "A": \$50,000.**

END OF SECTION 012100

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Engineer at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Subschedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values coordinated with each phase of payment.
 - 4. Subschedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide subschedules showing values coordinated with each element.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.

SECTION 012900 - PAYMENT PROCEDURES

- b. Name of Engineer.
 - c. Engineer's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts, where appropriate.
5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
7. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
8. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
9. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
10. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

SECTION 012900 - PAYMENT PROCEDURES

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Engineer and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment shall be as per mutual agreement between Owner and Contractor. The period covered by each Application for Payment starts on the day following the end of the preceding period and ends 15 days before the date for each progress payment.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.

SECTION 012900 - PAYMENT PROCEDURES

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 5. Waiver Forms: Submit executed waivers of lien on forms, acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Products list (preliminary if not final).
 5. Schedule of unit prices.
 6. Submittal schedule (preliminary if not final).
 7. Copies of building permits.
 8. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 9. Certificates of insurance and insurance policies.
 10. Performance and payment bonds.
 11. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Engineer issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.

SECTION 012900 - PAYMENT PROCEDURES

4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
6. AIA Document G707, "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.
8. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Information (RFIs).
 - 4. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

- b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
- c. Indicate functional and spatial relationships of components of Engineerural, structural, civil, mechanical, and electrical systems.
- d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
- e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
- f. Indicate required installation sequences.
- g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Engineer indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Organize coordination drawings as follows:

1. Floor Plans and Reflected Ceiling Plans: Show Engineerural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
6. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inches in diameter and larger.
 - b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire-alarm locations.
 - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - d. Location of pull boxes and junction boxes, dimensioned from column center lines.

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8. Fire-Protection System: Show the following:
 - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
9. Review: Engineer will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Engineer determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Engineer will so inform Contractor, who shall make changes as directed and resubmit.
10. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 013300 "Submittal Procedures."

1.6 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 1. Engineer will return RFIs submitted to Engineer by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Engineer of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Engineer, within three days of the meeting.
- B. Preconstruction Conference: **Schedule and conduct** a preconstruction conference before starting construction, at a time convenient to Owner and Engineer, but no later than **15** days after execution of the Agreement.
 1. Conduct the conference to review responsibilities and personnel assignments.
 2. Attendees: Authorized representatives of Owner, Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect progress, including the following:

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- a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - l. Preparation of record documents.
 - m. Use of the premises and existing building.
 - n. Work restrictions.
 - o. Working hours.
 - p. Owner's occupancy requirements.
 - q. Responsibility for temporary facilities and controls.
 - r. Procedures for moisture and mold control.
 - s. Procedures for disruptions and shutdowns.
 - t. Construction waste management and recycling.
 - u. Parking availability.
 - v. Office, work, and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.
 - y. Security.
 - z. Progress cleaning.
4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
1. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 2. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 3. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Project Closeout Conference: Schedule and conduct a project closeout conference, at a time convenient to Owner and Engineer, but no later than 30 days prior to the scheduled date of Substantial Completion.
1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 2. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.

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- b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Coordination of separate contracts.
 - k. Owner's partial occupancy requirements.
 - l. Installation of Owner's furniture, fixtures, and equipment.
 - m. Responsibility for removing temporary facilities and controls.
3. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- E. Progress Meetings: Conduct progress meetings at regular intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site utilization.
 - 9) Temporary facilities and controls.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Status of correction of deficient items.
 - 13) Field observations.
 - 14) Status of RFIs.
 - 15) Status of proposal requests.
 - 16) Pending changes.

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- 17) Status of Change Orders.
 - 18) Pending claims and disputes.
 - 19) Documentation of information for payment requests.
3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.4 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer and additional time for handling and reviewing submittals required by those corrections.

1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Engineer's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Engineer for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.

SECTION 013300 - SUBMITTAL PROCEDURES

- a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 8 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
- D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
 2. Include the following information for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name of Engineer.
 - d. Name of Contractor.
 - e. Name of subcontractor.
 - f. Name of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - l. Other necessary identification.
 - m. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.
 3. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will discard submittals received from sources other than Contractor.
- E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.

SECTION 013300 - SUBMITTAL PROCEDURES

- a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Engineer.
4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Engineer.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - l. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- F. Options: Identify options requiring selection by Engineer.
- G. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 1. Note date and content of previous submittal.

SECTION 013300 - SUBMITTAL PROCEDURES

2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
 - J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 1. Submit electronic submittals via email as PDF electronic files.
 2. Submittals: Submit 3 paper copies of each submittal unless otherwise indicated. Engineer will return 2 copies.
 3. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.

SECTION 013300 - SUBMITTAL PROCEDURES

4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before or concurrent with Samples.
 6. Submit Product Data in the following format:
 - a. PDF electronic file.
 - b. Or 3 paper copies of Product Data unless otherwise indicated. Engineer will return 2 copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Submit Shop Drawings in the following format:
 - a. PDF electronic file.
 - b. Or 3 opaque (bond) copies of each submittal.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

SECTION 013300 - SUBMITTAL PROCEDURES

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ENGINEER'S ACTION

- A. Submittals: Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.
- C. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- D. Submittals not required by the Contract Documents may be returned by the Engineer without action.

END OF SECTION 013300

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.
- J. "Installer": An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- K. The term "experienced," when used with an entity, means having successfully completed a minimum of **five** previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

SECTION 014200 - REFERENCES

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Engineer for a decision before proceeding.
 - 1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
 - 1. DIN - Deutsches Institut fur Normung e.V.; www.din.de.
 - 2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
 - 3. ICC - International Code Council; www.iccsafe.org.
 - 4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.

SECTION 014200 - REFERENCES

1. COE - Army Corps of Engineers; www.usace.army.mil.
2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
4. DOD - Department of Defense; www.quicksearch.dla.mil.
5. DOE - Department of Energy; www.energy.gov.
6. EPA - Environmental Protection Agency; www.epa.gov.
7. FAA - Federal Aviation Administration; www.faa.gov.
8. FG - Federal Government Publications; www.gpo.gov.
9. GSA - General Services Administration; www.gsa.gov.
10. HUD - Department of Housing and Urban Development; www.hud.gov.
11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
13. SD - Department of State; www.state.gov.
14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
17. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
18. USP - U.S. Pharmacopeial Convention; www.usp.org.
19. USPS - United States Postal Service; www.usps.com.

D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
3. DSCC - Defense Supply Center Columbus; (See FS).
4. FED-STD - Federal Standard; (See FS).
5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.
6. MILSPEC - Military Specification and Standards; (See DOD).
7. USAB - United States Access Board; www.access-board.gov.
8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following

SECTION 014200 - REFERENCES

list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; www.bearhfti.ca.gov.
2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.calregs.com.
3. CDHS; California Department of Health Services; (See CDPH).
4. CDPH; California Department of Public Health; Indoor Air Quality Program; www.cal-iaq.org.
5. CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
6. SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
7. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; www.txforestservation.tamu.edu.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product 7 days prior to bidding. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.

SECTION 016000 - PRODUCT REQUIREMENTS

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Engineer will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 6. Protect stored products from damage and liquids from freezing.
 - 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

SECTION 016000 - PRODUCT REQUIREMENTS

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Engineer will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 - 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:

SECTION 016000 - PRODUCT REQUIREMENTS

1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
3. Products:
 - a. Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience **will not** be considered unless otherwise indicated.
4. Manufacturers:
 - a. Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Coordination of Owner-installed products.
 - 6. Progress cleaning.
 - 7. Starting and adjusting.
 - 8. Protection of installed construction.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

- A. Cutting and Patching Plan: Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:
 - 1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
 - 3. Products: List products to be used for patching and firms or entities that will perform patching work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.

SECTION 017300 - EXECUTION

- a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.
6. Engineer's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.5 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 1. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection. When cutting and patching structural elements, retain a licensed Structural Engineer. Notify Structural Engineer of locations and details of cutting and obtain written approval before proceeding. Shore, brace, and support structural elements during cutting and patching.
 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operational elements include the following:
 - a. Primary operational systems and equipment.
 - b. Fire separation assemblies.
 - c. Air or smoke barriers.
 - d. Fire-suppression systems.
 - e. Mechanical systems piping and ducts.
 - f. Control systems.
 - g. Communication systems.
 - h. Fire-detection and -alarm systems.
 - i. Conveying systems.
 - j. Electrical wiring systems.
 - k. Operating systems of special construction.
 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:
 - a. Water, moisture, or vapor barriers.
 - b. Membranes and flashings.
 - c. Exterior curtain-wall construction.
 - d. Sprayed fire-resistive material.
 - e. Equipment supports.
 - f. Piping, ductwork, vessels, and equipment.
 - g. Noise- and vibration-control elements and systems.
 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner

SECTION 017300 - EXECUTION

that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

- B. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical, plumbing, and electrical systems, and other construction affecting the Work.
 - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

SECTION 017300 - EXECUTION

- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - 1. Description of the Work.
 - 2. List of detrimental conditions, including substrates.
 - 3. List of unacceptable installation tolerances.
 - 4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

SECTION 017300 - EXECUTION

- B. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- C. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- D. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
 - 4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

SECTION 017300 - EXECUTION

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 2. Allow for building movement, including thermal expansion and contraction.
 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.5 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

SECTION 017300 - EXECUTION

3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction personnel.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction personnel.

SECTION 017300 - EXECUTION

1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
2. Preinstallation Conferences: Include Owner's construction personnel at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

3.7 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 1. Remove liquid spills promptly.
 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements.

SECTION 017300 - EXECUTION

- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

- A. Coordinate startup and adjusting of equipment and operating components with requirements in Section 019113 "General Commissioning Requirements."
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- E. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

SECTION 017320 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of selected portions of building or structure.
 - 2. Demolition and removal of selected site elements.
 - 3. Salvage of existing items to be reused or recycled.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
 - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

SECTION 017320 - SELECTIVE DEMOLITION

1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review structural load limitations of existing structure.
 - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - 5. Review areas where existing construction is to remain and requires protection.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection , for dust control and , for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's building manager's and other tenants' on-site operations are uninterrupted.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Use of elevator and stairs.
 - 5. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- D. Predemolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by demolition operations.
- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.
- F. Warranties: Documentation indicating that existing warranties are still in effect after completion of selective demolition.

1.7 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.

SECTION 017320 - SELECTIVE DEMOLITION

1.8 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

1.9 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Engineer and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Historic Areas: Demolition and hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, including temporary protection.
- F. Storage or sale of removed items or materials on-site is not permitted.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.10 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding. Existing warranties include the following:
 - a. Roofing.
 - b. Firestopping.
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

SECTION 017320 - SELECTIVE DEMOLITION

1.11 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Engage a professional engineer to perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.
 - 1. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
- D. Steel Tendons: Locate tensioned steel tendons and include recommendations for de-tensioning.
- E. Verify that hazardous materials have been remediated before proceeding with building demolition operations.
- F. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video.
 - 1. Comply with requirements specified in Section 013233 "Photographic Documentation."
 - 2. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.
 - 3. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

SECTION 017320 - SELECTIVE DEMOLITION

3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off utilities with utility companies.
 - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
 - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
 - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
 - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
 - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
 - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling.

SECTION 017320 - SELECTIVE DEMOLITION

- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

3.5 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - 5. Maintain fire watch during and after flame-cutting operations.
 - 6. Maintain adequate ventilation when using cutting torches.
 - 7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 10. Dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Work in Historic Areas: Selective demolition may be performed only in areas of Project that are not designated as historic. In historic spaces, areas, and rooms, or on historic surfaces, the terms "demolish" or "remove" shall mean historic "removal" or "dismantling" as specified in Section 024296 "Historic Removal and Dismantling."
- D. Removed and Salvaged Items:
 - 1. Clean salvaged items.

SECTION 017320 - SELECTIVE DEMOLITION

2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

E. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

F. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Engineer, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least **3/4 inch** at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.
- B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.
- E. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI's "Recommended Work Practices for the Removal of Resilient Floor Coverings." Do not use methods requiring solvent-based adhesive strippers.
- F. Roofing: Remove no more existing roofing than what can be covered in one day by new roofing and so that building interior remains watertight and weathertight.
 1. Remove existing roof membrane, flashings, copings, and roof accessories.
 2. Remove existing roofing system down to substrate.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.

SECTION 017320 - SELECTIVE DEMOLITION

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
4. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."

B. Burning: Do not burn demolished materials.

3.8 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 017320

SECTION 017400 - GUARANTEES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1, apply to this Section.
- B. Refer to Instructions to Bidders for substitution of materials and products.
- C. Addenda issued during the bidding period that affect this section of the specifications.

1.2 WORK INCLUDED

- A. Unless stated otherwise on the Certificate of Substantial Completion, all guarantees shall commence with the date of Substantial Completion.
- B. Unless otherwise stated in these specifications, all guarantees shall include labor, material and delivery costs required for correction.
- C. General: In addition to the General Contractor's one year guarantee for the entire project, guarantees shall be furnished by subcontractors and suppliers. These guarantees shall be submitted to the Engineer in duplicate prior to application for final payment. Refer to individual specification sections for additional guarantees and requirements.
 - 1. One Year Guarantees
 - a. MEP SYSTEMs.
 - 2. Two Year Guarantees
 - a. Panelboards
 - 3. Ten Years Guaranty
 - a. Package Engine Generator

PART 2 - PRODUCTS

2.1 GUARANTEES

- A. Where guarantees are indicated to be provided by subcontractor or supplier, a detailed warranty written on the required form shall be provided. Refer to Section 017700 for Warranty forms.
- B. Manufacturer's standard warranties shall be adjusted as required to include all specified requirements in addition to manufacturer's normal provisions. Manufacturer guarantees shall be written on appropriate printed letterhead.

2.2 MATERIALS

SECTION 017400 - GUARANTEES

- A. Unless otherwise approved by the Engineer, all replacement materials shall be new and provided by the same manufacturer as the original installation.

PART 3 - EXECUTION

3.1 GENERAL

- A. Contractor shall arrange for all required inspections during the warranty period. Regardless of the wording of individual warranties, the Owner shall not be responsible for notification requirements for routine inspections during the General Contractor's warranty period.
- B. Upon receipt of written or verbal notice by the Owner or Engineer of a deficiency, the Contractor shall promptly respond with inspection and repair during the General Contractor's warranty period.
- C. The General Contractor shall be responsible for coordinating the activities of subcontractors, suppliers and manufacturers during the General Contractor's warranty period and the subcontractor/supplier/manufacturer extended warranty period.

END OF SECTION 017400

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. "Construction Contract Close Out Checklist", of this Section.
 - 2. [Additional requirements from Owner](#).
 - 3. Section 017300 "Execution" for progress cleaning of Project site.
 - 4. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 5. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
 - 6. Section 017900 "Demonstration and Training" for requirements for instructing Owner's personnel.

1.3 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

SECTION 017700 - CLOSEOUT PROCEDURES

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 15 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Engineer. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Engineer's signature for receipt of submittals.
 - 5. Submit test/adjust/balance records.
 - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 15 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."

SECTION 017700 - CLOSEOUT PROCEDURES

6. Advise Owner of changeover in heat and other utilities.
 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 9. Complete final cleaning requirements, including touchup painting.
 10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for final completion.

1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
 2. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Submit pest-control final inspection report.
- B. Inspection:
1. It is expected that Contractor will have thoroughly verified that all requirements have been fulfilled, and deficiencies repaired, **before** notifying Engineer that system is ready for final inspection, and **before** arranging final acceptance testing with Owner. Owner and Engineer therefore expect to make but one final inspection of system.
 2. Submit a written request for final inspection for acceptance. Provide at least 7 days' notice to Owner and Owner's representative before test. Arrange mutually convenient time for conducting test.
 3. On receipt of request, Engineer will either proceed with inspection. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 4. Reinspection:

SECTION 017700 - CLOSEOUT PROCEDURES

- a. Should more than one "final" inspection be required due to significant deficiencies, Contractor will be required to reimburse Engineer at a rate of \$200.00 per hour for expenses to cover any and all re-inspections required.
- b. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 1. Organize list of spaces in sequential order.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Engineer.
 - d. Name of Contractor.
 - e. Page number.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.

SECTION 017700 - CLOSEOUT PROCEDURES

- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

1.10 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
 - 1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
 - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 - 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
 - 5. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Note related Change Orders, Record Drawings, where applicable.
- D. Record Product Data: Submit one copy of each Product Data submittal. Mark one set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.

SECTION 017700 - CLOSEOUT PROCEDURES

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Drawings, where applicable.
- E. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
1. Provide instructors experienced in operation and maintenance procedures.
 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 3. Schedule training with Owner, through Engineer with at least **seven** days' advance notice.
 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
1. System design and operational philosophy.
 2. Review of documentation.
 3. Operations.
 4. Adjustments.
 5. Troubleshooting.

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6. Maintenance.
7. Repair.

3.2 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - g. Sweep concrete floors broom clean in unoccupied spaces.
 - h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - j. Remove labels that are not permanent.
 - k. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - n. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
 - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning.

SECTION 017700 - CLOSEOUT PROCEDURES

- o. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
 - p. Leave Project clean and ready for occupancy.
- C. Pest Control: Comply with pest control requirements in Section 015000 "Temporary Facilities and Controls." Prepare written report.
- D. Construction Waste Disposal: Comply with waste disposal requirements.

3.3 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

PART 4 - PROJECT CLOSEOUT MANUAL AND FORMS

4.1 FORMS

- A. The following forms shall be submitted to the Engineer during the construction contract close out process:
 - 1. Contractor's Affidavit of Payment of Debts and Claims
 - 2. Contractor's Affidavit of Payment of Release of Liens
 - 3. Consent of Surety to Final Payment
 - 4. General Contractor Affidavit and Release
 - 5. Subcontractor/Supplier Affidavit and Release
 - 6. General Contractor Guarantee
 - 7. Subcontractor Guarantee

SECTION 017700 - CLOSEOUT PROCEDURES

8. General Contractor Hazardous Material Certificate
9. Subcontractor/Supplier Hazardous Material Certificate

B. Use only the listed or enclosed forms.

4.2 PROJECT CLOSE OUT MANUAL

- A. The Contractor shall assemble and deliver to the Engineer two (2) complete copies of the Project Close Out Manual consisting of the documents listed below and others as may be required under other sections of the Project Manual. Manual shall be constructed of a good quality vinyl 3 ring binder with all pages 8½” x 11”.
- B. First sheet shall identify the project, Owner, Engineer, Engineer’s project number, Consultants and Contractor. Provide company name, address, telephone number and contact representative for each.
- C. Subsequent pages shall include the Table of Contents as included herein and all project data included in the Table of Contents. Provide identifying tabs between all sections.

4.3 CLOSEOUT CHECKLIST

A. The Construction Contract Closeout Checklist included herein recaps the major items to be addressed during the close out process. This list is to be used by the Engineer and Contractor.

B. Standard AIA forms are not included in this section, but shall be attached in the order given below.

C. CONSTRUCTION CONTRACT CLOSEOUT MANUAL TABLE OF CONTENTS

1. Section 1: Contractor’s Affidavit of Payment of Debts and Claims (AIA G706)
2. Section 2: Contractor’s Affidavit of Release of Liens (AIA G706A)
3. Section 3: Consent of Surety to Final Payment (AIA G707)
4. Section 4: Certificate of Substantial Completion (AIA G704)
5. Section 5: General Contractor Affidavit and Release
6. Section 6: Subcontractor/Supplier Affidavit and Release (from each subcontractor and supplier)
7. Section 7: General Contractor Guarantee
8. Section 8: Subcontractor Guarantee (from each subcontractor)
9. Section 9: List of Final Subcontractors/Suppliers (AIA G805)
10. Section 10: Manufacturer’s Guarantees and extended service contracts (NA)
11. Section 11: General Contractor Hazardous Material Certificate
12. Section 12: Subcontractor/Supplier Hazardous Material Certificate
13. Section 13: Miscellaneous
14. Section 14: N/A
15. Section 15: Mechanical Systems
16. Section 16: Electrical Systems
17. Section 17: Ceiling Systems
18. Section 18: Control System

SECTION 017700 - CLOSEOUT PROCEDURES

GENERAL CONTRACTOR AFFIDAVIT AND RELEASE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

1. That he/she is the _____ of _____, the contractor who constructed the project referenced above, and that, he/she is duly authorized to make this General Contractor Affidavit and Release.
2. That to the best of his/her knowledge and belief, all work required under the contract of the subject construction project has been performed in accordance with the terms thereof, there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of said contract, or any suits or claims for any other damages of any kind, nature, or description which might constitute a lien upon the property of the Owner.
3. That upon full payment of all sums due him/her for materials furnished and services rendered by the undersigned in connection with the performance of said contract, as evidenced by the amount shown on the Final Application and Certificate for Payment, the Contractor will release the Owner, the Engineer and the Engineer's consultants from any and all claims of any character arising out of or in any way connected with performance of said contract.

ATTEST (If Corporation)

Name of Contractor

Secretary

By

Date

Subscribed and sworn to before me on this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

SECTION 017700 - CLOSEOUT PROCEDURES

SUBCONTRACTOR / SUPPLIER AFFIDAVIT AND RELEASE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

CONTRACTOR: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

1. That he/she is the _____ of _____, the subcontractor/supplier who supplied, installed, and/or erected the work described below, and that, he/she is duly authorized to make this Subcontractor/Supplier Affidavit and Release:

Work Performed: _____

Specification Section(s): _____

2. That all work required under the subject subcontract or purchase order of the subject construction project has been performed in accordance with the terms thereof.

3. That to the best of his/her knowledge and belief, there are no unsatisfied claims for damages resulting from injury or death to any employees, sub-subcontractors, or the public at large arising out of the performance of said contract, or any suits or claims for any other damages of any kind, nature, or description which might constitute a lien upon the property of the Owner.

4. That upon full payment by the Contractor of all sums due it for materials furnished and services rendered by the undersigned in connection with the performance of said contract, as evidenced by the final payment amount shown below, the Subcontractor/Supplier will release the Owner, the Engineer and the Engineer's consultants from any and all claims of any character arising out of or in any way connected with performance of said contract.

a. Total Amount Paid to Date to this Subcontractor/Supplier: _____

b. Final Payment Amount owed to this Subcontractor/Supplier: _____

c. Final Subcontract Amount: _____
(a + b = c)

ATTEST (If Corporation)

Name of Subcontractor / Supplier

Secretary

By

Date

Subscribed and sworn to before me on this _____ day of _____, 20__.

SECTION 017700 - CLOSEOUT PROCEDURES

Notary Public: _____

My Commission Expires: _____

SECTION 017700 - CLOSEOUT PROCEDURES

GENERAL CONTRACTOR GUARANTEE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

1. That he/she is the _____ of _____, the contractor who constructed the project referenced above, and that, he/she is duly authorized to make this General Contractor Guarantee.
2. The undersigned Contractor warrants to the Owner and Engineer that materials and equipment furnished under the Contract are of good quality and new except where otherwise required or permitted by the Contract Documents, that the Work is free from defects not inherent in the quality required or permitted, and that the Work conforms with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy from damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.
3. In the event of failure of materials, products, or workmanship, during the specified warranty periods, the Contractor shall take appropriate measures to assure correction or replacement of the defective items, whether notified by the Owner or Engineer.
4. The Contractor warrants the entire project for a period of **12** months from the Date of Substantial Completion and specific sections of work for such additional periods as enumerated in the Contract Documents, except as follows:

SECTION 017700 - CLOSEOUT PROCEDURES

ATTEST (If Corporation)

Name of Contractor

Secretary

By

Date

Subscribed and sworn to before me on this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

SECTION 017700 - CLOSEOUT PROCEDURES

SUBCONTRACTOR GUARANTEE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

CONTRACTOR: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

1. That he/she is the _____ of _____, the subcontractor who supplied, installed, and/or erected the work described below, and that, he/she is duly authorized to make this Subcontractor Guarantee:

Work Performed: _____

Specification Section(s): _____

2. The undersigned Subcontractor warrants to the Owner and Engineer that materials and equipment furnished under the Contract are of good quality and new except where otherwise required or permitted by the Contract Documents, that the Work is free from defects not inherent in the quality required or permitted, and that the Work conforms with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Subcontractor's warranty excludes remedy from damage or defect caused by abuse, modifications not executed by the Subcontractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.
3. In the event of failure of materials, products, or workmanship, during the specified warranty periods, the Contractor shall take appropriate measures to assure correction or replacement of the defective items, whether notified by the Contractor, Owner or Engineer.
4. The Subcontractor warrants the work performed for a period of _____ months from the Date of Substantial Completion, except as follows:

SECTION 017700 - CLOSEOUT PROCEDURES

ATTEST (If Corporation)

Name of Subcontractor / Supplier

Secretary

By

Date

Subscribed and sworn to before me on this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

SECTION 017700 - CLOSEOUT PROCEDURES

GENERAL CONTRACTOR HAZARDOUS MATERIAL CERTIFICATE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

1. That he/she is the _____ of _____, the contractor who constructed the project referenced above, and that, he/she is duly authorized to make this Certification.
2. That to the best of his/her information, knowledge, and belief none of the below listed hazardous materials have been incorporated into the project:
 - Asbestos
 - Lead
 - P.C.B. (Polychloride Biphenyls)
 - Refrigerant R-11, R-12, R-113, R-114, R-500 and R-502

SECTION 017700 - CLOSEOUT PROCEDURES

SUBCONTRACTOR HAZARDOUS MATERIAL CERTIFICATE

STATE OF TEXAS

PROJECT: _____

COUNTY OF _____

OWNER: _____

ENGINEER: _____

KNOW ALL MEN BY THESE PRESENTS:

_____, being first duly sworn, disposes and says:

3. That he/she is the _____ of _____, the contractor who constructed the project referenced above, and that, he/she is duly authorized to make this Certification.
4. That to the best of his/her information, knowledge, and belief none of the below listed hazardous materials have been incorporated into the project:
 - Asbestos
 - Lead
 - P.C.B. (Polychloride Biphenyls)
 - Refrigerant R-11, R-12, R-113, R-114, R-500 and R-502

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Product maintenance manuals.
 - 5. Systems and equipment maintenance manuals.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect will return two copies.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
 1. List of documents.
 2. List of systems.
 3. List of equipment.
 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 1. Title page.
 2. Table of contents.
 3. Manual contents.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

- B. Title Page: Include the following information:
1. Subject matter included in manual.
 2. Name and address of Project.
 3. Name and address of Owner.
 4. Date of submittal.
 5. Name and contact information for Contractor.
 6. Name and contact information for Construction Manager.
 7. Name and contact information for Architect.
 8. Name and contact information for Commissioning Authority.
 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 10. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

- b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
4. Supplementary Text: Prepared on **8-1/2-by-11-inch** white bond paper.
5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
 1. Type of emergency.
 2. Emergency instructions.
 3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 1. Fire.
 2. Flood.
 3. Gas leak.
 4. Water leak.
 5. Power failure.
 6. Water outage.
 7. System, subsystem, or equipment failure.
 8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
 1. Instructions on stopping.
 2. Shutdown instructions for each type of emergency.
 3. Operating instructions for conditions outside normal operating limits.

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4. Required sequences for electric or electronic systems.
5. Special operating instructions and procedures.

2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 2. Performance and design criteria if Contractor has delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
1. Product name and model number. Use designations for products indicated on Contract Documents.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

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2.5 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

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- C. **Manufacturers' Maintenance Documentation:** Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.

- D. **Maintenance Procedures:** Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.

- E. **Maintenance and Service Schedules:** Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. **Scheduled Maintenance and Service:** Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. **Maintenance and Service Record:** Include manufacturers' forms for recording maintenance.

- F. **Spare Parts List and Source Information:** Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

- G. **Maintenance Service Contracts:** Include copies of maintenance agreements with name and telephone number of service agent.

- H. **Warranties and Bonds:** Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. **Operation and Maintenance Documentation Directory:** Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original project record documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared record Drawings in Section 017839 "Project Record Documents."
- G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 099000 – PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes surface preparation and field painting of the following:
 - 1. Piping and piping accessories and supports
 - 2. Exposed ductwork and accessories
- B. Paint exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
 - 1. Painting includes field painting of exposed bare and covered pipes (including color coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment.
- C. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
 - 1. Operating parts include moving parts of operating equipment and the following:
 - a. Valve and damper operators.
 - b. Linkages.
 - c. Sensing devices.
 - d. Motor and fan shafts.
 - 2. Labels: Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

1.3 SUBMITTALS

- A. Product Data: For each paint system specified. Include block fillers and primers.
 - 1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
- B. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of finish-coat material indicated.

SECTION 099000 – PAINTING

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.

1.6 PROJECT CONDITIONS

- A. Apply paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 and 90 deg F.
- B. Do not apply paint in rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers Names: The following manufacturers are referred to in the paint schedules by use of shortened versions of their names, which are shown in parentheses:
 - 1. Glidden Co. (The) (Glidden).
 - 2. Sherwin-Williams Co. (S-W).

2.2 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide primers, undercoats, and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- C. Colors: Match colors indicated by reference to manufacturer's color designations.
 - 1. Condenser Water: To be coordinated with Owner.

SECTION 099000 – PAINTING

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with the Applicator present, under which painting will be performed for compliance with paint application requirements.
 - 1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.

3.2 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.
 - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
 - 1. Provide barrier coats over incompatible primers or remove and reprime.
 - 2. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with the Steel Structures Painting Council's (SSPC) recommendations.
 - a. Blast steel surfaces clean as recommended by paint system manufacturer and according to requirements of SSPC-SP 10.
 - b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 - c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with the same primer as the shop coat.
 - 3. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

SECTION 099000 – PAINTING

- D. **Materials Preparation:** Mix and prepare paint materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.3 APPLICATION

- A. **General:** Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
1. Paint colors, surface treatments, and finishes are indicated in the schedules.
 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 3. Provide finish coats that are compatible with primers used.
 4. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 5. Sand lightly between each succeeding enamel or varnish coat.
- B. **Scheduling Painting:** Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 2. Omit primer on metal surfaces that have been shop primed and touchup painted.
 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
- C. **Application Procedures:** Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
- D. **Minimum Coating Thickness:** Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

SECTION 099000 – PAINTING

- E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and in occupied spaces.
- F. Mechanical items to be painted include, but are not limited to, the following:
 - 1. Piping, pipe hangers, accessories and supports.
 - 2. Exposed ductwork, plenums, accessories and supports.
- G. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.
- H. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.
- I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.4 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

3.5 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.

3.6 PAINT SCHEDULE

- A. Ferrous Metal: Semi-Gloss, Alkyd-Enamel Finish: 2 finish coats over an enamel undercoat and primer.
 - 1. Primer: Quick-drying, rust-inhibitive, alkyd-based or epoxy-metal primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils. S-W: Kem Kromik Universal Metal Primer B50NZ6/B50WZ1.
 - 2. Undercoat: As recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils. S-W: High-Solids Poly-Urethane Semi-Gloss B65 350 Series, with Hardner: B60V30.
 - 3. Finish Coat: Same as undercoat. Semi-gloss, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than **1.2 mils**

SECTION 099000 – PAINTING

END OF SECTION 099000

SECTION 231123 - FACILITY NATURAL-GAS PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipes, tubes, and fittings.
 - 2. Piping specialties.
 - 3. Piping and tubing joining materials.

1.3 DEFINITIONS

- A. Finished Spaces: Spaces other than mechanical and electrical equipment rooms, furred spaces, pipe and duct shafts, unheated spaces immediately below roof, spaces above ceilings, unexcavated spaces, crawlspaces, and tunnels.
- B. Exposed, Interior Installations: Exposed to view indoors. Examples include finished occupied spaces and mechanical equipment rooms.
- C. Exposed, Exterior Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions. Examples include rooftop locations.

1.4 PERFORMANCE REQUIREMENTS

- A. Minimum Operating-Pressure Ratings:
 - 1. Piping and Valves: **100 psig** minimum unless otherwise indicated.
 - 2. Service Regulators: **65 psig** minimum unless otherwise indicated.
 - 3. Minimum Operating Pressure of Service Meter: **5 psig**.
- B. Natural-Gas System Pressures: Two pressure ranges. Primary pressure is more than **2 psig** but not more than **10 psig**, and is reduced to secondary pressure of more than **0.5 psig** but not more than **2 psig**. Verify pressures on site and with equipment and appliances.
- C. Delegated Design: Design restraints and anchors for natural-gas piping and equipment, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

1.5 SUBMITTALS

- A. Product Data: For each type of the following:
 - 1. Piping specialties.

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2. Corrugated, stainless-steel tubing with associated components.
 3. Valves. Include pressure rating, capacity, settings, and electrical connection data of selected models.
 4. Pressure regulators. Indicate pressure ratings and capacities.
 5. Dielectric fittings.
- B. Shop Drawings: For facility natural-gas piping layout. Include plans, piping layout and elevations, sections, and details for fabrication of pipe anchors, hangers, supports for multiple pipes, alignment guides, expansion joints and loops, and attachments of the same to building structure. Detail location of anchors, alignment guides, and expansion joints and loops.
1. Detail mounting, supports, and valve arrangements for pressure regulator assembly.
- C. Coordination Drawings: Plans and details, drawn to scale, on which natural-gas piping is shown and coordinated with other installations, using input from installers of the items involved.
- D. Site Survey: Plans, drawn to scale, on which natural-gas piping is shown and coordinated with other services and utilities.
- E. Qualification Data: For qualified professional engineer.
- F. Welding certificates.
- G. Field quality-control reports.
- H. Operation and Maintenance Data: For **pressure regulators** to include in emergency, operation, and maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Steel Support Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Pipe Welding Qualifications: Qualify procedures and operators according to ASME Boiler and Pressure Vessel Code.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Handling Flammable Liquids: Remove and dispose of liquids from existing natural-gas piping according to requirements of authorities having jurisdiction.
- B. Deliver pipes and tubes with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe end damage and to prevent entrance of dirt, debris, and moisture.
- C. Store and handle pipes and tubes having factory-applied protective coatings to avoid damaging coating, and protect from direct sunlight.

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- D. Protect stored PE pipes and valves from direct sunlight.

1.8 PROJECT CONDITIONS

- A. Perform site survey, research public utility records, and verify existing utility locations. Contact utility-locating service for area where Project is located.
- B. Interruption of Existing Natural-Gas Service: Do not interrupt natural-gas service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide purging and startup of natural-gas supply according to requirements indicated:
 - 1. Notify **Architect** no fewer than seven days in advance of proposed interruption of natural-gas service.
 - 2. Do not proceed with interruption of natural-gas service without **Architect's** written permission.

1.9 COORDINATION

- A. Coordinate sizes and locations of concrete bases with actual equipment provided.
- B. Coordinate requirements for access panels and doors for valves installed concealed behind finished surfaces. Comply with requirements in Division 08 Section "Access Doors and Frames."

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

- A. Steel Pipe: ASTM A 53/A 53M, black steel, Schedule 40, Type E or S, Grade B.
 - 1. Malleable-Iron Threaded Fittings: ASME B16.3, Class 150, standard pattern.
 - 2. Wrought-Steel Welding Fittings: ASTM A 234/A 234M for butt welding and socket welding.
 - 3. Unions: ASME B16.39, Class 150, malleable iron with brass-to-iron seat, ground joint, and threaded ends.
 - 4. Forged-Steel Flanges and Flanged Fittings: ASME B16.5, minimum Class 150, including bolts, nuts, and gaskets of the following material group, end connections, and facings:
 - a. Material Group: 1.1.
 - b. End Connections: Threaded or butt welding to match pipe.
 - c. Lapped Face: Not permitted underground.
 - d. Gasket Materials: ASME B16.20, metallic, flat, asbestos free, aluminum o-rings, and spiral-wound metal gaskets.
 - e. Bolts and Nuts: ASME B18.2.1, carbon steel aboveground and stainless steel underground.
 - 5. Protective Coating for Underground Piping: Factory-applied, three-layer coating of epoxy, adhesive, and PE.

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- a. Joint Cover Kits: Epoxy paint, adhesive, and heat-shrink PE sleeves.
6. Mechanical Couplings:
 - a. **Steel** flanges and tube with epoxy finish.
 - b. Buna-nitrile seals.
 - c. **Steel** bolts, washers, and nuts.
 - d. Coupling shall be capable of joining PE pipe to PE pipe, steel pipe to PE pipe, or steel pipe to steel pipe.
 - e. Steel body couplings installed underground on plastic pipe shall be factory equipped with anode.
- B. Corrugated, Stainless-Steel Tubing: Comply with ANSI/IAS LC 1.
 1. Tubing: ASTM A 240/A 240M, corrugated, Series 300 stainless steel.
 2. Coating: PE with flame retardant.
 - a. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1) Flame-Spread Index: **25** or less.
 - 2) Smoke-Developed Index: **50** or less.
 3. Fittings: Copper-alloy mechanical fittings with ends made to fit and listed for use with corrugated stainless-steel tubing and capable of metal-to-metal seal without gaskets. Include brazing socket or threaded ends complying with ASME B1.20.1.
 4. Striker Plates: Steel, designed to protect tubing from penetrations.
 5. Manifolds: Malleable iron or steel with factory-applied protective coating. Threaded connections shall comply with ASME B1.20.1 for pipe inlet and corrugated tubing outlets.
- C. PE Pipe: ASTM D 2513, SDR 11.
 1. PE Fittings: ASTM D 2683, socket-fusion type or ASTM D 3261, butt-fusion type with dimensions matching PE pipe.
 2. PE Transition Fittings: Factory-fabricated fittings with PE pipe complying with ASTM D 2513, SDR 11; and steel pipe complying with ASTM A 53/A 53M, black steel, Schedule 40, Type E or S, Grade B.
 3. Transition Service-Line Risers: Factory fabricated and leak tested.
 - a. Underground Portion: PE pipe complying with ASTM D 2513, SDR 11 inlet connected to steel pipe complying with ASTM A 53/A 53M, Schedule 40, Type E or S, Grade B, with corrosion-protective coating for aboveground outlet.
 - b. Outlet shall be threaded or flanged or suitable for welded connection.
 - c. Bridging sleeve over mechanical coupling.
 - d. Factory-connected anode.
 - e. Tracer wire connection.
 - f. Ultraviolet shield.
 - g. Stake supports with factory finish to match steel pipe casing or carrier pipe.
 4. Steel Mechanical Couplings: Capable of joining plain-end PE pipe to PE pipe, steel pipe to PE pipe, or steel pipe to steel pipe.
 - a. **Steel** flanges and tube with epoxy finish.
 - b. Buna-nitrile seals.

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- c. **Steel** bolts, washers, and nuts.
- d. Factory-installed anode for steel-body couplings installed underground.

2.2 PIPING SPECIALTIES

- A. Appliance Flexible Connectors:
 - 1. Indoor, Fixed-Appliance Flexible Connectors: Comply with ANSI Z21.24.
 - 2. Indoor, Movable-Appliance Flexible Connectors: Comply with ANSI Z21.69.
 - 3. Corrugated stainless-steel tubing with polymer coating.
 - 4. Operating-Pressure Rating: **0.5 psig**.
 - 5. End Fittings: Zinc-coated steel.
 - 6. Threaded Ends: Comply with ASME B1.20.1.
 - 7. Maximum Length: **72 inches**.
- B. Quick-Disconnect Devices: Comply with ANSI Z21.41.
 - 1. Copper-alloy convenience outlet and matching plug connector.
 - 2. Nitrile seals.
 - 3. Hand operated with automatic shutoff when disconnected.
 - 4. For indoor or outdoor applications.
 - 5. Adjustable, retractable restraining cable.
- C. Weatherproof Vent Cap: Cast- or malleable-iron increaser fitting with corrosion-resistant wire screen, with free area at least equal to cross-sectional area of connecting pipe and threaded-end connection.

2.3 JOINING MATERIALS

- A. Joint Compound and Tape: Suitable for natural gas.
- B. Welding Filler Metals: Comply with AWS D10.12/D10.12M for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.
- C. Brazing Filler Metals: Alloy with melting point greater than **1000 deg F** complying with AWS A5.8 /A5.8M. Brazing alloys containing more than 0.05 percent phosphorus are prohibited.

2.4 MANUAL GAS SHUTOFF VALVES

- A. See "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles for where each valve type is applied in various services.
- B. General Requirements for Metallic Valves, **NPS 2** and Smaller: Comply with ASME B16.33.
 - 1. CWP Rating: **125 psig**.
 - 2. Threaded Ends: Comply with ASME B1.20.1.
 - 3. Dryseal Threads on Flare Ends: Comply with ASME B1.20.3.
 - 4. Tamperproof Feature: Locking feature for valves indicated in "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles.

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5. Listing: Listed and labeled by an NRTL acceptable to authorities having jurisdiction for valves **1 inch** and smaller.
 6. Service Mark: Valves **1-1/4 inches** to **NPS 2** shall have initials "WOG" permanently marked on valve body.
- C. General Requirements for Metallic Valves, **NPS 2-1/2** and Larger: Comply with ASME B16.38.
1. CWP Rating: **125 psig**
 2. Flanged Ends: Comply with ASME B16.5 for steel flanges.
 3. Tamperproof Feature: Locking feature for valves indicated in "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles.
 4. Service Mark: Initials "WOG" shall be permanently marked on valve body.
- D. Two-Piece, Regular-Port Bronze Ball Valves with Bronze Trim: MSS SP-110.
1. Body: Bronze, complying with ASTM B 584.
 2. Ball: Chrome-plated bronze.
 3. Stem: Bronze; blowout proof.
 4. Seats: Reinforced TFE.
 5. Packing: Threaded-body packnut design with adjustable-stem packing.
 6. Ends: Threaded, flared, or socket as indicated in "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles.
 7. CWP Rating: **600 psig**.
 8. Listing: Valves **NPS 1** and smaller shall be listed and labeled by an NRTL acceptable to authorities having jurisdiction.
 9. Service: Suitable for natural-gas service with "WOG" indicated on valve body.
- E. Bronze Plug Valves: MSS SP-78.
1. Body: Bronze, complying with ASTM B 584.
 2. Plug: Bronze.
 3. Ends: Threaded, socket, or flanged as indicated in "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles.
 4. Operator: Square head or lug type with tamperproof feature where indicated.
 5. Pressure Class: **125 psig**.
 6. Listing: Valves **NPS 1** and smaller shall be listed and labeled by an NRTL acceptable to authorities having jurisdiction.
 7. Service: Suitable for natural-gas service with "WOG" indicated on valve body.
- F. Cast-Iron, Nonlubricated Plug Valves: MSS SP-78.
1. Body: Cast iron, complying with ASTM A 126, Class B.
 2. Plug: Bronze or nickel-plated cast iron.
 3. Seat: Coated with thermoplastic.
 4. Stem Seal: Compatible with natural gas.
 5. Ends: Threaded or flanged as indicated in "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles.
 6. Operator: Square head or lug type with tamperproof feature where indicated.
 7. Pressure Class: **125 psig**.
 8. Listing: Valves **NPS 1** and smaller shall be listed and labeled by an NRTL acceptable to authorities having jurisdiction.
 9. Service: Suitable for natural-gas service with "WOG" indicated on valve body.
- G. PE Ball Valves: Comply with ASME B16.40.

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1. Body: PE.
2. Ball: PE.
3. Stem: Acetal.
4. Seats and Seals: Nitrile.
5. Ends: Plain or fusible to match piping.
6. CWP Rating: **80 psig**
7. Operator: Nut or flat head for key operation.
8. Include plastic valve extension.

H. Valve Boxes:

1. Cast-iron, two-section box.
2. Top section with cover with "GAS" lettering.
3. Bottom section with base to fit over valve and barrel a minimum of **5 inches** in diameter.
4. Adjustable cast-iron extensions of length required for depth of bury.
5. Include tee-handle, steel operating wrench with socket end fitting valve nut or flat head, and with stem of length required to operate valve.

2.5 PRESSURE REGULATORS

A. General Requirements:

1. Single stage and suitable for natural gas.
2. Steel jacket and corrosion-resistant components.
3. Elevation compensator.
4. End Connections: Threaded for regulators **NPS 2** and smaller; flanged for regulators **NPS 2-1/2** and larger.

B. Line Pressure Regulators: Comply with ANSI Z21.80.

1. Body and Diaphragm Case: Cast iron or die-cast aluminum.
2. Springs: Zinc-plated steel; interchangeable.
3. Diaphragm Plate: Zinc-plated steel.
4. Seat Disc: Nitrile rubber resistant to gas impurities, abrasion, and deformation at the valve port.
5. Orifice: Aluminum; interchangeable.
6. Seal Plug: Ultraviolet-stabilized, mineral-filled nylon.
7. Single-port, self-contained regulator with orifice no larger than required at maximum pressure inlet, and no pressure sensing piping external to the regulator.
8. Pressure regulator shall maintain discharge pressure setting downstream, and not exceed 150 percent of design discharge pressure at shutoff.
9. Atmospheric Vent: Factory- or field-installed, stainless-steel screen in opening if not connected to vent piping.
10. Maximum Inlet Pressure: **10 psig**.

C. Appliance Pressure Regulators: Comply with ANSI Z21.18.

1. Body and Diaphragm Case: Die-cast aluminum.
2. Springs: Zinc-plated steel; interchangeable.
3. Diaphragm Plate: Zinc-plated steel.
4. Seat Disc: Nitrile rubber.
5. Seal Plug: Ultraviolet-stabilized, mineral-filled nylon.
6. Factory-Applied Finish: Minimum three-layer polyester and polyurethane paint finish.

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7. Regulator may include vent limiting device, instead of vent connection, if approved by authorities having jurisdiction.

2.6 DIELECTRIC FITTINGS

A. Dielectric Unions:

1. Minimum Operating-Pressure Rating: **150 psig**.
2. Combination fitting of copper alloy and ferrous materials.
3. Insulating materials suitable for natural gas.
4. Combination fitting of copper alloy and ferrous materials with threaded, brazed-joint, plain, or welded end connections that match piping system materials.

B. Dielectric Flanges:

1. Minimum Operating-Pressure Rating: **150 psig**.
2. Combination fitting of copper alloy and ferrous materials.
3. Insulating materials suitable for natural gas.
4. Combination fitting of copper alloy and ferrous materials with threaded, brazed-joint, plain, or welded end connections that match piping system materials.

C. Dielectric-Flange Kits:

1. Minimum Operating-Pressure Rating: **150 psig**
2. Companion-flange assembly for field assembly.
3. Include flanges, full-face- or ring-type neoprene or phenolic gasket, phenolic or PE bolt sleeves, phenolic washers, and steel backing washers.
4. Insulating materials suitable for natural gas.
5. Combination fitting of copper alloy and ferrous materials with threaded, brazed-joint, plain, or welded end connections that match piping system materials.

2.7 LABELING AND IDENTIFYING

- A. Detectable Warning Tape: Acid- and alkali-resistant, PE film warning tape manufactured for marking and identifying underground utilities, a minimum of **6 inches** wide and **4 mils** thick, continuously inscribed with a description of utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to **30 inches** deep; colored yellow.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in for natural-gas piping system to verify actual locations of piping connections before equipment installation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

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3.2 PREPARATION

- A. Close equipment shutoff valves before turning off natural gas to premises or piping section.
- B. Inspect natural-gas piping according to **NFPA 54** and **the International Fuel Gas Code** to determine that natural-gas utilization devices are turned off in piping section affected.
- C. Comply with **NFPA 54**, and **the International Fuel Gas Code** requirements for prevention of accidental ignition.

3.3 OUTDOOR PIPING INSTALLATION

- A. Comply with NFPA 54 and the International Fuel Gas Code for installation and purging of natural-gas piping.
- B. Install underground, natural-gas piping buried at least **36 inches** below finished grade. Comply with requirements in Division 31 Section "Earth Moving" for excavating, trenching, and backfilling.
 - 1. If natural-gas piping is installed less than **36 inches** below finished grade, install it in containment conduit.
- C. Install underground, PE, natural-gas piping according to ASTM D 2774.
- D. Steel Piping with Protective Coating:
 - 1. Apply joint cover kits to pipe after joining to cover, seal, and protect joints.
 - 2. Replace pipe having damaged PE coating with new pipe.
- E. Install fittings for changes in direction and branch connections.

3.4 INDOOR PIPING INSTALLATION

- A. Comply with **NFPA 54** and **the International Fuel Gas Code** for installation and purging of natural-gas piping.
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements are used to size pipe and calculate friction loss, expansion, and other design considerations. Install piping as indicated unless deviations to layout are approved on Coordination Drawings.
- C. Arrange for pipe spaces, chases, slots, sleeves, and openings in building structure during progress of construction, to allow for mechanical installations.
- D. Install piping in concealed locations unless otherwise indicated and except in equipment rooms and service areas.
- E. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.

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- F. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.
- G. Locate valves for easy access.
- H. Install natural-gas piping at uniform grade of 2 percent down toward drip and sediment traps.
- I. Install piping free of sags and bends.
- J. Install fittings for changes in direction and branch connections.
- K. Verify final equipment locations for roughing-in.
- L. Comply with requirements in Sections specifying gas-fired appliances and equipment for roughing-in requirements.
- M. Drips and Sediment Traps: Install drips at points where condensate may collect, including service-meter outlets. Locate where accessible to permit cleaning and emptying. Do not install where condensate is subject to freezing.
 - 1. Construct drips and sediment traps using tee fitting with bottom outlet plugged or capped. Use nipple a minimum length of 3 pipe diameters, but not less than **3 inches** long and same size as connected pipe. Install with space below bottom of drip to remove plug or cap.
- N. Extend relief vent connections for service regulators, line regulators, and overpressure protection devices to outdoors and terminate with weatherproof vent cap.
- O. Conceal pipe installations in walls, pipe spaces, utility spaces, above ceilings, below grade or floors, and in floor channels unless indicated to be exposed to view.
- P. Concealed Location Installations: Except as specified below, install concealed natural-gas piping and piping installed under the building in containment conduit constructed of steel pipe with welded joints as described in Part 2. Install a vent pipe from containment conduit to outdoors and terminate with weatherproof vent cap.
 - 1. In Floors: Install natural-gas piping with welded or brazed joints and protective coating in cast-in-place concrete floors. Cover piping to be cast in concrete slabs with minimum of **1-1/2 inches** of concrete. Piping may not be in physical contact with other metallic structures such as reinforcing rods or electrically neutral conductors. Do not embed piping in concrete slabs containing quick-set additives or cinder aggregate.
 - 2. In Walls or Partitions: Protect tubing installed inside partitions or hollow walls from physical damage using steel striker barriers at rigid supports.
 - a. Exception: Tubing passing through partitions or walls does not require striker barriers.
 - 3. Prohibited Locations:
 - a. Do not install natural-gas piping in or through circulating air ducts, clothes or trash chutes, chimneys or gas vents (flues), ventilating ducts, or dumbwaiter or elevator shafts.
 - b. Do not install natural-gas piping in solid walls or partitions.

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- Q. Use eccentric reducer fittings to make reductions in pipe sizes. Install fittings with level side down.
- R. Connect branch piping from top or side of horizontal piping.
- S. Install unions in pipes **NPS 2** and smaller, adjacent to each valve, at final connection to each piece of equipment. Unions are not required at flanged connections.
- T. Do not use natural-gas piping as grounding electrode.
- U. Install strainer on inlet of each line-pressure regulator and automatic or electrically operated valve.
- V. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Division 23 Section "Sleeves and Sleeve Seals for HVAC Piping."
- W. Install sleeve seals for piping penetrations of concrete walls and slabs. Comply with requirements for sleeve seals specified in Division 23 Section "Sleeves and Sleeve Seals for HVAC Piping."
- X. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Division 23 Section "Escutcheons for HVAC Piping."

3.5 VALVE INSTALLATION

- A. Install manual gas shutoff valve for each gas appliance ahead of corrugated stainless-steel tubing, aluminum, or copper connector.
- B. Install underground valves with valve boxes.
- C. Install regulators and overpressure protection devices where required and with maintenance access space adequate for servicing and testing.
- D. Install anode for metallic valves in underground PE piping.

3.6 PIPING JOINT CONSTRUCTION

- A. Ream ends of pipes and tubes and remove burrs.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- C. Threaded Joints:
 - 1. Thread pipe with tapered pipe threads complying with ASME B1.20.1.
 - 2. Cut threads full and clean using sharp dies.
 - 3. Ream threaded pipe ends to remove burrs and restore full inside diameter of pipe.
 - 4. Apply appropriate tape or thread compound to external pipe threads unless dryseal threading is specified.

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5. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

D. Welded Joints:

1. Construct joints according to AWS D10.12/D10.12M, using qualified processes and welding operators.
2. Bevel plain ends of steel pipe.
3. Patch factory-applied protective coating as recommended by manufacturer at field welds and where damage to coating occurs during construction.

E. Brazed Joints: Construct joints according to AWS's "Brazing Handbook," "Pipe and Tube" Chapter.

F. Flanged Joints: Install gasket material, size, type, and thickness appropriate for natural-gas service. Install gasket concentrically positioned.

G. Flared Joints: Cut tubing with roll cutting tool. Flare tube end with tool to result in flare dimensions complying with SAE J513. Tighten finger tight, then use wrench. Do not overtighten.

H. PE Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.

1. Plain-End Pipe and Fittings: Use butt fusion.
2. Plain-End Pipe and Socket Fittings: Use socket fusion.

3.7 HANGER AND SUPPORT INSTALLATION

A. Comply with requirements for pipe hangers and supports specified in Division 23 Section "Hangers and Supports for HVAC Piping and Equipment."

B. Install hangers for horizontal steel piping with the following maximum spacing and minimum rod sizes:

1. NPS 1 and Smaller: Maximum span, 96 inches; minimum rod size, 3/8 inch.
2. NPS 1-1/4: Maximum span, 108 inches; minimum rod size, 3/8 inch.
3. NPS 1-1/2 and NPS 2: Maximum span, 108 inches; minimum rod size, 3/8 inch.
4. NPS 2-1/2 to NPS 3-1/2: Maximum span, 10 feet; minimum rod size, 1/2 inch.
5. NPS 4 and Larger: Maximum span, 10 feet; minimum rod size, 5/8 inch.

3.8 CONNECTIONS

A. Connect to gas main according to utility's procedures and requirements.

B. Install natural-gas piping electrically continuous, and bonded to gas appliance equipment grounding conductor of the circuit powering the appliance according to NFPA 70.

C. Install piping adjacent to appliances to allow service and maintenance of appliances.

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- D. Connect piping to appliances using manual gas shutoff valves and unions. Install valve within **72 inches** of each gas-fired appliance and equipment. Install union between valve and appliances or equipment.
- E. Sediment Traps: Install tee fitting with capped nipple in bottom to form drip, as close as practical to inlet of each appliance.

3.9 LABELING AND IDENTIFYING

- A. Install detectable warning tape directly above gas piping, **12 inches** below finished grade, except **6 inches** below subgrade under pavements and slabs.

3.10 PAINTING

- A. Comply with requirements in Division 09 painting Sections for painting interior and exterior natural-gas piping.
- B. Paint exposed, exterior metal piping, valves, service regulators, service meters and meter bars, earthquake valves, and piping specialties, except components, with factory-applied paint or protective coating.
 - 1. Alkyd System: MPI EXT 5.1D.
 - a. Prime Coat: Alkyd anticorrosive metal primer equal to Sherwin Williams Kem Bond HS Primer or Kem Kromik Universal Metal Primer.
 - b. Intermediate Coat: Exterior alkyd enamel matching topcoat equal to Sherwin Williams Industrial Enamel VOC.
 - c. Topcoat: Exterior alkyd enamel matching topcoat equal to Sherwin Williams Industrial Enamel VOC.
 - d. Color: Safety Yellow.
- C. Paint exposed, interior metal piping, valves, service regulators, service meters and meter bars, earthquake valves, and piping specialties, except components, with factory-applied paint or protective coating.
 - 1. Latex Over Alkyd Primer System: MPI INT 5.1Q.
 - a. Prime Coat: **Alkyd anticorrosive** metal primer.
 - b. Intermediate Coat: Interior latex matching topcoat.
 - c. Topcoat: Interior latex.
 - d. Color: Coordinate with Owner.
 - 2. Alkyd System: MPI INT 5.1E.
 - a. Prime Coat: **Alkyd anticorrosive** metal primer.
 - b. Intermediate Coat: Interior alkyd matching topcoat.
 - c. Topcoat: Interior alkyd.
 - d. Color: Coordinate with Owner.

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- D. Damage and Touchup: Repair marred and damaged factory-applied finishes with materials and by procedures to match original factory finish.

3.11 CONCRETE BASES

- A. Concrete Bases: Anchor equipment to concrete base.
 1. Construct concrete bases of dimensions indicated, but not less than **4 inches** larger in both directions than supported unit.
 2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on **18-inch** centers around the full perimeter of the base.
 3. Install epoxy-coated anchor bolts for supported equipment that extend through concrete base, and anchor into structural concrete floor.
 4. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 5. Install anchor bolts to elevations required for proper attachment to supported equipment.
 6. Use **3000-psi**, 28-day, compressive-strength concrete and reinforcement.]

3.12 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. Tests and Inspections:
 1. Test, inspect, and purge natural gas according to **NFPA 54** and **the International Fuel Gas Code** and authorities having jurisdiction.
- C. Natural-gas piping will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.13 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain earthquake valves.

3.14 OUTDOOR PIPING SCHEDULE

- A. Underground natural-gas piping shall be the following:
 1. PE pipe and fittings joined by heat fusion, or mechanical couplings; service-line risers with tracer wire terminated in an accessible location.
- B. Aboveground natural-gas piping shall be the following:
 1. Steel pipe with malleable-iron fittings and threaded joints.
- C. Containment Conduit: Steel pipe with wrought-steel fittings and welded joints. Coat pipe and fittings with protective coating for steel piping.

SECTION 231123 - FACILITY NATURAL-GAS PIPING

3.15 INDOOR PIPING SCHEDULE FOR SYSTEM PRESSURES LESS THAN 0.5 PSIG

- A. Aboveground, branch piping **NPS 1** and smaller shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- B. Aboveground, distribution piping shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- C. Underground, below building, piping shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- D. Containment Conduit: Steel pipe with wrought-steel fittings and welded joints. Coat pipe and fittings with protective coating for steel piping.
- E. Containment Conduit Vent Piping: Steel pipe with malleable-iron fittings and threaded or wrought-steel fittings with welded joints. Coat underground pipe and fittings with protective coating for steel piping.

3.16 INDOOR PIPING SCHEDULE FOR SYSTEM PRESSURES MORE THAN 0.5 PSIG AND LESS THAN 5 PSIG

- A. Aboveground, branch piping **NPS 1** and smaller shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- B. Aboveground, distribution piping shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- C. Underground, below building, piping shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- D. Containment Conduit: Steel pipe with wrought-steel fittings and welded joints. Coat underground pipe and fittings with protective coating for steel piping.
- E. Containment Conduit Vent Piping: Steel pipe with malleable-iron fittings and threaded or wrought-steel fittings with welded joints. Coat underground pipe and fittings with protective coating for steel piping.

3.17 INDOOR PIPING SCHEDULE FOR SYSTEM PRESSURES MORE THAN 5 PSIG

- A. Aboveground, Branch Piping: Steel pipe with steel welding fittings and welded joints.
- B. Aboveground, distribution piping shall be the following:
 - 1. Steel pipe with steel welding fittings and welded joints.
- C. Underground, below building, piping shall be the following:
 - 1. Steel pipe with malleable-iron fittings and threaded joints.
- D. Containment Conduit: Steel pipe with wrought-steel fittings and welded joints. Coat pipe and fittings with protective coating for steel piping.

SECTION 231123 - FACILITY NATURAL-GAS PIPING

- E. Containment Conduit Vent Piping: Steel pipe with malleable-iron fittings and threaded or wrought-steel fittings with welded joints. Coat underground pipe and fittings with protective coating for steel piping.

3.18 UNDERGROUND MANUAL GAS SHUTOFF VALVE SCHEDULE

- A. Connections to Existing Gas Piping: Use valve and fitting assemblies made for tapping utility's gas mains and listed by an NRTL.
- B. Underground:
 - 1. PE valves.
 - 2. **NPS 2** and Smaller: Bronze plug valves.
 - 3. **NPS 2-1/2** and Larger: Cast-iron, plug valves.

3.19 ABOVEGROUND MANUAL GAS SHUTOFF VALVE SCHEDULE

- A. Valves for pipe sizes **NPS 2** and smaller shall be Bronze plug valve.
- B. Valves for pipe sizes **NPS 2-1/2** and larger shall Cast-iron plug valve.

END OF SECTION 231123

SECTION 260010 - SUMMARY OF ELECTRICAL WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and other Division 26 Specification Sections, apply to this Section.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The following Summary of Work is intended as an aid to achieve an understanding of the various elements of work included in the project, as is not intended to be all-inclusive. Detailed descriptions of work and requirements are given in drawings and specifications.
- B. Scope of Work:
 - 1. General: The “Cameron County 835 East Levee & San Benito Annex Building Standby Power Upgrades” consists of an existing six-story building, approximate 51,500 s.f. and a single-story building, approximate 78,603 s.f. These buildings will generally be operated from 8:00am to 5:00pm. (Monday through Friday) with occasional after hours and weekends use.
 - 2. Electrical: Refer to Section 011000.

1.3 ALLOWANCES

- A. Electrical: See Division 1 for electrical allowances.

1.4 COORDINATION

- A. All electrical work shall be done under sub-contract to a General Contractor, who ultimately responsible for the entire project. Electrical Contractor shall coordinate all work through General Contractor, even in areas where only electrical work is to take place.
- B. All questions, requests for information, submittals, and correspondence from the Electrical Contractor shall be submitted via the General Contractor, who will forward to the Architect, who will then forward to the Engineer.
- C. Electrical Contractor shall not make any changes to design without written authorization from the Engineer. If changes are requested by the Owner, Architect, General Contractor, Suppliers, Manufacturers, or any others, Contractor should issue a written RFI for response by the Engineer.
- D. Electrical Contractor shall issue seven (7) days written notice prior to any activities that require the presence of the Engineer at the job-site. This applies to all inspections required by specifications, and particularly to those where work will be covered (underground raceways, electrical raceways above ceiling).
- E. Cooperate fully with other contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.
- F. Fully coordinate with HVAC controls contractor for generator equipment controls interface.

SECTION 260010 - SUMMARY OF ELECTRICAL WORK

- G. Fully coordinate with the Plumbing contractors for the generator gas supply installation and disconnection.
- H. Fully coordinate with the Elevator Contractor for the elevator equipment controls interface.
- I. Issue written notification of the following tasks and allow five (5) days for Engineer to respond and schedule an inspection as required:
 - 1. Upon completion of underground raceways installation and prior to covering up.
 - 2. Upon completion of installing all raceways, labeling all j-boxes and prior to suspended ceiling installation.
 - 3. Upon completion of pulling all wiring, making all terminations, labeling and color-coding wires at the safety switches/transfer switches and prior to installing their covers.
 - 4. When ready to request manufacturer's start-up of each piece of equipment.
 - 5. When ready for Substantial Completion Inspection.
 - 6. When ready for Final Inspection.
- J. Failure to issue written notification may result in work having to be redone to allow for proper inspection. It is this contractor's responsibility to make sure Engineer receives notification.

1.5 UTILITIES

- 1. Coordinate with power, water, telephone, cable and gas utilities to locate all utilities prior to digging in any area.
- 2. Obtain any approvals required from utilities to relocate utilities.
- 3. Cost of relocating or bypassing utilities indicated on drawings shall be included in Base Bid.
- 4. Coordinate with utility for electrical service. Base bid shall include all costs associated with service connection, including permit fees.

1.6 CONTRACTOR USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises, clear and available to the Owner, the Owner's employees, and emergency vehicles at all time. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Site Safety: Take every precaution to ensure the site does not present a threat to the safety of occupants and/or workers. Minimal safety requirements include, but are not limited to the following:
 - 1. Temporary fencing around construction areas.
 - 2. Yellow caution tape and construction barricades along open trenches during the day. Trenches shall be covered at night and warning lights provided on construction barricades.
 - 3. Temporary fencing around equipment while site work is in progress.

SECTION 260010 - SUMMARY OF ELECTRICAL WORK

- C. Work shall take place with minimal disruption to Owner's operations in areas surrounding the job site.

1.7 SUBMITTALS - Special Requirements

- A. All submittals need to comply with submittal requirements as outlined on this Pre-Construction Meeting Agenda & specifications.
- B. Plumbing, Mechanical & Electrical Submittals shall be submitted electronically. Please organize the files as noted below (Native PDF format & searchable format). Files would need to be properly identified (cover letter, stamped, etc.) from the general contractor.
- C. All submittals to be separated by sections and identified by section #s, in native and searchable pdf format. All selections/markings or highlighting made on the submittal shall be specific for project requirements and exactly for what the Contractor is intending to provide on the project. If submittal does not specify as to which model/options will be used by highlighting or marking the submittal, then submittal will be returned as rejected.
- D. Manufacturer's standard dimensioned drawings, performance and product data shall be edited to delete reference to equipment, features, or information which is not applicable to the equipment being supplied for this project. Including Bill or List of Materials.
- E. Individual submittals shall not be reviewed until a complete package is received.
- F. Allow two weeks for initial review by Engineer, from the day it is received.
- G. After released by GC, Subcontractor shall have one week to respond to our submittal/re-submittal review comments.
- H. Allow one week for review of resubmittals by Engineer, from the day it is received.
- I. All submittal review comments shall be forwarded by Engineer to Architect, who will then distribute as per Division 1.
- J. Provide detailed coordination drawings showing how mechanical, electrical & plumbing system components will be installed in coordination with work by others. Engineer's drawing files will be made available to Contractor for producing coordination and as-built drawings upon request.

1. Miscellaneous Electrical – Submittal #1

- a. 260519 Low-Voltage Electrical Power Conductors and Cables
- b. 260526 Grounding and Bonding for Electrical Systems
- c. 260529 Hangers and Supports for Electrical Systems
- d. 260533 Raceways and Boxes for Electrical Systems
- e. 260553 Identification for Electrical Systems
- f. 260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling

2. Electrical Gear Submittal #2

- a. 262813 Fuses
- b. 262816 Enclosed Switches and Circuit Breakers

SECTION 260010 - SUMMARY OF ELECTRICAL WORK

3. Electrical Studies Submittal #3

- a. 262230 Transfer Switches
- b. 263213 Packaged Engine Generator

1.8 SCHEDULE OF VALUES -Special Requirements

- A. Electrical Contractor shall submit a Schedule of Values reflecting the total value of Electrical Work in the Contract and broken down into the following items as a minimum, with a line item for Materials/Equipment and another for Labor.

ELECTRICAL

- 1. Electrical Gear.
- 2. Generator & Transfer Switches
- 3. Raceways including wiring.
- 4. Allowances.
- 5. Miscellaneous.
- 6. Administrative and project management.

1.9 CODE COMPLIANCE:

The design for this project is based on:

- 1. Occupational Safety and Health Act (OSHA)
- 2. National Electric Code (NEC)
- 3. National Fire Code
- 4. International Building Code
- 5. UL 916
- 6. Local ordinances

END OF SECTION 260010

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Connectors, splices, and terminations rated 600 V and less.

1.3 ACTION SUBMITTALS

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

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency.
- B. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Member Company of NETA or an NRTL.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

- A. Manufacturer:
 - 1. Senator Wire & Cable Company.
 - 2. Southwire Company.
 - 3. Encore Wire
- B. Copper Conductors: Comply with NEMA WC 70/ICEA S-95-658.
- C. Conductor Insulation: Comply with NEMA WC 70/ICEA S-95-658 for Type THHN/THWN-2, Type XHHW-2 and Type SO.

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

- D. Multiconductor Cable: Comply with UL 1569 and NEMA WC 70/ICEA S-95-658 for metal-clad cable, Type MC and Type SO with ground wire.

2.2 CONNECTORS AND SPLICES

- A. Manufacturers:
 - 1. AFC Cable Systems, Inc.
 - 2. AMP Incorporated/Tyco International.
 - 3. Hubbell/Anderson.
 - 4. O-Z/Gedney; EGS Electrical Group LLC.
 - 5. 3M Company; Electrical Products Division.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

2.3 SYSTEM DESCRIPTION

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with NFPA 70.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger, except VFC cable, which shall be extra flexible stranded.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Exposed Feeders: Type THHN/THWN-2, single conductors in raceway.
- B. Feeders Concealed in Ceilings, Walls and Partitions: Type THHN/THWN-2, single conductors in raceway.
- C. Feeders Concealed in Concrete, below Slabs-on-Grade, and underground: Type THHN/THWN-2, single conductors in raceway.
- D. Exposed Branch Circuits: Type THHN/THWN-2, single conductors in raceway.
- E. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN/THWN-2, single conductors in raceway.

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

- F. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and underground: Type THHN/THWN-2, single conductors in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors unless otherwise indicated.
- B. Complete raceway installation between conductor and cable termination points according to Section 260533 "Raceways and Boxes for Electrical Systems" prior to pulling conductors and cables.
- C. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- D. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, which will not damage cables or raceway.
- E. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
- F. Support cables according to Section 260529 "Hangers and Supports for Electrical Systems."

3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- B. Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
 - 1. Use oxide inhibitor in each splice, termination, and tap for aluminum conductors.
- C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.

3.5 IDENTIFICATION

- A. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."
- B. Identify each spare conductor at each end with identity number and location of other end of conductor, and identify as spare conductor.

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

3.6 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.7 FIRESTOPPING

- A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Section 078413 "Penetration Firestopping."

3.8 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors for compliance with requirements.
 - 2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - 3. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each splice in conductors No. 3 AWG and larger. Remove box and equipment covers so splices are accessible to portable scanner. Correct deficiencies determined during the scan.
 - a. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each splice 11 months after date of Substantial Completion.
 - b. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - c. Record of Infrared Scanning: Prepare a certified report that identifies splices checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.
 - d. [Main electrical service/switchboard: Re-tighten electrical connectors and terminals \(line side and load side\) according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.](#)
- B. Test and Inspection Reports: Prepare a written report to record the following:
 - 1. Procedures used.
 - 2. Results that comply with requirements.
 - 3. Results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
- C. Cables will be considered defective if they do not pass tests and inspections.

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

END OF SECTION 260519

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes grounding and bonding systems and equipment.
- B. Section includes grounding and bonding systems and equipment, plus the following special applications:
 - 1. Underground distribution grounding.
 - 2. Ground bonding common with lightning protection system.
 - 3. Foundation steel electrodes.

1.3 ACTION SUBMITTALS

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

1.4 INFORMATIONAL SUBMITTALS

- A. As-Built Data: Plans showing dimensioned as-built locations of grounding features specified in "Field Quality Control" Article, including the following:
 - 1. Ground rods.
 - 2. Ground rings.
 - 3. Grounding arrangements and connections for separately derived systems.
- B. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For grounding to include in emergency, operation, and maintenance manuals.
 - 1. In addition to items specified in Section "Operation and Maintenance Data," include the following:
 - a. Instructions for periodic testing and inspection of grounding features at ground rings and grounding connections for separately derived systems based on and NFPA 70B.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

1.6 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

- A. Insulated Conductors: tinned-copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
 - 1. Solid Conductors: ASTM B 3.
 - 2. Stranded Conductors: ASTM B 8.
 - 3. Tinned Conductors: ASTM B 33.
 - 4. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch in diameter.
 - 5. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
 - 6. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.
 - 7. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.
- C. Grounding Bus: Predrilled rectangular bars of annealed copper, 1/4 by 4 inches in cross section, with 9/32-inch holes spaced 1-1/8 inches apart. Stand-off insulators for mounting shall comply with UL 891 for use in switchboards, 600 V and shall be Lexan or PVC, impulse tested at 5000 V.

2.2 CONNECTORS

- A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.
- B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy.
- C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.
- D. Bus-Bar Connectors: Mechanical type, cast silicon bronze, solderless **exothermic**-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

2.3 GROUNDING ELECTRODES

- A. Ground Rods: Copper-clad; 3/4 inch by 10 feet.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 3 - EXECUTION

3.1 APPLICATIONS

- A. Conductors: Install solid conductor for No. 10 AWG and smaller, and stranded conductors for No. 8 AWG and larger unless otherwise indicated.
- B. Underground Grounding Conductors: Install bare tinned copper conductor, No. 2/0 AWG minimum.
 - 1. Bury at least 24 inches below grade.
 - 2. Duct-Bank Grounding Conductor: Bury 12 inches above duct bank when indicated as part of duct-bank installation.
- C. Isolated Grounding Conductors: Green-colored insulation with continuous yellow stripe. On feeders with isolated ground, identify grounding conductor where visible to normal inspection, with alternating bands of green and yellow tape, with at least three bands of green and two bands of yellow.
- D. Grounding Bus: Install in electrical equipment rooms, in rooms housing service equipment, and elsewhere as indicated.
 - 1. Install bus horizontally, on insulated spacers 2 inches minimum from wall, 6 inches above finished floor unless otherwise indicated.
 - 2. Where indicated on both sides of doorways, route bus up to top of door frame, across top of doorway, and down; connect to horizontal bus.
- E. Conductor Terminations and Connections:
 - 1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
 - 2. Underground Connections: Welded connectors except at test wells and as otherwise indicated.
 - 3. Connections to Ground Rods at Test Wells: Bolted connectors.
 - 4. Connections to Structural Steel: Welded connectors.

3.2 GROUNDING AT THE SERVICE

- A. Equipment grounding conductors and grounding electrode conductors shall be connected to the ground bus. Install a main bonding jumper between the neutral and ground buses.

3.3 GROUNDING SEPARATELY DERIVED SYSTEMS

- A. Generator: Install grounding electrode(s) at the generator location. The electrode shall be connected to the equipment grounding conductor and to the frame of the generator.

3.4 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

- A. Comply with IEEE C2 grounding requirements.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- B. Grounding Manholes and Handholes: Install a driven ground rod through manhole or handhole floor, close to wall, and set rod depth so 4 inches will extend above finished floor. If necessary, install ground rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from ground rod into manhole through a waterproof sleeve in manhole wall. Protect ground rods passing through concrete floor with a double wrapping of pressure-sensitive insulating tape or heat-shrunk insulating sleeve from 2 inches above to 6 inches below concrete. Seal floor opening with waterproof, nonshrink grout.
- C. Grounding Connections to Manhole Components: Bond exposed-metal parts such as inserts, cable racks, pulling irons, ladders, and cable shields within each manhole or handhole, to ground rod or grounding conductor. Make connections with No. 4 AWG minimum, stranded, hard-drawn copper bonding conductor. Train conductors level or plumb around corners and fasten to manhole walls. Connect to cable armor and cable shields according to written instructions by manufacturer of splicing and termination kits.
- D. Pad-Mounted Transformers and Switches: Install two ground rods and ground ring around the pad. Ground pad-mounted equipment and noncurrent-carrying metal items associated with substations by connecting them to underground cable and grounding electrodes. Install tinned-copper conductor not less than No. 2 AWG for ground ring and for taps to equipment grounding terminals. Bury ground ring not less than 6 inches from the foundation.

3.5 EQUIPMENT GROUNDING

- A. Install insulated equipment grounding conductors with all feeders and branch circuits.
- B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:
 - 1. Feeders and branch circuits.
 - 2. Lighting circuits.
 - 3. Receptacle circuits.
 - 4. Single-phase motor and appliance branch circuits.
 - 5. Three-phase motor and appliance branch circuits.
 - 6. Flexible raceway runs.
 - 7. Metal-clad cable runs.
 - 8. Busway Supply Circuits: Install insulated equipment grounding conductor from grounding bus in the switchgear, switchboard, or distribution panel to equipment grounding bar terminal on busway.
 - 9. X-Ray Equipment Circuits: Install insulated equipment grounding conductor in circuits supplying x-ray equipment.
- C. Air-Duct Equipment Circuits: Install insulated equipment grounding conductor to duct-mounted electrical devices operating at 120 V and more, including air cleaners, heaters, dampers, humidifiers, and other duct electrical equipment. Bond conductor to each unit and to air duct and connected metallic piping.
- D. Water Heater and Heat-Tracing Cables: Install a separate insulated equipment grounding conductor to each electric water heater and heat-tracing cable. Bond conductor to heater units, piping, connected equipment, and components.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- E. Isolated Grounding Receptacle Circuits: Install an insulated equipment grounding conductor connected to the receptacle grounding terminal. Isolate conductor from raceway and from panelboard grounding terminals. Terminate at equipment grounding conductor terminal of the applicable derived system or service unless otherwise indicated.
- F. Isolated Equipment Enclosure Circuits: For designated equipment supplied by a branch circuit or feeder, isolate equipment enclosure from supply circuit raceway with a nonmetallic raceway fitting listed for the purpose. Install fitting where raceway enters enclosure, and install a separate insulated equipment grounding conductor. Isolate conductor from raceway and from panelboard grounding terminals. Terminate at equipment grounding conductor terminal of the applicable derived system or service unless otherwise indicated.
- G. Poles Supporting Outdoor Lighting Fixtures: Install grounding electrode and a separate insulated equipment grounding conductor in addition to grounding conductor installed with branch-circuit conductors.
- H. Metallic Fences: Comply with requirements of IEEE C2.
 - 1. Grounding Conductor: Bare, tinned copper, not less than No. 3 AWG.
 - 2. Gates: Shall be bonded to the grounding conductor with a flexible bonding jumper.
 - 3. Barbed Wire: Strands shall be bonded to the grounding conductor.

3.6 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Ground Bonding Common with Lightning Protection System: Comply with NFPA 780 and UL 96 when interconnecting with lightning protection system. Bond electrical power system ground directly to lightning protection system grounding conductor at closest point to electrical service grounding electrode. Use bonding conductor sized same as system grounding electrode conductor, and install in conduit.
- C. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade unless otherwise indicated.
 - 1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
 - 2. For grounding electrode system, install at least three rods spaced at least one-rod length from each other and located at least the same distance from other grounding electrodes, and connect to the service grounding electrode conductor.
- D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
 - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
3. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

E. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes; use a bolted clamp connector or bolt a lug-type connector to a pipe flange by using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.
2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

F. Bonding Interior Metal Ducts: Bond metal air ducts to equipment grounding conductors of associated fans, blowers, electric heaters, and air cleaners. Install **tinned** bonding jumper to bond across flexible duct connections to achieve continuity.

G. Grounding for Steel Building Structure: Install a driven ground rod at base of each corner column and at intermediate exterior columns at distances not more than 60 feet apart.

H. Ground Ring: Install a grounding conductor, electrically connected to each building structure ground rod and to each indicated item, extending around the perimeter of building.

1. Install tinned-copper conductor not less than No. 2/0 AWG for ground ring and for taps to building steel.
2. Bury ground ring not less than 24 inches from building's foundation.

3.7 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
3. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, at individual ground rods. Make tests at ground rods before any conductors are connected.
 - a. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.

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- b. Perform tests by fall-of-potential method according to IEEE 81.
 4. Prepare dimensioned Drawings locating each, ground rod and ground-rod assembly, and other grounding electrodes. Identify each by letter in alphabetical order, and key to the record of tests and observations. Include the number of rods driven and their depth at each location, and include observations of weather and other phenomena that may affect test results. Describe measures taken to improve test results.
- B. Grounding system will be considered defective if it does not pass tests and inspections.
 - C. Prepare test and inspection reports.
 - D. Report measured ground resistances that exceed the following values:
 1. Power and Lighting Equipment or System with Capacity of 500 kVA and less: 10 ohms.
 2. Power and Lighting Equipment or System with Capacity of 500 to 1000 kVA: 5 ohms.
 3. Power and Lighting Equipment or System with Capacity More Than 1000 kVA: 3 ohms.
 4. Power Distribution Units or Panelboards Serving Electronic Equipment: 3 ohm(s).
 5. Manhole Grounds: 10 ohms.
 - E. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION 260526

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Hangers and supports for electrical equipment and systems.
 - 2. Construction requirements for concrete bases.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - a. Hangers.
 - b. Steel slotted support systems.
 - c. Nonmetallic support systems.
 - d. Trapeze hangers.
 - e. Clamps.
 - f. Turnbuckles.
 - g. Sockets.
 - h. Eye nuts.
 - i. Saddles.
 - j. Brackets.
 - 2. Include rated capacities and furnished specialties and accessories.
- B. Shop Drawings: For fabrication and installation details for electrical hangers and support systems.
 - 1. Trapeze hangers. Include product data for components.
 - 2. Steel slotted-channel systems.
 - 3. Nonmetallic slotted-channel systems.
 - 4. Equipment supports.

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1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plan(s) and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
1. Suspended ceiling components.
 2. Structural members to which hangers and supports will be attached.
 3. Size and location of initial access modules for acoustical tile.
 4. Items penetrating finished ceiling, including the following:
 - a. Lighting fixtures.
 - b. Air outlets and inlets.
 - c. Speakers.
 - d. Sprinklers.
 - e. Access panels.
 - f. Projectors.
- B. Welding certificates.

1.5 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
1. AWS D1.1/D1.1M.
 2. AWS D1.2/D1.2M.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
1. Flame Rating: Class 1.
 2. Self-extinguishing according to ASTM D 635.

2.2 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Comply with MFMA-4 factory-fabricated components for field assembly.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Allied Tube & Conduit.
 - b. Cooper B-Line, Inc.; a division of Cooper Industries.
 - c. ERICO International Corporation.
 - d. GS Metals Corp.

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- e. Thomas & Betts Corporation.
 - f. Unistrut; Tyco International, Ltd.
 - g. Wesanco, Inc.
2. Material: Plain steel.
 3. Channel Width: 1-1/4 inches.
 4. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
 5. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.
 6. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
 7. Protect finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
 8. Channel Dimensions: Selected for applicable load criteria.
- B. Conduit and Cable Support Devices: Steel hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- C. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for nonarmored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be made of malleable iron.
- D. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M steel plates, shapes, and bars; black and galvanized.
- E. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Hilti Inc.
 - 2) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 3) MKT Fastening, LLC.
 - 4) Simpson Strong-Tie Co., Inc.; Masterset Fastening Systems Unit.
 2. Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel, for use in hardened portland cement concrete, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Cooper B-Line, Inc.; a division of Cooper Industries.
 - 2) Empire Tool and Manufacturing Co., Inc.
 - 3) Hilti Inc.
 - 4) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 5) MKT Fastening, LLC

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3. Concrete Inserts: Steel or malleable-iron, slotted support system units are similar to MSS Type 18 units and comply with MFMA-4 or MSS SP-58.
 - a. Clamps for Attachment to Steel Structural Elements: MSS SP-58 units are suitable for attached structural element.
 - b. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
 - c. Toggle Bolts: All-steel springhead type.
 - d. Hanger Rods: Threaded steel.
 - e. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
 - f. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
 - g. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
 - h. Toggle Bolts: All-steel springhead type.
 - i. Hanger Rods: Threaded steel

2.3 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

- A. Description: Welded or bolted structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.
- B. Materials: Comply with requirements in Section 055000 "Metal Fabrications" for steel shapes and plates.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems unless requirements in this Section are stricter.
- B. Comply with requirements for raceways and boxes specified in Section 260533 "Raceways and Boxes for Electrical Systems."
- C. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMTs and RMCs as scheduled in NECA 1, where its Table 1 lists maximum spacings that are less than those stated in] NFPA 70. Minimum rod size shall be 1/4 inch in diameter.
- D. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
 1. Secure raceways and cables to these supports with two-bolt conduit clamps.
- E. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this article.
- B. Raceway Support Methods: In addition to methods described in NECA 1, EMTs, and RMCs may be supported by openings through structure members, according to NFPA 70.
- C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb.
- D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
 - 1. To Wood: Fasten with lag screws or through bolts.
 - 2. To New Concrete: Bolt to concrete inserts.
 - 3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
 - 4. To Existing Concrete: Expansion anchor fasteners.
 - 5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
 - 6. To Steel: Spring-tension clamps.
 - 7. To Light Steel: Sheet metal screws.
 - 8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.
- E. Drill holes for expansion anchors in concrete at locations and to depths that avoid the need for reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

- A. Comply with installation requirements in Architectural Section "Metal Fabrications" for site-fabricated metal supports.
- B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- C. Field Welding: Comply with AWS D1.1/D1.1M.

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

3.4 CONCRETE BASES

- A. Construct concrete bases of dimensions indicated but not less than 4 inches larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.
- B. Use 3000-psi, 28-day compressive-strength concrete. Concrete materials, reinforcement, and placement requirements are specified in Sections "Cast-in-Place Concrete" or "Miscellaneous Cast-in-Place Concrete."
- C. Anchor equipment to concrete base as follows:
 - 1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 2. Install anchor bolts to elevations required for proper attachment to supported equipment.
 - 3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

3.5 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils.
- B. Touchup: Comply with requirements in Sections "Exterior Painting", "Interior Painting" and "High-Performance Coatings" for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.
- C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION 260529

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Metal conduits, tubing, and fittings.
 - 2. Nonmetal conduits, tubing, and fittings.
 - 3. Metal wireways and auxiliary gutters.
 - 4. Boxes, enclosures, and cabinets.
 - 5. Handholes and boxes for exterior underground cabling.

1.3 DEFINITIONS

- A. GRC: Galvanized rigid steel conduit.
- B. IMC: Intermediate metal conduit.
- C. EMT: Electrical metallic tubing.
- D. FMC: Flexible metal conduit.
- E. LFMC: Liquidtight flexible metal conduit.
- F. LFNC: Liquidtight flexible nonmetallic conduit.
- G. NBR: Acrylonitrile-butadiene rubber.
- H. RNC: Rigid nonmetallic conduit.

1.4 ACTION SUBMITTALS

- A. Product Data: For raceways, wireways and fittings, hinged-cover enclosures, and cabinets.
- B. Shop Drawings: For custom enclosures and cabinets. Include plans, elevations, sections, and attachment details.

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1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Conduit routing plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of items involved:
 - 1. Structural members in paths of conduit groups with common supports.
 - 2. HVAC and plumbing items and architectural features in paths of conduit groups with common supports.
- B. Source quality-control reports.

PART 2 - PRODUCTS

2.1 METAL CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Alflex Inc.
 - 3. Allied Tube & Conduit; a Tyco International Ltd. Co.
 - 4. Anamet Electrical, Inc.; Anaconda Metal Hose.
 - 5. Electri-Flex Co.
 - 6. Manhattan/CDT/Cole-Flex.
 - 7. Maverick Tube Corporation.
 - 8. O-Z Gedney; a unit of General Signal.
 - 9. Wheatland Tube Company.
 - 10. Hylsa
- B. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. GRC: Comply with ANSI C80.1 and UL 6.
- D. EMT: Comply with ANSI C80.3 and UL 797.
- E. FMC: Comply with UL 1; zinc-coated steel.
- F. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.
- G. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
 - 1. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 886 and NFPA 70.
 - 2. Fittings for EMT:
 - a. Material: Steel (Zinc is not acceptable).
 - b. Type: set-screw.

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

3. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.
- H. Joint Compound for GRC: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.

2.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. AFC Cable Systems, Inc.
 2. Anamet Electrical, Inc.; Anaconda Metal Hose.
 3. Aruco Corporation.
 4. CANTEX Inc.
 5. CertainTeed Corp.; Pipe & Plastics Group.
 6. Condux International, Inc.
 7. ElecSYS, Inc.
 8. Electri-Flex Co.
 9. Lamson & Sessions; Carlon Electrical Products.
 10. Manhattan/CDT/Cole-Flex.
 11. RACO; a Hubbell Company.
 12. Thomas & Betts Corporation.
- B. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. RNC: Type EPC-40-PVC complying with NEMA TC 2 and UL 651 unless otherwise indicated.
- D. LFNC: Comply with UL 1660.
- E. RTRC: Comply with UL 1684A and NEMA TC 14.
- F. Fittings for and RNC: Comply with NEMA TC 3; match to conduit or tubing type and material.
- G. Fittings for LFNC: Comply with UL 514B.

2.3 METAL WIREWAYS AND AUXILIARY GUTTERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Cooper B-Line, Inc.
 2. Hoffman.
 3. Square D; Schneider Electric.

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

- B. Description: Sheet metal, complying with UL 870 and NEMA 250, Type 1 or Type 3R unless otherwise indicated, and sized according to NFPA 70.
 - 1. Metal wireways installed outdoors shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Fittings and Accessories: Include covers, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.
- D. Wireway Covers: Hinged type unless otherwise indicated.
- E. Finish: Manufacturer's standard enamel finish.

2.4 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
 - 2. EGS/Appleton Electric.
 - 3. Erickson Electrical Equipment Company.
 - 4. Hoffman.
 - 5. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 6. O-Z/Gedney; a unit of General Signal.
 - 7. RACO; a Hubbell Company.
 - 8. Robroy Industries, Inc.; Enclosure Division.
 - 9. Spring City Electrical Manufacturing Company.
 - 10. Thomas & Betts Corporation.
 - 11. Walker Systems, Inc.; Wiremold Company (The).
- B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.
- C. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.
- D. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, aluminum, Type FD, with gasketed cover.
- E. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- F. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, cast aluminum with gasketed cover.
- G. Box extensions used to accommodate new building finishes shall be of same material as recessed box.
- H. Device Box Dimensions: 4 inches by 2-1/8 inches by 2-1/8 inches deep.
- I. Gangable boxes are allowed as long as permitted by the NEC.

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

- J. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, Type 1 for indoor applications and Type 3R (stainless steel) outdoor with continuous-hinge cover with flush latch unless otherwise indicated.
 - 1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
 - 2. Nonmetallic Enclosures: Fiberglass.
 - 3. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.

- K. Cabinets:
 - 1. NEMA 250, Type 1, Type 3R galvanized-steel or 4XSS box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
 - 2. Hinged door in front cover with flush latch and concealed hinge.
 - 3. Key latch to match panelboards.
 - 4. Metal barriers to separate wiring of different systems and voltage.
 - 5. Accessory feet where required for freestanding equipment.
 - 6. Nonmetallic cabinets shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.5 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING

- A. General Requirements for Handholes and Boxes:
 - 1. Boxes and handholes for use in underground systems shall be designed and identified as defined in NFPA 70, for intended location and application.
 - 2. Boxes installed in wet areas shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

- B. Polymer-Concrete Handholes and Boxes with Polymer-Concrete Cover: Molded of sand and aggregate, bound together with polymer resin, and reinforced with steel, fiberglass, or a combination of the two.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 2. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:
 - a. Armorcast Products Company.
 - b. Carson Industries LLC.
 - c. CDR Systems Corporation.
 - d. New Basis.
 - 3. Standard: Comply with SCTE 77.
 - 4. Configuration: Designed for flush burial with open bottom unless otherwise indicated.
 - 5. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure and handhole location.
 - 6. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
 - 7. Cover Legend: Molded lettering, "ELECTRIC".
 - 8. Conduit Entrance Provisions: Conduit-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall.
 - 9. Handholes 18 Inches Wide by 24 Inches Long and Larger: Have inserts for cable racks and pulling-in irons installed before concrete is poured.

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2.6 SOURCE QUALITY CONTROL FOR UNDERGROUND ENCLOSURES

- A. Handhole and Pull-Box Prototype Test: Test prototypes of handholes and boxes for compliance with SCTE 77. Strength tests shall be for specified tier ratings of products supplied.
 - 1. Tests of materials shall be performed by an independent testing agency.
 - 2. Strength tests of complete boxes and covers shall be by either an independent testing agency or manufacturer. A qualified registered professional engineer shall certify tests by manufacturer.
 - 3. Testing machine pressure gages shall have current calibration certification complying with ISO 9000 and ISO 10012 and traceable to NIST standards.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

- A. Outdoors: Apply raceway products as specified below unless otherwise indicated:
 - 1. Exposed Conduit: GRC.
 - 2. Concealed Conduit, Aboveground: GRC.
 - 3. Underground Conduit: RNC, Type EPC-40-PVC.
 - 4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
 - 5. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R or Type 4SS as noted on plans.
- B. Indoors: Apply raceway products as specified below unless otherwise indicated:
 - 1. Exposed, Not Subject to Physical Damage: EMT.
 - 2. Exposed and Subject to Severe Physical Damage: GRC. Raceway locations include the following:
 - a. Loading dock.
 - b. Corridors used for traffic of mechanized carts, forklifts, and pallet-handling units.
 - c. Mechanical rooms.
 - d. Gymnasiums.
 - 3. Concealed in Ceilings and Interior Walls and Partitions: EMT
 - 4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
 - 5. Damp or Wet Locations: GRC.
 - 6. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4 stainless steel in institutional and commercial kitchens and damp or wet locations.
- C. Minimum Raceway Size: 1/2-inch trade size.
- D. Raceway Fittings: Compatible with raceways and suitable for use and location.

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1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
 2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with this type of conduit. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer and apply in thickness and number of coats recommended by manufacturer.
 3. EMT: Use setscrew steel fittings. Comply with NEMA FB 2.10.
 4. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.
- E. Install nonferrous conduit or tubing for circuits operating above 60 Hz. Where aluminum raceways are installed for such circuits and pass through concrete, install in nonmetallic sleeve.
- F. Do not install aluminum conduits, boxes, or fittings in contact with concrete or earth.
- G. Install surface raceways only where indicated on Drawings.
- H. Do not install nonmetallic conduit where ambient temperature exceeds 120 deg F.

3.2 INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NECA 102 for aluminum conduits. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
- B. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
- C. Complete raceway installation before starting conductor installation.
- D. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for hangers and supports.
- E. Arrange stub-ups so curved portions of bends are not visible above finished slab.
- F. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of changes in direction.
- G. Conceal conduit and EMT within finished walls, ceilings, and floors unless otherwise indicated. Install conduits parallel or perpendicular to building lines.
- H. Support conduit within 12 inches of enclosures to which attached.
- I. Stub-ups to Above Recessed Ceilings:
1. Use EMT for raceways.
 2. Use a conduit bushing or insulated fitting to terminate stub-ups not terminated in hubs or in an enclosure.

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- J. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- K. Coat field-cut threads on PVC-coated raceway with a corrosion-preventing conductive compound prior to assembly.
- L. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.
- M. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch trade size and insulated throat metal bushings on 1-1/2-inch trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- N. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.
- O. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- P. Cut conduit perpendicular to the length. For conduits 2-inch trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length.
- Q. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.
- R. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings according to NFPA 70.
- S. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:
 - 1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
 - 2. Where an underground service raceway enters a building or structure.
 - 3. Where otherwise required by NFPA 70.
- T. Comply with manufacturer's written instructions for solvent welding RNC and fittings.
- U. Expansion-Joint Fittings:
 - 1. Install in each run of aboveground RNC that is located where environmental temperature change may exceed 30 deg F and that has straight-run length that exceeds 25 feet. Install in each run of aboveground RMC conduit that is located where environmental temperature change may exceed 100 deg F and that has straight-run length that exceeds 100 feet.

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2. Install type and quantity of fittings that accommodate temperature change listed for each of the following locations:
 - a. Outdoor Locations Not Exposed to Direct Sunlight: 125 deg F temperature change.
 - b. Outdoor Locations Exposed to Direct Sunlight: 155 deg F temperature change.
 - c. Indoor Spaces Connected with Outdoors without Physical Separation: 125 deg F temperature change.
 - d. Attics: 135 deg F.
 3. Install fitting(s) that provide expansion and contraction for at least 0.00041 inch per foot of length of straight run per deg F of temperature change for PVC conduits. Install fitting(s) that provide expansion and contraction for at least 0.000078 inch per foot of length of straight run per deg F of temperature change for metal conduits.
 4. Install expansion fittings at all locations where conduits cross building or structure expansion joints.
 5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at time of installation. Install conduit supports to allow for expansion movement.
- V. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches of flexible conduit for recessed and semirecessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
1. Use LFMC in damp or wet locations subject to severe physical damage.
 2. Use LFMC or LFNC in damp or wet locations not subject to severe physical damage.
- W. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.
- X. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.
- Y. Locate boxes so that cover or plate will not span different building finishes.
- Z. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.
- AA. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.
- ### 3.3 INSTALLATION OF UNDERGROUND CONDUIT
- A. Direct-Buried Conduit:
1. Excavate trench bottom to provide firm and uniform support for conduit. Prepare trench bottom as specified in Division 3 for pipe less than 6 inches in nominal diameter.
 2. Install backfill as specified in Division 3."
 3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction

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as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction as specified in Division 3."

4. Install manufactured duct elbows for stub-ups at poles and equipment and at building entrances through floor unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
5. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through floor.
 - a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches of concrete for a minimum of 12 inches on each side of the coupling.
 - b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.
6. Warning Planks: Bury warning planks approximately 12 inches above direct-buried conduits but a minimum of 6 inches below grade. Align planks along centerline of conduit.
7. Underground Warning Tape: Comply with requirements in Section 260553 "Identification for Electrical Systems."

3.4 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES

- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch above finished grade.
- D. Install handholes with bottom below frost line, below grade.
- E. Install removable hardware, including pulling eyes, cable stanchions, cable arms, and insulators, as required for installation and support of cables and conductors and as indicated. Select arm lengths to be long enough to provide spare space for future cables but short enough to preserve adequate working clearances in enclosure.
- F. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

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3.5 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.6 FIRESTOPPING

- A. Install firestopping at penetrations of fire-rated floor and wall assemblies. Comply with requirements in Section 078413 "Penetration Firestopping."

3.7 PROTECTION

- A. Protect coatings, finishes, and cabinets from damage and deterioration.
 - 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

END OF SECTION 260533

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

1. Sleeves for raceway and cable penetration of non-fire-rated construction walls and floors.
2. Sleeve-seal systems.
3. Sleeve-seal fittings.
4. Grout.
5. Silicone sealants.

- B. Related Requirements:

1. Section 078413 "Penetration Firestopping" for penetration firestopping installed in fire-resistance-rated walls, horizontal assemblies, and smoke barriers, with and without penetrating items.

1.3 ACTION SUBMITTALS

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

PART 2 - PRODUCTS

2.1 SLEEVES

- A. Wall Sleeves:

1. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, zinc coated, plain ends.
2. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop unless otherwise indicated.

- B. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies: Galvanized-steel sheet; 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint, with tabs for screw-fastening the sleeve to the board.

- C. PVC-Pipe Sleeves: ASTM D 1785, Schedule 40.

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

- D. Molded-PVC Sleeves: With nailing flange for attaching to wooden forms.
- E. Molded-PE or -PP Sleeves: Removable, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.
- F. Sleeves for Rectangular Openings:
 - 1. Material: Galvanized sheet steel.
 - 2. Minimum Metal Thickness:
 - a. For sleeve cross-section rectangle perimeter less than 50 inches and with no side larger than 16 inches, thickness shall be 0.052 inch.
 - b. For sleeve cross-section rectangle perimeter 50 inches or more and one or more sides larger than 16 inches, thickness shall be 0.138 inch.

2.2 SLEEVE-SEAL SYSTEMS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
 - 1. Manufacturers:
 - a. Advance Products & Systems, Inc.
 - b. Calpico, Inc.
 - c. Metraflex Co.
 - d. Pipeline Seal and Insulator, Inc.
 - 2. Sealing Elements: Nitrile (Buna N rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
 - 3. Pressure Plates: Carbon steel.
 - 4. Connecting Bolts and Nuts: [Carbon steel, with corrosion-resistant coating,] of length required to secure pressure plates to sealing elements.

2.3 SLEEVE-SEAL FITTINGS

- A. Description: Manufactured plastic, sleeve-type, waterstop assembly made for embedding in concrete slab or wall. Unit shall have plastic or rubber waterstop collar with center opening to match piping OD.

2.4 GROUT

- A. Description: Nonshrink; recommended for interior and exterior sealing openings in non-fire-rated walls or floors.
- B. Standard: ASTM C 1107/C 1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- C. Design Mix: 5000-psi, 28-day compressive strength.

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

- D. Packaging: Premixed and factory packaged.

2.5 SILICONE SEALANTS

- A. Silicone Sealants: Single-component, silicone-based, neutral-curing elastomeric sealants of grade indicated below.
 - 1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces that are not fire rated.
 - 2. Sealant shall have VOC content of 150 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 3. Sealant shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- B. Silicone Foams: Multicomponent, silicone-based liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam.

PART 3 - EXECUTION

3.1 SLEEVE INSTALLATION FOR NON-FIRE-RATED ELECTRICAL PENETRATIONS

- A. Comply with NECA 1.
- B. Comply with NEMA VE 2 for cable tray and cable penetrations.
- C. Sleeves for Conduits Penetrating Above-Grade Non-Fire-Rated Concrete and Masonry-Unit Floors and Walls:
 - 1. Interior Penetrations of Non-Fire-Rated Walls and Floors:
 - a. Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint. Comply with requirements in Section 079200 "Joint Sealants."
 - b. Seal space outside of sleeves with mortar or grout. Pack sealing material solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect material while curing.
 - 2. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 3. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
 - 4. Install sleeves for wall penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of walls. Cut sleeves to length for mounting flush with both surfaces of walls. Deburr after cutting.
 - 5. Install sleeves for floor penetrations. Extend sleeves installed in floors 2 inches above finished floor level. Install sleeves during erection of floors.

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

- D. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies:
 - 1. Use circular metal sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 2. Seal space outside of sleeves with approved joint compound for gypsum board assemblies.
- E. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.
- F. Aboveground, Exterior-Wall Penetrations: Seal penetrations using steel pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- G. Underground, Exterior-Wall and Floor Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inch annular clear space between raceway or cable and sleeve for installing sleeve-seal system.

3.2 SLEEVE-SEAL-SYSTEM INSTALLATION

- A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at raceway entries into building.
- B. Install type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.3 SLEEVE-SEAL-FITTING INSTALLATION

- A. Install sleeve-seal fittings in new walls and slabs as they are constructed.
- B. Assemble fitting components of length to be flush with both surfaces of concrete slabs and walls. Position waterstop flange to be centered in concrete slab or wall.
- C. Secure nailing flanges to concrete forms.
- D. Using grout, seal the space around outside of sleeve-seal fittings.

END OF SECTION 260544

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Identification for raceways.
2. Identification of power and control cables.
3. Identification for conductors.
4. Underground-line warning tape.
5. Warning labels and signs.
6. Instruction signs.
7. Equipment identification labels.
8. Miscellaneous identification products.

1.2 ACTION SUBMITTALS

- A. Product Data: For each electrical identification product indicated.

1.3 QUALITY ASSURANCE

- A. Comply with ANSI A13.1.
- B. Comply with NFPA 70.
- C. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.
- D. Comply with ANSI Z535.4 for safety signs and labels.
- E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

PART 2 - PRODUCTS

2.1 POWER AND CONTROL RACEWAY IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway size.
- B. Colors for Raceways Carrying Circuits at 600 V or Less:
1. Black letters on an orange field.
 2. Legend: Indicate voltage and system or service type.

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- C. Vinyl Labels for Raceways Carrying Circuits at 600 V or Less: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing ends of legend label.

2.2 ARMORED AND METAL-CLAD CABLE IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each cable size.
- B. Colors for Cables Carrying Circuits at 600 V and Less:
 - 1. Black letters on an orange field.
 - 2. Legend: Indicate voltage and system or service type.
- C. Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing ends of legend label.
- D. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; 2 inches wide; compounded for outdoor use.
- E. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tube with machine-printed identification label. Sized to suit diameter of and shrinks to fit firmly around cable it identifies. Full shrink recovery at a maximum of 200 deg F. Comply with UL 224.

2.3 POWER AND CONTROL CABLE IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.
- B. Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing ends of legend label.
- C. Self-Adhesive, Self-Laminating Polyester Labels: Preprinted, 3-mil thick flexible label with acrylic pressure-sensitive adhesive that provides a clear, weather- and chemical-resistant, self-laminating, protective shield over the legend. Labels sized to fit the cable diameter such that the clear shield overlaps the entire printed legend.
- D. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tube with machine-printed identification label. Sized to suit diameter of and shrinks to fit firmly around cable it identifies. Full shrink recovery at a maximum of 200 deg F. Comply with UL 224.
- E. Snap-Around Labels: Slit, pretensioned, flexible, preprinted, color-coded acrylic sleeve, with diameter sized to suit diameter of cable it identifies and to stay in place by gripping action.
- F. Snap-Around, Color-Coding Bands: Slit, pretensioned, flexible, solid-colored acrylic sleeve, 2 inches long, with diameter sized to suit diameter of cable it identifies and to stay in place by gripping action.

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2.4 CONDUCTOR IDENTIFICATION MATERIALS

- A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide.
- B. Self-Adhesive, Self-Laminating Polyester Labels: Preprinted, 3-mil- thick flexible label with acrylic pressure-sensitive adhesive that provides a clear, weather- and chemical- resistant, self-laminating, protective shield over the legend. Labels sized to fit the conductor diameter such that the clear shield overlaps the entire printed legend.
- C. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tube with machine-printed identification label. Sized to suit diameter of and shrinks to fit firmly around conductor it identifies. Full shrink recovery at a maximum of 200 deg F. Comply with UL 224.
- D. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.

2.5 WARNING LABELS AND SIGNS

- A. Comply with NFPA 70 and 29 CFR 1910.145.
- B. Self-Adhesive Warning Labels: Factory-printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment unless otherwise indicated.
- C. Baked-Enamel Warning Signs:
 - 1. Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for application.
 - 2. 1/4-inch grommets in corners for mounting.
 - 3. Nominal size, 7 by 10 inches.
- D. Metal-Backed, Butyrate Warning Signs:
 - 1. Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs with 0.0396-inch galvanized-steel backing; and with colors, legend, and size required for application.
 - 2. 1/4-inch grommets in corners for mounting.
 - 3. Nominal size, 10 by 14 inches.
- E. Warning label and sign shall include, but are not limited to, the following legends:
 - 1. Multiple Power Source Warning: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
 - 2. Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."

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2.6 INSTRUCTION SIGNS

- A. Engraved, laminated acrylic or melamine plastic, minimum 1/16 inch thick for signs up to 20 sq. inches and 1/8 inch thick for larger sizes.
 - 1. Engraved legend with black letters on white face.
 - 2. Punched or drilled for mechanical fasteners.
 - 3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.
- B. Adhesive Film Label: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch.
- C. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch. Overlay shall provide a weatherproof and UV-resistant seal for label.

2.7 EQUIPMENT IDENTIFICATION LABELS

- A. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch. Overlay shall provide a weatherproof and UV-resistant seal for label.
- B. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch.
- C. Stenciled Legend: In nonfading, waterproof, black ink or paint. Minimum letter height shall be 1 inch.

2.8 MISCELLANEOUS IDENTIFICATION PRODUCTS

- A. Paint: Comply with requirements in painting Sections for paint materials and application requirements. Select paint system applicable for surface material and location (exterior or interior).
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
- B. Apply identification devices to surfaces that require finish after completing finish work.

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- C. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
- D. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
- E. Attach plastic raceway and cable labels that are not self-adhesive type with clear vinyl tape with adhesive appropriate to the location and substrate.
- F. System Identification Color-Coding Bands for Raceways and Cables: Each color-coding band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- G. Underground-Line Detectable Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade. Use multiple tapes where width of multiple lines installed in a common trench or concrete envelope exceeds 16 inches overall.
- H. Painted Identification: Comply with requirements in painting Sections for surface preparation and paint application.

3.2 IDENTIFICATION SCHEDULE

- A. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits More Than 30 A, and 120 V to ground: Install labels at 30-foot maximum intervals.
- B. Accessible Raceways and Cables within Buildings: Identify the covers of each junction and pull box of the following systems with self-adhesive vinyl labels with the wiring system legend and system voltage. System legends shall be as follows:
 - 1. Emergency Power.
 - 2. Power.
 - 3. UPS.
 - 4. Fire Alarm System
 - 5. Fire-Suppression Supervisory and Control System
 - 6. Security System
 - 7. Mechanical and Electrical Supervisory System
 - 8. Telecommunication System.
 - 9. Control Wiring.
- C. Power-Circuit Conductor Identification: For secondary conductors No. 1/0 AWG and larger in vaults, pull and junction boxes, manholes, and handholes use color-coding conductor tape. Identify source and circuit number of each set of conductors. For single conductor cables, identify phase in addition to the above.
- D. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull

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and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.

1. Color-Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded service feeder and branch-circuit conductors.
 - a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
 - b. Colors for 208/120-V Circuits:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Phase C: Blue.
 - c. Colors for 480/277-V Circuits:
 - 1) Phase A: Brown.
 - 2) Phase B: Orange.
 - 3) Phase C: Yellow.
 - d. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.
- E. Install instructional sign including the color-code for grounded and ungrounded conductors using adhesive-film-type labels.
- F. Control-Circuit Conductor Identification: For conductors and cables in pull and junction boxes, manholes, and handholes, use write-on tags with the conductor or cable designation, origin, and destination.
- G. Control-Circuit Conductor Termination Identification: For identification at terminations provide heat-shrink preprinted tubes with the conductor designation.
- H. Conductors to Be Extended in the Future: Attach write-on tags to conductors and list source.
- I. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.
 1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
 2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
 3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual.
- J. Locations of Underground Lines: Identify with underground-line detectable warning tape for power, lighting, communication, and control wiring and optical fiber cable.
 1. Limit use of underground-line warning tape to direct-buried cables.
 2. Install underground-line warning tape for both direct-buried cables and cables

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in raceway.

- K. Workspace Indication: Install floor marking tape to show working clearances in the direction of access to live parts. Workspace shall be as required by NFPA 70 and 29 CFR 1926.403 unless otherwise indicated. Do not install at flush-mounted panelboards and similar equipment in finished spaces.
- L. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Self-adhesive warning labels.
 - 1. Comply with 29 CFR 1910.145.
 - 2. Identify system voltage with black letters on an orange background.
 - 3. Apply to exterior of door, cover, or other access.
 - 4. For equipment with multiple power or control sources, apply to door or cover of equipment including, but not limited to, the following:
 - a. Power transfer switches.
 - b. Controls with external control power connections.
- M. Operating Instruction Signs: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.
- N. Emergency Operating Instruction Signs: Install instruction signs with white legend on a red background with minimum 3/8-inch-high letters for emergency instructions at equipment used for power transfer and load shedding.
- O. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and the Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.
 - 1. Labeling Instructions:
 - a. Indoor Equipment: Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on 1-1/2-inch-high label; where two lines of text are required, use labels 2 inches high.
 - b. Outdoor Equipment: Engraved, laminated acrylic or melamine label Stenciled legend 4 inches high.
 - c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
 - d. Unless provided with self-adhesive means of attachment, fasten labels with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.
 - 2. Equipment to Be Labeled:
 - a. Panelboards, electrical cabinets, and enclosures.

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- b. Distribution panelboards and Switchboards – label each circuit breaker
- c. Access doors and panels for concealed electrical items.
- d. Electrical switchgear and switchboards.
- e. Emergency system boxes and enclosures.
- f. Disconnect switches.
- g. Push-button stations.
- h. Power transfer equipment.

3.3 INSTALLATION

Verify identity of each item before installing identification products.

END OF SECTION 260553

SECTION 262313 – PACKAGE ENGINE GENERATOR

PART 1 - GENERAL

1.1. DESCRIPTION OF SYSTEM & SITE

- A. Provide a **600 kW (with upsized alternator 800 kW)** integrated, standby power system to supply electrical power at **480 Volts, 60 Hertz, 3 Phase**. The generator shall consist of a liquid cooled diesel (bi-fuel configured) engine, a synchronous AC alternator, and system controls with all necessary accessories for a complete operating system, including but not limited to the items as specified hereinafter.
- B. The generator shall be able to operate on 100% diesel or a blend of diesel and natural gas. The generator shall initially start and run using diesel fuel. As conditions warrant, natural gas will automatically be introduced into the engines air intake system for operation in bi-fuel mode. In bi-fuel mode, the generator, operating at typical load and ambient conditions, shall extend the on-site fuel's run-time by a factor of three.
- C. The site is an NEC ordinary location with no specific harsh environment requirements.
- D. The genset shall be applied at the listed ambient and elevation. Bidders to submit the generators rated power output at **100** ambient (°F) and **1,000** elevation (Ft).
- E. Bidders are to submit the genset's sound level in dBA at 23 ft based on the configuration specified.

1.2. REQUIREMENTS OF REGULATORY AGENCIES

- A. An electric generating system, consisting of a prime mover, generator, governor, coupling and all controls, must have been tested, as a complete unit, on a representative engineering prototype model of the equipment to be sold.
- B. The generator set must conform to applicable NFPA requirements.
- C. The generator set must include a listing for the UL2200 standard for stationary engine generator assembly.
- D. The generator must meet EPA federal emission guidelines for stationary emergency power generation in both diesel and bi-fuel modes of operation. This compliance must be factory verified using a 5 mode EPA test in an EPA certified test cell. In field compliance testing of third party bi-fuel equipment is not acceptable.

1.3. MANUFACTURER QUALIFICATIONS

- A. This system shall be supplied by an original equipment manufacturer (OEM) who has been regularly engaged in the production of engine-alternator sets, automatic transfer switches, and associated controls for a minimum of 25 years, thereby identifying one source of supply and responsibility. Approved suppliers are Generac Industrial Power or an approved equal.
- B. The manufacturer shall have printed literature and brochures describing the standard series

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specified, not a one of a kind fabrication. Custom designed paralleling solutions using site specific PLC programs and site specific schematics are not acceptable.

- C. Manufacturer's authorized service representative shall meet the following criteria:
 - 1. Certified, factory trained, industrial generator technicians
 - 2. Service support 24/7
 - 3. Service location within 200 miles
 - 4. Response time of 4 hours
 - 5. Service & repair parts in-stock at performance level of 95%

1.4. SUBMITTALS

- A. Engine Generator specification sheet
- B. Controls specification sheet(s)
- C. Installation / Layout dimensional drawing
- D. Wiring schematic
- E. Sound data
- F. Emission certification
- G. Warranty statement

PART 2 - PRODUCTS

2.1 ENGINE RATING AND PERFORMANCE

- A. The prime mover shall be a liquid cooled, diesel fueled (bi-fuel configured), turbocharged after-cooled engine of 4-cycle design. It will have adequate horsepower to achieve rated kW output with at an operating speed of 1800 RPM.
- B. The engine shall support a 100% load step.
- C. The generator system shall support generator start-up and load transfer within 10 seconds.

2.2 ENGINE OIL SYSTEM

- A. Full pressure lubrication shall be supplied by a positive displacement lube oil pump. The engine shall have a replaceable oil filter(s) with internal bypass and replaceable element(s).
- B. The engine shall operate on mineral based oil. Synthetic oils shall not be required.
- C. The oil shall be cooled by an oil cooler which is integrated into the engine system.

2.3 ENGINE COOLING SYSTEM

- A. The engine is to be cooled with a unit mounted radiator, fan, water pump, and closed coolant recovery system. The coolant system shall include a coolant fill box which will provide visual means to determine if the system has adequate coolant level. The radiator shall be

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designed for operation in 122 degrees F, (50 degrees C) ambient temperature.

- B. The engine shall have (a) unit mounted, thermostatically controlled water jacket heater(s) to aid in quick starting. The wattage shall be as recommended by the manufacturer.
- C. Engine coolant and oil drain extensions, equipped with pipe plugs and shut-off valves, must be provided to the outside of the mounting base for cleaner and more convenient engine servicing.
- D. A radiator fan guard must be installed for personnel safety that meets UL and OSHA safety requirements.

2.4 ENGINE STARTING SYSTEM

- A. Starting shall be by a solenoid shift, DC starting system.
- B. The engine's cranking batteries shall be lead acid. The batteries shall be sized per the manufacturer's recommendations. The batteries supplied shall meet NFPA 110 cranking requirements of 90 seconds of total crank time. Battery specifications (type, amp-hour rating, cold cranking amps) to be provided in the submittal.
- C. The genset shall have an engine driven, battery charging alternator with integrated voltage regulation.
- D. The genset shall have an automatic dual rate, float equalize, 10 amp battery charger. The charger must be protected against a reverse polarity connection. The chargers charging current shall be monitored within the generator controller to support remote monitoring and diagnostics. The battery charger is to be factory installed on the generator set. Due to line voltage drop concerns, a battery charger mounted in the transfer switch will be unacceptable.

2.5 ENGINE FUEL SYSTEM

- A. The engine fuel system shall be designed for operation on #2 diesel fuel and cold weather diesel blends. The engine's diesel fuel shall be controlled through the speed governor function. The diesel will enter the engine through a standard diesel injection system.
- B. The engines fuel system shall be designed for bi-fuel operation on up to 75% natural gas. The natural gas is pipeline grade with an input pressure of 1 psi.
- C. The engine's natural gas fuel shall be actively controlled based on engine load and manifold air temperature by the integrated genset controller. Third party bi-fuel controls are not acceptable. The natural gas shall enter the engine with the intake air prior to the turbo-charger. If natural gas supply fails, the engine will automatically pick-up the load with additional diesel fuel and shut-off the natural gas inlet.
- D. The engine shall include a primary fuel filter, water separator, manual fuel priming pump, and engine flexible fuel lines must be installed at the point of manufacture. Element shall be replaceable paper type.

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- E. The engines suction line shall be fitted with a check valve to secure prime for the engine's injection pump.

2.6 ENGINE CONTROLS

- A. Engines that are equipped with an electronic engine control module (ECM), shall monitor and control engine functionality and seamlessly integrate with the genset controller through digital communications. ECM monitored parameters shall be integrated into the genset controllers NFPA 110 alarm and warning requirements. All ECM fault codes shall be displayed at the genset controller in standard language – fault code numbers are not acceptable.
- B. For engines without ECM functionality or for any additional genset controller monitoring, sensors are to be conditioned to a 4-20ma signal level to enhance noise immunity and all sensor connections shall be sealed to prevent corrosion.
- C. Engine speed shall be controlled with an integrated isochronous governor function with no change in alternator frequency from no load to full load. Steady state regulation is to be 0.25%.

2.7 ENGINE EXHAUST & INTAKE

- A. The engine exhaust emissions shall meet the EPA emission requirements for standby power generation.
- B. The generator set must include a factory installed and tested oxidizing catalyst to ensure meeting EPA CO levels in bi-fuel mode. Third party solutions are not acceptable.
- C. The manufacturer shall supply its recommended stainless steel, flexible connector to couple the engine exhaust manifold to the exhaust system. A rain cap will terminate the exhaust pipe after the silencer. All components must be properly sized to assure operation without excessive back pressure when installed.
- D. The manufacturer shall supply a critical grade exhaust silencer as standard. For applications with site specific sound requirements (reference section 1.1), the silencer shall be selected to achieve site sound levels.
- E. For gensets in a weather or sound attenuated enclosure, all exhaust piping from the turbo-charger discharge to the silencer shall be thermally wrapped to minimize heat dissipation inside the enclosure.
- F. The engine intake air is to be filtered with engine mounted, replaceable, dry element filters.

2.8 ALTERNATOR

- A. The alternator shall be the voltage and phase configuration as specified in section 1.1.1.

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- B. The alternator shall be a 4-pole, revolving field, stationary armature, synchronous machine. The excitation system shall utilize a brushless exciter with a three phase full wave rectifier assembly protected against abnormal transient conditions by a surge protector. Photo-sensitive components will not be permitted in the rotating exciter.
1. The alternator shall include a permanent magnet generator (PMG) for excitation support. The system shall supply a minimum short circuit support current of 300% of the rating (250% for 50Hz operation) for 10 seconds.
 2. The alternator shall support 2,800 skVA with a maximum voltage dip of 30%.
 3. Three phase alternators shall be 12 lead, broad range capable of supporting voltage reconnection. Single phase alternators shall be four lead and dedicated voltage designs (600v) shall be six lead. All leads must be extended into a NEMA 1 connection box for easy termination. A fully rated, isolated neutral connection must be included by the generator set manufacturer.
 4. The alternator shall use a single, sealed bearing design. The rotor shall be connected to the engine flywheel using flexible drive disks. The stator shall be direct connected to the engine to ensure permanent alignment.
 5. The alternator shall meet temperature rise standards of UL2200 (120 degrees C). The insulation system material shall be class "H" capable of withstanding 150 degrees C temperature rise.
 6. The alternator shall be protected against overloads and short circuit conditions by advanced control panel protective functions. The control panel is to provide a time current algorithm that protects the alternator against short circuits. To ensure precision protection and repeatable trip characteristics, these functions must be implemented electronically in the generator control panel -- thermal magnetic breaker implementation are not acceptable.
 7. An alternator strip heater shall be installed to prevent moisture condensation from forming on the alternator windings. A tropical coating shall also be applied to the alternator windings to provide additional protection against the entrance of moisture.

2.9 CONTROLS

- A. The generator control system shall be a fully integrated microprocessor based control system for standby emergency engine generators meeting all requirements of NFPA 110 level 1.
- B. The generator control system shall be a fully integrated control system enabling remote diagnostics and easy building management integration of all generator functions. The generator controller shall provide integrated and digital control over all generator functions including: bi-fuel control, engine protection, alternator protection, speed governing, voltage regulation and all related generator operations. The generator controller must also provide seamless digital integration with the engine's electronic engine control module (ECM) if so equipped. Generator controller's that utilize separate voltage regulators and speed governors or do not provide

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seamless integration with the engine management system are considered less desirable.

- C. Communications shall be supported with building automation via the Modbus protocol without network cards. Optional internet and intranet connectivity shall be available.
- D. The control system shall provide an environmentally sealed design including encapsulated circuit boards and sealed automotive style plugs for all sensors and circuit board connections. The use of non-encapsulated boards, edge cards, and pc ribbon cable connections are considered unacceptable.
- E. Circuit boards shall utilize surface mount technology to provide vibration durability. Circuit boards that utilize large capacitors or heat sinks must utilize encapsulation methods to securely support these components.
- F. A predictive maintenance algorithm that alarms when maintenance is required. The controller shall have the capability to call out to the local servicing dealer when maintenance is required.
- G. Diagnostic capabilities should include time-stamped event and alarm logs, ability to capture operational parameters during events, simultaneous monitoring of all input or output parameters, callout capabilities, support for multi-channel digital strip chart functionality and .2 msec data logging capabilities.
- H. In addition to standard NFPA 110 alarms, the application loads should also be protected through instantaneous and steady state protective settings on system voltage, frequency, and power levels.
- I. The control system shall provide pre-wired customer use I/O: 4 relay outputs (user definable functions), communications support via RS232 and RS485. Additional I/O must be an available option.
- J. Customer I/O shall be software configurable providing full access to all alarm, event, data logging, and shutdown functionality. In addition, custom ladder logic functionality inside the generator controller shall be supported to provide application support flexibility. The ladder logic function shall have access to all the controller inputs and customer assignable outputs.
- K. The control panel will display all user pertinent unit parameters including engine and alternator operating conditions; oil pressure and optional oil temperature; coolant temperature and level alarm; fuel level (where applicable); engine speed; DC battery voltage; run time hours; generator voltages, amps, frequency, kilowatts, and power factor; alarm status and current alarm(s) condition per NFPA 110 level 1

2.10 ENGINE / ALTERNATOR PACKAGING

- A. The engine/alternator shall be isolated from the generator frame with rubber isolators. The packaging shall not require the addition of external spring isolators.
- B. A mainline, thermal magnetic circuit breaker carrying the UL mark shall be factory installed. The breaker shall be rated between 100 to 125% of the rated ampacity of the genset. The line side connections are to be made at the factory. Output lugs shall be provided for load side connections.

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- C. A second mainline, thermal magnetic circuit breaker carrying the UL mark shall be factory installed. The breaker shall be rated **1,000** amps. The line side connections are to be made at the factory. Output lugs shall be provided for load side connections.
- D. The generator shall include a unit mounted auxiliary power load center. All ancillary AC devices (block heater, battery charger, alternator strip heater, etc) shall have a dedicated breaker within the load center.

2.11 ENCLOSURE

- A. The genset shall be packaged with a sound attenuating enclosure.
- B. The enclosure shall be completely lined with sound deadening material. This material must be of a self-extinguishing design with a reflective surface for enhanced serviceability.
- C. The enclosure shall be made of **aluminum** with a minimum thickness of **1/8 gauge**. The enclosure is to have hinged, removable doors to allow access to the engine, alternator, and control panel. The hinges shall allow for door fit adjustment. Hinges and all exposed fasteners will be stainless steel or SERMAGARD COATED. The use of pop-rivets weakens the paint system and not allowed on external painted surfaces. Each door will have lockable hardware with identical keys.
- D. The enclosure shall be coated with electrostatic applied powder paint, baked and finished to manufacturer's specifications. The color will be manufacturer's standard.
- E. The enclosure shall utilize an upward discharging radiator hood. Due to concerns relative to radiator damage, circulating exhaust, and prevailing winds, equipment without a radiator discharge hood will not be acceptable.
- F. The genset silencer shall be mounted on the discharge hood of the enclosure. Due to architectural concerns, silencers mounted on the top of the generator enclosure are not acceptable. Gensets with silencers mounted inside the main generator compartment are acceptable only if the silencer is thermally wrapped to minimize heat stress on the surrounding components.

2.12 SUB-BASE FUEL TANK

- A. The packaging shall include a double wall, sub-base mounted, UL142 listed fuel tank. The tank shall be sized to provide **48** hours of run time.
- B. The tank shall include fuel suction and return connections, normal and emergency vents, secondary containment emergency vent and rupture basin sensor, mechanical fuel level indication and a stub-up area convenient for electrical conduit entry.
- C. The fuel tank shall use an electric fuel sensor to provide an analog indication of fuel level. The controller shall have a warning indication on low fuel level and provide optional shutdown functionality for low, low fuel level.

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- D. The fuel tank must be supplied by the engine-generator set manufacturer and be installed before shipment.

2.13 LOOSE ITEMS

- A. Supplier to itemize loose parts that require site mounting and installation. Preference will be shown for gensets that factory mount items like mufflers, battery chargers, etc.
- B. Spare Parts:
 - 1. Fuses: One spare set
 - 2. Filters One spare set (air, fuel, oil)

PART 3 – EXECUTION

3.1 ADDITIONAL PROJECT REQUIREMENTS

A. Factory testing

- 1. Before shipment of the equipment, the engine-generator set shall be tested under rated load for performance and proper functioning of control and interfacing circuits. Tests shall include:
 - a. Verify voltage & frequency stability.
 - b. Verify transient voltage & frequency dip response.
 - c. Load test the generator for 2 hours.
 - d. Verify paralleling and load sharing capabilities.

B. Manuals

- 1. Three (3) sets of owner's manuals specific to the product supplied must accompany delivery of the equipment. General operating instruction, preventive maintenance, wiring diagrams, schematics and parts exploded views specific to this model must be included.

C. Installation

- 1. Contractor shall install the complete electrical generating system including all external fuel connections in accordance with requirements of NEC, NFPA, and the manufacturer's recommendations as reviewed by the Engineer.

D. Service

- 1. Supplier of the genset and associated items shall have permanent service facilities in this trade area. These facilities shall comprise a permanent force of factory trained service personnel on 24 hour call, experienced in servicing this type of equipment, providing warranty and routine maintenance service to afford the owner maximum protection. Delegation of this service responsibility for any of the equipment listed herein will not be considered fulfillment of these specifications. Service contracts shall also be available.

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E. Warranty

1. The standby electric generating system components, complete genset and instrumentation panel shall be warranted by the manufacturer against defective materials and factory workmanship for a period of ten (10) years. Such defective parts shall be repaired or replaced at the manufacturer's option, free of charge for parts, labor and travel.
2. The warranty period shall commence when the standby power system is first placed into service. Multiple warranties for individual components (engine, alternator, controls, etc.) will not be acceptable. Satisfactory warranty documents must be provided. Also, in the judgment of the specifying authority, the manufacturer supplying the warranty for the complete system must have the necessary financial strength and technical expertise with all components supplied to provide adequate warranty support.

3.2 STARTUP AND COMMISSIONING

- A. The supplier of the electric generating plant and associated items covered herein shall provide factory trained technicians to validate the completed installation and to perform an initial startup inspection to include:
 - B. Ensuring the engine starts (both hot and cold) within the specified time.
 - C. Verification of engine parameters within specification.
 - D. Verify no load frequency and voltage, adjusting if required.
 - E. Test all automatic shutdowns of the engine-generator.
 - F. Perform a load test of the electric plant, ensuring full load frequency and voltage are within specification by using building load.

3.3 IDENTIFICATION

- A. Identify system components according to Division 22 “Identification for Plumbing Piping Equipment” and Division 26 “Electrical Identification.”

3.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner’s maintenance personnel to adjust, operate, and maintain packaged engine generators. Refer to Division 1 Section “Demonstration and Training.” Provide two 4-hour demonstration and training.

END OF SECTION 262313

SECTION 262320 - TRANSFER SWITCHES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes transfer switches rated 600 V and less, including the following:
 - 1. Automatic transfer switches.
 - 2. Remote annunciation and control systems.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, weights, operating characteristics, furnished specialties, and accessories.
- B. Shop Drawings: Dimensioned plans, elevations, sections, and details showing minimum clearances, conductor entry provisions, gutter space, installed features and devices, and material lists for each switch specified.
- C. Qualification Data: For manufacturer and testing agency.
- D. Field quality-control test reports.
- E. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 1 Section "Operation and Maintenance Data," include the following:
 - 1. Features and operating sequences, both automatic and manual.
 - 2. List of all factory settings of relays; provide relay-setting and calibration instructions, including software, where applicable.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Maintain a service center capable of providing training, parts, and emergency maintenance repairs within a response period of less than eight hours from time of notification.
- B. Source Limitations: Obtain automatic transfer switches and remote annunciator and control panels through one source from a single manufacturer.

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- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- D. Comply with NEMA ICS 1.
- E. Comply with NFPA 70.
- F. Comply with NFPA 99.
- G. Comply with NFPA 110.
- H. Comply with UL 1008 unless requirements of these Specifications are stricter.

1.5 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Contactor Transfer Switches:
 - a. Power Temp Systems Inc.
 - b. Generac
 - c. Caterpillar; Engine Div.
 - d. Onan/Cummins Power Generation; Industrial Business Group.
 - e. Kohler
 - 2. Transfer Switches Using Molded-Case Switches or Circuit Breakers:
 - a. Eaton Electrical Inc.; Cutler-Hammer.
 - b. Hubbell Industrial Controls, Inc.

2.2 GENERAL TRANSFER-SWITCH PRODUCT REQUIREMENTS

- A. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer, including tungsten filament lamp loads not exceeding 30 percent of switch ampere rating, unless otherwise indicated.
- B. Tested Fault-Current Closing and Withstand Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing according to UL 1008.

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1. Where transfer switch includes internal fault-current protection, rating of switch and trip unit combination shall exceed indicated fault-current value at installation location.
- C. Solid-State Controls: Repetitive accuracy of all settings shall be plus or minus 2 percent or better over an operating temperature range of minus 20 to plus 70 deg C.
- D. Resistance to Damage by Voltage Transients: Components shall meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.41. Components shall meet or exceed voltage-impulse withstand test of NEMA ICS 1.
- E. Electrical Operation: Accomplish by a nonfused, momentarily energized solenoid or electric-motor-operated mechanism, mechanically and electrically interlocked in both directions.
- F. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.
 1. Limitation: Switches using molded-case switches or circuit breakers or insulated-case circuit-breaker components are not acceptable.
 2. Switch Action: Double throw; mechanically held in both directions.
 3. Contacts: Silver composition or silver alloy for load-current switching. Conventional automatic transfer-switch units, rated 225 A and higher, shall have separate arcing contacts.
- G. Neutral Switching. Where four-pole switches are indicated, provide neutral pole switched simultaneously with phase poles.
- H. Neutral Terminal: Solid and fully rated, unless otherwise indicated.
- A. Battery Charger: For generator starting batteries that do not have a generator mounted battery charger.
 1. Float type rated 10 A.
 2. Ammeter to display charging current.
 3. Fused ac inputs and dc outputs.
- B. Annunciation, Control, and Programming Interface Components: Devices at transfer switches for communicating with remote programming devices, annunciators, or annunciator and control panels shall have communication capability matched with remote device.
- C. Factory Wiring: Train and bundle factory wiring and label, consistent with Shop Drawings, either by color-code or by numbered or lettered wire and cable tape markers at terminations. Color-coding and wire and cable tape markers are specified in Division 16 Section "Electrical Identification."
 1. Designated Terminals: Pressure type, suitable for types and sizes of field wiring indicated.
 2. Power-Terminal Arrangement and Field-Wiring Space: Suitable for top, side, or bottom entrance of feeder conductors as indicated.
 3. Control Wiring: Equipped with lugs suitable for connection to terminal strips.

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- D. Enclosures: General-purpose NEMA 250, Type 1, complying with NEMA ICS 6 and UL 508, unless otherwise indicated.

2.3 AUTOMATIC TRANSFER SWITCHES

- A. Comply with Level 1 equipment according to NFPA 110.
- B. Switching Arrangement: Double-throw type, capable of pauses or intermediate position stops during normal functioning, unless otherwise indicated.
- C. Manual Switch Operation: Under load, with door closed and with either or both sources energized. Transfer time is same as for electrical operation. Control circuit automatically disconnects from electrical operator during manual operation.
- D. Manual Switch Operation: Unloaded. Control circuit automatically disconnects from electrical operator during manual operation.
- E. Signal-Before-Transfer Contacts: A set of normally open/normally closed dry contacts operates in advance of retransfer to normal source. Interval is adjustable from 1 to 30 seconds.
- F. Digital Communication Interface: Matched to capability of remote annunciator or annunciator and control panel.
- G. Transfer Switches Based on Molded-Case-Switch Components: Comply with NEMA AB 1, UL 489, and UL 869A.
- H. Motor Disconnect and Timing Relay: Controls designate starters so they disconnect motors before transfer and reconnect them selectively at an adjustable time interval after transfer. Control connection to motor starters is through wiring external to automatic transfer switch. Time delay for reconnecting individual motor loads is adjustable between 1 and 60 seconds, and settings are as indicated. Relay contacts handling motor-control circuit inrush and seal currents are rated for actual currents to be encountered.
- I. Programmed Neutral Switch Position: Switch operator has a programmed neutral position arranged to provide a midpoint between the two working switch positions, with an intentional, time-controlled pause at midpoint during transfer. Pause is adjustable from 0.5 to 30 seconds minimum and factory set for 0.5 second, unless otherwise indicated. Time delay occurs for both transfer directions. Pause is disabled unless both sources are live.
- J. Automatic Transfer-Switch Features:
 - 1. Undervoltage Sensing for Each Phase of Normal Source: Sense low phase-to-ground voltage on each phase. Pickup voltage shall be adjustable from 85 to 100 percent of nominal, and dropout voltage is adjustable from 75 to 98 percent of pickup value. Factory set for pickup at 90 percent and dropout at 85 percent.
 - 2. Adjustable Time Delay: For override of normal-source voltage sensing to delay transfer and engine start signals. Adjustable from zero to six seconds, and factory set for one second.
 - 3. Voltage/Frequency Lockout Relay: Prevent premature transfer to generator. Pickup voltage shall be adjustable from 85 to 100 percent of nominal. Factory set for pickup at

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- 90 percent. Pickup frequency shall be adjustable from 90 to 100 percent of nominal. Factory set for pickup at 95 percent.
4. Time Delay for Retransfer to Normal Source: Adjustable from 0 to 30 minutes, and factory set for 10 minutes to automatically defeat delay on loss of voltage or sustained undervoltage of emergency source, provided normal supply has been restored.
 5. Test Switch: Simulate normal-source failure.
 6. Switch-Position Pilot Lights: Indicate source to which load is connected.
 7. Source-Available Indicating Lights: Supervise sources via transfer-switch normal- and emergency-source sensing circuits.
 - a. Normal Power Supervision: Green light with nameplate engraved "Normal Source Available."
 - b. Emergency Power Supervision: Red light with nameplate engraved "Emergency Source Available."
 8. Unassigned Auxiliary Contacts: Two normally open, single-pole, double-throw contacts for each switch position, rated 10 A at 240-V ac.
 9. Transfer Override Switch: Overrides automatic retransfer control so automatic transfer switch will remain connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.
 10. Engine Starting Contacts: One isolated and normally closed, and one isolated and normally open; rated 10 A at 32-V dc minimum.
 11. Engine Shutdown Contacts: Instantaneous; shall initiate shutdown sequence at remote engine-generator controls after retransfer of load to normal source.
 12. Engine Shutdown Contacts: Time delay adjustable from zero to five minutes, and factory set for five minutes. Contacts shall initiate shutdown at remote engine-generator controls after retransfer of load to normal source.
 13. Engine-Generator Exerciser: Solid-state, programmable-time switch starts engine generator and transfers load to it from normal source for a preset time, then retransfers and shuts down engine after a preset cool-down period. Initiates exercise cycle at preset intervals adjustable from 7 to 30 days. Running periods are adjustable from 10 to 30 minutes. Factory settings are for 7-day exercise cycle, 20-minute running period, and 5-minute cool-down period. Exerciser features include the following:
 - a. Exerciser Transfer Selector Switch: Permits selection of exercise with and without load transfer.
 - b. Push-button programming control with digital display of settings.
 - c. Integral battery operation of time switch when normal control power is not available.

2.4 REMOTE ANNUNCIATOR AND CONTROL SYSTEM

- A. Functional Description: Include the following functions for indicated transfer switches:
 1. Indication of sources available, as defined by actual pickup and dropout settings of transfer-switch controls.
 2. Indication of switch position.
 3. Indication of switch in test mode.
 4. Indication of failure of digital communication link.
 5. Key-switch or user-code access to control functions of panel.

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6. Control of switch-test initiation.
 7. Control of switch operation in either direction.
 8. Control of time-delay bypass for transfer to normal source.
- B. Malfunction of annunciator, annunciation and control panel, or communication link shall not affect functions of automatic transfer switch. In the event of failure of communication link, automatic transfer switch automatically reverts to stand-alone, self-contained operation. Automatic transfer-switch sensing, controlling, or operating function shall not depend on remote panel for proper operation.
- C. Remote Annunciation and Control Panel: Solid-state components. Include the following features:
1. Controls and indicating lights grouped together for each transfer switch.
 2. Label each indicating light control group. Indicate transfer switch it controls, location of switch, and load it serves.
 3. Digital Communication Capability: Matched to that of transfer switches supervised.
 4. Mounting: Flush, modular, steel cabinet, unless otherwise indicated.

2.5 SOURCE QUALITY CONTROL

- A. Factory test and inspect components, assembled switches, and associated equipment. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Annunciator and Control Panel Mounting: Flush in wall, unless otherwise indicated.
- B. Identify components according to Division 26 Section "Electrical Identification."
- C. Set field-adjustable intervals and delays, relays, and engine exerciser clock.

3.2 CONNECTIONS

- A. Wiring to Remote Components: Match type and number of cables and conductors to control and communication requirements of transfer switches as recommended by manufacturer. Increase raceway sizes at no additional cost to Owner if necessary to accommodate required wiring.
- B. Ground equipment according to Division 26 Section "Grounding and Bonding."
- C. Connect wiring according to Division 26 Section "Conductors and Cables."

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3.3 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections. Report results in writing.
- B. Perform tests and inspections and prepare test reports.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installation, including connections, and to assist in testing.
 - 2. After installing equipment and after electrical circuitry has been energized, test for compliance with requirements.
 - 3. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - 4. After energizing circuits, demonstrate interlocking sequence and operational function for each switch at least three times.
 - a. Simulate power failures of normal source to automatic transfer switches and of emergency source with normal source available.
 - b. Simulate loss of phase-to-ground voltage for each phase of normal source.
 - c. Verify time-delay settings.
 - d. Verify pickup and dropout voltages by data readout or inspection of control settings.
 - e. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cool-down and shutdown.
 - 5. Ground-Fault Tests: Coordinate with testing of ground-fault protective devices for power delivery from both sources.
 - a. Verify grounding connections and locations and ratings of sensors.
- C. Coordinate tests with tests of generator and run them concurrently.
- D. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- E. Remove and replace malfunctioning units and retest as specified above.

3.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment as specified below. Refer to Division 1 Section "Demonstration and Training."
- B. Coordinate this training with that for generator equipment.

END OF SECTION 262320

SECTION 262813 - FUSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Cartridge fuses rated 600 V ac and less for use in the following:
 - a. Enclosed switches.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for spare-fuse cabinets. Include the following for each fuse type indicated:
 - 1. Ambient Temperature Adjustment Information: If ratings of fuses have been adjusted to accommodate ambient temperatures, provide list of fuses with adjusted ratings.
 - a. For each fuse having adjusted ratings, include location of fuse, original fuse rating, local ambient temperature, and adjusted fuse rating.
 - b. Provide manufacturer's technical data on which ambient temperature adjustment calculations are based.
 - 2. Dimensions and manufacturer's technical data on features, performance, electrical characteristics, and ratings.
 - 3. Current-limitation curves for fuses with current-limiting characteristics.
 - 4. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse. Submit in electronic format suitable for use in coordination software and in PDF format.
 - 5. Coordination charts and tables and related data.
 - 6. Fuse sizes for elevator feeders and elevator disconnect switches.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For fuses to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 017700 "Closeout Procedures," and or Section 017823 "Operation and Maintenance Data," include the following:
 - 1. Ambient temperature adjustment information.
 - 2. Current-limitation curves for fuses with current-limiting characteristics.

SECTION 262813 - FUSES

3. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse used on the Project. Submit in PDF format.
4. Coordination charts and tables and related data.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Fuses: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.

1.6 FIELD CONDITIONS

- A. Where ambient temperature to which fuses are directly exposed is less than 40 deg F or more than 100 deg F, apply manufacturer's ambient temperature adjustment factors to fuse ratings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Cooper Industries, Inc.; Bussmann Div.
 2. Mersen
- B. Source Limitations: Obtain fuses, for use within a specific product or circuit, from single source from single manufacturer.

2.2 CARTRIDGE FUSES

- A. Characteristics: NEMA FU 1, current-limiting, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Comply with NEMA FU 1 for cartridge fuses.
- D. Comply with NFPA 70.
- E. Coordinate fuse ratings with utilization equipment nameplate limitations of maximum fuse size and with system short-circuit current levels.

2.3 FUSE COVER

SECTION 262813 - FUSES

- A. Fuse cover shall be BUSSMANN "SAMI"

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine fuses before installation. Reject fuses that are moisture damaged or physically damaged.
- B. Examine holders to receive fuses for compliance with installation tolerances and other conditions affecting performance, such as rejection features.
- C. Examine utilization equipment nameplates and installation instructions. Install fuses of sizes and with characteristics appropriate for each piece of equipment.
- D. Evaluate ambient temperatures to determine if fuse rating adjustment factors must be applied to fuse ratings.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 FUSE APPLICATIONS

- A. Cartridge Fuses:
 - 1. Main Feeders: Class RK1, time delay.
 - a. 250volts - Bussmann LOW-PEAK LPN-RK dual element.
 - b. 600volts – Bussmann LOW-PEAK LPS-RK dual element.
 - 2. Motor Branch Circuits: Class RK1, time delay.
 - a. 250volts - Bussmann LOW-PEAK LPN-RK dual element.
 - b. 600volts – Bussmann LOW-PEAK LPS-RK dual element.
 - 3. Large Motor Branch (601-4000 A): Class L, time delay.
 - 4. Provide open-fuse indicator fuses or fuse covers with open fuse indication.

3.3 INSTALLATION

- A. Install fuses in fusible devices. Arrange fuses so rating information is readable without removing fuse.

3.4 IDENTIFICATION

- A. Install labels complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems" and indicating fuse replacement information inside of door of each fused switch and adjacent to each fuse block, socket, and holder.

END OF SECTION 262813

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Fusible switches.
 - 2. Enclosures.

1.3 DEFINITIONS

- A. NC: Normally closed.
- B. NO: Normally open.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.
 - 1. Enclosure types and details for types other than NEMA 250, Type 1.
 - 2. Current and voltage ratings.
 - 3. Short-circuit current ratings (interrupting and withstand, as appropriate).
 - 4. Include evidence of NRTL listing for series rating of installed devices.
 - 5. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices, accessories, and auxiliary components.
 - 6. Include time-current coordination curves (average melt) for each type and rating of overcurrent protective device; include selectable ranges for each type of overcurrent protective device.
- B. Shop Drawings: For enclosed switches and circuit breakers. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Wiring Diagrams: For power, signal, and control wiring.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.

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- B. Seismic Qualification Certificates: For enclosed switches and circuit breakers, accessories, and components, from manufacturer.
 - 1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
 - 2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
 - 3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- C. Field quality-control reports.
 - 1. Test procedures used.
 - 2. Test results that comply with requirements.
 - 3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.
- D. Manufacturer's field service report.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For enclosed switches and circuit breakers to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:
 - 1. Manufacturer's written instructions for testing and adjusting enclosed switches and circuit breakers.
 - 2. Time-current coordination curves (average melt) for each type and rating of overcurrent protective device; include selectable ranges for each type of overcurrent protective device. Submit on translucent log-log graph paper.

1.7 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Member Company of NETA or an NRTL.
 - 1. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.
- B. Source Limitations: Obtain enclosed switches and circuit breakers, overcurrent protective devices, components, and accessories, within same product category, from single source from single manufacturer.
- C. Product Selection for Restricted Space: Drawings indicate maximum dimensions for enclosed switches and circuit breakers, including clearances between enclosures, and adjacent surfaces and other items. Comply with indicated maximum dimensions.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- E. Comply with NFPA 70.

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Rate equipment for continuous operation under the following conditions unless otherwise indicated:
 - 1. Ambient Temperature: Not less than minus 22 deg F and not exceeding 104 deg F.
 - 2. Altitude: Not exceeding 6600 feet.
- B. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electric service according to requirements indicated:
 - 1. Notify Architect and or Construction Manager no fewer than seven days in advance of proposed interruption of electric service.
 - 2. Indicate method of providing temporary electric service.
 - 3. Do not proceed with interruption of electric service without Architect's or Construction Manager's written permission.
 - 4. Comply with NFPA 70E.

1.9 COORDINATION

- A. Coordinate layout and installation of switches, circuit breakers, and components with equipment served and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Square D Co.
 - 2. Eaton Corporation.
 - 3. Siemens
 - 4. General Electric ABB

2.2 FUSIBLE SWITCHES

- A. Type HD, Heavy Duty, Single Throw, 240 or 600-V ac (as per connected voltage), 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate indicated fuses, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.
- B. Accessories:
 - 1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.

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2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
3. Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are specified.
4. Hookstick Handle: Allows use of a hookstick to operate the handle.
5. Lugs: Mechanical type, suitable for number, size, and conductor material.
6. Service-Rated Switches: Labeled for use as service equipment.

2.3 ENCLOSURES

- A. Enclosed Switches and Circuit Breakers: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.
 1. Indoor, Dry and Clean Locations: NEMA 250, Type 1.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine elements and surfaces to receive enclosed switches and circuit breakers for compliance with installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install individual wall-mounted switches and circuit breakers with tops at uniform height unless otherwise indicated.
- B. Comply with mounting and anchoring requirements specified in Section 260548.16 "Seismic Controls for Electrical Systems."
- C. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.
- D. Install fuses in fusible devices.
- E. Comply with NECA 1.

3.3 IDENTIFICATION

- A. Comply with requirements in Section 260553 "Identification for Electrical Systems."
 1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
 2. Label each enclosure with engraved metal or laminated-plastic nameplate.

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

3.4 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- B. Acceptance Testing Preparation:
 - 1. Test insulation resistance for each enclosed switch and circuit breaker, component, connecting supply, feeder, and control circuit.
 - 2. Test continuity of each circuit.
- C. Tests and Inspections:
 - 1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - 2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
 - 3. Perform the following infrared scan tests and inspections and prepare reports:
 - a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each enclosed switch and circuit breaker. Remove front panels so joints and connections are accessible to portable scanner.
 - b. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each enclosed switch and circuit breaker 11 months after date of Substantial Completion.
 - c. Instruments and Equipment: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - 4. Test and adjust controls, remote monitoring, and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Enclosed switches and circuit breakers will be considered defective if they do not pass tests and inspections.
- E. Prepare test and inspection reports, including a certified report that identifies enclosed switches and circuit breakers and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

- A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.
- B. Set field-adjustable circuit-breaker trip ranges as specified in Section 260573 "Overcurrent Protective Device Coordination Study."

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

END OF SECTION 262816

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes: Excavating and backfilling trenches for utilities for buried utility structures.
- B. Related Requirements: Div. 1 for recording preexcavation and earth-moving progress.

1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
- F. Fill: Soil materials used to raise existing grades.
- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- H. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- I. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- J. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

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1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.
 - 1. Review methods and procedures related to earthmoving, including, but not limited to, the following:
 - a. Personnel and equipment needed to make progress and avoid delays.
 - b. Coordination of Work with utility locator service.
 - c. Extent of trenching by hand or with air spade.
 - d. Field quality control.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required: Warning tapes.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
 - 1. Classification according to ASTM D 2487.
 - 2. Laboratory compaction curve according to ASTM D Standards.
- C. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by earth-moving operations. Submit before earth moving begins.

1.7 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.

1.8 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.
- C. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures are in place.
- D. The following practices are prohibited within protection zones:

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1. Storage of construction materials, debris, or excavated material.
 2. Parking vehicles or equipment.
 3. Foot traffic.
 4. Erection of sheds or structures.
 5. Impoundment of water.
 6. Excavation or other digging unless otherwise indicated.
 7. Attachment of signs to or wrapping materials around trees or plants.
- E. Do not direct vehicle or equipment exhaust towards protection zones.
- F. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 294/D 2940M 0; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

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- I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and zero to 5 percent passing a No. 4 sieve.
- J. Sand: ASTM C 33/C 33M; fine aggregate.
- K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

2.2 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:
 - 1. Red: Electric.
 - 2. Orange: Telephone and other communications.
 - 3. Blue: Water systems.
 - 4. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

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3.4 EXCAVATION, GENERAL

- A. Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
 - 2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions: 6 inches beneath pipe in trenches and the greater of 24 inches wider than pipe or 42 inches wide.

3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
 - 1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: 12 inches each side of pipe or conduit.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 - 1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
 - 2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
 - 3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
 - 4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

3.6 SUBGRADE INSPECTION

- A. Notify Architect when excavations have reached required subgrade.
- B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Proof-roll subgrade with a pneumatic-tired to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.

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- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.7 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.8 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Surveying locations of underground utilities for Record Documents.
 - 2. Testing and inspecting underground utilities.
 - 3. Removing trash and debris.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.9 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Backfill voids with satisfactory soil while removing shoring and bracing.
- D. Initial Backfill:
 - 1. Soil Backfill: Place and compact initial backfill of subbase material, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
 - a. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- E. Final Backfill:
 - 1. Soil Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
 - 2. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation.
- F. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

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3.10 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.11 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy or frozen.
 - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2% and is too wet to compact to specified dry unit weight.

3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight:
 - 1. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.
 - 2. For utility trenches, compact each layer of initial and final backfill soil material at 85%.

3.13 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 - 2. Pavements: Plus or minus 1/2 inch.

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3.14 FIELD QUALITY CONTROL

- A. Special Inspections: Owner may engage a qualified special inspector to perform the following special inspections:
 - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 - 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 - 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Owner may engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test for previously completed work comply with requirements.
- D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2937, and ASTM D 6938, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 100 or less of trench length but no fewer than two tests.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.15 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.16 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Architect. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

SECTION 312000 - EARTH MOVING

END OF SECTION 312000

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 1. Piping joining materials.
 2. Transition fittings.
 3. Dielectric fittings.
 4. Sleeves.
 5. Identification devices.
 6. Piping system common requirements.

1.3 DEFINITIONS

- A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions.
- B. Concealed Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.
- C. ABS: Acrylonitrile-butadiene-styrene plastic.
- D. CPVC: Chlorinated polyvinyl chloride plastic.
- E. PE: Polyethylene plastic.
- F. PVC: Polyvinyl chloride plastic.

1.4 ACTION SUBMITTALS

- A. Product Data: For the following:
 1. Dielectric fittings.
 2. Identification devices.

1.5 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

1.6 QUALITY ASSURANCE

- A. Steel Support Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pipes and tubes with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic pipes protected from direct sunlight. Support to prevent sagging and bending.

1.8 COORDINATION

- A. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are constructed.
- B. Coordinate installation of identifying devices after completing covering and painting if devices are applied to surfaces.
- C. Coordinate size and location of concrete bases. Formwork, reinforcement, and concrete requirements are specified in Division 3.

PART 2 - PRODUCTS

2.1 PIPING JOINING MATERIALS

- A. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.
 - 1. ASME B16.21, nonmetallic, flat, asbestos free, 1/8-inch maximum thickness, unless otherwise indicated.
 - a. Full-Face Type: For flat-face, Class 125, cast-iron and cast-bronze flanges.
 - b. Narrow-Face Type: For raised-face, Class 250, cast-iron and steel flanges.
 - 2. AWWA C110, rubber, flat face, 1/8 inch thick, unless otherwise indicated; and full-face or ring type, unless otherwise indicated.
- B. Flange Bolts and Nuts: ASME B18.2.1, carbon steel, unless otherwise indicated.
- C. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer, unless otherwise indicated.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- D. Solder Filler Metals: ASTM B 32, lead-free alloys. Include water-flushable flux according to ASTM B 813.
- E. Brazing Filler Metals: AWS A5.8, BCuP Series, copper-phosphorus alloys for general-duty brazing, unless otherwise indicated; and AWS A5.8, BAg1, silver alloy for refrigerant piping, unless otherwise indicated.
- F. Welding Filler Metals: Comply with AWS D10.12/D10.12M for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.
- G. Solvent Cements for Joining Plastic Piping:
 - 1. ABS Piping: ASTM D 2235.
 - 2. CPVC Piping: ASTM F 493.
 - 3. PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.
 - 4. PVC to ABS Piping Transition: ASTM D 3138.
- H. Fiberglass Pipe Adhesive: As furnished or recommended by pipe manufacturer.

2.2 TRANSITION FITTINGS

- A. Transition Fittings, General: Same size as, and with pressure rating at least equal to and with ends compatible with, piping to be joined.
- B. Transition Couplings NPS 1-1/2 and Smaller:
 - 1. Underground Piping: Manufactured piping coupling or specified piping system fitting.
 - 2. Aboveground Piping: Specified piping system fitting.
- C. AWWA Transition Couplings NPS 2 and Larger:
 - 1. Manufacturers:
 - a. Cascade Waterworks Mfg. Co.
 - b. Dresser Industries, Inc.; DMD Div.
 - c. Ford Meter Box Company, Incorporated (The); Pipe Products Div.
 - d. JCM Industries.
 - e. Smith-Blair, Inc.
 - f. Viking Johnson.
 - 2. Description: AWWA C219, metal sleeve-type coupling for underground pressure piping.
- D. Plastic-to-Metal Transition Fittings:
 - 1. Manufacturers:
 - a. Eslon Thermoplastics.
 - 2. Description: CPVC and PVC one-piece fitting with manufacturer's Schedule 80 equivalent dimensions; one end with threaded brass insert, and one solvent-cement-joint end.
- E. Plastic-to-Metal Transition Unions:
 - 1. Manufacturers:
 - a. NIBCO INC.
 - b. NIBCO, Inc.; Chemtrol Div.
 - 2. Description: MSS SP-107, CPVC and PVC four-part union. Include brass threaded end, solvent-cement-joint plastic end, rubber O-ring, and union nut.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- F. Flexible Transition Couplings for Underground Nonpressure Drainage Piping:
 - 1. Manufacturers:
 - a. Cascade Waterworks Mfg. Co.
 - b. Fernco, Inc.
 - c. Mission Rubber Company.
 - d. Plastic Oddities, Inc.
 - 2. Description: ASTM C 1173 with elastomeric sleeve, ends same size as piping to be joined, and corrosion-resistant metal band on each end.

2.3 DIELECTRIC FITTINGS

- A. Dielectric Fittings, General: Assembly of copper alloy and ferrous materials or ferrous material body with separating nonconductive insulating material suitable for system fluid, pressure, and temperature.
- B. Dielectric Unions:
 - 1. Manufacturers:
 - a. Capitol Manufacturing Co.
 - b. Central Plastics Company.
 - c. Eclipse, Inc.
 - d. Epcos Sales, Inc.
 - e. Hart Industries, International, Inc.
 - f. Watts Industries, Inc.; Water Products Div.
 - g. Zurn Industries, Inc.; Wilkins Div.
 - 2. Description: Factory fabricated, union, NPS 2 and smaller.
 - a. Pressure Rating: 250 psig at 180 deg F.
 - b. End Connections: Solder-joint copper alloy and threaded ferrous; threaded ferrous.
- C. Dielectric Flanges:
 - 1. Manufacturers:
 - a. Capitol Manufacturing Co.
 - b. Central Plastics Company.
 - c. Epcos Sales, Inc.
 - d. Watts Industries, Inc.; Water Products Div.
 - 2. Description: Factory-fabricated, bolted, companion-flange assembly, NPS 2-1/2 to NPS 4 and larger.
 - a. Pressure Rating: 175 psig minimum.
 - b. End Connections: Solder-joint copper alloy and threaded ferrous; threaded solder-joint copper alloy and threaded ferrous.
- D. Dielectric-Flange Kits:
 - 1. Manufacturers:
 - a. Advance Products & Systems, Inc.
 - b. Calpico, Inc.
 - c. Central Plastics Company.
 - d. Pipeline Seal and Insulator, Inc.
 - 2. Description: Nonconducting materials for field assembly of companion flanges, NPS 2-1/2 and larger.
 - a. Pressure Rating: 150 psig minimum.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- b. Gasket: Neoprene or phenolic.
 - c. Bolt Sleeves: Phenolic or polyethylene.
 - d. Washers: Phenolic with steel backing washers.
- E. Dielectric Couplings:
- 1. Manufacturers:
 - a. Calpico, Inc.
 - b. Lochinvar Corp.
 - 2. Description: Galvanized-steel coupling with inert and noncorrosive, thermoplastic lining, NPS 3 and smaller.
 - a. Pressure Rating: 300 psig at 225 deg F.
 - b. End Connections: Threaded.
- F. Dielectric Nipples:
- A. Dielectric Nipples: Electroplated steel nipple with inert and noncorrosive, thermoplastic lining; plain, threaded, or grooved ends; and 300-psig minimum working pressure at 225 deg F.
- 1. Manufacturers:
 - a. Perfection Corp.
 - b. Precision Plumbing Products, Inc.
 - c. Sioux Chief Manufacturing Co., Inc.
 - d. Victaulic Co. of America.
 - 2. Description: Electroplated steel nipple with inert and noncorrosive, thermoplastic lining.
 - a. Pressure Rating: 300 psig at 225 deg F.
 - b. End Connections: Threaded or grooved.

2.4 SLEEVES

- A. Mechanical sleeve seals for pipe penetrations: Modular sealing element unit, designed for field assembly, to fill annular space between pipe and sleeve.
- 1. Manufacturers:
 - a. Advance Products & Systems, Inc.
 - b. Calpico, Inc.
 - c. Metraflex Co.
 - d. Pipeline Seal and Insulator, Inc.
 - 2. Sealing Elements: EPDM interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
 - 3. Pressure Plates: Stainless steel. Include two for each sealing element.
 - 4. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.
- B. Galvanized-Steel Sheet Sleeves: 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint.
- C. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized, plain ends.
- D. Cast-Iron Sleeves: Cast or fabricated "wall pipe" equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- E. Molded PVC Sleeves: Permanent, with nailing flange for attaching to wooden forms.
- F. PVC Pipe Sleeves: ASTM D 1785, Schedule 40.
- G. Molded PE Sleeves: Reusable, PE, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.

2.5 IDENTIFICATION DEVICES

- A. General: Products specified are for applications referenced in other utilities Sections. If more than single type is specified for listed applications, selection is Installer's option.
- B. Equipment Nameplates: Metal permanently fastened to equipment with data engraved or stamped.
 - 1. Data: Manufacturer, product name, model number, serial number, capacity, operating and power characteristics, labels of tested compliances, and essential data.
 - 2. Location: Accessible and visible.
- C. Stencils: Standard stencils prepared with letter sizes complying with recommendations in ASME A13.1. Minimum letter height is 1-1/4 inches for ducts, and 3/4 inch for access door signs and similar operational instructions.
- D. Snap-on Plastic Pipe Markers: Manufacturer's standard preprinted, semirigid, snap-on type. Include color-coding according to ASME A13.1, unless otherwise indicated.
- E. Plastic Tape: Manufacturer's standard color-coded, pressure-sensitive, self-adhesive vinyl tape, at least 3 mils thick.
- F. Valve Tags: Stamped or engraved with 1/4-inch letters for piping system abbreviation and 1/2-inch sequenced numbers. Include 5/32-inch hole for fastener.
 - 1. Material: 0.032-inch-thick, polished brass.
- G. Valve Tag Fasteners: Brass, wire-link or beaded chain; or brass S-hooks.
- H. Engraved Plastic-Laminate Signs: ASTM D 709, Type I, cellulose, paper-base, phenolic-resin-laminate engraving stock; Grade ES-2, black surface, black phenolic core, with white melamine subcore, unless otherwise indicated. Fabricate in sizes required for message. Provide holes for mechanical fastening.
 - 1. Engraving: Engraver's standard letter style, of sizes and with terms to match equipment identification.
 - 2. Thickness: 1/8 inch, unless otherwise indicated.
 - 3. Fasteners: Self-tapping, stainless-steel screws or contact-type permanent adhesive.
- I. Plastic Equipment Markers: Manufacturer's standard laminated plastic, in the following color codes:
 - 1. Green: Cooling equipment and components.
 - 2. Yellow: Heating equipment and components.
 - 3. Brown: Energy reclamation equipment and components.
 - 4. Blue: Equipment and components that do not meet criteria above.
 - 5. Hazardous Equipment: Use colors and designs recommended by ASME A13.1.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

6. Terminology: Match schedules as closely as possible. Include the following:
 - a. Name and plan number.
 - b. Equipment service.
 - c. Design capacity.
 - d. Other design parameters such as pressure drop, entering and leaving conditions, and speed.
7. Size: 2-1/2 by 4 inches for control devices, dampers, and valves; 4-1/2 by 6 inches for equipment.
- J. Plasticized Tags: Preprinted or partially preprinted, accident-prevention tags, of plasticized card stock with mat finish suitable for writing.
 1. Size: 3-1/4 by 5-5/8 inches.
 2. Fasteners: Brass grommets and wire.
 3. Nomenclature: Large-size primary caption such as DANGER, CAUTION, or DO NOT OPERATE.
- K. Lettering and Graphics: Coordinate names, abbreviations, and other designations used in piped utility identification with corresponding designations indicated. Use numbers, letters, and terms indicated for proper identification, operation, and maintenance of piped utility systems and equipment.
 1. Multiple Systems: Identify individual system number and service if multiple systems of same name are indicated.

PART 3 - EXECUTION

3.1 PIPED UTILITY DEMOLITION

- A. Disconnect, demolish, and remove piped utility systems, equipment, and components indicated to be removed.
 1. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 2. Piping to Be Abandoned in Place: Drain piping. Fill abandoned piping with flowable fill, and cap or plug piping with same or compatible piping material.
 3. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 4. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make operational.
 5. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
- B. If pipe, insulation, or equipment to remain is damaged in appearance or is unserviceable, remove damaged or unserviceable portions and replace with new products of equal capacity and quality.

3.2 PIPING INSTALLATION

- A. Install piping according to the following requirements and utilities Sections specifying piping systems.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on the Coordination Drawings.
- C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- D. Install piping to permit valve servicing.
- E. Install piping at indicated slopes.
- F. Install piping free of sags and bends.
- G. Install fittings for changes in direction and branch connections.
- H. Select system components with pressure rating equal to or greater than system operating pressure.
- I. Sleeves are not required for core-drilled holes.
- J. Permanent sleeves are not required for holes formed by removable PE sleeves.
- K. Install sleeves for pipes passing through concrete and masonry walls and concrete floor and roof slabs.
 - 1. Cut sleeves to length for mounting flush with both surfaces.
 - a. Exception: Extend sleeves installed in floors of equipment areas or other wet areas 2 inches above finished floor level.
 - 2. Install sleeves in new walls and slabs as new walls and slabs are constructed.
 - a. Steel Pipe Sleeves: For pipes smaller than NPS 6.
 - b. Steel Sheet Sleeves: For pipes NPS 6 and larger, penetrating gypsum-board partitions.
- L. Verify final equipment locations for roughing-in.
- M. Refer to equipment specifications in other Sections for roughing-in requirements.

3.3 PIPING JOINT CONSTRUCTION

- A. Join pipe and fittings according to the following requirements and utilities Sections specifying piping systems.
- B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

- D. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 - 1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
 - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- E. Welded Joints: Construct joints according to AWS D10.12/D10.12M, using qualified processes and welding operators according to Part 1 "Quality Assurance" Article.
- F. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- G. Grooved Joints: Assemble joints with grooved-end pipe coupling with coupling housing, gasket, lubricant, and bolts according to coupling and fitting manufacturer's written instructions.
- H. Soldered Joints: Apply ASTM B 813 water-flushable flux, unless otherwise indicated, to tube end. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy (0.20 percent maximum lead content) complying with ASTM B 32.
- I. Brazed Joints: Construct joints according to AWS's "Brazing Handbook," "Pipe and Tube" Chapter, using copper-phosphorus brazing filler metal complying with AWS A5.8.
- J. Pressure-Sealed Joints: Assemble joints for plain-end copper tube and mechanical pressure seal fitting with proprietary crimping tool to according to fitting manufacturer's written instructions.
- K. Plastic Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
 - 1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
 - 2. ABS Piping: Join according to ASTM D 2235 and ASTM D 2661 appendixes.
 - 3. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.
 - 4. PVC Pressure Piping: Join schedule number ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
 - 5. PVC Nonpressure Piping: Join according to ASTM D 2855.
 - 6. PVC to ABS Nonpressure Transition Fittings: Join according to ASTM D 3138 Appendix.
- L. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D 3139.
- M. Plastic Nonpressure Piping Gasketed Joints: Join according to ASTM D 3212.
- N. Plastic Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.
 - 1. Plain-End PE Pipe and Fittings: Use butt fusion.
 - 2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.
- O. Bonded Joints: Prepare pipe ends and fittings, apply adhesive, and join according to pipe manufacturer's written instructions.

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

3.4 PIPING CONNECTIONS

- A. Make connections according to the following, unless otherwise indicated:
 - 1. Install unions, in piping NPS 2 and smaller, adjacent to each valve and at final connection to each piece of equipment.
 - 2. Install flanges, in piping NPS 2-1/2 and larger, adjacent to flanged valves and at final connection to each piece of equipment.
 - 3. Install dielectric fittings at connections of dissimilar metal pipes.

3.5 IDENTIFICATION

- A. Piping Systems: Install pipe markers on each system. Include arrows showing normal direction of flow.
 - 1. Stenciled Markers: According to ASME A13.1.
 - 2. Plastic markers, with application systems. Install on insulation segment if required for hot noninsulated piping.
 - 3. Locate pipe markers on exposed piping according to the following:
 - a. Near each valve and control device.
 - b. Near each branch, excluding short takeoffs for equipment and terminal units. Mark each pipe at branch if flow pattern is not obvious.
 - c. Near locations where pipes pass through walls or floors or enter inaccessible enclosures.
 - d. At manholes and similar access points that permit view of concealed piping.
 - e. Near major equipment items and other points of origination and termination.
- B. Equipment: Install engraved plastic-laminate sign or equipment marker on or near each major item of equipment.
 - 1. Lettering Size: Minimum 1/4 inch high for name of unit if viewing distance is less than 24 inches, 1/2 inch high for distances up to 72 inches, and proportionately larger lettering for greater distances. Provide secondary lettering two-thirds to three-fourths of size of principal lettering.
 - 2. Text of Signs: Provide name of identified unit. Include text to distinguish among multiple units, inform user of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.
- C. Adjusting: Relocate identifying devices that become visually blocked by work of this or other Divisions.

END OF SECTION 330500

TABLE OF CONTENTS
FOR STRUCTURAL SPECIFICATIONS

CAMERON COUNTY
835 EAST LEVEE & SAN BENITO ANNEX BUILDING
STANDBY POWER UPGRADES
SEALED SET

PREPARED FOR
ETHOS ENGINEERING

ISSUED: MAY 25, 2023

SECTION 031000 – CONCRETE FORMS
SECTION 032000 – CONCRETE REINFORCEMENT
SECTION 033000 – CAST-IN-PLACE CONCRETE



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5-25-2023

SECTION 031000 – CONCRETE FORMS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Formwork for cast-in-place concrete including shoring, bracing and anchorage.
- B. Openings for other Work.
- C. Release agents and other related form accessories.
- D. Form stripping.

1.2 RELATED SECTION

- A. Section 032000 - Concrete Reinforcement
- B. Section 033000 - Cast-In-Place Concrete

1.3 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. 347, Recommended Practice for Concrete Formwork.

1.4 DEFINITIONS

- A. Concealed: For Work required under this Section, the term "concealed" will mean "not exposed to view in finished construction."
- B. Exposed: For Work required under this Section, the term "exposed" will mean "exposed to view in finished construction."

1.5 QUALITY ASSURANCE

- A. Grading Rules. Rules of the following associations apply to materials furnished under this Section:
 - 1. Southern Pine Inspection Bureau (SPIB).
 - 2. Western Wood Products Association (WWPA).
- B. Tolerances: Follow ACI 301 (Table 4.3.1).

SECTION 031000 – CONCRETE FORMS

1.6 DELIVERY, STORAGE AND HANDLING

- A. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.7 DESIGN CRITERIA

- A. Design, engineering, fabrication, erection, maintenance and removal of formwork shall be responsibility of Contractor.
- B. Construct forms following ACI 318, ACI 347, OSHA, state and local requirements.
- C. Provide forms with sufficient strength to withstand pressures resulting from concrete placement and vibration.
- D. Responsibility for properly bracing and shoring to support subsequent construction loads rests solely with Contractor.
- E. Responsibility for removal of forms at any time before concrete has obtained certified specified design strength rests solely with Contractor.
- F. The Engineer's efforts are aimed at designing a project which will be safe after full completion. The Engineer has no expertise in, and takes no responsibility for, construction means and methods or job Site safety during construction which are exclusively Contractor's responsibility. Processing and/or approving submittals made by Contractor which may contain information related to construction methods or safety issues, or participation in meetings where such issues might be discussed must not be construed as voluntary assumption by Engineer of any responsibility for safety procedures.

PART 2 - PRODUCTS

2.1 MANUFACTURERS / PRODUCTS

- A. Use forms specified in the general notes of the structural drawings. Provide in largest practical sizes to minimize number of required joints.

2.2 MATERIALS

- A. Wood Form Materials:
 - 1. Reference general structural notes in sheet S1.1 for wood grade requirements.
- B. Preformed Steel Forms: Minimum 16 gauge (0.06"/1.5mm) matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.

SECTION 031000 – CONCRETE FORMS

- C. Form Release Agent: Colorless chemical form coating or mineral oil which will not stain concrete or absorb moisture.
- D. Form Ties: Standard coil or snap galvanized adjustable ties with 3/4" diameter plastic cones on exposed surfaces. Provide manufacturer's recessed plugs of gray plastic or concrete to seal tie holes.
- E. Nails, Spikes, Lag Bolts, Through Bolts and Anchorages: Sizes required; of sufficient strength and character to maintain formwork in place while placing concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify lines, levels and centers before proceeding with formwork.
- B. Verify that dimensions agree with drawings.

3.2 ERECTION / INSTALLATION / APPLICATION

- A. Follow ACI 301 and 347.
- B. Provide forms as follows:
 - 1. Concealed Surfaces: Rough or board form finish left by clean, straight formed lumber.
 - 2. Exposed Surfaces (Typical): Hardboard or plywood lined concrete forms.
- C. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to over-stressing by construction loads.
- D. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping.
- E. Align joints and make watertight. Keep form joints to minimum.
- F. Obtain approval before framing openings in structural members which are not shown.
- G. Provide 1" chamfer strips in exposed exterior corners of beams, girders, columns, walls or foundation forms, around tops of all foundation slabs and elsewhere shown.
- H. Provide temporary ports or openings in formwork required for cleaning out debris, adjusting reinforcing steel and to facilitate inspection.
- I. Coordinate with Work of other Sections which require attachment of components to formwork.
- J. Coat forms with non-staining form release agent. No other coating will be permitted unless specifically approved by Architect.
- K. Inserts, Embedded Parts and Openings:

SECTION 031000 – CONCRETE FORMS

1. Provide formed openings required for items to be embedded in or passing through concrete Work.
 2. Locate and set in place items which will be cast directly into concrete.
 3. Coordinate with Work of other Sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, collars, thimbles, ties, sockets, nailing blocks, other inserts and components of other Work.
 4. Obtain required setting information before proceeding.
- L. Install accessories following manufacturer's instructions, straight, level and plumb. Ensure items are not disturbed during concrete placement.
- M. Form Removal:
1. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
 2. Loosen forms carefully. Do not wedge pry bars, hammers or tools against exposed concrete surfaces.
 3. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- N. Do not construct any masonry walls on concrete floors or walls until concrete has attained its design strength and forms and shoring have been removed.
- O. Terminate embedded form ties 1-1/2" from formed face of concrete. Construct ties so that ends and fasteners can be removed without causing spalling of face of concrete.
- P. Repair form tie holes as follows:
1. Below Grade Surfaces: Fill tie holes with waterproof bituminous mastic to prevent water infiltration.
 2. Above Grade Surfaces - Concealed: Fill tie holes with compatible materials flush with adjacent concrete.
 3. Above Grade Surfaces - Exposed: Fill tie holes with compatible materials flush with adjacent concrete. Repairs shall blend in inconspicuously with surrounding surfaces. Follow Section 033000.
- Q. Finishes. Follow ACI 301 unless specifically shown otherwise.
- 3.3 TOLERANCES
- A. Formwork: Follow ACI 301.
- 3.4 FIELD QUALITY CONTROL
- A. Inspect erected formwork, shoring and bracing to ensure that Work follows formwork design and that supports, fastenings, wedges, ties and items are secure.

SECTION 031000 – CONCRETE FORMS

3.5 ADJUSTING AND CLEANING

- A. Clean forms as erection proceeds to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

END OF SECTION 031000

SECTION 032000 - CONCRETE REINFORCEMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Reinforcing steel, welded wire fabric, tie wires and other related accessories.
- B. Work includes reinforcing for interior and exterior cast-in-place concrete and reinforced concrete unit masonry Work.

1.2 RELATED SECTIONS

- A. Section 033000 - Cast-In-Place Concrete.

1.3 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. 301, Structural Concrete.
 - 2. 315, Manual of Standard Practice for Detailing Reinforced Concrete Structures.
 - 3. 318, Building Code Requirements for Reinforced Concrete.
- B. American Society for Testing and Materials (ASTM):
 - 1. A82, Cold Drawn Steel Wire for Concrete Reinforcement.
 - 2. A185, Welded Steel Wire Fabric for Concrete Reinforcement.
 - 3. A615, Deformed and Plain Billet Steel Bars for Concrete Reinforcement (including supplementary requirements)
- C. Concrete Reinforcing Steel Institute (CRSI):
 - 1. Manual of Practice.
 - 2. 63, Recommended Practice For Placing Reinforcing Bars.
 - 3. 65, Recommended Practice for Placing Bar Supports, Specifications and Nomenclature.

1.4 SUBMITTALS

- A. Submit:
 - 1. Shop drawings. Provide electronic (pdf format) file of submittals. Electronic submittals shall be organized into a single pdf file.
 - a. Show reinforcing steel and wire fabric sizes, spacings, locations and quantities, bending and cutting schedules and supporting and spacing devices.
 - b. Indicate visual method of identification of bar strengths following ASTM standard for steel type used.
 - 2. Certified copies of mill test reports of reinforcement materials analysis (upon request).
- B. Provide submittals within 30 days after Contract date.

1.5 QUALITY ASSURANCE

- A. Maintain 1 copy of each referenced document at Site.
- B. Fabrication and Placement Tolerances: Follow ACI 301.

SECTION 032000 - CONCRETE REINFORCEMENT

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver to Site free of rust and scale, clearly marked as to bar strength.
- B. Store reinforcing materials on pallets or other materials off ground. Avoid surface contamination before placement and prevent bending or warping.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Reinforcing Steel: ASTM A615, Grade 60 (60,000 psi yield strength) billet steel bars; unfinished. Provide in sizes shown on plans provide deformed bars typically and plain bars where dowels are shown.
- B. Stirrup Steel: #3 reinforcing bars may by ASTM A615 Grade 40.
- C. Welded Wire Fabric (WWF): ASTM A185, plain type; unfinished. Provide in sheet form not in rolls. Provide as sized if shown or as follows if not shown:
 - 1. Provide 1 layer of 6 x 6 W1.4/W1.4 in sidewalk and toppings 4" or less in thickness.

2.2 ACCESSORIES

- A. Tie Wire: Minimum 16 gauge (0.06") annealed type.
- B. Chairs, Bolsters, Bar Supports and Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions.
- C. Special Chairs, Bolsters, Bar Supports and Spacers Adjacent to Weather Exposed Concrete Surfaces: Stainless steel type; sizes and shapes required.

2.3 FABRICATION

- A. Fabrication: Follow CRSI Manual of Practice.
- B. Locate reinforcing splices not shown at points of minimum stress.

PART 3 EXECUTION

3.1 PREPARATION

- A. Foundations and Footings:
 - 1. Clean excavations of loose debris and earth. Cut sides of excavations square and remove loose material.
 - 2. Pump out standing water from excavations before placing reinforcement. Remove and replace mud or frozen soil with lean concrete.

SECTION 032000 - CONCRETE REINFORCEMENT

- B. Clean reinforcement completely before concrete placement. Reinforcement shall be free from loose, flaky rust, mud, oil or other coatings that would destroy or reduce bond with concrete at time concrete is placed. Re-inspect reinforcement and clean off any dried cement, mortar or dirt when placement is delayed.
- C. Obtain Owner's Engineer's approval of reinforcement installations prior to placement of any concrete.

3.2 ERECTION / INSTALLATION / APPLICATION

- A. Position reinforcement following ACI 301, ACI 315 and drawn details.
- B. Provide reinforcing steel in concrete footings, foundation walls, thickened slabs, retaining walls and elsewhere shown.
- C. Provide reinforcing steel in concrete unit masonry walls, bond beams and elsewhere shown.
- D. Provide corner reinforcing steel in footings at corners and at intersections of walls unless shown otherwise:
 - 1. Bar size and spacing shall match wall or footing reinforcing.
 - 2. Return bars minimum of 36 diameters on each end.
 - 3. WELDING OF REINFORCING IS NOT PERMITTED.
- E. Provide the following minimum concrete cover requirements for reinforcing steel unless shown otherwise:
 - 1. Concrete Cast Against and Permanently Exposed to Earth: 3".
 - 2. Concrete Exposed to Earth or Weather:
 - a. #5 Bars and Smaller: 1-1/2".
 - b. Others: 2".
- F. Provide minimum splice requirements for reinforcing steel shown or required by ACI 318. Stagger splices so that no more than 1/2 of horizontal reinforcing steel is spliced at any given cross section.
- G. Provide a bond breaker such as plastic sleeves at all dowel bars occurring at control and expansion joints.
- H. Place, support and secure reinforcement against displacement. Do not deviate from required position.
 - 1. Provide bolsters and chairs required to maintain reinforcing steel at proper elevation in slab.
- I. Lap welded wire fabric minimum 6" or 1 full mesh on sides and 1 foot or 2 full meshes on ends and extend to within 2" of slab edges. Chair support welded wire fabric so that welded wire fabric is in upper half of slab while placing slabs on grade unless specifically shown otherwise.
- J. Carry welded wire fabric and reinforcing steel through control (contraction) joints but not through construction and expansion joints unless shown otherwise.
 - 1. Grease dowels thoroughly and paper wrap to allow for horizontal movement at expansion joints.

SECTION 032000 - CONCRETE REINFORCEMENT

- 2. Cut alternate wires of welded wire fabric at control joints.

- K. Take care to avoid disturbing reinforcement and vapor retarder during placing of concrete. Remove and reinstall disturbed or improperly installed reinforcement when discovered or instructed by Owner's Engineer before continuing concrete placement.

- L. Accommodate placement of formed openings.

END OF SECTION 032000

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Interior and exterior plain and reinforced site-placed concrete, vapor retarders, expansion joints, curing compounds and other related accessories.

1.2 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

- A. Anchor bolts.
- B. Reinforcement.

1.3 RELATED SECTIONS

- A. Section 032000 - Concrete Reinforcement.

1.4 REFERENCES

- A. American Concrete Institute (ACI):
 1. 301, Structural Concrete.
 2. 302, Guide for Concrete Floor and Slab Construction.
 3. 304, Measuring, Mixing, Transporting and Placing Concrete.
 4. 305R, Hot Weather Concreting.
 5. 308, Curing Concrete.
 6. 309, Recommended Practice for Consolidation of Concrete.
 7. 318, Building Code Requirements for Reinforced Concrete.
- B. American Society for Testing and Materials (ASTM):
 1. C31, Making and Curing Concrete Test Specimens in the Field.
 2. C33, Concrete Aggregates.
 3. C39, Compressive Strength of Cylindrical Concrete Specimens.
 4. C94, Ready Mixed Concrete.
 5. C143, Test Method for Slump of Portland Cement Concrete.
 6. C150, Portland Cement.
 7. C171, Sheet Materials for Curing Concrete.
 8. C172, Sampling Freshly Mixed Concrete.
 9. C231, Air Content of Freshly Mixed Concrete by the Pressure Method.
 10. C260, Air Entraining Admixtures for Concrete.
 11. C309, Liquid Membrane - Forming Compounds for Curing Concrete.
 12. C494, Chemical Admixtures for Concrete.
 13. C618, Fly Ash and Raw or Calcinated Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.

1.5 DEFINITIONS

- A. Concealed: For Work required under this Section, the term "concealed" will mean "not exposed to view in finished construction."

SECTION 033000 - CAST-IN-PLACE CONCRETE

- B. Exposed: For Work required under this Section, the term "exposed" will mean "exposed to view in finished construction."

1.6 SUBMITTALS

- A. Submit: Submittal shall be provided in electronic (pdf format) format. Electronic submittal shall be provided in a single pdf file.
 - 1. Concrete mix designs. Follow ACI 301. Submit a mix design for each class of concrete required within 30 days after Contract date and prior to placing any concrete.
 - 2. Product data including installation requirements for curing/sealer compounds, mineral and chemical admixtures and joint devices.
 - 3. Concrete delivery tickets.
 - a. Submit to Owner's Engineer at Site.
 - b. Follow ASTM C94. Also include:
 - 1) Batch number.
 - 2) Mix by class of concrete and bag content with maximum aggregate size used
 - 3) Air content.
 - 4) Quantities and types of admixtures.
 - 5) Slump.
 - 6) Time of loading.
 - c. Delivery tickets not showing time of loading will be grounds for rejection of load.
 - 4. Testing laboratory reports.
 - a. Submit directly to Owner's Engineer, Contractor and ready-mix supplier.
 - 5. Certification or test results indicating compliance of material or source of material with these specifications (upon request).

1.7 QUALITY ASSURANCE

- A. Maintain 1 copy of each referenced document at Site.
- B. Acquire cement and aggregate from same source for all Work.
- C. Tolerances: Place and finish cast-in-place concrete within tolerance limits specified in ACI 301 and as follows:
 - 1. Formed Surfaces: Follow ACI 301 (Table 4.3.1.).
- D. Acceptance Of Work: Presence or evidence of nonconforming Work shall be sufficient cause for Owner's Engineer to require entire section of concrete affected be torn out and rebuilt properly at Contractor's expense.
 - 1. Such unacceptable Work includes:
 - a. Horizontal or vertical misalignment.
 - b. Cracking.
 - c. Honeycombing.
 - d. Spalling.
 - e. Embedded debris.
 - 2. If by tests or on-site observation, Owner's Engineer determines that any of Contract requirements have not been fully met in completion of this Work, he may require

SECTION 033000 - CAST-IN-PLACE CONCRETE

additional testing or retesting to determine composition, soundness and actual structural capacity of any concrete.

3. Costs for such testing shall be paid by Contractor if such tests subsequently establish that Work is unacceptable and by Owner if Work is found to be acceptable.
4. Remove and replace all unacceptable Work including related Work which was acceptable but which must be disturbed as a result of replacement if such tests establish that Work is unacceptable with regard to compliance with these specifications.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Concrete Delivery: Follow ACI 304 and ASTM C94.
- B. Deliver packaged materials in manufacturer's unopened, labeled containers.
- C. Store materials to provide protection from weather and damage.
- D. Deliver concrete in agitating or revolving type equipment. DO NOT USE NON-AGITATING EQUIPMENT.
- E. Discharge concrete at Site within 1-1/2 hours or 300 revolutions, whichever comes first, after water has been added to cement and aggregates or cement batches with aggregates unless a longer time is specifically authorized by Owner's Engineer.
- F. Owner's Engineer may require a reduction in this elapsed time during hot weather, when high early strength cement is being used or under other conditions contributing to quick stiffening of concrete.

1.9 PROJECT CONDITIONS

- A. Coordinate Work of other trades who will furnish and install items of Work (sleeves, piping, conduit, inserts, etc.) to be cast in concrete. Place no concrete until such items are in place.
 1. Anchor bolts for steel columns to be supplied by Metal Building Manufacturer to the rebar / concrete finishing contractor for installation.
- B. Place concrete at ambient temperatures between 50° and 95°F.
- C. Follow instructions for special procedures at end of this Section should it be necessary to place concrete in colder or hotter weather.
- D. Protect freshly placed concrete from rainfall, water leaks, falling objects, traffic of any kind and other hazards to surfaces. Provide barricades and lights if necessary.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Portland Cement:
 1. ASTM C150 Type I (Normal) or Type II (Moderate).
 2. Cement shall be free of false set when tested following ASTM C451.

SECTION 033000 - CAST-IN-PLACE CONCRETE

3. Use same brand, type and source throughout.
- B. Aggregates:
1. Fine Aggregate: ASTM C33; natural or manufactured sand, clean, hard and durable, uncoated grains, free from deleterious matter. Average fineness modulus shall be between 2.5 and 3.0.
 2. Coarse Aggregate: ACI 301 and ASTM C33.
 - a. Interior and Concealed Exterior Applications: Crushed gravel or stone, durable uncoated particles free from deleterious matter.
 - b. Exposed Exterior Applications: Crushed dolomite, granite or limestone.
 - c. Grading: ASTM C33 No. 57.
- C. Admixtures:
1. Mineral Admixtures:
 - a. Fly Ash: ASTM C618 Class C or Class F; loss on ignition 6% maximum.
 - b. Fly ash source must be approved by Owner's Engineer. Preapproved sources are:
 - 1) Class C: Boral Manufacturing
 2. Chemical Admixtures:
 - a. Water Reducing Admixtures: ASTM C494 Type A (Water Reducing).
 - 1) Type E (Water Reducing and Accelerating) may be used during cold weather and Type D (Water Reducing and Retarding) during hot weather with Engineer's prior approval.
 - 2) Type F (Water Reducing - High Range) or Type G (Water Reducing High Range and Retarding) admixtures (superplasticizers) may used be used with Engineer's prior approval.
 - b. Calcium chloride, thiocyanates, corrosive admixtures or admixtures containing more than 0.05% chloride ions (total) are not permitted.
 3. DO NOT USE ANY OTHER ADMIXTURES WITHOUT ARCHITECT'S PRIOR WRITTEN APPROVAL.
- D. Water: Potable; free from objectionable quantities of foreign materials harmful to concrete such as silt, organic matter, acids, alkali, salt and other deleterious substances.
- E. Vapor Retarders: Clear or black fungus resistant polyethylene or fabric reinforced plastic film recommended for below grade application; 10 mil thick.
- F. Expansion Joint Filler Strips: ASTM D1751 non-extruding and resilient type, asphalt impregnated fiberboard or felt or ASTM D1752 closed cell foam with resiliency recovery of 95% if not compressed more than 50% of original thickness; 3/8" thick for interior and 1/2" thick for exterior unless shown otherwise.
- G. Liquid Curing/Sealer Compound (Typical): ASTM C309 Type 1; approved by Asphalt and Vinyl Composition Tile Institute; 30% minimum solids content.
- H. Sheet Curing Membranes: ASTM C171; absorptive mats, waterproof paper or polyethylene film.

2.2 CONCRETE MIXES

A. General Requirements:

GRA Engineering
Cameron County 835 East Levee & San Benito Annex Building
Standby Power Upgrades

033000-4

SECTION 033000 - CAST-IN-PLACE CONCRETE

1. Concrete Mixing: Follow ASTM C94. BATCH MIXING OF CONCRETE ON SITE IS NOT PERMITTED EXCEPT FOR MISCELLANEOUS MIXES.
2. Mixing Procedures: Follow ACI 301.
3. Handling and Weighing: Follow ACI 304.
4. Measure water, air entraining admixtures and water reducing admixtures by weight or volume. Measure all other materials by weight.
5. AIR ENTRAINED CEMENT IS NOT ACCEPTABLE.
 - a. Provide only non-air entrained concrete.
6. Provide water reducing admixtures in all Classes of concrete Work.
7. No dry-packaged mixtures are allowed.
8. Fly ash may be provided as supplementary cementitious material in concrete Work. Fly ash content shall not exceed 25% of the cementitious material weight within a concrete batch.
9. Exposed concrete is to meet requirements for potentially destructive exposure.
10. Admixtures are to be added at batch plant.
11. Do not add water to mix on job unless previously approved by Owner's Engineer. Note amount of water added on delivery ticket.
12. Nominal maximum allowable slump of concrete (except for controlled density fill) is 4".
13. Provide minimum 3 day compressive strength of 1,800 psi for concrete used for floors.

B. Concrete Properties and Proportions:

1. Provide concrete meeting the following properties and performance specifications

2. Foundation Concrete (Class 2): Slab, Grade Beams & Footings

F'c	3,000 psi (28-day compressive strength)
Portland Cement	ASTM C 150 Type I/II
Fly Ash	ASTM C 618 Class C (Maximum of 25% of cementitious material)
Water/Cementitious Material Ratio	0.60 Maximum
Slump	5" (+/- 1") measured from the discharge of the truck
Coarse Aggregate	1" maximum with gradation requirements prescribed in Table 2 of ASTM C33 Size No. 57
Air Entrainment	Air entrainment shall not be used for concrete with exposed steel troweled surfaces
Total Air Content	3% Maximum (by volume)
Concrete Temperature	95°F Maximum

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine Site conditions and excavations for earth forms to verify that they are neatly and accurately cut and correctly located.
- B. Examine formwork to verify that it is sound and correctly located, that conditions are proper for concrete installation and that excavations are sufficient to permit placement, inspection and removal of forms.

SECTION 033000 - CAST-IN-PLACE CONCRETE

- C. Examine reinforcement to verify requirements for concrete cover.
- D. Examine areas of Work to be cast to determine that substrates are properly installed, required reinforcement, inserts and embedded items are in place and that correct finish top of cast elevations can be obtained.
 - 1. Verify that conduit and piping is installed below slab. NO UTILITIES ARE TO BE BUILT INTO SLAB OR TOPPING.
 - 2. Verify depths of depressed conditions are correct for specified delayed finishes. Slabs to receive finishes over 1/8" in thickness shall be depressed as required to allow for alignment with adjacent finish materials.
 - 3. Verify base and sub-base slope correctly at floor drains. Slab thickness shall be maintained in sloped areas.
- E. Do not start Work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Ensure availability of sufficient labor, equipment and materials to place concrete correctly following Project requirements and scheduled casting.
- B. Notify Owner's Engineer at least 48 hours in advance of placing any concrete. Place concrete only when Owner's Engineer is present unless this requirement is specifically waived. Excavations must be inspected and approved by soils engineer.
- C. Place no concrete before embedded items are in place and before forms, reinforcing and affected Work of other trades have been examined.
 - 1. Coordinate placement of joint devices with erection of formwork and placement of form accessories.
- D. Drill holes in previously poured concrete, insert steel dowels and pack solid with non-shrink grout in locations where new concrete is dowelled to existing Work including at bases and pads.
- E. Immediately Before Placing Concrete:
 - 1. Clean debris from forms, decks, base slabs, bottoms of forms, etc. to receive concrete.
 - 2. Thoroughly wet base of slabs poured directly on earth, sand, stone, concrete or gravel.
 - 3. Verify sizes and locations of openings required.
 - 4. Secure approval of conditions from Owner's Engineer. Allow a minimum of 1 hour for Owner's Engineer's inspection after installation of reinforcing and before placing concrete.

3.3 ERECTION / INSTALLATION /APPLICATION

- A. Follow ACI 301.
- B. Place concrete only when Owner's Engineer is present unless this requirement is specifically waived by Owner's Engineer upon notice of scheduled pour.
- C. Notify Owner's Engineer not less than 48 hours (excluding holidays and weekends) in advance of placing concrete.

SECTION 033000 - CAST-IN-PLACE CONCRETE

- D. Provide concrete of following various classes unless shown otherwise.
 - 1. Class I: Cast-In Place Concrete .
- E. Provide uniform slope at rate shown on structural foundation plans. Exterior walkways shall slope as indicated on Architectural plans.
- F. Install vapor retarder under interior and exterior slabs, walks, bases and pads on grade.
 - 1. Lay film directly on slab base just before setting reinforcing and pouring concrete slabs. Provide widest widths practical and oriented to obtain least lineal footage of joint.
 - 2. Lap and seal joints. Lap film a minimum of 6" at joints with top lap placed in direction of spreading of concrete. Seal joints watertight by taping or applying sealant at overlapping edges and ends.
 - 3. Carry film up walls, columns, etc. and secure in place with cement or tape. Fold and cement corners or otherwise make vaporproof.
 - 4. Provide sealed contact with piping and other penetrating items. Cut film carefully around opening for pipes, ducts, conduit, wiring, etc. Tape film to insure maximum barrier effectiveness.
 - 5. Exercise care so that film is not punctured. Seal joints, cuts, punctures, etc. with tape, cement or hot iron.
 - 6. Trim exposed film at floor line after concrete has cured and hardened.
 - 7. Repair vapor retarder damaged during placement of concrete reinforcing.
- G. Provide sufficient workmen to allow for placement of concrete and other operations within time limits required.
- H. Keep delivery carts and buggies on runways. Do not allow them to bear on reinforcing or uncured concrete.
- I. Deposit concrete within 6 feet of its final location to avoid segregation due to rehandling or flowing. Do not drop concrete freely where reinforcing will cause segregation. Chuting procedure is subject to approval of Owner's Engineer. Maximum allowable drop is 5 feet. SPREADING WITH VIBRATORS IS PROHIBITED.
- J. Place concrete quickly and vibrate thoroughly with a vibratory screed or other device approved by Owner's Engineer. Maintain specified position of mesh and reinforcement. Follow ACI 309 for use and type of vibrators.
- K. Deposit concrete continuously, or when continuous placement is not possible, provide construction joints at locations approved by Owner's Engineer.
- L. Do not deposit partially set concrete, retempered concrete or any concrete failing slump or air content tests.
- M. Consolidate concrete by internal vibration to maximum practical density so that it is free from pockets of coarse aggregate and trapped air, fits tightly against subgrades, forms and embedded items and leaves smooth, dense surfaces.
- N. Operate vibrators using experienced workers and where possible use same operators throughout Project. DO NOT USE VIBRATORS AGAINST FORMS OR REINFORCEMENT.

SECTION 033000 - CAST-IN-PLACE CONCRETE

- O. Finishes: Follow ACI 301 (Chapter 11). Perform finishing using only experienced, skilled workers.
1. Flatwork:
 - a. Slab finish shall be as noted on structural foundation plans. Reference structural general notes for flatness requirements pertaining to surface finish.
 - b. Detectable Warning Finish: For exterior handicapped curb cuts (ramp only not on flared sides), textured or imprinted concrete using rollers or aluminum tools to produce 0.9" diameter x 0.2" high (nominal) truncated domes at 2.35" on center following requirements of Americans With Disabilities Act (ADA).
 2. Vertical and Miscellaneous Work:
 - a. Exposed Surfaces: Smooth, Do Not Rub Cement Paste on Exposed Concrete Surfaces.
 - b. Concealed Surfaces: Rough form finish.
- P. Control (Contraction) Joints:
1. General Requirements:
 - a. Provide joints in walks, pads, slabs and toppings shown or specified.
 - b. Make joints approximately 1/8" wide and minimum depth of 1/4 slab thickness.
 - c. Locate as shown or as follows if not shown. Verify final locations with Owner's Engineer before proceeding.
 2. Interior Locations:
 - a. Provide sawed control joints where shown or at maximum 20 feet on center in each direction in slabs and toppings if not shown.
 - V. Install sawed joints immediately after final finishing to depth of 1-1/2" with Soff-Cut saw.
 - VI. Saw control joints 1/8" wide unless otherwise approved. A keyed construction joint may be located where sawed joint is required.
- Q. Curing and Protection: Follow ACI 308.
1. Prevent excessive moisture loss from formed surfaces. Cure formed surfaces by moist-curing or application of curing compound for remainder of curing period if forms are removed before 7 days have elapsed.
 2. Provide 1 application of liquid curing/sealer compound immediately after finishing of concrete on interior and exterior concrete slabs.
 - a. Exception #1: Floors scheduled to receive ceramic tile and quarry tile shall be sheet membrane/water (moist) cured for minimum of 10 days.
 - 1) Begin water curing as soon as concrete has hardened sufficiently to prevent damage from water or cover material.
 - 2) Water curing shall consist of ponding or with sprinkling, spraying or covering with wet burlap, sand or waterproof barrier such as polyethylene or building paper.
 - 3) Maintain 100% coverage continuously over water cured slabs for minimum of 4 days for ponding and for 7 days for spraying and membrane curing.

3.4 FIELD QUALITY CONTROL

SECTION 033000 - CAST-IN-PLACE CONCRETE

- A. Test and inspect materials and operations as Work progresses. Failure to detect defective Work shall not prevent rejection when defect is discovered nor shall it obligate Owner for final acceptance.
- B. Costs for any retesting resulting from Work found to be in non-compliance shall be paid for by Contractor.
- C. Strength: ASTM C31, C39 and C172.
 - 1. Conduct strength tests of all classes of concrete (except miscellaneous mixes).
 - 2. Secure composite samples following ASTM C172. For strength tests, a sample shall be obtained from same batch of concrete on a representative, random basis. A sample consists of six specimens.
 - 3. Mold and cure each sample following ASTM C31.
 - 4. Test 1 specimen at 7 days, test 2 specimens at 28 days and 1 specimen at 56 days following ASTM C39. Results shall be average of strengths of 2 specimens, except that if 1 specimen in a test manifests evidence of improper sampling, molding or testing, it shall be discarded.
 - 5. Record exact location of Work represented by each sample on test reports.
 - 6. Provide a sample for each amount or fraction thereof of each class of concrete placed each day as follows:
 - a. 0-150 Cubic Yards: 1 Sample.
- E. Air Content: ASTM C231.
- F. Slump: ASTM C143.

3.5 ADJUSTING AND CLEANING

- A. Provide materials, methods and finishes for cleaning, patching and other repairs consistent with similar concrete Work in place, approved by Owner's Engineer before beginning repair Work and performed at Contractor's expense.
- B. Repair any slabs which do not meet finish requirements performing all grinding, filling of cracks or patching and leveling procedures as required. Replace slabs which cannot be successfully repaired.
- C. Point carefully around piping, conduit and other penetrations on both interior and exterior surfaces.
- D. Obtain Owner's Engineer prior approval of any corrective measures for slabs which are dusting or showing other signs of improper curing. These may include additional applications of sealer or hardener, grinding or covering with coating or topping.
- E. Remove from interior and exterior exposed surfaces any stain-producing elements such as pyrites, nails, wire, reinforcing steel and form ties immediately prior to final acceptance.
- F. Remove stains completely. Use of weak acids or patented cleaners is acceptable but surface is to be completely neutralized after use.
- G. Blend in surfaces of exposed repairs inconspicuously with surrounding surfaces.

SECTION 033000 - CAST-IN-PLACE CONCRETE

3.6 PROTECTION

- A. Protect newly placed concrete from weather and construction traffic damage.

3.7 SPECIAL PROCEDURES

- A. It is Project intent to continue concrete Work required to keep Project on schedule throughout summer and winter.
- B. Hot Weather Concreting:
 - 1. Follow ACI 305R.
 - 2. Obtain approval to use a retarder in concrete.
 - 3. Temperature of concrete shall not exceed 95°F.
 - 4. Cool water and aggregate to lower temperature of concrete.
 - 5. Cool subgrade and forms by sprinkling with water immediately before placing.
 - 6. Schedule trucks to reduce waiting time at Site.
 - 7. Cure immediately after finishing.
- C. Replace any concrete injured or destroyed by reason of freezing, hot or cold weather at Contractor's own expense including cost of replacing any Work embedded in concrete.

END OF SECTION 033000