

SERVICE WINDOW & SECURITY MODIFICATIONS

FIRST & SECOND FLOOR ADMINISTRATION BUILDING MCKINNEY, TEXAS

FIRST FLOOR SUBCOURTHOUSE BUILDING PLANO, TEXAS

CONSTRUCTION DOCUMENTS PROJECT MANUAL

PROJECT NUMBER: 2412 COLLIN COUNTY IFB NO: 2025-091 ISSUE DATE: DECEMBER 2024 SET NUMBER:





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00 01 08 PROJECT DIRECTORY

Owner: COLLIN COUNTY, TEXAS

Attn: Brad Harris, Building & Construction Projects Coordinator

Collin County Construction & Projects

4600 Community Avenue McKinney, Texas 75071

Architect: SPURGIN & ASSOCIATES ARCHITECTS

Attn: Kent Spurgin, Principal

1216 N Central Expressway, Suite 200A

McKinney, Texas 75070

END OF PROJECT DIRECTORY

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END OF LIST OF DRAWINGS

001116 Advertisement for Bids

1 SCOPE OF WORK

SCOPE OF WORK INCLUDES all materials, labor, equipment and services to produce or be incorporated in such construction. Contract will be a general contract for installation of windows, security cameras, and communication devices.

Payment for the contract work shall be made pursuant to the terms of the Contract Documents.

2 TIMELINE

| Advertisement/Release Project Date: | March 11, 2025 |
|--|--|
| Pre-Bid Meeting (Non-Mandatory): | March 27, 2025, 2:00pm |
| | County Clerk Conference Room 2nd floor Administration Building 2300 Bloomdale Road Mckinney, Texas |
| Question and Substitution Request Submission Deadline: | April 10, 2025, 2:00pm |
| Bid Opening: | May 1, 2025, 2:00pm |

3 PROBABLE CONSTRUCTION COST

The opinion of probable construction cost for this contract is \$150,000

4 BID INFORMATION

Collin County uses OpenGov Procurement for the notification and dissemination of all solicitations for commodities and services. The receipt of solicitations through any other company may result in your receipt of incomplete specifications and/or addenda which could ultimately render your bid non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other company.

COLLIN COUNTY APPRECIATES your time and effort in preparing a bid.

Collin County prefers to receive all bids electronically through

https://procurement.opengov.com/portal/collincountytx, however the County will accept hard copy bids. Hard copy paper bid must be in a separate sealed envelope, manually signed in ink by a person having the authority to bind the firm in a contract and marked clearly on the outside as outlined above. Please note that all bids must be received at the designated location by the deadline shown. Bids received after deadline shall

be considered void and unacceptable. Collin County is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in the Collin County Purchasing Department shall be the official time of receipt. All bid forms provided in this Invitation for Bid must be completed prior to submission. Failure to complete the forms shall render your bid null and void. We would appreciate you indicating on your "NO BID" response any requirements of this bid request which may have influenced your decision to "NO BID".

BIDS WILL BE publicly opened in the Office of the Purchasing Agent, 2300 Bloomdale Rd, Suite 3160, McKinney, TX 75071, at the date and time indicated above.

No oral, telegraphic, telephonic or facsimile bids will be considered. **Bids submitted via email, CD-ROM, or Flash Drive will not be accepted.** Bids may be submitted in electronic format via Collin County eBid located at https://procurement.opengov.com/portal/collincountytx

5 PRE-BID INFORMATION

A PRE-BID MEETING & SITE-WALK will be held by Collin County at County Clerk Conference Room 2nd floor Administration Building 2300 Bloomdale Road Mckinney, Texas, on **Thursday, March 27, 2025 at 2:00 pm** in order for bidders to ask questions regarding the proposed work. It is the bidder's responsibility to review the site and documents to gain a full understanding of the requirements of the bid.

6 BID SECURITY

BID SECURITY: All Bidders must submit, prior to the bid opening time, a Certified Check, Cashier's Check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted.

- A. Bid Bond, certified check or Cashier's Check may be mailed or hand delivered to the Office of the Collin County Purchasing Agent, Collin County Administration Building, 2300 Bloomdale Road, Ste 3160, McKinney, TX 75071 and shall be delivered in an envelope, marked plainly on the outside with the Bid Name and Number.
- B. Bidders submitting a bid via Collin County eBid shall upload a Bid Bond at https://procurement.opengov.com/portal/collincountytx

Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered. Failure to submit a copy of bid security prior to bid opening shall be cause for rejection of bid.

The original Bid Bond shall be received in the Collin County Purchasing Department **no later than** close of business on the third working day after the bid opening. **Late receipt of or failure to submit original Bid Bond shall be cause for rejection of bid.**

7 BONDS

Contractor must furnish a performance bond and payment bond within ten (10) consecutive calendar days following award of contract. The bonds shall be issued by a corporate surety in accordance with all Texas Law,

| including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects. | | | |
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002113 Instructions to Bidders

1.01 RELATED DOCUMENTS

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

1.02 DEFINITIONS

- A. All definitions set forth in the General Conditions of the Contract for Construction or in other Contract Documents are applicable to these Bidding Documents.
- B. Bidding Documents include the Advertisement or Invitation for Bids, Instructions to Bidders, the bid form, other sample bidding and contract forms and the proposed Contract Documents including any Addenda issued prior to receipt of bids.
- C. Addenda are written or graphic instruments issued prior to the opening of the Bidding Documents, which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- D. Spurgin Associates Arhcitects will be hereafter referred to in the Project Manual as "Architect" and all correspondence shall be addressed to: Daniel Ragusa, Spurgin Associates Arhcitects, 103 W Louisiana St, McKinney, TX 75069.
- E. "Brad Harris" will be hereinafter referred to in this Project Manual as "Project Manager".
- F. "Collin County" will be hereafter referred to in this Project Manual as "Owner".
- G. A Bid is a complete and properly signed submittal to do the Work for designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- H. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.
- An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid in the corresponding change in the Work, as described in the Bidding Documents or in the proposed Contract Documents.
- J. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or service as described in the Bidding Documents or in the proposed Contract Documents.
- K. A Bidder is a person or entity who submits a Bid.

- L. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the work.
- M. A Contractor is a person or entity who is determined to be the lowest responsible and responsive bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.
- N. The Bid Requirements and Other General Conditions, as provided under the Division of the North Central Texas Council of Governments Standard Specifications for Public Works Construction will be applicable to this project, unless noted otherwise in the Contract Documents

1.03 EXAMINATION OF DOCUMENTS AND SITE

- A. Each bidder, by making his/her Bid, represents that he/she has read and understands the Bidding Documents.
- B. Each Bidder, by making his/her Bid, represents that he/she has visited the site, performed investigations and verifications as he/she deems necessary, and familiarized himself/herself with the local conditions under which the Work is to be performed and will be responsible for any and all errors in his/her bid resulting from his/her failure to do so.
- C. The location and elevations of the various utilities and pipe work included within the scope of the work are offered as a general guide only, without guarantee as to accuracy. The Contractor shall verify and investigate to his/her own satisfaction the location and elevation of all utilities, pipe work, and the like and shall adequately inform himself/herself of their relation to the work before submitting a bid.
- D. Before submitting a bid each bidder will, at bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information (surface, subsurface, and underground facilities) at or contiguous to the site, or otherwise which may affect cost, progress, performance or furnishing of the work and which bidder deems necessary to determine its bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Bidder will rely solely on its own site investigation and assumes the risk of any site conditions not discovered that may result in additional costs and all errors in the bid.
- E. On request in advance, Owner will provide each bidder access to the site to conduct explorations and tests as each bidder deems necessary for submission of a bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.
- F. The lands upon which the work is to be performed, right-of way and easement for access thereto and other lands designated for use by Contractor in performing the work are identified in the Contract.
- G. Each bidder by making his/her bid represents that his/her bid is based upon the materials, systems, and equipment required by the Bidding Documents without exception.

1.04 BIDDING DOCUMENTS

- A. Complete sets of Bidding Documents shall be used in preparing bids; neither County, nor Architectassume any responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.
- B. County or the Architect, in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

1.05 BIDDING PROCEDURES

- A. All bids shall be prepared on the forms provided by the Architectand submitted in accordance with the Instruction to Bidders. The Architector owner will furnish bidders with bid forms which will provide for the following bid items. Bidders shall provide all requested information. Prices bid/proposed shall <u>only</u> be considered if they are provided in the appropriate space(s) on the Collin County bid form(s). For consideration, any additions or deductions to the bid/proposal prices offered must be shown under the exceptions section of the bid/proposal in the case of electronic submittal, ONLY in the case of a hard copy submittal will an additional attachment be allowed. Extraneous numbers, prices, comments, etc. or bidder/offeror generated documents appearing elsewhere on the bid or as an additional attachment shall be deemed to have no effect on the prices offered in the designated locations.
 - 1. A single contract price for each bid item as detailed and described in these specifications.
 - 2. Acknowledgment of Addenda.
 - 3. Number of consecutive calendar days to complete project.
 - 4. Alternate bids.
 - 5. Unit prices.
- B. A bid (electronic or hard copy) is invalid if it has not been deposited at the designed location prior to the time and date for receipt of bids indicated in the Advertisement or Invitation For Bid, or prior to any extension thereof issued to the bidders. Bids received in County Purchasing Department after submission deadline shall be returned unopened and will be considered void and unacceptable. Owner is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in County Purchasing Department shall be the official time of receipt.
- C. Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his/her bid or any part thereof for ninety (90) consecutive calendar days after the time designated for the receipt of bids in the Advertisement or Invitation For Bid.
- D. Bids shall not contain any recapitulation of the Work to be done.

- E. The Bidder shall make no additional stipulations on the Bid Form nor limit or qualify his/her bid in any other manner. Bids so qualified will be subject to disqualification.
- F. Collin County is by statute exempt from the State Sales Tax and Federal Excise Tax; therefore, the prices submitted shall not include taxes.

1.06 DISCREPANCIES AND AMBIGUITIES

Any interpretations, corrections and/or changes to an Invitation for Bid and related Specifications or extensions to the opening/receipt date will be made by addenda to the respective document by the Collin County Purchasing Department. Questions and/or clarification requests must be submitted no later than the date specified in the solicitation. Those received at a later date may not be addressed prior to the public opening. Sole authority to authorize addenda shall be vested in Collin County Purchasing Agent as entrusted by the Collin County Commissioners Court. Addenda may be transmitted electronically via Collin County eBid, by facsimile, E-mail transmission or mailed via the US Postal Service.

A. Addenda will be transmitted to all that are known to have received a copy of the IFB and related Specifications. However, it shall be the sole responsibility of the Bidder to verify issuance/non-issuance of addenda and to check all avenues of document availability (i.e. OpenGov Procurement at https://procurement.opengov.com/portal/collincountytx, telephoning Purchasing Department directly, etc.) prior to opening/receipt date and time to insure Bidder's receipt of any addenda issued. Bidder shall acknowledge receipt of all addenda.

1.07 SUBSTITUTIONS

- A. Each bidder represents that his/her bid is based upon the materials and equipment described in the Bidding Documents.
- B. No substitution will be considered unless written request has been submitted to the Architect for approval by the date specified in the solicitation. Submit substitution request forms to curogers@co.collin.tx.us.
- C. If the Architectand Owner approves a proposed substitution, such approval will be set forth in an Addendum.

1.08 QUALIFICATION OF BIDDERS

- A. Within seven (7) consecutive calendar days following bid opening, the apparent low bidder shall submit with a properly executed Contractor's Qualification Statement as evidence to establish bidder's financial responsibility, experience and possession of such equipment as may be needed to prosecute the work in an expeditious, safe and satisfactory manner. This Statement shall include:
 - 1. List of current projects.

- 2. List of projects completed within the past five years.
- 3. Experience of key individuals of the organization.
- 4. Trade and Bank references.
- 5. A recent financial statement to confirm that the bidder has suitable financial status to meet obligations incidental to performing the work. Audited financial statements are not mandatory. Unaudited financial statements will be accepted. If bidder's firm does, however, have audited statements, please include a copy with your bid.
- 6. A statement of cost for each major item of Work included in the Bid.
- 7. A designation of the Work to be performed by the Bidder with his/her own forces.
- 8. A list of names of the Subcontractors or other persons or organizations (including those who are to furnish materials or equipment fabricated to a special design) proposed for each portion of the Work. The Bidder will be required to establish to the satisfaction of the Architectand Owner the reliability and responsibility of the proposed Subcontractors. Prior to the award of the Contract, the Architectwill notify the Bidder in writing if either the County or the Architect, after due investigation, has reasonable and substantial objection to any person or organization on such lists. If Owner or Architect has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the Bidder may, at his/her option, withdraw his/her Bid without forfeiture of Bid Security or provide an acceptable substitute. Subcontractors and other persons and organizations proposed by the Bidder and accepted by Owner and Architectmust be used on the Work for which they were proposed and accepted, and shall not be changed except with the written approval of Owner and the Architect.
- B. Bidders may be disqualified and their bids not considered for any of the following specific reasons:
 - 1. Reason for believing collusion exists among bidders.
 - 2. The bidder being interested in any litigation against Owner.
 - 3. The bidder being in arrears on any existing contract or having defaulted on a previous contract.
 - 4. Lack of competency as revealed by the financial statement, experience and equipment, questionnaires, or qualification statement.
 - 5. Uncompleted work which in the judgment of Owner will prevent or hinder the prompt completion of additional work if awarded.
- C. Minimum Standards For Responsible Prospective Bidders: A prospective Bidder must meet the following minimum requirements. Collin County may request representation and other information sufficient to determine Bidder's ability to meet these minimum standards listed below.

- 1. have adequate financial resources, or the ability to obtain such resources as required;
- 2. be able to comply with the required or proposed delivery/ completion schedule;
- 3. have a satisfactory record of performance;
- 4. have a satisfactory record of integrity and ethics; and
- 5. be otherwise qualified and eligible to receive an award.
- D. In determining to whom to award the contract, the Owner may consider;
 - 1. the purchase price;
 - the reputation of the bidder/contractor/vendor and of the bidder/contractor/vendor's goods or services;
 - 3. the quality of the bidder/contractor/vendor's goods or services;
 - 4. the extent to which the goods or services meet the Owner's needs;
 - 5. the bidder/contractor/vendor's past relationship with the Owner;
 - 6. the total long-term cost to the Owner to acquire the bidder/contractor/vendor's goods or services; and
 - 7. any other relevant factors specifically listed in the Instruction to Bidders.

1.09 PREPARATION OF BID

- A. Bidder shall submit his/her bid on the forms furnished by the Architect. All blank spaces in forms shall be correctly filled in and the bidder shall state the prices, written in words and in figures. Where there is discrepancy between the price written in words and the price written in figures, the price written in words shall govern. If bid is submitted by an individual, his/her name must be signed by him/her or his/her duly authorized agency. If the bid is submitted by a firm, association or partnership, the name and address of each member must be given, and the bid must be signed by an official or duly authorized agent. Powers of attorney authorizing agents or others to sign bids must be properly certified and must be in writing and submitted with the bid.
- B. Bidder shall bear any/all costs associated with its preparation of any bid, proposal or submittal.
- C. Public Information Act: Collin County is governed by the Texas Public Information Act, Chapter 552 of the Texas Government Code. All information submitted by prospective bidders during the bidding process is subject to release under the Act.
- D. The Bidder shall comply with Commissioners Court Order No. 2004-167-03-11, County Logo Policy.

1.10 BID SECURITY

- A. Each bid must be accompanied by Bid Security (in accordance with instructions set forth in section 001116-Advertisement For Bids) made payable to Owner in an amount of five percent (5%) of the bidder's maximum bid price and in the form of a Cashier's Check or a Bid Bond, duly executed by bidder as principal and having as surety thereon, a corporate surety authorized and admitted to do business in the State of Texas and licensed to issue such bond, as a guarantee that the bidder will enter into a Contract and execute required Performance, Payment, and two (2) year Maintenance Bonds within ten (10) consecutive calendar days of Collin County Commissioners Court award of Contract.
- B. The Bid Security of the contractor will be retained until such bidder has executed the Contract Agreement and furnished the required Contract Security, whereupon, the Bid Security will be returned. If the contractor fails to execute and deliver the Agreement and furnish the required Contract Security within ten (10) consecutive calendar days of Collin County Commissioners Court award of Contract, Owner may annul the award of contract and the Bid Security of that bidder will be forfeited. The Bid Security of the other bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh (7th) consecutive calendar day after the effective date of the Agreement or the ninety-fifth (95th) consecutive calendar day after the bid opening, whereupon, the Bid Security furnished by such bidders will be returned. Bid Security with bids which are not competitive will be returned within seven (7) consecutive calendar days after the contract award.
- C. Should the bidder to whom the Contract is awarded refuse or neglect to execute and file the contract and bonds within ten (10) consecutive calendar days of Collin County Commissioners Court award of Contract, Owner may annul award of Contract and the Bid Security filed with the bid shall become the property of Owner, not as a penalty, but as liquidated damages. Owner reserves the right to award canceled Contract to next responsible, lowest and best bidder as it deems to be in the best interest of the County.
- D. Owner will have the right to retain the bid security of all bidders until either:
 - 1. the Contract has been executed and the bonds have been furnished, or
 - 2. the specified time has elapsed so that bids may be withdrawn, or
 - 3. all bids have been rejected.

1.11 PERFORMANCE BOND, LABOR & MATERIAL PAYMENT BOND, MAINTENANCE BOND

A. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners Court award of Contract, a Performance Bond in the amount of one hundred

percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.

- B. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners Court award of Contract, a Payment Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.
- C. The Contractor must demonstrate to Owner that it can secure the required performance and payment bonds, issued by a corporate surety company authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. Contractor must also demonstrate that the bond is not in excess of ten percent (10%) of the corporate surety company's capital and surplus. To the extent the amount of the bond exceeds ten percent (10%) of the corporate surety company's capital and surplus, such bond will not be accepted unless bidder provides written certification that the corporate surety company has reinsured the portion of the risk that exceeds ten percent (10%) of the corporate surety company's capital and surplus with one or more insurers who are duly authorized, accredited or trusted to do business in the State of Texas. The amount reinsured by any reinsurer must not exceed ten percent (10%) of the reinsurer's capital and surplus.
- D. The Contractor must file with the performance bond and payment bond, all documents and information necessary to establish that the agent signing the bond is authorized to write the bond in the amount requested, and if applicable, that reinsurance requirements, have been met, including limits and ratings or other evidence of company solvency.
- E. If the corporate surety company on any bond furnished by Contractor to Owner is declared bankrupt or becomes insolvent or such corporate surety company's right to do business in the State of Texas is revoked, the Contractor shall within five (5) consecutive calendar days thereafter substitute another bond and corporate surety company, both of which shall be acceptable to Owner.

1.12 FILING BID

A. All Bids, proposals, or submittals submitted in hard copy paper form shall be submitted in a sealed envelope, plainly marked on the outside with the Invitation for Bid (IFB) number and name. A hard copy paper form bid, proposal, or submittal shall be manually signed in ink by a person having the

- authority to bind the firm in a contract. Submittals, bids or proposals shall be mailed or hand delivered to the Collin County Purchasing Department.
- B. No oral, telegraphic or telephonic submittals will be accepted. Bids, proposals, or submittals may be submitted in electronic format via Collin County eBid at https://procurement.opengov.com/portal/collincountytx.
- C. All Bids, submittals or proposals submitted electronically via OpenGov Procurement at https://procurement.opengov.com/portal/collincountytx shall remain locked until official date and time of opening as stated in the Special Terms and Conditions of the IFB.
- D. For hard copy paper form bids, proposals, or submittals, any alterations made prior to opening date and time must be initialed by the signer of the bid, proposal, or submittal, guaranteeing authenticity. Bids, proposals, or submittals cannot be altered or amended after submission deadline.
- E. No bid, proposal, or submittal will be considered unless it is filed with the Owner Purchasing Department within the time limit for receiving bids as stated in the Advertisement for Bids or IFB. Each hard copy paper bid shall be in a sealed envelope plainly marked with the word "BID", and the name and bid number of the project as designated in the Advertisement for Bids or IFB.

1.13 MODIFICATION AND WITHDRAWAL OF BID

A. No bid, proposal, or submittal may be withdrawn or modified after the bid opening except where the award of the contract has been delayed beyond ninety (90) consecutive calendar days after date of bid opening or as per Texas Local Government Code, Title 8, Chapter 262, Subchapter C., Section 262.0305. Modifications after Award.

1.14 IRREGULAR BID

A. It is understood that Collin County, Texas reserves the right to accept or reject any and/or all Bids, proposals, or submittals for any or all products and/or services covered in an Invitation For Bid (IFB) and to waive informalities or defects in submittals or to accept such submittals as it shall deem to be in the best interest of Collin County.

1.15 REJECTION OF BID

A. The bidder acknowledges the right of Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of Owner to reject a bid if the bidder failed to furnish any required Bid Security, or to submit the data required by the Bidding Documents, or if the bid is in any way incomplete or irregular.

1.16 METHOD OF AWARD

- A. In evaluating bids, Owner will consider whether or not the bids comply with the prescribed requirements, base prices, any alternates, unit pricing, completion time, bidder's qualifications, bidder's proposed subcontractors, suppliers, etc., and other data as may be requested in the Bid Documents.
- B. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications and financial ability of bidder, proposed subcontractors, suppliers and other persons and organizations to perform and furnish the Work in accordance with the Bidding Documents to Owner's satisfaction within the prescribed time.
- C. If the contract is to be awarded, it will be awarded to the lowest and best responsible bidder whose evaluation, by Owner, indicates to be in the best interests of the project. If no alternates are selected by Owner, the Owner may award the contract to a responsible bidder who submits the lowest and best bid.
- D. <u>Evaluation of Alternates</u> Any and/or all or none of the alternates may be considered in evaluation. Owner may award Contract on base bid plus any and/or all or none of the alternates.
- E. Owner anticipates award within ninety (90) consecutive calendar days after bid opening.
- F. The bid, when properly accepted by the County, shall constitute a Contract equally binding between the contractor and Owner. No different or additional terms will become part of this Contract with the exception of a written Change Order, signed by both parties.
- G. 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 Collin County Purchasing Agent.

1.17 EXECUTION OF CONTRACT

A. The person or persons, partnership, company, firm, association or corporation to whom a contract is awarded shall within ten (10) consecutive calendar days after such award, sign the necessary contract agreements and submit the required bonds entering into the required Contract with Owner. No contract shall be binding on Owner until it has been executed by Owner or his/her duly authorized representative, and delivered to the Contractor.

1.18 FAILURE TO EXECUTE CONTRACT

A. The failure of the Bidder to execute the required bonds or to sign the required Contract within ten (10) consecutive calendar days after the Contract is awarded, shall be considered by Owner as abandonment of his/her Bid, and Owner may annul the award, at the Owner's sole discretion.

1.19 PURCHASE ORDER

A. A purchase order(s) shall be generated by Owner to the contractor. The purchase order number <u>must</u> appear on all itemized invoices. Collin County will not be responsible for any orders placed or delivered without a valid purchase order number.

1.20 NOTICE TO PROCEED

A. Upon the execution and delivery of Bonds, Executed Contract by Contractor, progress schedule, proof of insurance, and all other documents required prior to commencing work herein, Owner will issue a written Notice to Proceed to the Contractor requesting that he/she proceed with construction, and the Contractor shall commence work within ten (10) consecutive calendar days after the date of Notice to Proceed.

1.21 PAYMENT PROCEDURES

- A. Contractor shall submit Applications for Payment in accordance with the Contract, and payments shall be made in accordance with the Contract Documents.
- B. Final Payment: Upon final completion and acceptance of the work, Owner shall pay the remainder of the contract price as recommended by Architect, in accordance with Texas Government Code, Title 10, Subtitle F., Chapter 2251. Contractor(s) is required to pay subcontractors within ten (10) days after the contractor has received payment from the County.
- C. The Contractor understands, acknowledges and agrees that if the Contractor subcontracts with a third party for services and/or material, the primary Contractor (awardee) accepts responsibility for full and prompt payment to the third party. Any dispute between the primary Contractor and the third party, including any payment dispute, will be promptly remedied by the Contractor. Failure to promptly render a remedy or to make prompt payment to the third party (subcontractor) may result in the withholding of funds from the primary Contractor by Collin County for any payments owed to the third party.

1.22 AFFIDAVIT OF BILLS PAID

A. Prior to final acceptance of this project by Owner, the Contractor shall execute an affidavit that all bills for labor, materials, and incidentals incurred in the project construction have been paid in full, and that there are no claims pending.

1.23 EXEMPTION FROM STATE OF TEXAS AND LOCAL SALES TAX ON MATERIALS

A. Owner qualifies for exemption from State and Local Sales Tax pursuant to the provisions of Chapter 151, Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. The Contractor performing this Contract may purchase all materials, supplies, equipment consumed in the performance of this Contract by issuing to his/her suppliers an exemption certificate in lieu of the tax.

1.24 CONFLICT OF INTEREST

A. No public official shall have interest, direct or indirect, in this contract, in accordance with Texas Local Government Code Title 5, Subtitle C, Chapter 171.

1.25 ETHICS

The bidder/contractor shall comply with Commissioners Court Order No. 96-680-10-28, Establishment of Guidelines & Restrictions Regarding the Acceptance of Gifts by County Officials & County employees.

1.26 BID COMPLIANCE

- A. Bid must comply with all federal, state, county and local laws concerning this type of project and the fulfillment of all ADA (Americans With Disabilities Act) requirements.
- B. Design, strength, quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practice.
- C. All products must be new and unused, unless otherwise specified, in first-class condition and of current manufacture.

1.27 DRUG FREE

- A. All bidders shall provide any and all notices as may be required under the Drug-Free Work Place Act of 1988, 41 U.S.C. 701, and Collin County Commissioners Court Order No. 90-455-06-11, to its employees and all sub-contractors to insure that Owner maintains a drug-free work place. The use, possession or being under the influence of drugs and/or alcohol while working on this bid project or while on County property is prohibited and may result in removal of an individual from the project and/or immediate termination of contract. The County reserves the right to review drug testing records of any personnel involved in this bid project. The County may require, at contractor's expense, drug testing of contractor's personnel if no drug testing records exists or if such test results are older than six (6) months.
- B. Substances and cut-off levels are as follows:

| SUBSTANCE | MAXIMUM LEVEL |
|--------------|---------------|
| | |
| Amphetamines | 1000 NG/ML |
| Barbiturates | 300 NG/ML |

| Benzodiazepines | 300 NG/ML |
|----------------------------|-----------|
| Cocaine Metabolite | 300 NG/ML |
| Opiates | 300 NG/ML |
| Phencyclidine (PCP) | 25 NG/ML |
| THC (Marijuana) Metaboline | 100 NG/ML |
| Methadone, Urinary | 300 NG/ML |
| Methaquaone, Urine | 300 NG/ML |
| Propoxyphene | 300 NG/ML |

1.28 INDEMNIFICATION

A. To the fullest extent permitted by law, the CONTRACTOR and his sureties shall indemnify, defend and hold harmless the OWNER and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER growing out of such injury or damage. In no event shall OWNER be liable to CONTRACTOR for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. CONTRACTOR'S duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the CONTRACTOR likewise covenants and agrees to, and does hereby, indemnify and hold harmless the OWNER from and against any and all injuries, loss or damages to property of the OWNER during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the CONTRACTOR.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

1.29 CONSTRUCTION SCHEDULE

- A. The time for completion is set forth herein and will be included in the Contract. All work shall be completed within the consecutive calendar day count shown in the Contractor's bid. The calendar day count shall commence ten (10) consecutive calendar days after the date of the Notice to Proceed.
- B. Prior to the issuance of the Notice to Proceed by Owner, the Contractor shall submit a detailed progress and schedule chart to Owner for review. This chart will be used to assure completion of the job within the number of consecutive calendar days stated in bid documents.

1.30 DELAYS AND EXTENSIONS OF TIME

- A. If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Architectdetermines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architectmay determine.
- B. If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that the weather conditions had an adverse effect on the scheduled construction.
- C. Contractor's sole remedy for any delays in the project, which are not the fault of the Contractor, shall be an equitable extension of time to perform the work, required by the Contract. In no event shall the Contractor be entitled tom make a claim for delay, impact or acceleration damages against the Owner.

1.31 DAMAGES

Should the contractor fail to complete the project within the specified completion schedule the sum of 500.00 per calendar day will be deducted from the moneys due the contractor for the work. This sum shall not be considered as a penalty, but rather as reasonable liquidated damages, since it would be impracticable or extremely difficult to fix the actual damages. An extension of time may be allowed for delays beyond the control of the contractor at the discretion of Owner.

1.32 TERMINATION

This contract shall remain in effect until any of the following occurs:

- A. completion of project;
- B. acceptance of work ordered; or
- C. termination by either party pursuant to the terms of the Contract with a thirty (30) days written notice prior to cancellation that must state therein the reasons for such cancellation.
- D. breach of the contract by the Contractor for failure
 - 1. to meet completion schedules, or
 - 2. otherwise perform in accordance with these specifications.

Breach of contract or default authorizes the County to purchase elsewhere and charge the full increase in cost and handling to the defaulting Contractor.

1.33 PATENTS - COPYRIGHTS

A. The contractor agrees to protect Owner from any claims involving infringements of patents and/or copyrights. In no event shall Owner be liable to a contractor for any/all suits arising on the grounds of patent(s) or copyright(s) infringement.

1.34 VENUE; GOVERNING LAW

A. This contract will be governed by the laws of the State of Texas. Should any portion of this contract be in conflict with the laws of the State of Texas, the State laws shall invalidate only that portion. The remaining portion of the contract shall remain in effect. This contract is performable in Collin County, Texas.

1.35 ASSIGNMENT

A. The contractor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written approval from Collin County Commissioners Court.

1.36 SILENCE OF SPECIFICATION

A. The apparent silence of any part of the specification as to any detail or to 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. All interpretations of the specification shall be made on the basis of this statement.

1.37 PROVISION CONCERNING ESCALATOR CLAUSES

A. Bid(s) containing any condition which provides for changes in the stated bid prices due to increase or decrease in the costs of materials, labor, or other items required for this project, will be rejected and returned to the bidder without being considered.

1.38 ESTIMATES OF QUANTITIES

A. The quantities listed in the Bid Form will be considered as approximate and will be used for the comparison of bids. Payments will be made to the Contractor only for the actual quantities of work performed or materials furnished in accordance with the contract. The quantity of work to be done and the materials may be increased or decreased as provided for in the Contract Documents.

1.39 TREE PROTECTION OUTSIDE LIMITS OF WORK

A. The Contractor will be required to obtain written authorization from Owner for the removal of any tree three inches (3") in diameter or greater for any area outside the limits of the street right-of-way or slope easement. It is the intent of Owner to preserve as much as possible the natural condition of the floodplains.

1.40 EXCAVATION/TRENCH SAFETY

A. TRENCH SAFETY

1. The CONTRACTOR shall be responsible for complying with state laws and federal regulations relating to trench safety, including those which may be enacted during the performance under this contract. The CONTRACTOR shall be responsible for selecting an appropriate method of providing trench safety after due consideration of the job conditions, location of utilities, pavement conditions and other relevant factors. Slope-back methods which may result in unnecessary displacement of utilities and/or destruction of pavement may not be used without permission from the OWNER. The CONTRACTOR shall be responsible for providing to the OWNER an acceptable trench safety plan signed and sealed by a Professional Engineer qualified to do such work and registered in Texas. Devices used to provide trench safety such as trench shields and shoring systems will be likewise certified by professional Engineers registered in the State of Texas or by a professional Engineer registered in the state of manufacture of the shield.

B. PAYMENT FOR TRENCH SAFETY

1. Payment for trench safety shall be by the lineal feet of trench exceeding a depth of five (5) ft. Excavation for slope-back methods shall be subsidiary to the trench safety pay item including replacement and recompaction. Excess excavation for other trench safety methods is also subsidiary to the trench safety pay item. Costs relating to the preparation of the trench safety plan including geotechnical investigation, testing and report preparation fees are all subsidiary to the pay item for trench safety. Should trench safety measures be required during contract performance

where no pay item has been provided, then the CONTRACTOR shall immediately notify the OWNER and, if directed to do so, provide trench safety under the provisions of the contract. Should the OWNER fail to authorize the work, then the CONTRACTOR shall proceed under the provisions of the Contract. Trench safety requirements are mandatory and may not be waived.

C. PAYMENT FOR SPECIAL SHORING

- 1. Payment for special shoring, if any, shall be based on the square feet of shoring used.
- D. The Contractor must be made aware that on construction projects in which trench excavation will exceed a depth of five feet (5'), the uniform set of general conditions must require that the bid documents and the contract include detailed plans and specifications for adequate safety systems that meet Occupational Safety and Health Administration standards that will be in effect during the period of construction of the project. The Contractor shall provide a separate pay item for trench excavation safety in accordance with the Texas Health & Safety Code Chapter 756. The Contractor shall verify that these plans and specifications include a pay item for these same trench excavation safety systems, in accordance with Texas Government Code, Title 10, Section 2166.303, Uniform Trench Safety Conditions. The contractor shall insure that drainage from adjacent properties is not blocked by his/her excavations. Measurement and payment for excavation/trench safety systems will not be made directly, but considered subsidiary to the work.
- E. The Contractor shall be responsible for obtaining and paying for all surveys and testing, including geotechnical surveys and testing, necessary to insure it can comply with all laws regarding adequate trench excavation safety.

1.41 CONSTRUCTION STAKING

- A. Architectwill provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.
- B. The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

1.42 PERMITS

A. Contractor shall be responsible for obtaining all necessary permits.

1.43 MATERIALS TESTING

A. Owner will be responsible for all materials testing.

1.44 STORM WATER PROTECTION

- A. The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).
- B. Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project). BMPs include, but are not limited to:
 - 1. Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.
 - 2. Installing and managing erosion and sediment control.
 - 3. Make available, upon request, permit associated documentation.
 - 4. Practicing spill prevention and good housekeeping.
 - 5. Meeting the requirements of the MS4 permit.
- C. In addition to the requirements of the Construction General permit (TXR150000), the MS4 permits lists prohibited discharges which will be enforced at the County construction sites whether the operator is the County or a contractor. The following discharges are prohibited:
 - 1. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
 - 2. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;
 - 3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
 - 4. Soaps or solvents used in vehicle and equipment washing; and,
 - 5. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

1.45 WAGE SCALE

- A. In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.
- B. Wage Determination: Building Construction, https://sam.gov/wage-determination/TX20240239/1

- C. Except for work on legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.
- D. For legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.
- E. For overtime work, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) Under the provisions of Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.
- F. If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the contract work.

1.46 CONTRACT ADMINISTRATOR

A. Collin County Purchasing Department shall serve as Contract Administrator or shall supervise agents designated by Collin County.

1.47 WARRANTIFS

A. All warranties shall be stated as required in the Uniform Commercial Code.

1.48 UNIFORM COMMERCIAL CODE

A. The Contractor and Collin County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

1.49 ADVERTISEMENT OF CONTRACT

A. Contractor shall not fraudulently advertise, publish or otherwise make reference to the existence of a contract between Collin County and Contractor for purposes of solicitation. As exception, Contractor may refer to Collin County as an evaluating reference for purposes of establishing a contract with other entities.

1.50 DIAGNOSTIC TOOLS

A. Contractor shall provide Collin County with diagnostic access tools at no additional cost to Collin County, for all Electrical and Mechanical systems, components, etc., procured through this contract.

1.51 CRIMINAL HISTORY BACKGROUND CHECK

A. If required, ALL individuals may be subject to a criminal history background check performed by Collin County prior to access being granted to Collin County facilities. Upon request, Vendor/Contractor/Provider shall provide list of individuals to Collin County Purchasing Department within five (5) working days.

1.52 IMMIGRATION AND REFORM ACT OF 1986

A. Vendors/Contractors/Providers must be in compliance with the Immigration and Reform Act of 1986 and all employees specific to this solicitation must be legally eligible to work in the United States of America.

1.53 CERTIFICATION OF ELIGIBILITY

A. This provision applies if the anticipated Contract exceeds \$100,000.00 and as it relates to the expenditure of federal grant funds. By submitting a bid or proposal in response to this solicitation, the Bidder/Quoter/Offeror certifies that at the time of submission, he/she is not on the Federal Government's list of suspended, ineligible, or debarred contractors. In the event of placement on the list between the time of bid/proposal submission and time of award, the Bidder/Quoter/Offeror will notify the Collin County Purchasing Agent. Failure to do so may result in terminating this contract for default.

1.54 NOTICE TO CONTRACTORS (IF APPLICABLE)

- A. The Collin County Detention Facility houses persons who have been charged with and/or convicted of serious criminal offenses. When entering the Detention Facility, you could:
 - 1. hear obscene or graphic language;
 - 2. view partially clothed male inmates;
 - 3. be subjected to verbal abuse or taunting;
 - 4. risk physical altercations or physical contact, which could be minimal or possibly serious;
 - 5. be exposed to communicable or infectious diseases;
 - 6. be temporarily detained or prevented from immediately leaving the Detention Facility in the case of an emergency or "lockdown; and
 - 7. subjected to a search of your person or property.

While the Collin County Sheriff's Office takes every reasonable precaution to protect the safety of visitors to the Detention Facility, because of the inherently dangerous nature of a Detention Facility and the type of the persons incarcerated therein, please be advised that the possibility of such situations exist and you should carefully consider such risks when entering the Detention Facility. By entering the Collin County Detention Facility, you acknowledge that you are aware of such potential risks and willingly and knowingly choose to enter the Collin County Detention Facility.

1.55 E-Verify

A. Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER's intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification and non-discrimination. According to the INA, contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractors' process to verify enrollment compliance.

1.56 INSURANCE REQUIREMENTS

A. CONTRACTOR'S INSURANCE

- Everything that follows under insurance requirements is applicable to all subcontractors.
 Contractor will have discretion to determine coverage limis for its subcontractors for the required insurances.
- 2. Before commencing work, the CONTRACTOR shall be required to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. CONTRACTOR shall also be required to furnish the Collin County Purchasing Agent with certified copies of subcontractor's insurance certificates required by the Texas Department of Insurance, Division of Workers' Compensation, section 406.096(b), and coverages required herein in section 4.2. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor at their own expense shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates required of each policy for the CONTRACTOR and each subcontractor shall be delivered to the OWNER before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, nonrenewed or materially changed without 30 days advance written notice being given to the OWNER.

- 3. In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:
 - a. Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage of not less than \$1,000,000. In addition to these, the CONTRACTOR must comply with all the requirements of the Texas Department of Insurance, Division of Workers' Compensation; section 406.096(b); (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)
 - i. By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors who will provide services on the Project will be covered by workers compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.
 - ii. The CONTRACTOR'S failure to comply with any of these provisions is a breach of Contract by the Contractor which entitles the OWNER to declare the Contract void if the CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from the OWNER.
 - b. Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S and its subcontractors liability for injury to or death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:
 - i. General Aggregate \$2,000,000
 - ii. Products Components/Operations Aggregate \$2,000,000
 - iii. Personal and Advertising Injury \$ 1,000,000
 - iv. Each Occurrence \$ 2,000,000
 - v. Contractor's Pollution Liability \$1,000,000/\$3,000,000 (Occurrence Form)
 - vi. The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and

- underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.
- c. Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

d. OWNER'S PROTECTIVE LIABILITY INSURANCE

i. CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate. Owner's Protective Liability Insurance required by Contractor only is acceptable.

e. "UMBRELLA" LIABILITY INSURANCE

i. CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance (over Workers Comp, Auto, and General Liability) during the contract term, insuring CONTRACTOR for an amount of not less than \$2,000,000 per occurrence/\$2,000,000 aggregate limit combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured. Contractor can adjust to lower limits on umbrella liability insurance for its subcontractors.

f. RAILROAD PROTECTIVE INSURANCE

i. When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

g. BUILDER'S RISK

i. CONTRACTOR shall obtain, pay for, and maintain builders risk insurance during the contract term, insuring CONTRACTOR for an amount of not less than the total contract amount.

4. POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

- a. Each insurance policy to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:
 - i. each policy shall name the OWNER as an additional insured as to all applicable coverage
 - ii. each policy shall require that 30 days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;
 - iii. the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;
 - iv. the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;
 - v. all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;
 - vi. each policy shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and
 - vii. each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.
- b. Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:
 - any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;
 - ii. all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A+ VII or better as assigned by BEST Rating Company or equivalent; and
 - iii. Surplus lines insurance carriers will be acceptable when surplus lines companies meet all financial requirements and be liscensed in their home state. Collin County will take an extra step if a bid comes in to include coverage from a surplus lines carrier to verify if that

company is approved by TDI to do business in the state of Texas. Please verify with TDI at the phone number list in below link if your or your proposed surplus lines company is approved before you submit your bid.

https://www.tdi.texas.gov/pubs/consumer/cb015.html; and (d) All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

c. CONTRACTOR agrees to the following:

- CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies;
- ii. Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;
- iii. Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and
- iv. No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

1.57 BUSINESS WITH A FOREIGN ENTITY

A. Vendors/Contractors/Providers must be in compliance with the provisions of Section 2252.152 and Section 2252.153 of the Texas Government Code which states, in part, contracts with companies engaged in business with Iran, Sudan, or Foreign Terrorist Organizations are prohibited. A governmental entity may not enter into a contract with a company that is listed on the Comptroller of the State of Texas website identified under Section 806.051, Section 807.051 or Section 2253.253 which do business with Iran, Sudan or any Foreign Terrorist Organization. This Act is effective September 1, 2017.

1.58 FORCE MAJEURE

A. No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: acts of God; flood, fire or explosion; war, invasion, riot or other civil unrest; actions, embargoes or blockades in effect on or after the date of this Agreement; or national or regional emergency (each of the foregoing, a "Force Majeure Event"). A party whose performance is affected by a Force Majeure Event shall give notice to the other party, stating the period of time the occurrence is expected to continue and shall use diligent efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

004113 Pricing Table

Line Items

GRAND TOTAL PRICING

| Line Item | Description | Quantity | Unit of Measure | Unit Cost | Total |
|-----------|--|----------|--------------------|-----------|-------|
| 1 | Bid Grand Total per plans and specifications | 1 | Lump-Sum | | |
| TOTAL | | | 1 | | |

BOM-900 BUILDING UNIT PRICING

| Line Item | Description | Quantity | Unit of Measure | Unit Cost | Total |
|-----------|--|----------|--------------------|-----------|-------|
| 1 | AXIS Panoramic Camera | 1 | EA | | |
| 2 | AXIS Camera (Sensor) | 4 | EA | | |
| 3 | AXIS Main Unit | 1 | EA | | |
| 4 | AXIS Microphone | 2 | EA | | |
| 5 | Milestone Licenses | 2 | EA | | |
| 6 | AXIS Surface Mount | 1 | EA | | |
| 7 | AXIS Cable Connector Kit FAKRA | 1 | EA | | |
| 8 | Pass Thru Intercom With Mini Board for Audio Out | 4 | EA | | |
| 9 | AXIS Microphone Extension Cable B | 2 | EA | | |
| 10 | West Penn 357 Audo Cable | 2 | EA | | |
| 11 | West Penn 221 Speaker Cable | 2 | EA | | |
| 12 | Category 6+ Enhanced Cable, 4 Pair, F/UTP, CMP | 2 | EA | | |

| Line Item | Description | Quantity | Unit of Measure | Unit Cost | Total |
|-----------|---|----------|--------------------|-----------|-------|
| 13 | Category 6, RJ45, 8-position, 8-wire universal module. Green. | 4 | EA | | |
| 14 | Category 6 24 AWG UTP Copper Patch Cord, 7 ft, Green | 4 | EA | | |
| TOTAL | | | | | |

BOM-ADMIN BUILDING UNIT PRICING

| Line Item | Description | Quantity | Unit of Measure | Unit Cost | Total |
|-----------|--|----------|--------------------|-----------|-------|
| 1 | AXIS Main Unit | 4 | EA | | |
| 2 | AXIS Camera (Sensor) | 9 | EA | | |
| 3 | AXIS Camera Cable | 9 | EA | | |
| 4 | AXIS Panoramic Camera | 1 | EA | | |
| 5 | AXIS Dome Camera | 2 | EA | | |
| 6 | AXIS Surface Mount | 4 | EA | | |
| 7 | AXIS Microphone | 6 | EA | | |
| 8 | AXIS Microphone | 2 | EA | | |
| 9 | Milestone Recording Server (PowerEdge R450 Server 210-AZDS) | 1 | EA | | |
| 10 | Milestone Licenses | 7 | EA | | |
| 11 | AXIS Cable Connector Kit FAKRA | 2 | EA | | |
| 12 | Pass Thru Intercom With Mini Board for Audio Out | 12 | EA | | |
| 13 | AXIS Microphone Extension Cable B | 8 | EA | | |
| 14 | West Penn 357 Audo Cable | 8 | EA | | |

| Line Item | Description | Quantity | Unit of Measure | Unit Cost | Total |
|-----------|---|----------|--------------------|-----------|-------|
| 15 | West Penn 221 Speaker Cable | 8 | EA | | |
| 16 | Category 6+ Enhanced Cable, 4 Pair, F/UTP, CMP | 8 | EA | | |
| 17 | Category 6, RJ45, 8-position, 8-wire universal module. Green. | 14 | EA | | |
| 18 | Category 6 24 AWG UTP Copper Patch Cord, 7 ft, Green | 14 | EA | | |
| TOTAL | | | 1 | 1 | ı |

004313 BID BOND

| STATE OF TEXAS | § | | |
|---|--|--|---|
| COUNTY OF COLLIN | § | KNOW ALL MEN BY THESE PRESE | NTS: |
| ТНАТ | | | , a corporation organized and existing_under the laws o |
| | | ed to transact business in the State of Texas, whose addre | |
| | | , and State of,(hereina | |
| | | | fter referred to as "Surety", a corporation organized unde |
| the laws of the State of | and a | | surety on bonds for principals, are held and firmly bound |
| | | | and corporations who may furnish materials for or perforn |
| | | referred to in the attached Contract, , in the penal sum of | |
| | _ | _ | nt whereof, the said Principal and Surety bind themselves |
| and their heirs, administrato | rs, executors, successors, | and assigns, jointly and severally, firmly by these presen day of202 | |
| WHEREAS, the | Principal is herewith su | bmitting its proposal for IFB 2025-091 Collin County | Service for Windows and Security Cameras |
| difficult and impractical to Bonds. PROVIDED FU The Resident Agent of the S | determine accurately the IRTHER, that if any legal surety for delivery of notion | e actual amount of damages occurring to OWNER by r I action be filed on this Bond, venue shall lie in ice and service of process is: | he full penal sum hereof, as liquidated damages, it being reason of Principal's failure to execute said Contract and County, Texas. |
| | | | |
| | | | |
| Pnone Number: | | | |
| WITNESS | | PRINCIPAL | |
| | | Printed/Typed Name | <u>-</u> |
| | | Title: | |
| | | Company: | |
| | | Address: | |
| WITNESS | | SURETY | |
| | | Printed/Typed Name | 2 |
| | | Title: | |
| | | | |
| | | A 11 | |

NOTE: CERTIFIED COPY OF POWER-OF-ATTORNEY SHOULD BE ATTACHED HERETO.

Revised 11/2008

SECTION 004325 - PRODUCT SUBSTITUTION REQUEST FORM (Must be submitted by date specificed in solicitation)

| Bidder: | Project No: <u>IFB 2025-091</u> |
|--|---|
| Project: Collin County Service for | or Windows and Security Cameras |
| Section: | Article/ Paragraph: |
| Proposed Substitution: | |
| Manufacturer: | Address: |
| Telephone: | Proposed Model No.: |
| | description, specifications, drawings, photographs, and performance and test data equest; applicable portions of the data are clearly identified. |
| Attached data also includes a drequire for its installation. | escription of changes to the Contract Documents that the proposed substitution will |
| The undersigned warrants and r | epresents: |
| Same maintenance ser Proposed substitution of progress schedule. Proposed substitution of proposed substitu | furnished for proposed substitution as for specified product. vice and source of replacement parts, as applicable, is available. will have no adverse effect on other trades and will not affect or delay does not affect dimensions and functional clearances. for changes to building design, including A/E design, detailing, and sed by substitution. |
| Submitted By: | Signed: |
| Firm: | Address: |
| Phone: | |
| REVIEW & ACTION (Initial) | |
| Substitution approvedSubstitution rejected - | - Make submittals in accordance with Project Manual requirements. as noted - Make submittals in accordance with Project Manual requirements. Use specified materials. eccived too late - Use specified materials. |
| Signature: | Date: |
| | |
| Supporting Data Attached: | DrawingsProduct DataSamplesTestsReportsOther |

004513 Vendor Submissions

OpenGov Notice*

Collin County exclusively uses OpenGov Procurement for the notification and dissemination of all solicitations. The receipt of solicitations through any other means may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid/proposal non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other means. Please initial.

*Response required

2. Contact Information*

List the contact name, email address and phone number of the main person(s) Collin County should contact in reference to this solicitation. Contact(s) shall be duly authorized by the company, corporation, firm, partnership or individual to respond to any questions, clarification, and or offers in response to this solicitation.

*Response required

3. Exceptions*

If you take any exceptions to the specifications, you must submit the exception/s as a Question via the public eBid portal before the Question Cutoff Date for County consideration. The County will review and publish a response via eBid. If you would like to offer any substitutions, please review the Instruction to Bidders Document 002113, Section 1.07 and submit by separate attachment. Please initial.

*Response required

4. Calendar Days Bid*

Please state the consecutive calendar days bid from notice to proceed through completion of project.

*Response required

5. Insurance Acknowledgement*

I understand that the insurance requirements of this solicitation are required and are included in the submitted pricing. The Contractor shall furnish certificates of insurance for both the Contractor and any subcontractor to the Purchasing department if awarded all or a portion of the resulting contract. Please initial.

*Response required

6. Bid Bond Acknolwedgement*

II understand that accompanying this bid, is a certified check, cashier's check or Bid Bond in the amount of five percent (5%) of the total amount bid. Bidders submitting a bid via OpenGov Procurement shall upload a Bid Bond at https://procurement.opengov.com/portal/collincountytx. Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered.

I understand that the <u>original</u> Bid Bond shall be received in the Collin County Purchasing Department no later than close of business on the third working day after the bid opening. Late receipt of original Bid Bond shall be cause for rejection of bid. Please initial.

*Response required

7. Bid Bond

Part 1 (Scanned and Upload)

Cashier's check, certified check, or bid bond payable to the order of the Collin County, TX, of not less **five percent (5%)** of the bid in said amount, payable to the Collin County, TX and signed by the bidder as well as a corporate surety, shall accompany the bid

Please scan and upload a copy of your bid bond/cashier's check.

or

Part 2 (Mail or Hand Deliver)

Bidder must also MAIL or hand deliver bid guarantee with a postmarked date no later than 2:00 pm on Thursday, May 1, 2025 addressed to:

Collin County Purchasing

2300 Bloomdale Road Suite 3160, **Ste. 3160** McKinney,TX 75070

Please have the following listed clearly on the outside of the envelope:

- A. Bidder Name,
- B. Bid Bond" for Collin County Service for Windows and Security Cameras
- C. Contract Number 2025-091
- D. Date/time of the bid opening
- E. "DO NOT OPEN WITH REGULAR MAIL"

The Bid shall include the bid bond both uploaded into OpenGov Procurement and hard copy original mailed or hand delivered to the purchasing office no later than the close of business on the third working day after the bid opening, otherwise the bid will be deemed non-responsive.

8. Bonding Requirement Acknowledgement*

I understand that the bonding requirements of this solicitation are required and are included in the submitted pricing. A bond certificate (payment, performance, and/or maintenance) as stated in the specification document shall be submitted to the Purchasing department if I am awarded all or a portion of the resulting contract. Please initial.

*Response required

9. Subcontractors*

State the business name of all subcontractors and the type of work they will be performing under this contract. If you are fully qualified to self-perform the entire contract, please respond with "Not Applicable-Self Perform".

*Response required

10. Reference No. 1*

List a company or governmental agency, other than Collin County, where these same/like products/services, as stated herein, have been provided. Texas references are preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail. It is the responsibility of the Bidder/Proposer to ensure submitted references will be responsive to the County's requests. The County reserves the right to contact references other than those listed, and to consider any information acquired from all references during the evaluation process.

*Response required

11. Reference No. 2*

List a company or governmental agency, other than Collin County, where these same/like products/services, as stated herein, have been provided. Texas references are preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail. It is the responsibility of the Bidder/Proposer to ensure submitted references will be responsive to the County's requests. The County reserves the right to contact references other than those listed, and to consider any information acquired from all references during the evaluation process.

*Response required

12. Reference No. 3*

List a company or governmental agency, other than Collin County, where these same/like products/services, as stated herein, have been provided. Texas references are preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail. It is the responsibility of the Bidder/Proposer to ensure submitted references will be responsive to the County's requests. The County reserves the right to contact references other than those listed, and to consider any information acquired from all references during the evaluation process.

*Response required

13. Preferential Treatment*

The County of Collin, as a governmental agency of the State of Texas, may not award a contract to a nonresident bidder unless the nonresident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is

located or a state in which the nonresident is a resident manufacturer. (Government Code, Title 10, V.T.C.A., Chapter 2252, Subchapter A).

- 1. Is your principal place of business in the State of Texas?
- 2. If your principal place of business is not in Texas, in which State is your principal place of business?
- 3. If your principal place of business is not in Texas, does your state favor resident bidders (bidders in your state) by some dollar increment or percentage?
- 4. If your state favors resident bidders, state by what dollar amount or percentage.
- *Response required

14. Debarment Certification*

I certify that neither my company nor an owner or principal of my company has been debarred, suspended or otherwise made ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension," as described in the Federal Register and Rules and Regulations. Please initial.

15. Immigration and Reform Act*

I declare and affirm that my company is in compliance with the Immigration and Reform Act of 1986 and all employees are legally eligible to work in the United States of America. I further understand and acknowledge that any non-compliance with the Immigration and Reform Act of 1986 at any time during the term of this contract will render the contract voidable by Collin County. Please initial.

16. Information Regarding Conflicts of Interest

During the 79th Legislative Session, House Bill 914 was signed into law effective September 1, 2015, which added Chapter 176 to the Texas Local Government Code. Recent changes have been made to Chapter 176 pursuant to HB23, which passed the

84th Legislative Session. Chapter 176 mandates the public disclosure of certain information concerning persons doing business or seeking to do business with Collin County, including family, business, and financial relationships such persons may have with Collin County officers or employees involved in the planning, recommending, selecting and contracting of a vendor for this procurement.

For a copy of Form CIQ and CIS: https://www.ethics.state.tx.us/forms/conflict/

The vendor acknowledges by doing business or seeking to do business with Collin County that they have been notified of the requirements under Chapter 176 of the Texas Local Government Code and that they are solely responsible for complying with the terms and conditions therein. Furthermore, any individual or business

^{*}Response required

^{*}Response required

entity seeking to do business with Collin County who does not comply with this practice may risk award consideration of any County contract.

For a listing of current Collin County Officers: https://www.collincountytx.gov/Contact/county-officials

At the time of this solicitation being released, the following are known to be involved in the planning, recommending, selecting, and/or contracting for the attached procurement:

Department:

Sandeep Kathuria-Director of Construction and Projects

Brad Harris-Building Projects Coordinator

Purchasing:

Michelle Charnoski, NIGP-CPP, CPPB – Purchasing Agent

Marci Chrismon, CPPB – Assistant Purchasing Agent

Cory Rogers-Senior Buyer

Commissioners Court:

Chris Hill - County Judge

Susan Fletcher - Commissioner Precinct No. 1

Cheryl Williams – Commissioner Precinct No. 2

Darrell Hale - Commissioner Precinct No. 3

Duncan Webb - Commissioner Precinct No. 4

Advisors:

Kent Spurgin

Spurgin & Associates Architects

1216 N Central Expressway

Suite 200A

McKinney, TX 75070

Please complete and upload.

17. Confirmation of Conflict of Interest*

I have read the conflict of interest information above and will file the CIQ form if a conflict exists.

| ☐ Please confirm | n |
|------------------|---|
|------------------|---|

*Response required

18. Disclosure of Certain Relationships*

Chapter 176 of the Texas Local Government Code requires that any vendor considering doing business with a local government entity disclose the vendor's affiliation or business relationship that might cause a conflict of interest with a local government entity. Subchapter 6 of the code requires a vendor to file a conflict of interest questionnaire (CIQ) if a conflict exists. By law this questionnaire must be filed with the records administrator of Collin County no later than the 7th business day after the date the vendor becomes aware of an event that requires the statement to be filed. A vendor commits an offense if the vendor knowingly violates the code. An offense under this section is a misdemeanor. By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code. Please send completed forms to the Collin County County Clerk's Office located at 2300 Bloomdale Rd., Suite 2104, McKinney, TX 75071. Please initial.

19. Anti-Collusion Statement*

Bidder certifies that its Bid/Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Bid/Proposal for the same materials, services, supplies, or equipment and is in all respects fair and without collusion or fraud. No premiums, rebates or gratuities permitted; either with, prior to, or after any delivery of material or provision of services. Any such violation may result in Agreement cancellation, return of materials or discontinuation of services and the possible removal from bidders list. Please initial.

*Response required

20. Disclosure of Interested Parties*

Section 2252.908 of the Texas Government Code requires a business entity entering into certain contracts with a governmental entity to file with the governmental entity a disclosure of interested parties at the time the business entity submits the signed contract to the governmental entity. Section 2252.908 requires the disclosure form (Form 1295) to be signed by the authorized agent of the contracting business entity, acknowledging that the disclosure is made under oath and under penalty of perjury. Section 2252.908 applies only to a contract that requires an action or vote by the governing body of the governmental entity before the contract may be signed or has a value of at least \$1 million. Section 2252.908 provides definitions of certain terms occurring in the section. Section 2252.908 applies only to a contract entered into on or after January 1, 2016. Please initial.

*Response required

21. Notification Survey*

In order to better serve our offerors, the Collin County Purchasing Department is conducting the following survey. We appreciate your time and effort expended to submit your bid. Should you have any questions or require more information please call (972) 548-4165. How did you receive notice of this request?

^{*}Response required

| ☐ OpenGov Notification |
|---------------------------------|
| ☐ Plano Star Courier |
| □ Plan Room |
| \square Collin County Website |
| \square Other |
| *Response required |

22. Critical Infrastructure Affirmation*

Pursuant to section 2274.0102 of the Texas Government Code, Respondent certifies that neither it nor its parent company, nor any affiliate of Respondent or its parent company, is: (1) majority owned or controlled by citizens or governmental entities of China, Iran, North Korea, Russia, or any other country designated by the Governor under Government Code Section 2274.0103, or (2) headquartered in any of those countries. Please initial.

*Response required

23. Energy Company Boycotts*

Pursuant to Section 2274.002 of the Texas Government Code, should the contract have a value of \$100,000 or more and the company employs 10 or more full-time employees, Respondent represents and warrants that: (1) it does not, and will not for the duration of the contract, boycott energy companies, and (2) will not boycott energy companies during the term of the contract. If circumstances relevant to this provision change during the course of the contract, Respondent shall promptly notify Agency. Please initial.

☐ Please confirm

24. Firearm Entities and Trade Associations Discrimination*

Pursuant to section 2274.002 of the Texas Government Code, should the contract have a value of \$100,000 or more and the company employs 10 or more full-time employees, Respondent verifies that: (1) it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association. If circumstances relevant to this provision change during the course of the contract, Respondent shall promptly notify Agency. Please initial.

*Response required

25. Construction Acknowledgement*

Bidder, declares that the only person or parties interested in this bid are those principals named herein, that his/her bid is made without collusion with any other person, firm or corporation, that he/she has carefully examined the Contract Documents including the Advertisement for Bids, Instruction to Bidders, Construction Agreement, Specifications and the Drawings, therein referred to and has carefully examined the locations, conditions and classes of materials for the proposed work, and agrees that he/she will provide all the necessary labor, machinery, tools, equipment, apparatus and other items incidental to construction and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed

therein. Bidder hereby declares that he/she has visited the site of the Work and has carefully examined the Contract Documents pertaining to the Work covered by the above Bid, and he/she further agrees to commence work within ten (10) consecutive calendar days after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within the number of days specified subject to such extensions of time allowed by Specifications. Bidder certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final. The prices have been shown in words and figures for each item listed in this bid and it is understood that in the event of a discrepancy, the words shall govern. Please initial.

*Response required

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

| This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Sec | office USE ONLY |
|--|--|
| This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a verbas a business relationship as defined by Section 176.001(1-a) with a local governmental entitivendor meets requirements under Section 176.006(a). | |
| By law this questionnaire must be filed with the records administrator of the local governmental entit than the 7th business day after the date the vendor becomes aware of facts that require the staten filed. <i>See</i> Section 176.006(a-1), Local Government Code. | |
| A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government offense under this section is a misdemeanor. | Code. An |
| Name of vendor who has a business relationship with local governmental entity. | |
| | |
| Check this box if you are filing an update to a previously filed questionnaire. completed questionnaire with the appropriate filing authority not later than the 7 you became aware that the originally filed questionnaire was incomplete or in | th business day after the date on which |
| Name of local government officer about whom the information is being disclosed | |
| Name of Officer | _ |
| | |
| Describe each employment or other business relationship with the local govern officer, as described by Section 176.003(a)(2)(A). Also describe any family relation Complete subparts A and B for each employment or business relationship described CIQ as necessary. A. Is the local government officer or a family member of the officer recother than investment income, from the vendor? Yes No B. Is the vendor receiving or likely to receive taxable income, other than of the local government officer or a family member of the officer AND the local governmental entity? Yes No Describe each employment or business relationship that the vendor named in S | ection 1 maintains with a corporation or |
| other business entity with respect to which the local government officer serve ownership interest of one percent or more. | |
| Check this box if the vendor has given the local government officer or a famil as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a)(a)(b), excluding gifts described in Section 176.003(a)(b), excluding gifts described in Section 176.003(a)(a)(b), excluding gifts described in Section 176.003(a)(b), excluding gifts described in Section 176.003 | |
| 7 | |
| Signature of yandar daing business with the sourcemental antity | |
| Signature of vendor doing business with the governmental entity | Date |

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. For easy reference, below are some of the sections cited on this form.

<u>Local Government Code § 176.001(1-a)</u>: "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.

005213 CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT is made and entered into by and between as "Contractor"), and COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas (hereinafter referred to as "County" or "OWNER"), to be effective from and after the date hereinafter provided.

For and in consideration of the covenants and agreements contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

CONTRACT SUM

The County shall pay the Contractor in current funds for the performance of the work, subject to additions and deductions by Change orders as provided in the Contract Documents. The contract sum shall be the amount of ______ (\$_______).

EFFECTIVE DATE

This Construction Agreement, having been previously approved by the Commissioners' Court of Collin County, Texas, shall be effective upon the date of delivery and execution by Contractor, provided the County executes the same within five (5) consecutive calendar days after said delivery and execution by Contractor.

I. CONTRACT GENERAL PROVISIONS

1.1 DEFINITIONS

Words which have well-known technical or construction industry meanings shall have their commonly understood meanings in the Contract Documents, unless a different meaning is stated in the Contract Documents. The following words and expressions, or pronouns used in their place, shall wherever they appear in this contract be construed as follows, unless a different meaning is clear from the context:

Addendum, Bulletin or Letter of Clarification: Any additional contract provisions, or change, revisions or clarification of the Contract Documents issued in writing by the OWNER, to prospective bidders prior to the receipt of bids.

Contract or Contract Documents: The written agreement covering the performance of the work. The Contract and Contract Documents include this written Construction Agreement between OWNER and CONTRACTOR, Advertisement for Bids, Instructions to Bidders, Requests for Proposal, all Addenda, the Specifications, including the general and supplemental special and technical conditions, Drawings, provisions, plans or working drawings — and any supplemental changes or agreements pertaining to the Work or materials therefor; and bonds and any additional documents incorporated by reference in the above.

CONTRACTOR: The person, persons, partnership, firm, corporation, association or organization, or any combination thereof, entering into the contract for the execution of the work, acting directly or through a duly authorized representative.

Other CONTRACTORS: Any contractor, other than the CONTRACTOR or his subcontractors, who has a direct contact with the OWNER for work on or adjacent to the site of the work.

Contract Work or Work: Everything expressly or impliedly required to be furnished and done by the CONTRACTOR by the Contract Documents.

Engineer: The term "Engineer" means the Engineer or his duly authorized representative. The Engineer shall be understood to be the Engineer of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the Engineer and the CONTRACTOR.

Extra Work: Work other than that which is expressly or impliedly required by the Contract Documents at the time of the execution of the contract.

Change Order: A written order to the CONTRACTOR authorizing and directing an addition, deletion or revision in the work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or the Contract time.

Contract Price: The total amount of money payable to the CONTRACTOR under the terms and conditions of the Contract Documents. When used in such context, it may also mean the unit price of an item of work under the Contract terms.

OWNER'S Representative: The Engineer or other duly authorized assistant, agent, engineer, inspector or superintendent acting within the scope of their particular duties.

Drawings or Contract Drawings: Those drawings that are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, including but not limited to, the plans, elevations, sections, details, schedules, diagrams, any bulletin, or any detailed drawing furnished by the OWNER, pertaining or supplemental thereto.

Specifications: Those portions of the Contract Documents that specify the requirements for materials, equipment, systems, standards and workmanship for performance of the Work, and related services.

Inspector: Any representative of the OWNER designated to inspect the work.

Materialman or Supplier: Any subcontractor contracting with the CONTRACTOR, or any of his subcontractors, to fabricate or deliver or who actually fabricates or delivers materials, supplies or equipment to be consumed or incorporated into the Work.

Notice: Written notice effective the date of the postmark thereon, or if hand delivered, effective the date of hand delivery.

OWNER: COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas. The term OWNER means the OWNER or its authorized representative.

Payment Bond: A bond in the amount of the Contract executed by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of payment bond beneficiaries supplying labor and materials in the prosecution of the Contract Work.

Performance Bond: A bond in the amount of the Contract executed by a corporat surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of the Owner, conditioned on the faithful performance of the Contract Work in accordance with the plans, specification, and Contract Documents.

Maintenance Bond: A bond executed by a corporate surety for 10% of the Contract Price that complies with all Texas Laws, including but not limited to, Chapter 3503 of the Texas Insurance Code, guaranteeing the prompt, full and faithful performance of the general guaranty and warranty contained in the Contract Documents, and Texas Law.

Project: The total construction of the work described in the Contract Documents performed by the Contractor, Other Contractor or the Owner in whole or part.

Proposal: The written statement or statements duly submitted to the OWNER by the person, persons, partnership, company, firm, association or corporation proposing to do the Work contemplated, including the approved form on which the formal bids for the Work are to be proposed.

Plan, or Plans: The plans are the drawings or reproductions therefrom made by the Owner or Owner's Representative and approved by the Owner showing the dimensions, location, design and position of the various elements of the Project and Work, including plans, elevations, sections, details, schedules, diagrams, working drawings, preliminary drawings, and such supplemental drawings as the Owner may issue to clarify other drawings or for the purpose of showing changes in the Contract Work authorized by the Owner, or for showing details not shown therein.

Special Provisions or Conditions: The special clauses of the Contract, or Contract Documents, setting forth conditions or requirements peculiar to the specific Project involved, supplementing the standard or general specifications and taking precedence over any conditions or requirements of the standard or general specifications with which they are in conflict.

Specifications or Contract Specifications: All of the general, special and technical conditions or provisions, and all addendum or supplements thereto consisting of

written requirements for materials, equipment, systems, standards and performance of the work.

Site: The area upon or in which the CONTRACTOR'S operations are carried on, and such other areas adjacent thereto as may be designated as such by the OWNER.

Subcontractors: Any persons, firm or corporation, other than employees of the CONTRACTOR, who or which contracts with the CONTRACTOR to furnish, or who actually furnishes, labor and/or materials and equipment at or about the site.

Sureties: The corporate bodies which are bound by such bonds as are required with and for the CONTRACTOR. The sureties engaged to be responsible for the entire and satisfactory fulfillment of the Contract and for any and all requirements as set out in the specifications, Contract or plans.

The Work: All work including the furnishing of all labor, materials, tools, equipment, required submittals and incidentals to be performed by the CONTRACTOR under the terms of the Contract.

Directed, Required, Approved and Words of Like Import: Whenever they apply to the Work or its performance, the words "directed," "required," "permitted," "ordered," "designated," "established," "prescribed" and words of like import used in the Contract, specifications or upon the drawings shall imply the direction, requirement, permission, order, designation or prescription of the OWNER; and "approved," "acceptable," "satisfactory" and words of like import shall mean approved by, acceptable to or satisfactory to the OWNER.

Equal: Materials, articles or methods which are of equal or higher quality than those specified or shown on the drawings and as further defined in the "or equal" clause. Substitution of Materials shall be determined by the Engineer at his or her discretion, and approved by the Owner.

Working Time, Completion Time or Contract Time: The time set forth in the Contract for the performance and completion of the Work contracted for. The time may be expressed as calendar days, working days or a specific date.

Calendar Day or Days: Any successive days of the week or month, no days being excepted.

Working Day: A working day is defined as a calendar day not including Saturdays, Sundays or those legal holidays as specified in the list prepared by the OWNER for contract purposes. Nothing in this definition shall be construed as prohibiting the CONTRACTOR from working on Saturdays if he so desires, however permission of the OWNER shall be necessary if the CONTRACTOR chooses to work on Saturday. Work on Sundays shall not be permitted without the written permission of the OWNER. If Saturday or Sunday work is permitted, working time shall be charged on the same basis as week days. Where the working time is expressed as calendar days

or a specific date, the concept of working days shall no longer be relevant to the contract.

CONTRACT DOCUMENTS

- 1.2 The parties agree that the Contract Documents shall consist of the following documents in addition to any other documents referenced or incorporated herein:
 - A. This written Construction Agreement, including any changes or modifications;
 - B. All addenda including the following listed and numbered addenda:

 Addendum No. 1 dated ______ Received _____

 Addendum No. 2 dated ______ Received _____
 - C. Advertisement for Bids, Instructions to Bidder, the Invitation to Bid and Bid Form:
 - D. The Special/Supplemental Conditions;
 - E. The Specifications and the Project Drawings (if any);
 - F. The Construction Details shown on plans;
 - G. The Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums;
 - H. The Performance Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price;
 - I. The Payment Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price; and,
 - J. The Maintenance Bond in the sum of TEN PERCENT (10%) of the total Contract Price.

1.2.1 PRIORITY OF THE CONTRACT DOCUMENTS

These Contract Documents (A through J above) form the Construction Agreement and are a part of this Construction Agreement as if fully set forth herein. In the event of an inconsistency in any of the provisions of the Contract Documents, the inconsistency shall be resolved by giving precedence to the Contract Documents in the order in which they are listed above.

1.2.2 THE CONTRACT

The Contract Documents form the Contract. The Contract represents the entire integrated agreement between the OWNER and the CONTRACTOR and supersedes all prior negotiations, and representations by either party.

1.3 CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intent of the documents, unless otherwise specifically provided, is to produce complete and finished work, which the CONTRACTOR undertakes to do in full compliance with the Contract Documents. It is not intended to mention every item of work in the specifications which can be

adequately shown on the drawings nor to show on the drawings all items of work described or required by the specifications. All materials or labor for work shown on the drawings or reasonably inferable therefrom as being necessary to produce a finished job shall be provided by the CONTRACTOR whether or not same is expressly covered in the specifications. No verbal conversation, understanding or agreement with any officer or employee or agent of the OWNER, either before or after the execution of the Contract, shall affect or modify any of the terms, conditions or obligations contained in the Contract Documents.

1.3.1 CONTRACT DRAWINGS AND SPECIFICATIONS

The OWNER shall furnish the CONTRACTOR one copy of the Contract Drawings and any supplemental drawings and specifications reasonably necessary for the proper execution of the work. At least one copy of all drawings and specifications shall be accessible at all times to the OWNER at the job site.

1.3.2 SUPPLEMENTAL DRAWINGS AND SPECIFICATIONS

In order to carry out the intent of the Contract Documents and to assist the CONTRACTOR in performing its work, the OWNER, after the execution of the Contract, may, by supplemental drawings, specifications or otherwise, furnish additional information or instructions as may be necessary for construction purposes.

All such supplemental drawings, specifications or instructions are intended to be consistent with the Contract Documents and reasonably inferable therefrom. Therefore, no extra costs shall be allowed by the OWNER on a claim that particular supplemental drawings, specifications or instructions differ from the requirements of the Contract Documents, incurring extra costs, unless the CONTRACTOR has first brought the matter, in writing, to the OWNER'S attention for adjustment before proceeding with the work covered by such.

If the OWNER decides that there is no departure from the requirements of the Contract Documents, the CONTRACTOR shall then proceed with the work as shown, specified or directed. If the OWNER shall decide that Extra Work is involved, he shall so modify the supplemental drawings, specifications or instructions to eliminate the Extra Work, or cause a written Change Order to be issued in accordance with the Contract Documents.

1.3.3 ERRORS AND CORRECTIONS IN DRAWINGS AND SPECIFICATIONS

The CONTRACTOR shall not take advantage of any apparent errors, omissions or discrepancies in the drawings or specifications; and the Engineer shall be permitted to make such corrections or interpretations

asos3Documents. In case of any errors, omissions or discrepancies in the drawings or specifications, the CONTRACTOR shall promptly submit the matter to the OWNER or OWNER'S Representative in writing who, in turn, shall promptly make a determination and issue the necessary instructions in writing. Any adjustment by the CONTRACTOR without this determination and instructions shall be at the CONTRACTOR'S own risk and expense. The Work is to be made complete as intended by the Contract Documents.

1.3.4 EXISTING STRUCTURES

The plans show the general locations of some known surface and subsurface structures. The locations of many gas mains, water mains, conduits, sewers, other utilities, etc., however, are unknown, and the OWNER assumes no responsibility for failure to show any or all of these structures on the plans or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for Extra Work or for increasing the pay quantities in any manner whatsoever. The CONTRACTOR shall be solelsponsible for locating all gas mains, water mains, conduits, sewers, other utilities etc., so as to perform the Work without damaging the same.

II. THE WORK

2.1 SCOPE OF WORK

Contractor shall provide all labor, supervision, materials, and equipment necessary to perform all work required by the Contract Documents in connection with <u>IFB 2025-091</u>, <u>Collin County Service for Windows and Security Cameras</u>.

2.2 CHANGE OR MODIFICATION OF CONTRACT

2.2.1 ALTERATION OF PLANS AND SPECIFICATIONS

The OWNER reserves the right to make such changes in the plans and specifications and in the character of the work as may be necessary or desirable to insure completion in the most satisfactory manner, provided such changes do not materially alter the original plans and specifications or change the general nature of the Work as a whole. Such changes shall not be considered as waiving or invalidating any condition or provision of the Contract or bonds. Such changes shall be issued by the Engineer.

2.2.2 INCREASED OR DECREASED QUANTITIES OF WORK

The OWNER reserves the right and may from time to time, by written order, and without notice to any surety, make changes in the quantity or time of performance of the Work, as may be considered necessary or desirable and such changes shall not be considered as waiving or invalidating any conditions or provisions of the Contract or bonds. The CONTRACTOR

shall perform all the Contract Work in strict compliance with the Contract Documents, and shall not make any changes to the Work without prior written authorization from the OWNER, in the form of a written Change Order. If such changes increase or decrease either the cost or the time necessary for the performance of the Work, then the parties will mutually agree upon an equitable adjustment to the price or time to perform the Work pursuant to the terms of the Contract.

2.2.3 EXTRA WORK/CHANGE ORDERS

When any work is necessary to the proper completion of the Project and for which no prices are provided for in the Bid or Proposal and Contract, the CONTRACTOR shall do such work, but only when and as ordered in writing by the OWNER. The OWNER may order changes in the Work without invalidating Contract. Payment for Extra Work shall be made as provided herein. Contractor agrees that overhead and profit for Extra Work shall not exceed 10% of the total cost of the Extra Work. The Contractor shall not be entitled to any additional funds for any work or Extra Work performed on the Project, unless a Change Order is issued and signed by the Owner. The CONTRACTOR shall perform the work as altered, whether increased or decreased, and no allowances shall be made for anticipated profits. Nothing in this section shall give rise to any claims for any delay or acceleration damages, and the CONTRACTORS sole remedy for any delays in the Project shall remain an equitable extension of time as provided for in the Contract Documents. CONTRACTOR acknowledges and agrees to waive all rights or claims for compensation for any additional or other work not specifically authorized by the OWNER.

2.3 DISPUTED WORK AND CLAIMS FOR ADDITIONAL COMPENSATION

If the CONTRACTOR is of the opinion that (a) the work necessary or required to accomplish the result intended by this Contract, or (b) any work ordered to be done as Contract Work by the OWNER is Extra Work and not Contract Work, or (c) any determination or order of the OWNER violates the terms and provisions of this Contract, the CONTRACTOR shall promptly, either before proceeding with such work or complying with such order or determination, notify the OWNER in writing of his contentions with respect thereto and request a final determination thereof.

Such determination of the OWNER shall be given in writing to the CONTRACTOR. If the OWNER determines that the work in question is Extra Work and not Contract Work, or that the order complained of requires performance by the CONTRACTOR beyond that required by the Contract or violates the terms and provisions of the Contract, thereupon the OWNER shall cause either (a) the issuance of a written Change Order covering the Extra Work as provided herein, or (b) the determination or order complained of to be rescinded or so modified so as to not require performance beyond that required by the terms and provisions of the Contract.

If the OWNER determines that the work in question is Contract Work and not Extra Work, or that the determination or order complained of does not require performance by the CONTRACTOR beyond that required by the Contract or violate the terms and provisions of the Contract, he shall direct the CONTRACTOR to proceed, and the CONTRACTOR must promptly comply. In order to reserve his right to claim compensation for such work resulting from such compliance, however, the CONTRACTOR must, within 20 calendar days after receiving the OWNER'S determination and direction, notify the OWNER in writing that the work is being performed, or that the determination and direction is being complied with, under protest.

If the CONTRACTOR fails to so appeal to the OWNER for a determination or, having so appealed, should the CONTRACTOR thus fail to notify the OWNER in writing of his protest, the CONTRACTOR shall be deemed to have waived any claim for extra compensation or damages therefore. No oral appeals or oral protests, no matter to whom made, shall be deemed even substantial compliance with the provisions of this item.

In addition to the foregoing requirements, the CONTRACTOR shall, upon notice from the OWNER, produce for examination for a minimum period of three (3) years following final payment or termination of contract and audit at the CONTRACTOR'S office, by the representatives of the OWNER, all his books and records showing all of his acts and transactions in connection with contractual performance as well as relating to or arising by reason of the matter in dispute. At such examination a duly authorized representative of the CONTRACTOR may be present.

Unless the aforesaid requirements and conditions are complied with by the CONTRACTOR, the OWNER shall be released from all claims arising under, relating to or by reason of disputed work or Extra Work. It is further stipulated and agreed that no conduct on the part of the OWNER or any agent or employee of the OWNER shall ever be construed as a waiver of the requirements of this section, when such requirements constitute an absolute condition precedent to any approval of any claim for extra compensation, notwithstanding any other provisions of the Contract Documents; and in any action against the OWNER to recover any sum in excess of the contract amount, the CONTRACTOR must allege and prove strict compliance with the provisions of this section. The CONTRACTOR ASSUMES THE RISK OF NONPAYMENT, for failing to comply with any of the requirements of this section.

III. CONTRACTORS RESPONSIBILITIES

3.1 CONTRACTOR'S REPRESENTATIONS, WARRANTIES AND ASSURANCES.

In consideration of, and to induce the award of this contract to him, the CONTRACTOR represents and warrants: (a) That he is financially solvent, and sufficiently experienced and competent to perform the work; (b) That the facts

stated in the proposal and the information given by him pursuant to the bidding documents are true and correct in all respects; (c) That he has read, understood and complied with all the requirements set forth in the bidding documents; (d) That he is familiar with and understands all laws and regulations applicable to the work; and (e) unless otherwise specifically provided for in the Contract Documents, the CONTRACTOR shall do all the Work and shall furnish all the tools, equipment, machinery, materials, labor and appliances, except as herein otherwise specified, necessary or proper for performing and completing the work required by this Contract, in the manner and within the time herein prescribed.

By executing the contract, the CONTRACTOR represents that he has visited the site of Work, has fully familiarized himself with the local and on-site conditions under which the work is to be performed and has correlated his observation with the requirements of the Contract Documents. In addition, the CONTRACTOR represents that he has satisfied himself as to subsurface conditions at the site of the Work. Information, data and representations contained in the Contract Documents pertaining to the conditions at the site, including subsurface conditions, are for information only and are not warranted or represented in any manner to accurately show the conditions at the site of the Work. The CONTRACTOR agrees that he shall make no claims for damages, additional compensation or extension of time against the OWNER because of encountering actual conditions in the course of the Work which vary or differ from conditions or information contained in the Contract Documents. All risks of differing subsurface conditions shall be borne solely by the CONTRACTOR.

The CONTRACTOR shall carefully study and compare the Contract Documents and shall at once report to the OWNER any error, inconsistency or omission he may discover. The CONTRACTOR shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings, product data or samples for such portion of the work.

3.1.1 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Shop drawings are drawings, diagrams, schedules and other data specially prepared for the work by the CONTRACTOR or any subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- B. Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the CONTRACTOR to illustrate a material, product or system for some portion of the work.
- C. Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the work shall be judged.

- D. the CONTRACTOR shall provide, review, approve and submit to the Engineer with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the OWNER or any separate contractor, all shop drawings, product data and samples required by the Contract Documents. The Work will be performed in accordance with submittals approved by the Engineer. The CONTRACTOR shall not be relieved responsibility for deviations from the requirements of the Contract Documents by errors or ommisions by the OWNER or Engineer in approving Shop Drawings, Product Data, samples or any other submittals.
- E. By approving and submitting shop drawings, product data and samples, the CONTRACTOR represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or shall do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- F. As the Engineer's review is only for general conformance with the requirements of the Contract Documents, the CONTRACTOR shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Engineer's approval of shop drawings, product data or samples unless the CONTRACTOR has specifically informed the Engineer in writing of such deviation at the time of submission and the Engineer have given written approval to the specific deviation. The CONTRACTOR shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof. The CONTRACTOR shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.
- G. The CONTRACTOR shall be responsible for delays caused by rejection of the submittal of inadequate or incorrect shop drawings, product data or samples. The CONTRACTOR shall be responsible for seeing that any "approved" copies of shop drawings bearing the approval of the Engineer are allowed on the job site. The CONTRACTOR shall be responsible for providing all copies of approved shop drawings necessary for the construction operations.
- H. The CONTRACTOR shall keep adequate records of submittal and approvals so that an accurate up-to-date record file is maintained at the job site at all times.
- I. No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittal has been approved by the Engineer. All such portions of the work shall be in accordance with approved submittals.

3.1.2 SURETY BONDS

With the execution and delivery of the contract, the CONTRACTOR shall furnish and file with the OWNER in the amounts herein required, the surety bonds specified hereunder. Without exception, the OWNER'S bond forms, attached hereto as Section 00610 and 00611 must be used, and exclusive venue for any lawsuit in connection with such bonds shall be specified as the county in which the OWNER'S principal office is located. Such surety bonds shall be in accordance with Texas Law, including but not limited to, the provisions of Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code. These bonds shall automatically be increased by the amount of any change order or supplemental agreement which increases the contract price with or without notice to the surety, but in no event shall a change which reduces the contract amount reduce the penal amount of such bonds.

- A. Performance Bond. A good and sufficient bond in an amount not less than 100 percent (100%) of the total amount of the Contract Price guaranteeing the full and faithful execution of the Work and performance of the Contract in accordance with the plans, specifications and Contract Documents, including any extensions thereof, for the protection of the OWNER. This bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one year from the date of completion and acceptance of the improvement by the OWNER or such lesser or greater period as may be designated in the Contract Documents.
- B. Payment Bond. A good and sufficient bond in an amount not less than 100 percent (100%) of the total amount of the Contract Price guaranteeing the full and proper protection of all payment bond beneficiaries and claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant.
- C. Maintenance Bond. A good and sufficient bond in an amount not less than ten percent (10%) of the total amount of the Contract Price guaranteeing the project against defects.
- D. Sureties. No sureties shall be accepted by the OWNER who are now in default or delinquent on any bonds or who are interested in any litigation against the OWNER. All bonds shall be made on forms furnished by the OWNER and shall be executed by not less than one corporate surety authorized to do business in the State of Texas and acceptable to the OWNER. The sureties shall be listed in the most current Federal Register Treasury List. Each bond shall be executed by the CONTRACTOR and surety. Each surety shall designate an agent resident in the OWNER'S jurisdictional area acceptable to the OWNER to whom any requisite notices may be delivered and on whom service of process may be had in matters

arising out of such suretyship. The OWNER reserves the right to reject any and all sureties.

E. Additional or Substitute Bonds. If at any time the OWNER is or becomes dissatisfied with any surety, then upon the performance or payment bond, the CONTRACTOR shall, within five days after notice from the OWNER to do so, substitute an acceptable bond (or bonds), or provide an additional bond, in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such bonds shall be paid by the CONTRACTOR without recourse to the OWNER. No further payments under the contract shall be deemed due or payable until the substitute or additional bonds shall have been furnished and accepted by the OWNER.

3.1.3 PERMITS AND FEES

The CONTRACTOR shall secure and pay for all building permits and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are normally and legally required for the construction of similar projects in the State of Texas. The CONTRACTOR will give all notices required by laws, ordinances, rules, regulations and lawful orders of authorized public authorities required for the proper and legal performance of the Work.

3.14 CONTRACT DOCUMENTS AT SITE

The CONTRACTOR shall keep and maintain at the Project site one record copy of the Contract Documents, including but not limited to, the Drawings, Specifications, addenda, Change Orders, submittals, Product Data, Samples and other modifications, in good order and marked to show the current construction of the Project. These documents shall be available to the OWNER or Engineer to review at any time and shall be submitted to the OWNER upon completion of the Project, along with a complete set of as built drawings.

3.2 CONTRACTOR'S RESPONSIBILITIES

3.2.1 PERFORMANCE OF THE WORK

In addition to those matters elsewhere expressly made the responsibility of the CONTRACTOR, the CONTRACTOR shall have the full and direct responsibility for the performance and completion of the Work under this Contract and for any act or neglect of the CONTRACTOR, his agents, employees or subcontractors. He shall bear all losses, if any, resulting on account of the amount and character of the Work, or because the conditions under which the work must be done are different from what were estimated

or anticipated by him, or because of weather, floods, elements or other causes.

3.2.2 MEANS AND METHODS OF CONSTRUCTION

Unless otherwise expressly provided in the contract drawings, specifications or bulletins, the means and methods of construction shall be such as the CONTRACTOR may choose; subject, however, to the OWNER'S right to prohibit means and methods proposed by the CONTRACTOR which in the OWNER'S judgment:

- A. shall constitute a hazard to the Work, or to persons or property, or shall violate express requirements of applicable laws or ordinances; or
- B. shall cause unnecessary or unreasonable inconvenience to the public; or
- C. shall not produce finished work in accordance with the requirements of the Contract Documents; or
- D. shall not assure the Work to be completed within the time allowed by the contract.

The OWNER'S approval of the CONTRACTOR'S means or methods of construction, or the OWNER'S failure to exercise his right to prohibit such means or methods, shall not relieve the CONTRACTOR of his responsibility for the Work or of his obligation to accomplish the result intended by the Contract Documents; nor shall the exercise or non-exercise of such rights to prohibit create a cause of action for damages or provide a basis for any claim by the CONTRACTOR against the OWNER. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, procedures, and for the safety precautions and programs in connection with the Work or the Project.

If the Contract Documents specify any means, methods, techniques, sequences or procedures, the CONTRACTOR shall evaluate said specifications and determine that they are safe for the proper prosecution of the Work. The CONTRACTOR shall be solely responsible for the job site safety of such means, methods, techniques, sequences or procedures. If the CONTRACTOR determines the specified means, methods, techniques, sequences or procedures may not be safe, the CONTRACTOR shall immediately notify the OWNER and Engineer and shall not proceed without further instructions.

3.2.3 CONSTRUCTION SCHEDULE

The CONTRACTOR, immediately after being awarded the contract, shall prepare and submit for the OWNER, and Engineer's information an estimated progress schedule for the work. The progress schedule shall be

related to the entire Project to the extent required by the Contract Documents and shall provide for expeditious and reasonable execution of the work, not to exceed the time limits for completion provided in the Contract Documents. The progress schedule shall be updated as the Work proceeds or the schedule changes and immediately upon request by the OWNER. The CONTRACTOR shall also prepare a schedule of submittals that allows for a reasonable time for the OWNER or Engineer to review the submittals so as not to delay the Project.

3.2.4 TIME OF PERFORMANCE OF THE WORK

The CONTRACTOR shall begin the work to be performed under this Contract not later than 10 days from the date specified in the purchase or work order and shall conduct the work in such a manner and with sufficient equipment, material and labor as is necessary to insure its completion within the working time. It is the intent of this specification to provide a continuous construction operation without delay except as occasioned by unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, and it shall be the CONTRACTOR's responsibility to execute the work in the most expeditious manner.

Work shall be done only during the regular and commonly accepted and prescribed working hours. No work shall be done on nights, Sundays or regular holidays unless permission is given by the OWNER

Time is of the Essence for the performance of the Work by the CONTRACTOR. CONTRACTOR agrees that the time allotted for the performance of the Work is reasonable.

3.2.5 PERFORMANCE OF EXTRA OR DISPUTED WORK

While the CONTRACTOR or his subcontractor is performing Extra Work in accordance with the OWNER'S written order, the cost of which is to be determined on a time and material basis, or is performing disputed work or complying with a determination or order under protest, the CONTRACTOR shall, on the Monday following the performance of the work, furnish the OWNER'S representative at the site with three copies of verified statements showing:

A. the name, address and telephone number of each workman employed on such Extra Work or engaged in complying with such determination or order, the character of Extra Work each is doing and the wages paid to him, including the rate and amount of payroll taxes, contributions for insurance, and federal social security; and

B. the nature, cost and quantity of any materials, plant equipment or construction equipment furnished or used in connection with the

performance of such Extra Work or in complying with such determination or order, and from whom purchased or rented, along with copies of invoices for such materials, plant equipment or construction equipment.

The CONTRACTOR and his subcontractors, when required by the OWNER, must also produce for inspection for a minimum period of three (3) years following final payment or termination of contract, produce for examination and audit by designated OWNER representatives, any and all of his books, vouchers, records, daily job diaries and reports, canceled checks, etc. showing the nature and quantity of labor, materials and equipment actually used in the performance of the Extra Work; the amounts expended therefore; and the costs incurred for insurance premiums and other items of expense directly chargeable to such Extra Work. The CONTRACTOR must permit the OWNER'S representatives to make extracts therefrom or copies thereof as may be desired.

Failure of the CONTRACTOR to comply strictly with the requirements of this section shall constitute a waiver of any claim for extra compensation on account of the performance of such Extra Work.

3.3 **OUALITY OF WORK**

3.3.1 INSPECTION AND TESTS

The CONTRACTOR shall furnish the OWNER with every reasonable accommodation and opportunity to ascertain whether or not the work performed is in accordance with the requirements and intent of the plans and specifications. Any work done or materials used without suitable inspection by the OWNER may be ordered removed and replaced at the CONTRACTOR'S expense. The CONTRACTOR shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the OWNER in his administration of the contract, or by inspections, tests or approvals required or performed by persons other than the CONTRACTOR.

Unless otherwise provided, the CONTRACTOR shall make arrangements for all tests, inspections and approvals with an independent testing laboratory or entity required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction over the Work or items to be tested, inspected or approved. If additional testing or inspection is required they shall be performed at the CONTRACTOR'S expense.

3.3.2 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected or condemned shall be repaired, or if it cannot be repaired satisfactorily, it shall be removed and replaced at the CONTRACTOR'S expense. Defective materials shall be immediately removed from the site of the work. Work done without line and grade having been given, work done beyond the lines or not in conformity with the grades shown on the plans or as given, save as herein provided, work done without written authority and prior agreement in writing as to process, shall be done at the CONTRACTOR'S risk and shall be considered unauthorized and at the option of the OWNER may be ordered removed at the CONTRACTOR'S expense.

Upon failure of the CONTRACTOR to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned work or materials immediately after receiving notice form the OWNER, the OWNER shall, after giving written notice to the CONTRACTOR, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and to deduct the cost thereof from any monies due or to become due the CONTRACTOR. Alternatively, the OWNER may, at its option, declare the CONTRACTOR in default.

3.3.3 WORKING AREA; COORDINATION WITH OTHER CONTRACTORS; FINAL CLEANUP

The CONTRACTOR shall confine his equipment, storage of materials and construction operations to the area shown on the contract drawings or stated in the specifications, prescribed by ordinance, laws, or permits or as may be directed by the OWNER, and shall not unreasonably encumber the site or public right-of-way with his construction equipment, plant or materials.

Such area shall not be deemed for the exclusive use of the CONTRACTOR. Other contractors of the OWNER may enter upon and use such portions of the area and for such items as determined by the OWNER are necessary for all purposes required by their contracts. The CONTRACTOR shall give to such other contractors all reasonable facilities and assistance to the end that the work on this and other contracts shall not be unduly or unreasonably delayed. Any additional areas desired by the CONTRACTOR for his use shall be provided by him at his own cost and expense.

The CONTRACTOR is responsible for cutting, fitting or patching any parts of the Work where such work is necessary to make the Work complete, for parts to fit together, or for any damage to the Work prior to Final Acceptance.

The CONTRACTOR shall keep the Project and the surrounding area clean and free from the accumulation of waste materials or trash. Upon

completion of the work and before final acceptance and final payment shall be made, the CONTRACTOR shall completely clean and remove from the site of the work surplus and discarded materials, temporary structures and debris of every kind. He shall leave the site of the work in a neat and orderly condition equal to that which originally existed, or as called for in the Contract Documents. Surplus and waste materials removed from the site of the work shall be disposed of at locations satisfactory to the OWNER, and at the CONTRACTOR'S sole cost.

3.4 LEGAL RESPONSIBILITIES

3.4.1. PATENTS AND COPYRIGHTS

The CONTRACTOR shall pay all royalties and license fees and shall provide, by suitable legal agreement with the patentee or owner, for the use of any design, device, material or process covered by letters, patent or any copyright. The CONTRACTOR shall indemnify, defend, hold and save the OWNER and its officers, employees and agents harmless from all liability and claims for infringement of any patent or copyright.

In the event that any claims, suit or action at law or in equity of any kind whatsoever is brought against the OWNER, or its officers, employees or agents involving any such patents, copyrights or license rights, then the OWNER shall have the right to and may retain from any money due or to become due to the CONTRACTOR such sum deemed necessary by the OWNER for its protection until such claim or suit shall have been settled and satisfactory evidence to that effect shall have been furnished the OWNER.

3.4.2 INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR and his sureties shall indemnify, defend and hold harmless the OWNER and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER growing out of such injury or damage. In no event shall OWNER be liable to CONTRACTOR for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. CONTRACTOR'S duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the CONTRACTOR likewise covenants and agrees to, and does hereby, indemnify and hold harmless the OWNER from and against any and all injuries, loss or damages to property of the OWNER during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the CONTRACTOR.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

3.5 SUPERVISION AND CONSTRUCTION PROCEDURES

3.5.1. SUPERVISION BY CONTRACTOR

The status of the CONTRACTOR is that of an independent CONTRACTOR under Texas law and the work under this Contract shall be under the direct charge and superintendence of the CONTRACTOR. Except where the CONTRACTOR is an individual and gives his personal superintendence to the work, the CONTRACTOR shall provide a competent superintendent or general foreman on the work site at all times during progress with full authority to act for the CONTRACTOR. The CONTRACTOR shall also provide an adequate staff for the coordination and expediting of the Work.

The superintendent and staff shall be satisfactory to the OWNER. The superintendent or general foreman shall not be changed during this Contract except with the written consent of the OWNER or unless the superintendent or general foreman proves unsatisfactory to the CONTRACTOR and ceases to be in his employ.

If the superintendent should be or become unsatisfactory to the OWNER, he shall be replaced by the CONTRACTOR upon written direction of the OWNER, and in such event, the CONTRACTOR shall not be entitled to file a claim for any additional working time or money from the OWNER.

3.5.2 EMPLOYEES

The CONTRACTOR shall employ only competent, efficient workmen and shall not use on the work any unfit person or one not skilled in the work assigned to him and shall at all times maintain good order among its employees. Whenever the OWNER shall inform the CONTRACTOR in writing that, in his opinion, any employee is unfit, unskilled, disobedient, or is disrupting the orderly progress of the work, such employee shall be removed from the work and shall not again be employed on it. Under urgent circumstances, the OWNER may orally require immediate removal of an employee for cause, to be followed by written confirmation.

The CONTRACTOR shall supervise and direct all the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences, procedures and safety procedures and for coordinating all portions of the Work under the Contract. The CONTRACTOR shall be responsible to the OWNER for the acts and omissions of his employees, subcontractors and their agents, employees and subcontractors performing any of the work under a contract with the CONTRACTOR.

3.5.3 LABOR AND MATERIALS

Unless otherwise provided in the Contract Documents, the CONTRACTOR shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated into the work.

The CONTRACTOR shall at all times enforce strict discipline and good order among his employees and shall not employ on the work site any unfit person or anyone not skilled in the task assigned to him.

The rate of progress shall be such that the whole work shall be performed and the premises cleaned up in accordance with the Contract within the working time established in the Contract, unless an extension of time is made in the manner hereinafter specified.

3.5.4 WAGE SCALE

In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

"General Decision Number: TX20240239 01/05/2024

General Decision Number: TX20230239

State: Texas

Construction Type: Building

County: Collin County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

| If the contract is entered linto on or after January 30, |2022, or the contract is |renewed or extended (e.g., an option is exercised) on or |after January 30, 2022:

- Executive Order 14026 generally applies to the contract.
- . The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.

If the contract was awarded on |. Executive Order 13658 |or between January 1, 2015 and| |January 29, 2022, and the |contract is not renewed or |extended on or after January 130, 2022:

- generally applies to the contract.
- |. The contractor must pay all| covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, |

| if it is higher) for all |
|---------------------------|
| hours spent performing on |
| that contract in 2024. |
| |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

ASBE0021-011 06/01/2023

| | Rates | Fringes |
|--|----------|---------|
| ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation) | \$ 31.32 | 7.52 |
| BOIL0074-003 07/01/2023 | | |
| | Rates | Fringes |
| BOILERMAKER | \$ 37.00 | 24.64 |
| CARP1421-002 02/01/2023 | | |
| | Rates | Fringes |
| MILLWRIGHT | \$ 30.12 | 41.45 |
| ELEV0021-006 01/01/2023 | | |

Rates

22

Fringes

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

| | Rates | Fringes |
|--|--------------|---------|
| POWER EQUIPMENT OPERATOR (1) Tower Crane | \$ 32.85 | 13.10 |
| Attachment and Hydraulic Crane 60 tons and above (3) Hydraulic cranes 59 | \$ 28.75 | 10.60 |
| Tons and under | \$ 32.35 | 13.10 |
| IRON0263-005 06/01/2023 | | |
| | Rates | Fringes |
| IRONWORKER (ORNAMENTAL AND STRUCTURAL) | \$ 27.89 | 7.93 |
| PLUM0100-005 11/01/2022 | | |
| | Rates | Fringes |
| HVAC MECHANIC (HVAC Unit Installation Only) | | 13.07 |
| Pipe Installation) | \$ 35.73 | 13.07 |
| SUTX2014-015 07/21/2014 | | |

Rates Fringes

| BRICKLAYER\$ | 21.06 | 0.00 |
|---|----------|------|
| CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation\$ | 15.78 ** | 0.00 |
| CAULKER\$ | 15.16 ** | 0.00 |
| CEMENT MASON/CONCRETE FINISHER\$ | 13.04 ** | 0.00 |
| DRYWALL HANGER AND METAL STUD INSTALLER\$ | 13.00 ** | 0.00 |
| ELECTRICIAN (Alarm Installation Only)\$ | 20.93 | 3.86 |
| ELECTRICIAN (Communication Technician Only)\$ | 15.35 ** | 1.39 |
| ELECTRICIAN (Low Voltage Wiring Only)\$ | 17.04 ** | 1.39 |
| ELECTRICIAN, Excludes Low Voltage Wiring and | | |
| <pre>Installation of Alarms/Sound and Communication Systems\$</pre> | 20.01 | 2.69 |
| FORM WORKER\$ | 11.89 ** | 0.00 |
| GLAZIER\$ | 16.46 ** | 3.94 |
| HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)\$ | 10.04 ** | 2.31 |
| <pre>INSTALLER - SIDING (METAL/ALUMINUM/VINYL)\$</pre> | 14.74 ** | 0.00 |
| INSTALLER - SIGN\$ | 15.50 ** | 0.00 |
| INSULATOR - BATT\$ | 13.00 ** | 0.00 |
| IRONWORKER, REINFORCING\$ | 12.29 ** | 0.00 |

| LABORER: Common or General | .\$ 10.52 ** | 0.00 |
|--|--------------|------|
| LABORER: Mason Tender - Brick | .\$ 10.54 ** | 0.00 |
| LABORER: Mason Tender - Cement/Concrete | .\$ 10.93 ** | 0.00 |
| LABORER: Pipelayer | .\$ 13.00 ** | 0.35 |
| LABORER: Plaster Tender | .\$ 12.22 ** | 0.00 |
| LABORER: Roof Tearoff | .\$ 11.28 ** | 0.00 |
| LABORER: Landscape and Irrigation | .\$ 10.55 ** | 0.00 |
| LATHER | .\$ 16.00 ** | 0.00 |
| OPERATOR: Backhoe/Excavator/Trackhoe | .\$ 12.83 ** | 0.00 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader | .\$ 13.93 ** | 0.00 |
| OPERATOR: Bulldozer | .\$ 18.29 | 1.31 |
| OPERATOR: Drill | .\$ 15.69 ** | 0.50 |
| OPERATOR: Forklift | .\$ 13.21 ** | 0.81 |
| OPERATOR: Grader/Blade | .\$ 13.03 ** | 0.00 |
| OPERATOR: Loader | .\$ 13.46 ** | 0.85 |
| OPERATOR: Mechanic | .\$ 17.52 | 3.33 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete) | .\$ 18.44 | 0.00 |
| OPERATOR: Roller | .\$ 15.04 ** | 0.00 |
| PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping | .\$ 13.35 ** | 5.10 |
| | | |

| PAINTER: Drywall Finishing/Taping Only\$ 14.24 ** | 3.83 |
|---|------|
| PIPEFITTER (HVAC Pipe Installation Only)\$ 20.45 | 4.00 |
| PLASTERER\$ 16.58 ** | 0.00 |
| PLUMBER, Excludes HVAC Pipe Installation\$ 22.46 | 4.06 |
| ROOFER\$ 17.19 ** | 0.00 |
| SHEET METAL WORKER (HVAC Duct Installation Only)\$ 21.13 | 4.79 |
| SHEET METAL WORKER, Excludes HVAC Duct Installation\$ 24.88 | 5.97 |
| SPRINKLER FITTER (Fire Sprinklers)\$ 37.50 | 0.00 |
| TILE FINISHER\$ 11.22 ** | 0.00 |
| TILE SETTER\$ 14.25 ** | 0.00 |
| TRUCK DRIVER: 1/Single Axle Truck\$ 16.00 ** | 0.81 |
| TRUCK DRIVER: Dump Truck\$ 12.39 ** | 1.18 |
| TRUCK DRIVER: Flatbed Truck\$ 19.65 | 8.57 |
| TRUCK DRIVER: Semi-Trailer Truck\$ 12.50 ** | 0.00 |
| TRUCK DRIVER: Water Truck\$ 12.00 ** | 4.11 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local),

a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division

U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

Except for work on legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.

For legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.

For overtime work, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on overtime.

Under the provisions of Texas Government Code, Title 10, Chapter 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.

If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the Contract Work.

3.5.5 Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER'S intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment non-discrimination. verification and According to the contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractors process to verify enrollment compliance.

3.5.6 COMPLIANCE WITH LAWS

The CONTRACTOR shall fully comply with all local, state and federal laws, including all codes, ordinances and regulations applicable to this Contract and the Work to be done thereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment.

All work required under this Contract is intended to comply with all requirements of law, regulation, permit or license. If the CONTRACTOR finds that there is a variance, he shall immediately report this to the OWNER for resolution.

3.5.6.1 EQUAL EMPLOYMENT OPPORTUNITY

The CONTRACTOR shall comply with all local, state and federal employment and discrimination laws and shall not discriminate against any employee or applicant for Employment because of race, color, religion, sex, age, national origin or any other class protected by law.

3.5.7 RAILWAY CROSSINGS

Where the Work encroaches upon any right-of-way of any railway, the OWNER shall secure the necessary easement for the work. Where railway tracks are to be crossed, the CONTRACTOR shall observe all the regulations and instructions of the railway company as to methods of doing the work or precautions for safety of property and the public. All negotiations with the railway company, except for right-of-way, shall be made by the CONTRACTOR. The railway company shall be notified by the CONTRACTOR not less than five days prior to commencing the work. The CONTRACTOR shall not be paid separate compensation for such railway crossing but shall receive only the compensation as set out in the proposal.

3.5.8 OTHER CONTRACTORS; OBLIGATION TO COOPERATE

The OWNER reserves the right to perform construction on the Project with its own forces or may award other contracts for additional work on this Project, and the CONTRACTOR shall fully cooperate with such other contractors and shall coordinate and fit his work to be done hereunder to such additional work as may be contracted by the OWNER. The CONTRACTOR shall not commit or permit any act which shall interfere with the performance of work by any other contractor.

Upon receiving written notice from the CONTRACTOR that the OWNER or another contractor is failing to coordinate his work with the Work under this Contract as directed by the OWNER, the OWNER shall promptly investigate the charge and take such necessary action as the situation may require. However, the OWNER shall not be liable to the CONTRACTOR for damages suffered by the CONTRACTOR due to the fault or negligence of another contractor or through failure of another contractor to carry out the directions of the OWNER. Should any interference occur between contractors, the Engineer may furnish the CONTRACTOR with written instructions designating priority of effort, whereupon the CONTRACTOR shall immediately comply with such direction. In such event, the CONTRACTOR shall be entitled to an extension of working time only for unavoidable delays verified by the Engineer; however, no increase in the Contract Price shall be due the CONTRACTOR.

3.5.9 SUBCONTRACTS

The CONTRACTOR shall not make any subcontract for performing any portion of the Work included in the contract without written notice to the OWNER. This contract having been made pursuant to the bid submitted by the CONTRACTOR and in reliance with the CONTRACTOR'S personal qualifications and responsibility, the OWNER reserves the right to withhold

approval of any subcontractor which the OWNER may deem would not be in the OWNER'S best interest.

The CONTRACTOR shall, as soon as practicable after signing the Contract, submit a separate written notice to the OWNER identifying each proposed subcontractor. Upon request of the OWNER, the CONTRACTOR shall promptly furnish additional information tending to establish that any proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.

If the OWNER determines that any proposed subcontractor is unacceptable, he shall so notify the CONTRACTOR, who may thereupon submit another proposed subcontractor unless the CONTRACTOR decides to do the work himself. Disapproval by the OWNER of any proposed subcontractor shall not provide a basis for any claim by the CONTRACTOR.

If an approved subcontractor fails to properly perform the work undertaken, he shall be removed from the job upon request of the OWNER, following notification to the CONTRACTOR in writing of the request for removal and the reasons therefore.

Each subcontract entered into shall provide that the provisions of this Contract shall apply to such subcontractor and his officers and employees in all respects as if he and they were employees of the CONTRACTOR. The OWNER'S decision not to disapprove of any subcontract shall not relieve the CONTRACTOR of any of his responsibilities, duties and liabilities hereunder. The CONTRACTOR shall be solely responsible for the acts, omissions, negligence or defaults of his subcontractors and of such subcontractor's officers, agents and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the CONTRACTOR to the extent of his subcontract.

The CONTRACTOR agrees to bind each subcontractor and each subcontractor agrees to be bound by the terms of the Contract Documents insofar as applicable to his work. The CONTRACTOR and each subcontractor jointly and severally agree that nothing in the Contract Documents or otherwise shall create or be deemed to create any rights in favor of a subcontractor against the OWNER; nor shall be deemed or construed to impose upon the OWNER any obligation, liability or duty to a subcontractor; or to create any contractual relation whatsoever between a subcontractor and the OWNER.

The provisions contained herein shall likewise apply to any subsubcontracts.

3.6 PROTECTION OF WORK AND OF PERSONS AND PROPERTY

3.6.1 PROTECTION OF WORK

During performance and up to date of final acceptance, the CONTRACTOR shall be under the absolute obligation to protect the finished work against any damage, loss or injury. In the event of such damage, loss or injury, the CONTRACTOR shall promptly replace or repair such work, whichever the OWNER shall determine to be preferable. The obligation to deliver finished work in strict accordance with the Contract prior to final acceptance shall be absolute and shall not be affected by the OWNER'S approval of or failure to prohibit means and methods of construction used by the CONTRACTOR. All risk of loss or damage to the work shall be borne solely by the CONTRACTOR until final completion and acceptance of all work by the OWNER, as evidenced by the OWNER'S issuance of a certificate of acceptance.

3.6.2 PROTECTION OF PERSONS AND PROPERTY

The CONTRACTOR shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise to protect persons and property while said persons or property are approaching, leaving or within the work site or any area adjacent to said work site. No separate compensation shall be paid to the CONTRACTOR for the installation or maintenance of any warning devices, barricades, lights, signs or any other precautionary measures required by law or otherwise for the protection of persons or property.

The CONTRACTOR shall assume all duties owed by the OWNER to the general public in connection with the general public's immediate approach to and travel through the work site and the area adjacent to said work site.

Where the work is carried on in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the CONTRACTOR shall at his own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as are required by law. The CONTRACTOR'S responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the project shall have been completed and accepted by the OWNER, and shall cease when the certificate of acceptance is issued by the OWNER pursuant to the Contract Documents.

If the OWNER discovers that the CONTRACTOR has failed to comply with the applicable federal and state law (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary

measures for the protection of persons or property), the OWNER may order the CONTRACTOR to take such additional precautionary measures as required by law to be taken to protect persons and property.

In addition, the CONTRACTOR shall be held responsible for all damages to the work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the OWNER may order the damaged portion immediately removed and replaced by and at the cost and expense of the CONTRACTOR.

3.6.3 SAFETY; TRENCH SAFETY; UNDERGROUND UTILITY SAFETY; PUBLIC CONVENIENCE AND SAFETY;

The CONTRACTOR shall be responsible for complying with state laws and federal regulations relating to safety, trench safety, and underground utility safety, including those which may be enacted during the performance under this Contract. The CONTRACTOR shall comply with the provisions of the Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums and the Instructions to Bidders regarding trench safety, public convenience and safety, and sanitary provisions. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work and the Project.

3.6.4 STORM WATER PROTECTION

The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).

Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project). BMPs include, but are not limited to:

- Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.
- Installing and managing erosion and sediment control.
- Make available, upon request, permit associated documentation.
- Practicing spill prevention and good housekeeping.
- Meeting the requirements of the MS4 permit.

3.7 MATERIALS AND WORKMANSHIP; WARRANTIES AND GUARANTEES Unless otherwise expressly provided in the contract drawings or specifications, the work shall be performed in accordance with the best modern practice with materials and workmanship of the highest quality and suitable for their purpose. The OWNER shall judge and determine the CONTRACTOR'S compliance with these requirements.

3.7.1 MATERIALS AND EQUIPMENT

The CONTRACTOR shall be free to secure the approved materials, equipment and articles from sources of his own selection. However, if the OWNER finds that the work shall be delayed or adversely affected in any way because a selected source of supply cannot furnish a uniform product in sufficient quantity and at the time required and a suitable source does exist, or the product is not suitable for the Work, the OWNER shall have the right to require the original source of supply changed by the CONTRACTOR. The CONTRACTOR shall have no claim for extra cost or damage because of this requirement.

The CONTRACTOR warrants to the OWNER that all materials and equipment furnished under this contract shall be new unless otherwise specified in the Contract Documents and that same shall be of good quality and workmanship, free from faults and defects and in conformance with the Contract Documents. All materials and equipment not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and shall be promptly repaired or replaced by the CONTRACTOR at the CONTRACTOR's sole cost upon demand of the OWNER. If required by the OWNER, the CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.7.1.1 "OR EQUAL" CLAUSE

A. Whenever a material or article required is specified or shown on the plans, by using the name of a proprietary product or of a particular manufacturer or vendor, any material or article which the Engineer determines shall perform adequately the duties imposed by the general design or which the Engineer deems to be of similar appearance (in cases where appearance is of importance) shall be considered equal and satisfactory, provided the material or article so proposed is of equal substance and function. Authorization for any substitution of materials or articles must be obtained by the CONTRACTOR from the Engineer before proceeding with such substitution.

B. Should an authorized substitution require redesign of a portion of the work or alterations to the plans or specifications in order for the materials or articles which are to be substituted to properly fit or in other ways to be satisfactory, the Engineer shall accomplish such redesigns and alterations. The CONTRACTOR shall bear all reasonable costs associated with redesign and alteration efforts performed by the Engineer.

3.7.2 WORKMANSHIP

The CONTRACTOR shall promptly correct or replace all work rejected by the OWNER as defective or as failing to conform to the Contract Documents whether observed before or after substantial completion and whether or not fabricated, installed or completed. The CONTRACTOR shall bear all costs of correcting such rejected work, including costs incurred for additional services made necessary thereby.

3.8 WARRANTIES

3.8.1 SPECIAL WARRANTY

If within one year after final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within such longer or shorter period of time as may be prescribed by law or by the terms of any other applicable special warranty on designated equipment or portions of work as required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so. This obligation shall survive termination or completion of the Contract. The OWNER shall give such notice promptly after discovery of the condition.

The CONTRACTOR shall remove from the site all portions of the work which are defective or nonconforming and which have not been corrected unless removal is waived in writing by the OWNER.

3.8.2 SUBCONTRACTORS' AND MANUFACTURERS' WARRANTIES All subcontractors', manufacturers' and suppliers' warranties and guarantees, express or implied, respecting any part of the work and any materials used therein, shall be obtained and enforced by the CONTRACTOR for the benefit of the OWNER without the necessity of separate transfer or assignment thereof.

3.8.3 CORRECTED WORK WARRANTY

Any work repaired or replaced, pursuant to this section, shall be subject to the provisions of this section to the same extent as work originally performed.

3.8.4 RIGHTS AND REMEDIES

The rights and remedies of the OWNER provided in this section are in addition to, and do not limit, any rights or remedies afforded to the OWNER by law or any other provision of the Contract Documents, or in any way limit the OWNER'S right to recovery of damage due to default under the Contract. No action or inaction by the OWNER shall constitute a waiver of a right or duty afforded it under the Contract.

IV. INSURANCE

4.1 CONTRACTOR'S INSURANCE

Before commencing work, the CONTRACTOR shall be required, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. CONTRACTOR shall also be required to furnish the Collin County Purchasing Agent with certified copies of subcontractor's insurance certificates required by the Texas Department of Insurance, Division of Workers' Compensation, section 406.096(b), and coverages required herein in section 4.2. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor, at their own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates of each policy for the CONTRACTOR and each subcontractor shall be delivered to the OWNER before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, nonrenewal or materially changed without 30 days advance written notice being given to the OWNER.

In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:

4.2 Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage at \$1,000,000. In addition to these, the CONTRACTOR and each subcontractor must comply with all the requirements of the Texas Department of Insurance, Division of Workers' Compensation, section 406.096(b); (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors who will provide services on the

Project will be covered by workers compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

The CONTRACTOR'S failure to comply with any of these provisions is a breach of Contract by the Contractor which entitles the OWNER to declare the Contract void if the CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from the OWNER.

4.3 Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S and its subcontractors liability for injury to or death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:

Per Project Aggregate \$2,000,000

Products — Components/Operations Aggregate \$2,000,000

Personal and Advertising Injury \$1,000,000

Each Occurrence \$2,000,000

Contractor's Pollution Liability \$1,000,000/\$3,000,000 (Occurrence Form)

- 4.3.1 The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.
- 4.4 Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

4.5 OWNER'S PROTECTIVE LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the

policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate.

4.6 "UMBRELLA" LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring CONTRACTOR for an amount of not less than \$2,000,000/\$2,000,000 aggregate limit combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured.

4.7 RAILROAD PROTECTIVE INSURANCE

When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

4.8 POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

All policies to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:

A. each policy shall name the OWNER as an additional insured as to all applicable coverage;

B. each policy shall require that 30 days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;

C. the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;

D. the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;

E. all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;

F. each policy shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and,

G. each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.

Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:

A. any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;

B. all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A-VII or better as assigned by BEST Rating Company or equivalent; and C. All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

CONTRACTOR agrees to the following:

- A. CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies;
- B. Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;
- C. Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and
- D. No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

V. OWNERS RIGHTS AND RESPONSIBILITIES

MONTHLY ESTIMATE, PARTIAL PAYMENTS AND FINAL PAYMENTS

5.1 Progress and final payments shall be paid to the Contractor based upon the progress of the Project as indicated by the approved Applications for Payment, certificates of acceptance, or Certificates for Payment, that include an approved Schedule of

Values that will be submitted by the CONTRACTOR to the OWNER prior to the commencement of the Work and in accordance with the following:

5.2 MONTHLY ESTIMATES

The CONTRACTOR shall deliver to the OWNER an itemized Application for Payment that shall include the work completed, materials stored at the Project site but not incorporated into the work, materials ready to be installed and stored at another agreed location, and the percentage of Work completed, through the 20th day of each month, on an Application for Payment with a schedule of values previously submitted by the Contractor and approved by the Owner. Prior to release of funds in connection with any Application for Payment, the Owner may request, and the Contractor must provide, properly executed statements of full or partial releases of claims acceptable to Owner in form and content, for all persons or entities supplying labor or materials to the Project.

5.2.1 The Application for Payment is a representation by the CONTRACTOR to the OWNER that the construction has progressed to the point indicated, the quality of the Work covered by the application is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount requested.

5.2.2 INSPECTION AND PARTIAL PAYMENTS

Whenever the CONTRACTOR shall submit an Application for Payment to the OWNER for work performed by the CONTRACTOR, the CONTRACTOR shall notify the Engineer that the improvement is ready for inspection. The Engineer shall then make such inspection, and will have the authority to reject work that does not conform to the Contract Documents. If the work is satisfactory and in accordance with the specifications and Contract Documents, the Engineer shall issue a Certificate for Payment.

- 5.2.3 Within thirty (30) days of the Owner's receipt of a properly submitted and correct Application for Payment, and the issuance of a Certificate for Payment, the Owner shall make payment to the Contractor, in the amount approved by the Owner less 5% retainage. Such payment shall be adjusted for work that is incomplete or not in accordance with the Contract Documents or that is the subject of a separate contract, or subcontract or supplier claim or lien against the Contractor or the payment bonds for the project.
- 5.2.4 No partial or final payment or the entire use or occupancy of the Project by the OWNER shall be considered acceptance of work that does not strictly comply with the Contract Documents or release the CONTRACTOR of any of his responsibilities under the Contract.

5.2.5 PAYMENT FOR LABOR AND MATERIAL; NO LIENS

The CONTRACTOR for himself or any of his subcontractors shall pay all indebtedness which may become due to any person, firm or corporation having furnished labor, material or both in the performance of this Contract. It shall be the responsibility of each person, firm or corporation claiming to have furnished labor, materials or both, in connection with this Contract, to protect his or its interest in the manner prescribed by applicable laws of the State of Texas, provided, however, that as this Contract provides for a public works project, no lien of any kind shall ever exist or be placed against the Work or any portion thereof, or any public funds or retainage held by the OWNER; and any subcontactor shall look solely to the CONTRACTOR and the payment bond surety, and not the OWNER, for payment of any outstanding amounts due for labor, materials or any other indebtedness in connection with the Work. However, the OWNER may, at any time prior to making final payment, require the CONTRACTOR to furnish a Consent of Surety to any payment due the CONTRACTOR for completed work and may, at the discretion of the OWNER or the request of the Surety, make the check jointly payable to the CONTRACTOR and the Surety. The Owner shall have no obligation under this Agreement to pay or to be responsible in any way for payment to any Engineer, another design professional, contractor, subcontractor or supplier performing portions of the Work, pursuant to a contract with the Contractor.

5.2.6 PAYMENT WITHHELD

In addition to express provisions elsewhere contained in the contract, the OWNER may withhold from any payment otherwise due the CONTRACTOR such amount as determined necessary to protect the OWNER'S interest, or, if it so elects, may withhold or retain all or a portion of any progress payment or refund payment on account of:

A. unsatisfactory progress of the Work not caused by conditions beyond the CONTRACTOR'S control,

B. defective work not corrected,

C. CONTRACTOR'S failure to carry out instructions or orders of the OWNER or his representative,

D. a reasonable doubt that the Contract can be completed for the balance then unpaid,

E. work or execution thereof not in accordance with the Contract Documents,

F. claim filed by or against the CONTRACTOR or reasonable evidence indicating probable filing of claims,

G. failure of the CONTRACTOR to make payments to subcontractor or for material or labor,

H. damage to another contractor,

I. unsafe working conditions allowed to persist by the CONTRACTOR,

J. failure of the CONTRACTOR to provide work schedules as required by the OWNER,

K. use of subcontractors without the OWNER'S approval or,

L. failure of the CONTRACTOR to keep current as-built record drawings at the job site or to turn same over in completed form to the OWNER.

When the above grounds are removed, payment shall be made for amounts withheld because of them, and OWNER shall never be liable for interest on any delayed or late payment.

5.2.7 PAYMENT FOR EXTRA WORK

The Extra Work done by the CONTRACTOR as authorized and approved by the Engineer shall be paid for in the manner hereinafter described, and the compensation thus provided shall be accepted by the CONTRACTOR as payment in full for all labor, materials, tools, equipment and incidentals and all superintendents' and timekeepers' services, all insurance, bond and all other overhead expense incurred in the performance of the Extra Work.

Payment for Extra Work shall be made by one of the following methods:

A. Method "A" — by unit prices agreed on in writing by the OWNER and CONTRACTOR before said Extra Work is commenced, subject to all other conditions of the contract.

B. Method "B" — by lump sum price agreed on in writing by the OWNER and the CONTRACTOR before said Extra Work is commenced, subject to all other conditions of the contract.

5.2.8 SUBSTANTIAL COMPLETION

The Project will be considered substantially complete when the OWNER can utilize the Project for its intended purpose and the Work is in conformance with the Contract Documents.

5.3 APPLICATION FOR FINAL PAYMENT.

Upon full performance of all the Contract Work and the full performance of all the provisions of the Contract, the CONTRACTOR shall submit a final application for payment to the OWNER, the CONTRACTOR shall notify the Engineer that the improvement is ready for inspection. All warranties and guaranties required of the CONTRACTOR by the Contract Documents shall be assembled and delivered by the CONTRACTOR to the OWNER as Part of the final Application for Payment. The Contractor will assign to the Owner all manufacturer's warranties relating to materials and labor used in the work and will perform the Work in such a manner as to preserve all such manufacturer's warranties. The CONTRACTOR will deliver a certificate evidencing that insurance and bonds required by the Contract Documents will remain in full force and effect pursuant to the requirements of the

Contract. The final Certificate for Payment will not be issued until all such warranties and guaranties have been received and accepted by the Owner, and a Certificate of Acceptance is issued by the Engineer.

5.3.1 FINAL INSPECTION AND ACCEPTANCE

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, the CONTRACTOR shall notify the OWNER, and Engineer that the improvement is ready for final inspection. The Engineer shall then make such final inspection, and if the work is satisfactory and in accordance with the specifications and Contract Documents, the CONTRACTOR shall be issued a certificate of acceptance.

5.3.2 FINAL PAYMENT

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, as evidenced in the certificate of acceptance, and all required submissions provided to the OWNER, a final estimate showing the value of the work shall be prepared by the Engineer as soon as the necessary measurements and computations can be made. All prior estimates upon which payments have been made are subject or necessary corrections or revisions in the final payment. The amount of this final estimate, less any sums that have been previously paid, or deducted under the provisions of the Contract, shall be paid the CONTRACTOR within 30 days after the final acceptance, provided that the CONTRACTOR has furnished to the OWNER a consent of surety and an affidavit or other satisfactory evidence that all indebtedness connected with the Work and all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished for and used in the performance of the work have been paid or otherwise satisfied, or that the person or persons to whom the same may respectively be due have consented to such final payment.

The acceptance by the CONTRACTOR of the final payment as aforesaid shall operate as and shall be a release to the OWNER from all claims or liabilities under the Contract, including all subcontractor claims, for anything done or furnished or relating to the Work under the Contract or for any act or neglect of said OWNER relating to or connected with the Contract.

All warranties and guarantees shall commence from the date of the certificate of acceptance. No interest shall be due the CONTRACTOR on any partial or final payment or on the retainage.

5.3 MODIFICATIONS TO CONTRACT WORK OR TIME OF PERFORMANCE

5.3.1 OWNER'S RIGHT TO TEMPORARILY SUSPEND WORK

5.3.2 REASONS FOR SUSPENSION

The OWNER shall have the right by written order to temporarily suspend the work, in whole or in part, whenever, in the judgment of the OWNER, such temporary suspension is required:

- A. in the interest of the OWNER generally,
- B. due to government or judicial controls or orders which make performance of this contract temporarily impossible or illegal,
- C. to coordinate the work of separate contractors at the job site,
- D. to expedite the completion of a separate contract even though the completion of this particular Contract may be thereby delayed,
- E. because of weather conditions unsuitable for performance of the Work, or
- F. because the CONTRACTOR is proceeding contrary to contract provisions or has failed to correct conditions considered unsafe for workmen.

The written order of the OWNER to the CONTRACTOR shall state the reasons for suspending the work and the anticipated periods for such suspension. Upon receipt of the OWNER'S written order, the CONTRACTOR shall suspend the work covered by the order and shall take such means and precautions as may be necessary to properly protect the finished and partially finished work, the unused materials and uninstalled equipment, including the providing of suitable drainage about the work and erection of temporary structures where necessary. The CONTRACTOR shall not suspend the Work without written direction from the OWNER and shall proceed with the work promptly when notified by the OWNER to resume operations.

5.3.3 NO ADDITIONAL COMPENSATION

No additional compensation shall be paid to the CONTRACTOR for a temporary suspension of the Work by the OWNER or otherwise where same is caused by the fault of the CONTRACTOR. Where such temporary suspension is not due to the fault of the CONTRACTOR, he shall be entitled to:

A. an equitable extension of working time for the completion of the work, not to exceed the delay caused by such temporary suspension, as determined by the OWNER; and

B. the actual and necessary costs of properly protecting the finished and partially finished work, unused materials and uninstalled

equipment during the period of the ordered suspension as determined by the OWNER as being beyond the Contract requirements, such costs, if any, to be determined pursuant to the terms of the Contract; and

C. where the CONTRACTOR elects to move equipment from the job site and then return it to the site when the work is ordered resumed, the actual and necessary costs of these moves, in an amount determined by the OWNER pursuant to the terms of the Contract.

5.3.4 USE OF COMPLETED PORTIONS OF WORK

The OWNER may, after written notice to the CONTRACTOR, and without incurring any liability for increased compensation to the CONTRACTOR, take over and use any completed portion of the Work prior to the final completion and acceptance of the entire work included in the Contract, and notwithstanding that the time allowed for final completion has not expired. The OWNER and CONTRACTOR agree that occupancy of portions of the Work by the OWNER shall not in any way evidence the substantial completion of the entire work or signify the OWNER's acceptance of the Work.

The CONTRACTOR shall not object to, nor interfere in any way with, such occupancy or use after receipt of the OWNER'S written notice. Immediately prior to such occupancy and use, the OWNER shall inspect such portion of the Work to be taken over and shall furnish the CONTRACTOR a written statement of the work, if any, still to be done on such part. The CONTRACTOR shall promptly thereafter complete such unfinished work to permit occupancy and use on the date specified in the OWNER'S written order, unless the OWNER shall permit specific items of work to be finished after the occupancy and use by the OWNER.

In the event the CONTRACTOR is unreasonably delayed by the OWNER exercising its rights under this section, the CONTRACTOR may submit a request for an extension of time; CONTRACTOR'S sole remedy for an unreasonable delay shall be an extension of time and shall not be entitled to any additional compensation.

5.4 COMMENCMENT; TIME OF COMPLETION; DELAYS; EXTENSION OF TIME; LIQUIDATED DAMAGES

5.4.1 COMMENCEMENT; TIME OF COMPLETION

Contractor shall commence work within ten (10) consecutive calendar days after receiving from County a notice to proceed. Contractor agrees and

covenants that the number of consecutive calendar days allowed to complete all work following a notice to proceed shall be as follows:

5.4.2. LIQUIDATED DAMAGES FOR FAILURE TO COMPLETE ON TIME

Time is of the essence in the progress and completion of this Contract. For each calendar day that any Work shall remain uncompleted after the time specified in the proposal and the Contract, or the increased time granted by the OWNER, or as equitably increased by additional work or materials ordered after the Contract is signed, the sum per day given in the following schedule, unless otherwise specified in the special provisions, shall be deducted from the monies due the CONTRACTOR:

The sum of money thus deducted for such delay, failure or noncompletion is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, per calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the Work. The said amounts are fixed and agreed upon by and between OWNER and CONTRACTOR because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER in such event would sustain; and said amounts are agreed to be the amount of damages which the OWNER would sustain and which shall be retained from the monies due, or that may become due, the CONTRACTOR under this Contract; and if said monies be insufficient to cover the amount owing, then the CONTRACTOR or his surety shall pay any additional amounts due.

5.4.3 EXTENSIONS OF TIME

The CONTRACTOR shall be entitled to an extension of working time under this Contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur, and then only when such time is approved by the OWNER. In adjusting the Contract working time for the completion of the Project, unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, acts of God or the public enemy, acts of the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors due to such causes beyond their control shall be taken into consideration.

If the satisfactory execution and completion of the Contract should require work and materials in greater amounts or quantities than those set forth in the Contract, requiring more time for completion than the anticipated time, then the contract working time shall be equitably increased, but not more than in the same proportion as the cost of the additional work bears to the cost of the original work contracted for. No allowances shall be made for delays or suspension of the performance of the Work due to the fault of the CONTRACTOR.

No adjustment to working time shall be made if, concurrently with the equitable cause for delay, there existed a cause for delay due to the fault or negligence of the CONTRACTOR, his agents, employees or subcontractors; and no adjustment shall be made to the Contract Price and the CONTRACTOR shall not be entitled to claim or receive any additional compensation as a result of or arising out of any delay resulting in adjustment to the working time hereunder, including delays caused by the acts or negligence of the OWNER. Notwithstanding any other provision of the Contract Documents, all claims for extension of working time must be submitted in accordance with the provisions of this Contract, and no act of the OWNER shall be deemed a waiver or entitlement of such extension.

5.5 TERMINATION FOR CONVENIENCE OF THE OWNER

5.5.1 NOTICE OF TERMINATION

The performance of the Work under this Contract may be terminated by the OWNER in whole or from time to time in part, in accordance with this section, whenever the OWNER shall determine that such termination is in the best interest of the OWNER. Any such termination shall be effected by mailing a notice of termination to the CONTRACTOR specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. Receipt of the notice shall be deemed conclusively presumed and established when the letter is placed in the United States Mail by the OWNER. Further, it shall be deemed conclusively presumed and established that such termination is made with just cause as therein stated; and no proof in any claim, demand or suit shall be required of the OWNER regarding such discretionary action.

5.5.2 CONTRACTOR ACTION

After receipt of a notice of termination, and except as otherwise directed by the OWNER or Engineer, the CONTRACTOR shall:

A. stop work under the Contract on the date and to the extent specified in the notice of termination;

B. place no further orders or subcontracts for materials, services or facilities except as may be necessary for completion of such portion the Work under the Contract as is not terminated;

C. terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;

D. transfer title to the OWNER and deliver in the manner, at the times, and to the extent, if any, directed by the OWNER or Engineer:

- 1. the fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the notice of termination; and
- 2. the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the OWNER.

E. complete performance of such part of the work as shall not have been terminated by the notice of termination; and

F. take such action as may be necessary, or as the Engineer may direct, for the protection and preservation of the property related to its Contract which is in the possession of the CONTRACTOR and in which the OWNER has or may acquire an interest.

At a time not later than 30 days after the termination date specified in the notice of termination, the CONTRACTOR may submit to the OWNER a list, certified as to the quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Engineer. Not later than 15 days thereafter, the OWNER shall accept title to such items and remove them or enter into a storage agreement covering the same, provided that the list submitted shall be subject to verification by the Engineer upon removal of the items, or, if the items are stored, within 45 days from the date of submission of the list, and provided that any necessary adjustments to correct the list as submitted shall be made prior to final settlement.

5.5.3 TERMINATION CLAIM

Within 60 days after notice of termination, the CONTRACTOR shall submit his termination claim to the Engineer and the OWNER in the form and with the certification prescribed herein. Unless one or more extensions in writing are granted by the OWNER upon request of the CONTRACTOR, made in writing within such 60-day period or authorized extension thereof, any and all such claims shall be conclusively deemed waived. termination claim shall (1) list all Contract Work which the CONTRACTOR has completed but for which the CONTRACTOR asserts it has not been paid, including any retainage; (2) list of all fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of the Contract and the itemized cost for each such fabricated or unfabricated part, work in process, completed work, supplies and other material; (3) list all costs and expenses saved as a result of the termination of the Contract. The termination claim must include a copy of all invoices for fabricated or unfabricated parts, supplies and other material produced as a part of, or acquired in connection with the performance of the Contract for which the CONTRACTOR seeks compensation; all invoices for any subcontractors providing services related to the Contract; and (3) evidence of payment of all material suppliers and subcontractors, together with CONTRACOTR's certification that all such-material suppliers and subcontractors have been fully paid together with executed lien releases from each such material supplier and subcontractor. The termination claim may not include any request for payment of Extra Work for which a Change Order has not been issued or for which the CONTRACTOR has not fully and timely complied with the provisions of section 2.3 of this Contract.

5.5.4 AMOUNTS

The CONTRACTOR and OWNER may agree upon the whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of work pursuant hereto, provided that such agreed amount or amounts shall never exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract Price of work not terminated. The contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount. No amount shall be due for lost or anticipated profits. Nothing prescribing the amount to be paid to the CONTRACTOR in the event of failure of the CONTRACTOR and the OWNER to agree upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, shall be deemed to limit, restrict or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the CONTRACTOR pursuant to this paragraph.

5.5.5 FAILURE TO AGREE

In the event of the failure of the CONTRACTOR and the OWNER to agree, as provided herein, upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, the OWNER shall determine, on the basis of information available to it, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amounts determined. No amount shall be due for lost or anticipated profits.

5.5.6 DEDUCTIONS

In arriving at the amount due the CONTRACTOR under this section, there shall be deducted (a) all unliquidated advance or other payments on account theretofore made to the CONTRACTOR, applicable to the terminated portion of this contract; (b) any claim which the OWNER may have against the CONTRACTOR in connection with this Contract; and (c) the agreed price for or the proceeds of sale of any materials, supplies or other things

kept by the CONTRACTOR or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the OWNER.

5.5.7 ADJUSTMENT

If the termination hereunder be partial prior to the settlement of the terminated portion of this Contract, the CONTRACTOR may file with the Owner a request in writing for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the notice of termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices; nothing contained herein, however, shall limit the right of the OWNER and the CONTRACTOR to agree upon the amount or amounts to be paid to the CONTRACTOR for the completion of the continued portion of the Contract when said contract does not contain an established contract price for such continued portion.

5.5.8 NO LIMITATION OF RIGHTS

Nothing contained in this section shall limit or alter the rights which the OWNER may have for termination of this Contract under any other provision of this Contract or any other right which OWNER may have for default or breach of contract by CONTRACTOR.

5.6 CONTRACTOR DEFAULT: OWNER'S RIGHT TO SUSPEND WORK AND ANNUL CONTRACT

The Work or any portion of the Work under contract shall be suspended immediately on written order of the OWNER declaring the CONTRACTOR to be in default. A copy of such notice shall be served on the CONTRACTOR'S surety. The contract may be annulled by the OWNER for any good cause or causes, among others of which special reference is made to the following:

A. failure of the CONTRACTOR to start the work within 10 days from date specified in the written work order issued by the OWNER to begin the work; B. evidence that the progress of the work being made by the CONTRACTOR is insufficient to complete the work within the specified working time;

- C. failure of the CONTRACTOR to provide sufficient and proper equipment, materials or construction forces for properly executing the Work;
- D. evidence that the CONTRACTOR has abandoned the Work or discontinuance of the performance of the Work or any part thereof and failure to resume performance within a reasonable time after notice to do so;

E. evidence that the CONTRACTOR has become insolvent or bankrupt, or otherwise financially unable to carry on the Work;

- F. deliberate failure on the part of the CONTRACTOR to observe any requirements of the specifications or to comply with any orders given by the Engineer as provided for in the specifications;
- G. failure of the CONTRACTOR to promptly make good any defects in materials or workmanship, or any defects of any nature, the correction of which has been directed in writing by the OWNER;
- H. evidence of collusion for the purpose of illegally procuring a contract or perpetrating fraud on the OWNER in the construction of work under contract:
- I. repeated violations of safe working procedures;
- J. the filing by the CONTRACTOR of litigation against the OWNER prior to final completion of the Work. When the Work is suspended for any of the causes itemized above, or for any other cause or causes, the CONTRACTOR shall discontinue the Work or such part thereof as the OWNER shall designate, whereupon the surety may either at its option assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue and perform the same or, with the written consent of the OWNER, sublet the same, provided, however, that the surety shall exercise its option within two weeks after the written notice to discontinue the work has been served upon the CONTRACTOR and upon the surety or its authorized agents. The surety in such event shall assume the CONTRACTOR'S place in all respects and shall be paid by the OWNER for all work performed by it in accordance with the terms of the Contract, but in no event shall such payments exceed the contract amount, regardless of the cost to the surety to complete the Work.

In the event that the surety assumes the CONTRACTOR'S place, duties and responsibilities in the Contract, all monies remaining due the CONTRACTOR at the time of his default shall thereupon become due and payable to the surety as the work progresses, subject to all terms of the Contract. In case the surety does not, within the hereinabove specified time, exercise its obligation to assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue, then the OWNER shall have the power to complete by contract or otherwise, as it may determine, the Work herein described or such part thereof as it may deem necessary; and the CONTRACTOR hereto agrees that the OWNER shall have the right to take possession of or use any or all of the materials, plans, tools, equipment, supplies and property of every kind provided by the CONTRACTOR for the purpose of the Work and to procure other tools, equipment and materials for the completion of the same and to charge to the account of the CONTRACTOR the expense of said contract for labor, materials, tools, equipment and expenses incident thereto. The expense so charged shall be deducted by the OWNER out of such monies as may be due or may at any time thereafter become due the CONTRACTOR under and by virtue of the Contract or any part thereof.

The OWNER shall not be required to obtain the lowest bid for the work of completing the Contract, but the expenses to be deducted shall be the actual cost of

such work. In case such expense is less than the sum which would have been payable under the contract if the same had been completed by the CONTRACTOR, then in such case the OWNER may pay the CONTRACTOR the difference in the cost, provided that the CONTRACTOR shall not be entitled to any claim for damages or for loss of anticipated profits.

In case such expense shall exceed the amount which would have been payable under the Contract if the same had been completed by the CONTRACTOR, the CONTRACTOR and his surety shall pay the amount of the excess to the OWNER on notice from the OWNER for excess due including any costs incurred by the OWNER, such as inspection, legal fees and liquidated damages. When any particular part of the Work is being carried out by the OWNER by contract or otherwise under the provisions of this section, the CONTRACTOR shall continue the remainder of the Work in conformity with the terms of the contract and in such manner as not to hinder or interfere with the performance of workmen employed as above provided by the OWNER or surety.

5.7 SUSPENSION BY COURT ORDER AGAINST THE OWNER

The CONTRACTOR shall suspend such part or parts of the Work pursuant to a court order issued against the OWNER and shall not be entitled to additional compensation by virtue of such court order; neither shall the CONTRACTOR be liable to the OWNER in the event the Work is suspended by such court order, unless such suspension is due to the fault or negligence of the CONTRACTOR. A delay of the CONTRACTOR due to a court order against the OWNER, or due to the OWNER'S failure to secure right-of-way at the time required or because of a conflict of a utility with the Work, shall not be cause for additional compensation for damages sustained by the CONTRACTOR, but may be a cause for extension of contract working time only. The CONTRACTOR'S sole remedy for any suspensions of the Work is an equitable extension of time to perform the Work.

5.8 NO WAIVER OF RIGHTS OR ESTOPPEL

The OWNER, or any officer or agent thereof, shall not be precluded at any time, either before or after final completion and acceptance of the Work and final payment therefore from:

A. showing the true and correct amount, classifications, quality and character of the Work done and materials furnished by the CONTRACTOR or any other person under this Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment or certification is untrue and incorrect or improperly made in any particular, or that the Work or the materials or any parts thereof do not in fact conform to the contract requirements; and (b) demanding the recovery from the CONTRACTOR of any overpayments made to him, or such damages as the OWNER may sustain by reason of the CONTRACTOR'S failure to perform

each and every part of this Contract in strict accordance with its terms; or both.

VI. AUTHORITY OF THE ENGINEER

6.1 All work shall be performed in a good and workmanlike manner and to the satisfaction of the Engineer. The Engineer shall decide all questions which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, sequence of the construction, interpretation of the plans and specifications, acceptable fulfillment of the Contract, compensation, mutual rights between contractors under these specifications and suspension of the Work. He shall determine the amount and quality of work performed and materials furnished, and his decisions and estimates shall be final. His estimate in such event shall be a condition precedent to the right of the CONTRACTOR to receive money due him under the Contract.

6.2 OWNER'S REPRESENTATIVES

Where the Contract Documents indicate that determinations, directions or approvals shall be made by the OWNER or "Owner's representatives," this shall mean the OWNER acting directly, or through duly authorized persons acting within the limit of authority delegated to them. Any determination, direction or approval of such authorized representatives shall be subject to review by the OWNER. For purposes of administering the schedule or the payment provisions of this Contract the Engineer may act as the Owner's representative for purposes of approving payments, changes, scheduling, or acceptance of the Work, at the OWNER'S discretion.

6.3 INSPECTIONS OF WORK PROGRESS

The Engineer shall visit the site at during construction of the Project as necessary as the Owner's Representative to verify that the Work is being performed in compliance with the Contract Documents and shall be given total access to the Project by the CONTRACTOR. Site visits or inspections by the Engineer shall in no way relieve the CONTRACTOR of any of its responsibilities or duties pursuant to the Contract Documents. The Engineer will neither have control over, nor be responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project.

6.4 CONSTRUCTION STAKES

Engineer will provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.

The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

6.5 APPROVAL OF SUBMITTALS

The Engineer shall review and approve or take other appropriate action the CONTRACTOR's submittals such as Shop Drawings, Product Data and Samples, for the purpose of checking for conformance with the Contract Documents. The Engineers review of the submittals shall not relieve the CONTRACTOR of any of its obligations to perform the Work in strict compliance with the Contract Documents. The Engineer's review shall not be considered approval of safety precautions, means and methods, techniques, sequences or procedures that are the responsibility of the CONTRACTOR.

VII. CLAIMS OR DISPUTES

7.1 CLAIMS AGAINST OWNER AND ACTION THEREON.

No claim against the OWNER under the Contract or for breach of the Contract or additional compensation for extra or disputed work shall be made or asserted against the OWNER under the Contract or in any court action, unless the CONTRACTOR shall have strictly complied with all requirements relating to the giving of notice and information with respect to such claim as required by the Contract.

7.2 CLAIM AGAINST OFFICERS, EMPLOYEES OR AGENT OF THE OWNER.

No claim whatsoever shall be made by the CONTRACTOR against any, past, present or future, officer, employee or agent of the OWNER for or on account of, anything done or omitted to be done in connection with this Contract.

VIII. MISCELLANEOUS PROVISIONS

8.1 FINANCIAL INTEREST IN ANY CONTRACT BY OWNER'S OFFICERS, EMPLOYEES OR AGENTS

No officer, employee or agent of the OWNER shall have a financial interest, direct or indirect, in any contract with the OWNER or be financially interested, directly or indirectly, in the sale to the OWNER of any land, materials, supplies or services, except on behalf of the OWNER as an officer or employee. Any willful violation of this article shall constitute malfeasance in office, and any officer or employee guilty thereof shall thereby forfeit his office or position. Any violation of this article with the knowledge, expressed or implied, of the persons, partnership, company, firm, association or corporation contracting with the OWNER shall render the contract involved voidable by the OWNER.

8.2 SERVICE OF NOTICES

The OWNER and the CONTRACTOR shall each designate addresses where all notices, directions or other communication may be delivered or to which they may be mailed.

Notices to the surety or sureties on contract bonds shall be directed or delivered to the home office, or to the agent or agents who executed the bonds on behalf of the surety or sureties, or to their designated agent for delivery of notices.

Actual delivery of any such notice, direction or communication to the aforesaid places or depositing it in a postpaid wrapper addressed thereto in any post office regularly maintained by the United States Postal Service shall be conclusively deemed to be sufficient service thereof upon the above persons as of the date of such delivery or deposit.

The designated addresses may be changed at any time by an instrument in writing executed by the party changing the addresses and delivered to the other party.

Nothing herein contained shall, however, be deemed to preclude or tender inoperative the service of any notice, direction or communication upon the above parties personally or, if the CONTRACTOR be a corporation, upon any officer or director thereof.

8.3 UNLAWFUL PROVISIONS DEEMED STRICKEN

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

8.4 ALL LEGAL PROVISIONS INCLUDED

It is the intent and agreement of the parties to this contract that all legal provisions of law required to be inserted herein shall be and are inserted herein. If through mistake or oversight, however, any such provision is not herein inserted, or is not inserted in proper form, then upon application of either party, the contract shall be amended so as to strictly comply with the law and without prejudice to the rights of either party hereunder.

8.5 ASSIGNMENTS

The CONTRACTOR shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in it or any part thereof without the previous written consent of the surety company and the written approval of the OWNER.

The CONTRACTOR shall not assign, either legally or equitably, by power of attorney or otherwise, any of the monies due or to become due under this Contract or its claim thereto without the prior written consent of the surety company and the written approval of the OWNER.

The approval of the OWNER of a particular assignment, transfer or conveyance shall not dispense with such approval to any further or other assignments.

The approval by the OWNER of any assignment, transfer or conveyance shall not operate to release the CONTRACTOR or surety hereunder from any of the Contract and bond obligations, and the CONTRACTOR shall be and remain fully responsible and liable for the defaults, negligent acts and omissions of his assignees, their agents and employees, as if they were his own.

8.6 STATE AND LOCAL SALES AND USE TAXES

The OWNER qualifies for exemption from the state and local sales and use taxes, pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. Therefore, the CONTRACTOR shall not pay such taxes which would otherwise be payable in connection with the performance of this Contract.

The CONTRACTOR shall issue an exemption certificate in lieu of the tax on the purchase, rental or lease of:

A. all materials, supplies, equipment and other tangible personal property incorporated into the real property being improved; and

B. all materials, supplies, equipment and other tangible personal property used or consumed by the CONTRACTOR in performing the Contract with the OWNER. Materials and supplies "used in the performance of a contract" include only those materials actually incorporated into the property being improved and those supplies directly used to incorporate such materials into the property being improved. Overhead supplies and supplies used indirectly or only incidental to the performance of the Contract with the OWNER are not included in the exemption.

Under "reasons said purchaser is claiming this exemption" in the exemption certificate, the CONTRACTOR must name the OWNER and the project for which the equipment, material and supplies are being purchased, leased or rented.

8.7 VENUE AND GOVERNING LAW

The parties agree that the laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Construction Agreement, and that the exclusive venue for any legal proceeding involving this Construction Agreement shall be in Collin County, Texas.

8.8 NO WAIVER OF LEGAL RIGHTS

Inspection by the Engineer or OWNER; any order, measurement, quantity or certificate by the Engineer; any order by the OWNER for payment of money; any payment for or acceptance of any work; or any extension of time or any possession taken by the OWNER shall not operate as a waiver of any provisions of the contract or any power therein reserved to the OWNER of any rights or damages therein provided. Any waiver of any breach of contract shall not be held to be a waiver of any other or subsequent breach. The OWNER reserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet the requirements of the Contract Documents. The OWNER reserves the right to recover by process of law sums as may be sufficient to correct any error or make good any deficiency in the Work resulting from such error, dishonesty or collusion by the CONTRACTOR or his agents, discovered in the Work after the final payment has been made.

Neither final acceptance of the Work, nor final payment shall relieve the CONTRACTOR of responsibility for faulty materials or workmanship, and the CONTRACTOR shall promptly remedy any defects due thereto and pay for any damage to other work resulting therefrom. Likewise, neither final acceptance nor final payment, nor partial or entire use or occupancy of the work by the OWNER shall constitute acceptance of work not done in accordance with the Contract Documents or relieve CONTRACTOR of liability with respect to any expressed or implied warranties or responsibility for faulty materials or workmanship, whether same be patently or latently defective.

8.9 OBLIGATION TO PERFORM FUNCTIONS

Any failure or neglect on the part of OWNER or Engineer or inspectors to enforce provisions herein dealing with supervision, control, inspection, testing or acceptance and approval of the work shall never operate to relieve CONTRACTOR from full compliance with the Contract Documents nor render OWNER liable to CONTRACTOR for money damages, extensions of time or increased compensation of any kind.

8.10 SUCCESSORS AND ASSIGNS

Subject to the limitations upon assignment and transfer herein contained, this contract shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns.

8.11 HEADINGS

The title and headings contained in the Contract Documents and the subject organization are used only to facilitate reference, and in no way define or limit the scope of intent of any of the provisions of this Contract.

8.12 ENTIRE AGREEMENT; AMENDMENTS; BINDING EFFECT

This Construction Agreement, including the Contract Documents and all the documents incorporated therein represents the entire and integrated agreement between the OWNER, Collin County, and the CONTRACTOR, and supersedes all

prior negotiations, representations, or agreements, either written or oral. This Construction Agreement may be amended only by written instrument signed by both, the OWNER, Collin County, and the CONTRACTOR. CONTRACTOR acknowledges that no representations have been made to it, upon which it is relying in entering into this Contract, which are not expressly set forth in the Contract Documents.

8.13 INTERPRETATION

Although this Agreement is drafted by the OWNER, Collin County, should any part be in dispute, the parties agree that this Construction Agreement shall not be construed more favorable for either party. No rule of construction requiring that ambiguities in this Contract shall be construed more favorably for either party shall apply.

8.14 EXPENSES FOR ENFORCEMENT

In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

8.15 FORCE MAJEURE

No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: acts of God; flood, fire or explosion; war, invasion, riot or other civil unrest; actions, embargoes or blockades in effect on or after the date of this Agreement; or national or regional emergency (each of the foregoing, a "Force Majeure Event"). A party whose performance is affected by a Force Majeure Event shall give notice to the other party, stating the period of time the occurrence is expected to continue and shall use diligent efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

IN WITNESS WHEREOF, the parties have executed this Construction Agreement upon the year and date indicated beneath their signatures hereto.

| | CONTRACTOR: |
|-----------|---|
| | By: |
| | Date: |
| ATTEST: | |
| Secretary | |
| | COLLIN COUNTY, TEXAS: |
| | By: |
| | Date: |
| | Collin County Commissioners Court Order No. |
| ATTEST: | |
| Secretary | |

ACKNOWLEDGMENTS

| STATE OF TEXAS | § | |
|------------------------------|--------------------|---|
| COUNTY OF | § | |
| BEFORE ME, | | on this day personally appeared |
| , of | | , acorporation, |
| known to me (or proved to i | me on the oath o | of) or |
| through | (description | of identity card or other document) to be the |
| | | going instrument and acknowledged to me that leed of the corporation, for the purposes and |
| consideration therein expres | | |
| consideration therein expres | sea and in the c | apacity therein stated. |
| GIVEN UNDER MY HAN | D AND SEAL | OF OFFICE, this the day of, 20 |
| | | |
| | | |
| Notary Public, State of Texa | as | |
| Printed Name | | - |
| Printed Name | | |
| My Commission expires on | the day c | of . |
| J | | |
| | | |
| STATE OF TEXAS | 8 | |
| | ° ' | |
| COUNTY OF COLLIN§ | | |
| BEFORE ME, | | on this day personally appeared |
| , Purchasing | Agent of COLI | on this day personally appeared LIN COUNTY, TEXAS, a political subdivision |
| of the State of Texas, known | n to me (or prov | red to me on the oath of)iption of identity card or other document) to be |
| or through | (descr | iption of identity card or other document) to be |
| that he/she executed the san | ibscribed to the | foregoing instrument and acknowledged to me I deed of COLLIN COUNTY, TEXAS, for the |
| | | ed and in the capacity therein stated. |
| | | |
| | seal of office the | his the day of |
| , 20 | | |
| | | |
| Notary Public, State of Texa | as | |
| | | |
| Printed Name | | |
| | | |
| My Commission expires on | the day o | of |

005425 W-9 FORM

(Rev. October 2018) Department of the Treasury Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

| | ľ | Thame (as shown on your moone tax return). Name is required on this line, as not leave this line blank. | | | | | | |
|---|------------|--|---|---|--|--|--|--|
| | 2 | 2 Business name/disregarded entity name, if different from above | | | | | | |
| Print or type. See Specific Instructions on page 3. | 3 | Check appropriate box for federal tax classification of the person whose name is entered on line 1. Ch following seven boxes. | 4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): | | | | | |
| | <u>'</u> | single-member LLC | Exempt payee code (if any) | | | | | |
| | | Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partner | | | | | | |
| | | Note: Check the appropriate box in the line above for the tax classification of the single-member of LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the canother LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single is disregarded from the owner should check the appropriate box for the tax classification of its own | Exemption from FATCA reporting code (if any) | | | | | |
| € Scif | | Other (see instructions) ▶ | | (Applies to accounts maintained outside the U.S.) | | | | |
| Spe | 5 | 5 Address (number, street, and apt. or suite no.) See instructions. | Requester's name a | nd address (optional) | | | | |
| See | 6 | 6 City, state, and ZIP code | | | | | | |
| | 7 | List account number(s) here (optional) | | | | | | |
| | | | | | | | | |
| Par | t I | Taxpayer Identification Number (TIN) | | | | | | |
| | | our TIN in the appropriate box. The TIN provided must match the name given on line 1 to av | 0.0 | urity number | | | | |
| | | withholding. For individuals, this is generally your social security number (SSN). However, falien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other | or a | | | | | |
| entitie | s, | it is your employer identification number (EIN). If you do not have a number, see How to ge | ta LL | | | | | |
| TIN, la | | | or | | | | | |
| | | the account is in more than one name, see the instructions for line 1. Also see What Name | and Employer | identification number | | | | |
| Number To Give the Requester for guidelines on whose number to enter. | | | | - | | | | |
| Par | t II | Certification | | | | | | |
| | | enalties of perjury, I certify that: | | | | | | |
| 1. The | nı | number shown on this form is my correct taxpayer identification number (or I am waiting for | a number to be iss | ued to me); and | | | | |
| 2. I an Ser | n n vic | not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) ce (IRS) that I am subject to backup withholding as a result of a failure to report all interest onger subject to backup withholding; and | I have not been n | otified by the Internal Revenue | | | | |
| 3. I an | n a | a U.S. citizen or other U.S. person (defined below); and | | | | | | |
| 4. The | F | ATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reportir | g is correct. | | | | | |
| | | ation instructions. You must cross out item 2 above if you have been notified by the IRS that you be failed to report all interest and dividends on your tax return. For real estate transactions, item 2 | | | | | | |

acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

U.S. person ▶ **General Instructions**

Signature of

Section references are to the Internal Revenue Code unless otherwise

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

Sign

Here

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)

Date ▶

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

006111 PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

| That | | | | organized and existing_under the laws of |
|--|---|---|---|---|
| the State of | , and fully authorized to | to transact business in the State of | Texas, whose address is | |
| City of | County of | , and State of | ,(hereinafter referred to as | |
| the laws of the State of | and autho | orized under the laws of the State | | s "Surety", a corporation organized_under for principals, are held and firmly bound |
| unto labor upon the buildings, s | | | o all persons, firms and corporations, in the penal sum of | who may furnish materials for or perform |
| | | | | as evidenced in the proposal plus 10- |
| percent of the stated pena connected with the below heirs, administrators, execu- | al sum as an additional sum identified Contract) in lawful utors, successors, and assigns, | of money representing additions money of the United States, for jointly and severally, firmly by the | al court expenses, attorneys' fees, a the payment whereof, the said Princi nese presents: | nd liquidated damages arising out of or pal and Surety bind themselves, and their of, 202, to which |
| | | | | erein for the construction of, |
| accordance with the plans original term thereof, and specifications hereto anner the date of final completion damages which OWNER may incur in making good shall fail to do so, it is agobligation. Provided furth "PROVIDED, of the Texas Insurance Cothey were fully copied at least of the Surety, for valuagreement which increases Contract price decrease the performed thereunder, or notice of any such change, Surety agrees the one (1) year from the date The undersigned whom service of process in | specifications, and Contract Eduring the life of any guaranty and, if the Principal shall repairs and final acceptance of the may suffer by reason of failured any default or deficiency, the greed that the OWNER may der, that if any legal action be fixed, the tree of the sum of the Bond and all liabilities and all liabilities and all liabilities and sum of the Bond. And the plans, specifications, or directions of time, alteration, of that the bond provides for the roof completion and acceptance and and designated agent is her may be had in matters arising of | Documents, including any extension by required under the Contract, and it and/or replace all defects due to work by OWNER; and if the Prince to so perform herein and shall from this obligation shall be void; of do said work and supply such marrialed on this Bond, venue shall lie is executed pursuant to the providities on this bond shall be determanded by the bond shall automatic into the surface of the Surety, but in the further that no change, extension rawings accompanying the same or addition to the terms of the Corepairs and/or replacement of all the of the improvement by the OWN reby designated by Surety herein | ons thereof which may be granted wind according to the true intent and may faulty materials or workmanship the acipal shall fully indemnify and save fully reimburse and repay OWNER at therwise, to remain in full force and atterials and charge the same against in Collin County, Texas. Sions Texas Government Code, Chaptined in accordance with the provision attically be increased by the amoun no event shall a Change Order or Suron of time, alteration, or addition to shall in any way affect its obligation intract or to the work to be performed defects due to faulty materials and worker. as the agent resident to whom any | work and performance of the Contract in th or without notice to Surety, during the eaning of said Contract and the plans and at appear within a period of one year from harmless the OWNER from all costs and Il outlay and expense which the OWNER of effect; and in case said CONTRACTOR said CONTRACTOR and Surety on this oter 2253, as amended, and Chapter 3503 ans of said articles to the same extent as if the tof any Change Order or supplemental pplemental Agreement which reduces the the terms of the Contract, or to the work in on this bond, and it does hereby waive thereunder. Orkmanship that appear within a period of requisite notice may be delivered and on the contract of the contract of the contract of the contract of the contract. |
| WITNESS | , , , , , , , , , , , , , , , , , , , | • | PRINCIPAL | |
| | | | Printed/Typed Name | |
| WITNESS | | | Address: | |
| WITNESS | | | SURETY | |
| | | | Printed/Typed Name Title: | |
| | | | Company: | |
| | | | Address: | |
| ě | Surety for delivery of notice a | • | | |
| | | | Note: Date of Bond | must NOT be |
| | | | _ prior to date o | f contract. |

Revised 11/2008

006113 PAYMENT BOND

STATE OF TEXAS COUNTY OF COLLIN

KNOW ALL MEN BY THESE PRESENTS:

| That | , a corporation organized and existing_under the laws of | | |
|---|--|--|--|
| the State of, and fully authorized to transact business | , and fully authorized to transact business in the State of Texas, whose address is | | |
| of the City of County | y of, and State of | | |
| ,(hereinafter referred to as "Principal"), and | | | |
| (hereinafter referred to as "Surety", a corporation organized_under the laws of the State | | | |
| of Texas to act as surety on bonds for principals, are held and firmly bound unto | (hereinafter referred | | |
| to as "Owner") and unto all persons, firms and corporations who may furnish materia | ıls for or perform labor upon the buildings, structures or improvements referred to | | |
| in the attached Contract, , in the penal sum of | | | |
| | approximate total amount of the Contract as evidenced in the proposal) in lawful | | |
| money of the United States, for the payment whereof, the said Principal and Surety b | ind themselves, and their heirs, administrators, executors, successors, and assigns, | | |
| jointly and severally, firmly by these presents: | | | |
| WHEREAS, the Principal has entered into a certain written contract with | the Owner, dated the $\underline{\hspace{1cm}}$ day of $\underline{\hspace{1cm}}$, $202\underline{\hspace{1cm}}$, to which | | |
| said Contract is hereby referred to and made a part hereof and as fully and to the same | extent as if copied at length herein for the construction of, | | |
| supplying labor and material in the prosecution of the work provided for in said Co faithfully perform said Contract and in all respects duly and faithfully observe and processed to by the Principal, and according to the true intent and meaning of duly authorized modifications of said Contract that may hereafter be made, notice of void; otherwise, to remain in full force and effect. Provided further, that if any legal at "PROVIDED, HOWEVER, that this bond is executed pursuant to the profithe Texas Insurance Code, as amended, and all liabilities on this bond shall be determined by the determined by the formal processed that the bond shall at agreement which increases the Contract price with or without notice to the Surety Contract, or to the work performed thereunder, or the plans, specifications, or drawing it does hereby waive notice of any such change, extension of time, alteration or addition. The undersigned and designated agent is hereby designated by Surety he whom service of process may be had in matters arising out of such suretyship. IN WITNESS WHEREOF, the said Principal and Surety have signed and | perform all and singular the covenants, conditions, and agreements in and by said f said Contract and the claims and specifications hereto annexed, and any and all f which modification to Surety being hereby waived, then this obligation shall be action be filed on this Bond, venue shall lie in Collin County, Texas. rovisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 termined in accordance with the provisions of said articles to the same extent as if attomatically be increased by the amount of any Change Order or supplemental and that no change, extension of time, alteration or addition to the terms of the gs accompanying the same, shall in anyway affect its obligation on this bond, and can to the terms of the Contract, or to the work to be performed thereunder. The rein as the agent resident to whom any requisite notice may be delivered and on the sealed this instrument this day of 202 | | |
| WITNESS | PRINCIPAL | | |
| | Printed/Typed Name | | |
| | Title: | | |
| | Company: | | |
| | company | | |
| | Address: | | |
| WITNESS | SURETY | | |
| | | | |
| | Printed/Typed Name | | |
| | Title: | | |
| | Company: | | |
| | | | |
| | Address: | | |
| The Resident Agent of the Surety for delivery of notice and service of process is: Name: | | | |
| Address: | Note: Date of Bond must NOT be | | |
| Phone Number: | prior to date of contract. | | |

01 11 00 SUMMARY OF WORK

1.0 GENERAL

1.01 SUMMARY

- A. The Project is located in multiple locations: the first and second floors of the Collin County Administration Building located at 2300 Bloomdale Road in McKinney, Texas and the first floor of the Collin County Subcourthouse located at 900 E. Park Boulevard in Plano. Texas.
- B. The Work is composed of (1) installing service windows to separate the public and staff side of various service counters in two spaces, (2) installing security cameras in two locations and (3) installing communication devices in two locations.
- C. The Work will be accomplished in a single phase in each of three locations; the work in three locations can run concurrently or consecutively as determined by the Contractor.
- D. All three locations of the Work will remain in operation for normal business hours during the course of the Work.
- E. The Contractor will be required to accomplish most of the Work on weekends or during evening hours to prevent disruption to normal business operation and to better ensure the safety of the public and County staff.
- F. The Work of this Contract will be performed under a single prime contract.
- G. Contractor's duties:
 - 1. Provide all labor, materials, equipment, tools, machinery, facilities, and services necessary for proper execution and completion of the work.
 - 2. Give required notices.
 - 3. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities which bear on performance of work.
 - 4. Promptly submit written notice to Architect of observed variance of Contract Documents from legal requirements. It is Contractor's responsibility to make certain that construction complies with applicable codes and regulations.
 - 5. Verify all conditions at the site and dimensions in the field prior to starting work. Architect shall be notified in writing of any discrepancies found.
 - 6. The Drawings and Specifications represent the work to be completed, not the method of construction.
 - 7. Obtain and pay for any inspections, permits, or licenses required. The required fees cost shall be included in the bid.
 - 8. Use every precaution to prevent damage to roads, adjacent property, buildings, and utilities above and below ground that are adjacent to or included in the area under contract. Repair and replace, at Contractor's expense, any material or item damaged or destroyed because of Contractor's operations.

1.02 CONTRACTOR USE OF PREMISES

- A. Confine operations at site to areas permitted by law, ordinances, permits and as designated by Owner.
 - Contractor and his personnel shall park their vehicles and trailers only in areas designated on the Drawings or as directed by the Owner.
- B. Owner will continue to occupy the existing facility during the work of this contract. Contractor shall carry out his work in such a way as to minimize interference with the Owner's work and use of site and parking areas specifically.
- C. Do not unreasonably encumber site with materials or equipment.
- D. Maintain required fire exits and fire lanes during construction in accordance with Fire Department regulations. Provide signage, barricades, walkways, and fences as may be required.

1.03 PARTIAL OWNER OCCUPANCY

A. The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

- 1. The Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
- 2. Contractor shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
- 3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
- 4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.04 CORRELATION OF DOCUMENTS

- A. Anything mentioned in the Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Specifications, is of like effect as if shown or mentioned in both. In case of difference between Drawings and Specifications, the Specifications will govern.
- B. Figures given on Drawings govern scale measurements, and large scale drawings and details govern small scale drawings. Schedules on any contract drawing will take precedence over conflicting information on that or any other contract drawing.
- C. Specifications determine nature and setting, workmanship and quality of materials; Drawings establish design, quantities, dimensions and details; Schedules give locations.
- D. Similar conditions may be illustrated by a single detailed drawing. The drawing may be subject to minor adjustments as directed by the Architect to satisfy exact and specific conditions. If discrepancies appear, Contractor shall request interpretation from the Architect prior to proceeding with the Work. Contractor shall not make such interpretations by himself, except at his own risk, responsibility and expense.

1.05 EXISTING CONDITIONS

- A. The Architect assumes no responsibility for the accuracy of the information on existing drawings. It is the intent of the Contract Drawings to integrate new work with existing work and the Contractor shall verify actual conditions.
- B. Prior to commencement of work, visit and examine the site verifying all existing conditions, control points, principal lines and elevations, presence of underground utilities, at or related to the site and existing buildings. In the event of any inconsistency or conflict between existing conditions and the bidding documents, immediately notify the Architect. Do not undertake any phase of the work affected by such inconsistency or conflict, pending the issuance of instructions by the Architect.
- C. Locations of utilities shown on the Drawings have been obtained from the existing site utility plans and utility companies. Contractor shall examine the site and verity to his own satisfaction the location and elevation of all utilities and shall adequately inform himself as to their relationship to the Work.
- D. Specifications and Drawings in no way imply as to the condition of the soil encountered. When excavation is required in execution of the Work, Contractor agrees that he has informed himself regarding conditions affecting the Work, labor, and materials required, without recourse to any representations as to soil conditions that may appear or seem to be implied in any portion of the Contract Documents.
- 2.0 PRODUCTS

 Not Applicable to this Section.
- 3.0 EXECUTION

 Not Applicable to this Section.

END OF SUMMARY OF WORK

01 26 00 CONTRACT MODIFICATION PROCEDURES

1.0 GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related work:
 - Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. General Conditions: Changes in the Work.
 - 3. Section 01 29 00: Payment Procedures.
 - 4. Section 01 33 00: Submittal Procedures.
 - 5. Section 01 62 00: Product Options.

1.02 MINOR CHANGES IN THE WORK

A. The Architect will issue supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, on AIA Form G710, Architect's Supplemental Instructions.

1.03 CHANGE ORDER PROPOSAL REQUESTS

- A. Owner-initiated proposal requests: The Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal requests issued by the Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
 - 2. Unless otherwise indicated in the proposal request, within fifteen (15) days of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Architect for the Owner's review.
 - a. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
- B. Contractor-initiated proposal requests: When latent of unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
 - Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
 - 2. Include a list of quantities of products required and unit cost, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Comply with requirements of Section 01 62 00 Products Options if the proposed change requires substitution of one product or system for a product or system specified.

1.04 ALLOWANCES

- A. Allowance adjustment: For allowance-cost adjustment, base each Change Order Proposal on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place. Where applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - Include installation costs in the purchase amount only where indicated as part of the allowance.
 - 2. When requested, prepare explanations and documentation to substantiate the margins claimed.
 - 3. Submit substantiation of a change in scope of work claimed in the Change Orders related to unit-cost allowances.
 - 4. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.

1.05 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction change directive: When the Owner and the Contractor disagree on the terms of a Change Order Proposal Request, the Architect may issue a Change Order Directive on AIA Form G714. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine change in the Contract Sum or Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.06 CHANGE ORDER PROCEDURES

- A. Upon the Owner's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the Owner and the Contractor on AIA Form G701.
 - 1. Change Orders will be numbered in sequence and dated.
 - 2. Change Orders will describe the change or changes and will refer to the Proposal Requests or Supplemental Instructions involved.
 - 3. The Architect will issue four (4) copies of each Change Order to the Contractor.
 - a. The Contractor promptly shall sign all four (4) copies and return three (3) copies to the Architect.
 - b. The Architect will retain one (1) signed copy in his file and will forward two (2) signed copies to the Owner.

2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

Not Applicable to this Section.

END OF CONTRACT MODIFICATION PROCEDURES

01 29 00 PAYMENT PROCEDURES

1.0 GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's Schedule of Values and Applications for Payment.
- B. Related work:
 - Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Form of Agreement: Contract Sum, schedule for payments.
 - 3. Section 01 33 00: Submittal Procedures: Construction Schedule.
 - 4. Section 01 77 00: Closeout Procedures: Payments upon Substantial Completion and Completion of the Work.

1.02 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of Schedule of Values with preparation of the Contractor's Construction Schedule.
- B. Approval: Submit and obtain the Architect's approval of the Schedule of Values at the earliest feasible date, but in no case later than ten (10) days before the date scheduled for submittal of the initial Application for Payment.
- C. Format and content: Use the Table of Contents in this Project Manual as a guide to establish the format for the Schedule of Values.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of the Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal
 - 2. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Table of Contents in this Project Manual. Break principal subcontract amounts down into several line items (i.e. Concrete shall be broken down into walks, paving, piers, grade beams, slabs, etc. as a minimum).
 - 3. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
 - Provide 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. Include requirements for insurance and bonded warehousing, if required.
 - 5. Margins of Cost: Show line items for indirect costs and margins on actual costs only when such items are listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.
 - 6. Temporary facilities and other major cost items that are not direct cost of actual work-in-place shall be shown as separate line items in the Schedule of Values.
 - 7. Schedule updating: List Change Orders as a separate line item when Change Orders or Construction Change Directives result in a change in the Contract Sum.
 - 8. Overhead and profit: Show separate line item values for overhead and profit. Percent draw each month to coincide with percent of job completion.

1.04 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
 - 1. The initial Application for Payment, the Application for Payment at the time of Substantial Completion, and the final Application for Payment involve additional requirements.
- B. Payment application forms: Use AIA Form G702 Application and Certificate for Payment and AIA Form G703 Continuation Sheet.
- C. Application preparation: Complete every entry on the form. Include notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions are made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- D. Transmittal: Submit four (4) signed and notarized original copies of each Application for Payment to the Architect. At least one copy shall be complete, including waivers of lien and similar attachments, when required.
- E. Waivers of mechanics lien: With each Application for Payment, submit waivers of mechanics lien from every entity who is lawfully entitled to file a mechanics lien arising out of the Contract or a Contractor's Certificate of Release of Liens for the construction period covered by the previous application.
- F. Payment application period: The period of construction Work covered by each Application for Payment is the period from the previous Application to the 20th day of the current month. Applications shall not include dates projected beyond the date of the Application.
- G. Payment application times:
 - 1. Informal submittal: Make an informal submittal of the Application for Payment to the Architect at the last regularly scheduled project meeting of each month.
 - a. Revise the informal submittal of the Application for Payment as agreed at the Project meeting, initialing all copies.
 - 2. Formal submittal: Make a formal submittal of the Application for Payment by the 25th day of the month based on the revised informal submittal.
 - By the end of the month, the Architect will compare the formal submittal with the approved informal submittal and, when approved, will sign the Application and Certificate for Payment and will distribute:
 - 1) One (1) copy to Contractor.
 - 2) One (1) copy to Architect's file.
 - 3) Two (2) copies to Owner.
- H. Payment to Contractor: Upon approval, Owner will disburse progress payments directly to the Contractor within thirty (30) days of receipt of the Application for Payment.
 - 1. Basis for payment shall be ninety five percent (95%) of the total labor and materials less the aggregate total of all previous payments. The aggregate total of all progress payments shall not exceed ninety five percent (95%) of the Contract Sum.
- I. Initial Application for Payment: Administrative actions and submittals, that must precede or coincide with submittal of the first Application for Payment, include the following:
 - 1. List of subcontractors.
 - 2. List of principal suppliers and fabricators.
 - 3. Schedule of Values.
 - 4. Contractor's Construction Schedule (preliminary if not final).
 - 5. List of Contractor's staff assignments.
 - 6. List of Contractor's principal consultants.
 - 7. Copies of building permit.
 - 8. Copies of authorizations and licenses from governing authorities for performance of the Work.
 - 9. Initial progress report.
 - 10. Report of preconstruction meeting.

- J. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment.
 - 1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
 - 2. Administrative actions and submittals that shall precede or coincide with the application include:
 - a. Occupancy permits and similar approvals.
 - b. Warranties (guarantees) and maintenance agreements.
 - c. Test/adjust/balance records.
 - d. Change of door locks to Owner's access.
 - e. Maintenance instructions.
 - f. Meter readings.
 - g. Startup performance reports.
 - h. Changeover information related to Owner's occupancy, use, operation, and maintenance.
 - i. Final cleaning.
 - j. Application for reduction of retainage and consent of surety.
 - k. Advice on shifting insurance coverages.
 - I. List of incomplete Work recognized as exceptions to Architect's Certificate of Substantial Completion.
- K. Final Application for Payment: Administrative actions and submittals that shall precede or coincide with submittal of the final Application for Payment include:
 - 1. Completion of Project closeout requirements.
 - 2. Completion of items specified for completion after Substantial Completion.
 - 3. Assurance that unsettled claims will be settled.
 - 4. Assurance that Work not complete and accepted will be completed without undue delay.
 - 5. Transmittal of required Project construction records to the Owner.
 - 6. Proof that taxes, fees and similar obligations have been paid.
 - 7. Removal of temporary facilities and services.
 - 8. Removal of surplus materials, rubbish, and similar elements.

Upon approval, Owner will disburse final payment directly to the Contractor within thirty (30) days of receipt of the Final Application for Payment.

2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

Not Applicable to this Section.

END OF PAYMENT PROCEDURES

01 31 00 PROJECT MANAGEMENT & COORDINATION

1.0 GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:
 - 1. Coordination.
 - 2. Administrative and supervisory personnel.
 - 3. General installation provisions.
 - 4. Cleaning and protection.
- B. Related work:
 - 1. Section 01 31 19: Project Meetings.
 - 2. Section 01 33 00: Submittal Procedures: Construction Schedule.
 - 3. Section 01 71 23: Field Engineering.
 - 4. Section 01 77 00: Closeout Procedures.

1.02 COORDINATION

- A. Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of these Specifications that depend on each other for proper installation, connection, and operation.
 - 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 assure maximum accessibility for required maintenance, service and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 - 1. Prepare similar memoranda for the Owner and separate Contractors where 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 assure orderly progress of the Work. Such administrative activities include, but are not limited to:
 - 1. Preparation of schedules.
 - 2. Installation and removal of temporary facilities.
 - 3. Delivery and processing of submittals.
 - 4. Progress meetings.
 - 5. Project closeout activities.
- D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.03 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. Project supervision: Maintain an experienced and capable superintendent on the project full time when work is being accomplished.
- B. Staff Names: Within fifteen (15) days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses and telephone numbers.
 - Post copies of the list in the Project meeting room and the temporary field office where applicable.

3.0 EXECUTION

3.01 GENERAL COORDINATION PROVISIONS

- A. Inspection of conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until satisfactory conditions have been corrected in an acceptable manner.
- B. Manufacturer's instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in the Contract Documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- E. Visual effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
- F. Recheck measurements and dimensions, before starting each installation.
- G. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

3.02 CLEANING AND PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- B. 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.
- C. Limiting exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to:
 - 1. Excessive static or dynamic loading.
 - 2. Excessive internal or external pressures.
 - 3. Excessively high or low temperatures.
 - 4. Excessively high or low humidity.
 - 5. Thermal shock.
 - 6. Air contamination or pollution.
 - 7. Water or ice.
 - 8. Solvents.
 - 9. Chemicals.
 - 10. Light.
 - 11. Radiation.
 - 12. Puncture.
 - 13. Abrasion.
 - 14. Heavy traffic.
 - 15. Soiling, staining or corrosion.
 - 16. Bacteria.
 - 17. Rodent and insect infestation.
 - 18. Combustion.
 - 19. Electrical current.

- 20. High speed operation.
- 21. Improper lubrication.
- 22. Unusual wear or other misuse.
- 23. Contact between incompatible materials.
- 24. Destructive testing.
- 25. Misalignment.
- 26. Excessive weathering.
- 27. Unprotected storage.
- 28. Improper shipping or handling.
- 29. Theft.
- 30. Vandalism.

END OF PROJECT MANAGEMENT & COORDINATION

01 31 19 PROJECT MEETINGS

1.0 GENERAL

1.01 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to:
 - 1. Preconstruction conferences.
 - 2. Progress meetings.
 - 3. Coordination meetings.
- B. Related work:
 - 1. Section 01 29 00: Payment Procedures.
 - 2. Section 01 31 00: Project Management & Coordination.
 - Section 01 33 00: Submittal Procedures.

1.02 PRECONSTRUCTION CONFERENCE

- A. Schedule a preconstruction conference before starting construction, at a time convenient to the Owner and the Architect, but no later than fifteen (15) days after execution of the Agreement. Hold the conference at the Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: Authorized representatives of the Owner and the Architect; the Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress including the following:
 - 1. Tentative construction schedule.
 - 2. Critical work sequencing.
 - 3. Designation of responsible personnel.
 - 4. Procedures for processing field decisions and Change Orders.
 - 5. Procedures for processing Applications for Payment.
 - 6. Distribution of Contract Documents.
 - 7. Submittal of Shop Drawings, Product Data and Samples.
 - 8. Preparation of Record Documents.
 - 9. Use of premises.
 - 10. Parking availability
 - 11. Office, work and storage areas.
 - 12. Equipment deliveries and priorities.
 - 13. Safety procedures.
 - 14. First aid.
 - 15. Security
 - 16. Housekeeping
 - 17. Schedule for progress meetings
 - 18. Working hours.

1.03 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project site at regular intervals; approximately every two (2) weeks. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the Owner and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities may be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.

- 1. At the last regularly scheduled progress meeting of each month, review preliminary submittal of payment request in accordance with Section 01 29 00 of these Specifications.
- 2. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
- 3. Review the present and future needs of each entity present, including the following:
 - a. Interface requirements.
 - b. Time.
 - c. Sequences.
 - d. Status of submittals.
 - e. Deliveries.
 - f. Off-site fabrication problems.
 - g. Access.
 - h. Site utilization.
 - i. Temporary facilities and services.
 - j. Hours of work.
 - k. Hazards and risks.
 - I. Housekeeping.
 - m. Quality and work standards.
 - n. Change Orders.
 - Documentation of information for payment requests.
- D. Reporting: No later than three (3) days after each meeting, distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - 1. Schedule updating: Revise the Contractor's Construction Schedule after each progress meting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

1.04 COORDINATION MEETINGS

- A. Conduct project coordination meetings at regular intervals convenient to all parties involved. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special preinstallation meetings.
- B. Request representation at each meeting by every party currently involved in coordination or planning for the construction activities involved.
- C. Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.
- 2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

Not Applicable to this Section.

END OF PROJECT MEETINGS

01 33 00 SUBMITTAL PROCEDURES

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Shop Drawings.
 - 3. Product Data.
 - 4. Samples.
 - 5. Quality assurance submittals.
- B. Related work:
 - 1. Section 01 29 00: Payment Procedures: Schedule of Values.
 - 2. Section 01 31 19: Project Meetings: Meeting minutes.
 - 3. Section 01 45 00: Quality Control: Inspection and test reports.
 - 4. Section 01 78 00: Closeout Submittals: Closeout documents.

1.02 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - 3. Verify all dimensions and that each item and its submittal conform in all respects with the specified requirements. Affix the Contractor's signature to each submittal certifying that this coordination has been performed.
 - 4. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
 - a. Allow two (2) weeks for initial review. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
 - b. If an intermediate submittal is necessary, process the same as the initial submittal.
 - c. Allow two (2) weeks for processing each resubmittal.
 - d. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- B. Submittal preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 1. Provide a space approximately 4 x 5 IN on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 - 2. Include the following information on the label for processing and recording action taken.
 - a. Project name.
 - b. Date.
 - c. Name and address of the Architect.
 - d. Name and address of the Contractor.
 - e. Name and address of the subcontractor.

- f. Name and address of the supplier.
- g. Name of the manufacturer.
- h. Number and title of appropriate Specification Section.
- i. Drawing number and detail references, as appropriate.
- C. Submittal transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Architect using a transmittal form. The Architect will not accept submittals received from sources other than the Contractor.
 - On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Contractor's responsibility for deviations from Contract Document requirements is not relieved by Architect's review unless specific deviations are brought to the attention of the Architect in writing. Include Contractor's certification that information complies with Contract Document requirements.
 - 2. When material is resubmitted for any reason, transmit under a new letter of transmittal and identify as a resubmittal.

1.03 CONSTRUCTION SCHEDULE

- A. Bar-chart schedule: Prepare a fully developed, horizontal bar-chart type, contractor's construction schedule. Submit within thirty (30) days after the date established for "Commencement of the Work".
 - 1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the Schedule of Values.
 - 2. Within each time bar, indicate estimated completion percentage in 10 percent (10%) increments. As Work progresses, place a contrasting mark in each bar to indicate actual completion.
 - 3. Prepare the schedule on a sheet, or a series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
 - 4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically the sequences necessary for completion of related portions of the Work.
 - 5. Coordinate the Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, progress reports, payment requests, and other schedules.
 - 6. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Architect's procedures necessary for certification of Substantial Completion.
- B. Phasing: On the schedule, where applicable, show how requirements for phased completion of the Work by separate Contractors and partial occupancy by the Owner affect the sequence of the Work.
- C. Work stages: Indicate important stages of construction for each major portion of the Work, including submittal review, testing, and installation.
- D. Cost correlation: At the head of the schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of Work performed as of the dates used for preparation of payment requests.
- E. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.
 - When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- F. Schedule updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made. Issue the updated schedule and submit with each month's Application for Payment.

1.04 SHOP DRAWINGS

- A. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- B. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:
 - 1. Dimensions.
 - 2. Identification of products and materials included by sheet number and detail number.
 - 3. Compliance with specified standards.
 - 4. Notation of coordination requirements.
 - 5. Notation of dimensions established by field measurement.
 - 6. Sheet size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 x 11 IN but no larger than 36 x 48 IN.
 - 7. Submittal: Submit one (1) correctable, translucent, reproducible print and three (3) blue-line or black-line prints for the Architect's review.
 - a. The Architect will return the reproducible print.
 - b. The blue-line or black-line prints will be retained by the Architect for his use and distribution to his consultants and the Owner.
 - c. The Contractor may make and distribute such copies as are required for his purposes.
 - The Contractor shall provide and maintain one (1) copy as a Record Document.
 - e. The Contractor shall provide necessary final copies to be included in maintenance manuals.
 - 8. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

1.05 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves. Where Product Data must be specially prepared because printed data is not suitable for use, submit as Shop Drawings.
 - 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurements.
 - f. Notation of coordination requirements.
 - 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 3. Submit the number of copies which are required for the Contractor's use, including maintenance manuals and Record Documents, PLUS three (3) copies. The Architect will retain three (3) copies for his use and distribution to his consultants and the Owner and will return the other copies marked with action taken and corrections or modifications required.
 - 4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal form.
 - a. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.
 - 1. Mount or display Samples in the manner specified to facilitate review of qualities indicated. Prepare samples to match the Architect's Sample. Include the following:
 - a. Specification Section number and reference.
 - b. Generic description of the Sample.
 - c. Sample source.
 - d. Product name or name of the manufacturer.
 - e. Compliance with recognized standards.
 - f. Availability and delivery time.
 - 2. Submit Samples for review of size, kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least three (3) multiple units that show approximate limits of the variations.
 - b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
 - c. Refer to other Specification Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
 - 3. Preliminary submittals: Submit a full set of choices where Samples are submitted for selection of color, pattern, texture, or similar characteristics from a range of standard choices.
 - a. The Architect will review and return preliminary submittals with the Architect's notation, indicating selection and other action.
 - 4. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit three (3) sets. The Architect will return one (1) set marked with the action taken.
 - 5. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
 - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - b. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- B. Distribution of Samples: Prepare and distribute additional sets of Samples to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
 - 1. Field Samples are full-size examples erected on-site to illustrate finishes, coatings, or finish materials and to establish the Project standard.
 - a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

1.07 QUALITY ASSURANCE SUBMITTALS

- A. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of these Specifications.
- B. Certifications: Where other Sections of these Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.
 - 1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.

C. Inspection and test reports: Requirements for submittal of inspection and test reports from independent testing agencies are specified in Section 01 45 00 Quality Control.

1.08 ARCHITECT'S ACTION

- A. Except for submittals for the record or information, where action and return is required, the Architect will review each submittal, mark to indicate action taken, and return promptly.
- B. Action stamp: The Architect will stamp each submittal with a uniform, action stamp. The Architect will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. Final unrestricted release: When the Architect marks a submittal "No Exceptions Taken", the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. Final but restricted release: When the Architect marks a submittal "Make Corrections Noted", the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. Returned for resubmittal: When the Architect marks a submittal "Revise and Resubmit", do not proceed with the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in according to the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
 - a. Do not use, or allow others to use, submittals marked "Revise and Resubmit" at the Project site or elsewhere where Work is in progress.
 - 4. Other action: Where a submittal is for information or record purposes or special processing or other activity, the Architect will return the submittal marked "No Exceptions Taken".
- C. Unsolicited submittals: The Architect will return unsolicited submittals to the sender without action.
- 2.0 PRODUCTSNot Applicable to this Section.
- 3.0 EXECUTION

 Not Applicable to this Section.

END OF SUBMITTAL PROCEDURES

01 42 00 REFERENCES

1.0 GENERAL

1.01 DEFINITIONS

- A. All definitions set forth in the General Conditions of the Contract for Construction or in other Contract Documents are applicable to the Bidding Documents.
- B. "Bidding Documents" include the Invitation to Bid, Instructions to Bidders, the Bid Form, other sample bidding and contract forms and the proposed Contract Documents including any Addenda issued prior to receipt of bids.
- C. "Addenda" are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- D. A "Bid" is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein supported by data called for by the Bidding Documents.
- E. "Base Bid" is the sum stated in the Bid for which the Bidder offers to perform the Work described as the base, to which Work may be added or deducted for sums stated in Alternate Bids.
- F. An "Alternative Bid" is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in project scope or materials or methods of construction described in the Bidding Documents is accepted.
- G. A "Unit Price" is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Contract Documents.
- H. A "Bidder" is one who submits a Bid for a prime contract with the Owner for the Work described in the proposed Contract Documents.
- I. A "Sub-bidder" is one who submits a bid to a Bidder for materials or labor for a portion of the Work.
- J. "Indicated" refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown", "noted", "scheduled", and "specified" are used to help the reader locate the reference. Location is not limited.
- K. "Directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean directed by the Architect, requested by the Architect, and similar phrases.
- L. "Approved" when used conjunction with the Architect's action on the Contractor's submittals, applications and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.
- M. "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- N. "Furnish" means supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- O. "Install" describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- P. "Provide" means to furnish and install a product, complete and ready for the intended use.
- Q. "Product" includes materials, systems, and equipment.
- R. "Similar" means in its general sense and not necessarily identical.
- S. "Building code" and "code" refers to regulations of governmental agencies having jurisdiction.
- T. An "Installer" is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 1. The term "experienced", when used with the term "installer", means having a minimum of five (5) previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of authorities having jurisdiction.

- 2. Trades: Using terms such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter". It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
- 3. Assigning specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
 - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.
- U. "Project site" is the space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
- V. "Testing agencies" are independent entities engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

1.02 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 2004 MASTERFORMAT format and numbering system.
- B. Specification content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
 - 1. Abbreviated language: Language used in Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be interpolated as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
 - Streamlined language: The Specifications generally use the imperative mod and streamlined language. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.
 - a. The words "shall be" are implied where a colon (:) is used within a sentence or phrase.

1.03 INDUSTRY STANDARDS

- A. Applicability of standards: Except where 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: Where the date of issue of a referenced standard is not specified, comply with the standard in effect as of the date of the Contract Documents.
- C. Conflicting requirements: Where compliance with two (2) 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 to the Architect before proceeding for a decision on requirements that are different but apparently equal, and where it is uncertain which requirement is the most stringent.

- Minimum quantity or quality levels: The quantity or quality level shown or 1. specified shall be the minimum acceptable. 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 the Refer uncertainties to the Architect for a decision before requirements. proceeding.
- D. Copies of standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to it's construction activity. applicable standards are not bound with the Contract Documents.
 - Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
- E. Abbreviations and names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Gale Research Co.'s "Encyclopedia of Associations", available at most libraries.
- F. Abbreviations and names: Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in the Contract Documents, are defined to mean the associated names.

AA Aluminum Association

AABC Associated Air Balance Council

American Architectural Manufacturers Association AAMA

AAN American Association of Nurserymen

American Association of State Highway and Transportation Officials **AASHTO**

American Association of Textile Chemists and Colorists AATCC

ABMA American Boiler Manufacturers Association

American Concrete Institute ACI

American Council of Independent Laboratories **ACIL**

American Concrete Pipe Association **ACPA** American's with Disabilities Act ADA

Air Diffusion Council ADC

Anti-Friction Bearing Manufacturers Association **AFBMA**

American Forest and Paper Association **AFPA**

AGA American Gas Association American Hardboard Association AHA

AHAM Association of Home Appliance Manufacturers

ΑI Asphalt Institute

American Institute of Architects AIA AIA American Insurance Association

AIHA American Industrial Hygiene Association American Institute of Steel Construction AISC AISI American Iron and Steel Institute

American Institute of Timber Construction

AITC

ALI Associated Laboratories Inc.

ALSC American Lumber Standards Committee Air Movement and Control Association **AMCA** American National Standards Institute ANSI **AOAC** Association of Official Analytical Chemists Association of Official Seed Analysts **AOSA** American Plywood Association APA

American Parquet Association APA American Petroleum Institute API

ARI Air Conditioning and Refrigeration Institute ARMA Asphalt Roofing Manufacturers Association

ASA Acoustical Society of America ASC Adhesive and Sealant Council ASHRAE American Society of Heating, Refrigeration and Air Conditioning

Engineers

ASME American Society of Mechanical Engineers
ASPA American Sod Producers Association
ASPE American Society of Plumbing Engineers
ASSE American Society of Sanitary Engineering
ASTM American Society for Testing and Materials

ATIS Alliance for Telecommunications Industry Solutions
AWCMA American Window Covering Manufacturers Association

AWI American Woodwork Institute

AWPA American Wood Preservers Association
AWPB American Wood Preservers Bureau

AWS American Welding Society

AWWA American Water Works Association

BHMA Builders' Hardware Manufacturers Association

BIA Brick Institute of America

BIFMA Business and Institutional Furniture Manufacturers Association

BOCA Building Officials and Code Administration

CAGI Compressed Air and Gas Institute
CAUS Color Association of the United States
CBM Certified Ballast Manufacturers Association

CCC Carpet Cushion Council

CDA Copper Development Association Inc.
CFFA Chemical Fabrics & Film Association Inc.

CGA Compressed Gas Association

CISCA Ceiling and Interior Systems Construction Association

CISPI Cast Iron Soil Pipe Institute
CRI Carpet and Rug Institute

CRSI Concrete Reinforcing Steel Institute
CTI Cooling Tile Institute of America
DHI Door and Hardware Institute

DIPRA Ductile Iron Pipe Research Association
DLPA Decorative Laminate Products Association
ECSA Exchange Carriers Standards Association

EIA Electronic Industries Association

EIMA Exterior Insulation Manufacturers Association EJMA Expansion Joint Manufacturers Association

ETL Testing Laboratories Inc.

FCI Fluid Controls Institute

FCIB Floor Covering Installation Board FGMA Flat Glass Marketing Association

FM Factory Mutual Engineering and Research Organization

FTI Facing Tile Institute
GA Gypsum Association
HEI Heat Exchange Institute
HI Hydronics Institute
HI Hydraulic Institute

HMA Hardwood Manufacturers Association

HPMA Hardwood Plywood Manufacturers Association HPVA Hardwood Plywood and Veneer Association

IBD Institute of Business Designers
IBC International Building Code

ICBO International Conference of Building Officials
ICEA Insulated Cable Engineers Association Inc.
IEC International Electrotechnical Commission
IEEE Institute of Electrical and Electronic Engineers
IESNA Illuminating Engineering Society of North America

IGCC Insulating Glass Certification Council
ILI Indiana Limestone Institute of America

IMSA International Municipal Signal Association

IRI Industrial Risk Insurers
ISA Instrument Society of America

KCMA Kitchen Cabinet Manufacturers Association

LIA Lead Industries Association Inc.
LPI Lightning Protection Institute

MBMA Metal Building Manufacturers Association
MCAA Mechanical Contractors Association of America
MFMA Maple Flooring Manufacturers Association

MIA Marble Institute of America

ML/SFA Metal Lath/Steel Framing Association
MSS Manufacturers Standardization Society

NAA National Arborist Association

NAAMM National Association of Architectural Metal Manufacturers
MAIMA North American Insulation Manufacturers Association

NAPA National Asphalt Pavement Association

NAPF National Association of Plastic Fabricators (Now DLPA)

NBGQA National Building Granite Quarries Association

NBS National Bureau of Standards

NBHA National Builders Hardware Association (Now DHI)

NCMA National Concrete Masonry Association

NCRPM National Council on Radiation Protection and Measurement

NEC National Electrical Code (From NFPA)
NECA National Electrical Contractors Association

NEII National Elevator Industry Inc.

NEMA National Electrical Manufacturers Association

NFPA National Fire Protection Association
NFPA National Forest Products Association
NFRC National Fenestration Rating Council
NHLA National Hardwood Lumber Association
NKCA National Kitchen Cabinet Association
NLGA National Lumber Grades Authority

NOFMA National Oak Flooring Manufacturers Association

NPA National Particleboard Association
NPCA National Paint and Coatings Association
NRCA National Roofing Contractors Association

NSF National Sanitation Foundation

NSSEA National School Supply and Equipment Association

NTMA National Terrazzo and Mosaic Association

NWMA National Woodwork Manufacturers Association (Now NWWDA)
NWWDA National Wood Window and Door Association (Formerly NWMA)

PCA Portland Cement Association Prestressed Concrete Institute PCI PDI Plumbing and Drainage Institute PEI Porcelain Enamel Institute **RFCI** Resilient Floor Covering Institute RIS Redwood Inspection Service Rubber Manufacturers Association RMA SAMA Scientific Apparatus Makers Association SBCCI Southern Building Code Congress International

SDI Steel Deck Institute SDI Steel Door Institute

SGCC Safety Glazing Certification Council

SHLMA Southern Hardwood Lumber Manufacturers Association SIGMA Sealed Insulating Glass Manufacturers Association

SJI Steel Joist Institute

SMACNA Sheet Metal and Air Conditioning Contractors National Association

SPIB Southern Pine Inspection Bureau SPRI Single Ply Roofing Institute

SSPC Steel Structures Painting Council
SSPMA Sump and Sewage Pump Manufacturers

SWI Steel Window Institute

SWPA Submersible Wastewater Pump Association

TAS Texas Accessibility Standards
TCA Tile Council of America

TIMA Thermal Insulation Manufacturers Association

TPI Truss Plate Institute
UBC Uniform Building Code
UFC Uniform Fire Code
UL Underwriters Laboratories
UMC Uniform Mechanical Code

UMC Uniform Mechanical Code
UPC Uniform Plumbing Code
WCLIP West Coast Lymber Inspection

WCLIB West Coast Lumber Inspection Bureau WCMA Wallcovering Manufacturers Association

WIC Woodwork Institute of California

WLPDIA Western Lath Plaster Drywall Industries Association

WRI Wire Reinforcement Institute
WSC Water Systems Council

WSFI Wood and Synthetic Flooring Institute
WWPA Western Wood Products Association
WWPA Woven Wire Products Association

G. Federal government agencies: Names and titles of federal government standard- or Specification-producing agencies are often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standard- or Specification-producing agencies of the federal government.

CE Corps of Engineers (U.S. Dept. of the Army)

CFR Code of Federal Regulations

CPSC Consumer Product Safety Commission

CS Commercial Standard (U.S. Dept. of Commerce)

DOC Department of Commerce
DOT Department of Transportation
EPA Environmental Protection Agency

FAA Federal Aviation Administration (U.S. DOT)
FCC Federal Communications Commission

FDA Food and Drug Administration

FHA Federal Housing Administration (U.S. Dept. of HUD)

FS Federal Specification (From GSA)
GSA General Services Administration

MIL Military Standardization Documents (U.S. Dept. of Defense)
NIST National Institute of Standards and Technology (U.S. Dept. of

Agriculture)

OSHA Occupational Safety and Health Administration (U.S. Dept. of Labor)

PS Public Standard (U.S. Dept. of Commerce)

REA Rural Electrification Administration (U.S. Dept. of Agriculture)

USDA U.S. Department of Agriculture

USPS U.S. Postal Service

2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

Not Applicable to this Section.

END OF REFERENCES

01 50 00 TEMPORARY FACILITIES & CONTROLS

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Water service and distribution.
 - 2. Temporary electric power and light.
 - 3. Telephone service.
 - 4. Storm and sanitary sewer.
- C. Support facilities include, but are not limited to, the following:
 - Temporary heat.
 - 2. Field offices and storage sheds.
 - 3. Temporary roads and paving.
 - 4. Sanitary facilities, including drinking water.
 - 5. Dewatering facilities and drains.
 - 6. Temporary enclosures.
 - 7. Hoists and temporary elevator use.
 - 8. Temporary project identification signs and bulletin boards.
 - 9. Waste disposal services.
 - 10. Rodent and pest control.
 - 11. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities include, but are not limited to, the following:
 - 1. Temporary fire protection.
 - 2. Barricades, warning signs, and lights.
 - 3. Sidewalk bridge or enclosure fence for the site.
 - 4. Environmental protection.

1.02 SUBMITTALS

- A. Temporary utilities: Submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.
- B. Implementation and termination schedule: Within fifteen (15) days of the date established for commencement of the Work, submit a schedule indicating implementation and termination of each temporary utility.

1.03 REFERENCES

- A. ANSI A10 Series: Construction and Demolition Standards.
- B. NECA 200: Recommended Practice for Installing and Maintaining Temporary Electrical Power at Construction Sites.
- C. NFPA 10: Standard for Portable Fire Extinguishers.
- D. NFPA 70: National Electric Code.
- E. NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations.

1.04 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations if authorities having jurisdiction including, but not limited to, the following:
 - 1. Building Code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police and Fire Department rules.
 - 5. Environmental protection regulations.

- B. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations", ANSI A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities".
 - 1. Electrical service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service NFPA 70 "National Electrical Code".
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.05 PROJECT CONDITIONS

- A. Temporary utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.
- B. Conditions of use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

2.0 PRODUCTS

2.01 MATERIALS

- A. General: Provide new materials. If acceptable to the Architect, the Contractor may use undamaged, previously used materials in serviceable condition. Provide materials suitable for use intended.
 - Use only cleaning materials which are compatible with the surface being cleaned, as recommended by the manufacturer of the material, and as needed to maintain the specified standard of cleanliness.
- B. Lumber and plywood: Comply with requirements Section 06 10 00 Rough Carpentry.
 - 1. For job-built temporary offices, shops, and sheds within the construction area, provide UL labeled, fire-treated lumber and plywood for framing, sheathing, and siding.
 - 2. For signs and directory boards, provide exterior-type, Grade B-B high-density concrete form overlay plywood of sizes and thicknesses indicated.
 - 3. For fences and vision barriers, provide minimum 3/8 IN thick exterior plywood.
 - 4. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8 IN thick exterior plywood.
- C. Gypsum wallboard: Provide gypsum wallboard on interior walls of temporary offices.
- D. Roofing materials: Provide UL Class A standard-weight asphalt shingles or LTL Class C mineral-surfaced roll; roofing on roofs of job-built temporary offices, shops, and sheds.
- E. Paint: Comply with requirements of Section 09 90 00 Painting.
 - 1. For job-built temporary offices, shops, sheds, fences, and other exposed lumber and plywood, provide exterior-grade acrylic-latex emulsion over exterior primer.
 - 2. For sign panels and applying graphics, provide exterior-grade alkyd gloss enamel over exterior primer.
 - 3. For interior walls of temporary offices, provide two (2) coats interior latex-flat wall paint.
- F. Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.
- G. Water: Provide potable water approved by local health authorities.
- H. Open-mesh fencing: Provide 0.120 IN thick, galvanized 2 IN chain link fabric fencing 6 FT high with galvanized barbed-wire top strand and galvanized steel pipe posts, 1-1/2 IN I.D. for line posts and 2-1/2 IN I.D. for comer posts.

2.02 EQUIPMENT

- A. General: Provide new equipment. If acceptable to the Architect, the Contractor may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.
 - 1. Use only cleaning equipment which is compatible with the surface being cleaned, as recommended by the manufacturer of the material, and as needed to maintain the specified standard of cleanliness.
- B. Water hoses: Provide 3/4 IN, heavy-duty, abrasion-resistant, flexible rubber hoses 100 FT long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shut off nozzles at hose discharge.
- C. Electrical outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110 to 120 Volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.
- D. Electrical power cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
- E. Lamps and light fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered-glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.
- F. Heating units: Provide temporary beating units that have been tested and labeled by LTL, FK or another recognized trade association related to the type of fuel being consumed.
- G. Temporary offices: Provide prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows, and serviceable finishes. Provide heated and air-conditioned units on foundations adequate for normal loading.
- H. Temporary toilet units: Provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
- I. Fire extinguishers: Provide hand-carried, portable, UL rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA recommended classes for the exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

3.0 EXECUTION

3.01 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with company recommendations.
 - 1. Arrange with company and existing users for a time when service can be interrupted, if necessary, to make connections for temporary services.
 - 2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
 - 3. Obtain easements to bring temporary utilities to the site where the Owner's easements cannot be used for that purpose.

- 4. Use charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect. Neither the Owner nor Architect will accept cost or use charges as a basis of claims for Change Orders.
- B. Water service
 - 1. Contractor may use existing water facilities at the site.
- C. Electric power service:
 - Contractor may use existing electrical service at the site.
 - Provide all necessary temporary wiring, extensions, and temporary lighting devices.
- D. Temporary lighting: When overhead floor or roof deck has been installed, provide temporary lighting with local switching.
 - 1. Install and operate temporary lighting that will fulfill security and protection requirements without operating the entire system. Provide temporary lighting that will provide adequate illumination for construction operations and traffic conditions.
- E. Temporary heat: Provide temporary heat required by construction activities for curing or drying of completed installations or for protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required and minimize consumption of energy.
- F. Heating facilities: Except where the Owner authorizes use of the permanent system, provide vented, self-contained, LP gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open flame, or salamander heating units is prohibited.
- G. Temporary telephones: Provide temporary telephone service throughout the construction period for all personnel engaged in construction activities. Install telephone on a separate line for each temporary office and first-aid station.
 - 1. Separate telephone lines: Provide additional telephone lines for the following:
 - Where an office has more than two (2) occupants, install a telephone for each additional occupant or pair of occupants.
 - b. Provide a dedicated telephone line for a fax machine in the field office.
 - 2. At each telephone, post a list of important telephone numbers.
- H. Sanitary facilities include temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.
 - 1. Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Provide covered waste containers for used material.
- I. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
 - 1. Provide separate facilities for male and female personnel.
- J. Wash facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a healthy and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
 - Provide safety showers, eyewash fountains, and similar facilities for convenience, safety, and sanitation of personnel.
- K. Drinking-water facilities: Provide containerized, tap-dispenser, bottled-water drinking-water units, including paper supply.
 - 1. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45° F to 55° F.
- L. Sewers and drainage: If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.

- 1. Filter out excessive amounts of soil, construction debris, chemicals, oils, and similar contaminants that might clog sewers or pollute waterways before discharge.
- 2. Connect temporary sewers to the municipal system, as directed by sewer department officials.
- 3. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. Following heavy use, restore normal conditions promptly.
- M. Provide earthen embankments and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

3.03 SUPPORT FACILITIES INSTALLATION

- A. Locate field offices, storage sheds, and other temporary construction and support facilities for easy access.
 - Maintain support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.
- B. Provide incombustible construction for offices, shops, and sheds located within the construction area or within 30 FT of building lines. Comply with requirements of NFPA 241.
- C. Field offices: Provide insulated, weathertight temporary offices of sufficient size to accommodate required office personnel at the Project site. Keep the office clean and orderly for use for small progress meetings. Furnish and equip offices as follows:
 - 1. Furnish with a desk and chairs, a file cabinet, plan table, plan rack, and a bookcase.
 - 2. Equip with a water cooler and private toilet complete with water closet, lavatory, and medicine cabinet unit with a mirror.
- D. Storage and fabrication sheds: Install storage and fabrication sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility service. Sheds may be open shelters or fully enclosed spaces within the building or elsewhere on the site.
- E. Temporary paving: Construct and maintain temporary roads and paving to support the indicated loading adequately and to withstand exposure to traffic during the construction period. Locate temporary paving for roads, storage areas, and parking where the same permanent facilities will be located. Review proposed modifications to permanent paving with the Architect.
 - 1. Paving: Comply with requirements of Division 2 grading specifications for construction and maintenance of temporary paving.
 - 2. Coordinate temporary paving development with subgrade grading, compaction, installation and stabilization of subbase, and installation of base and finish courses of permanent paving.
 - 3. Install temporary paving to minimize the need to rework the installations and to result in permanent roads and paved areas without damage or deterioration when occupied by the Owner.
 - 4. Extend temporary paving in and around the construction area as necessary to accommodate delivery and storage of materials, equipment usage, administration, and supervision.
- F. Dewatering facilities and drains: For temporary drainage and dewatering facilities and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division 2 Sections. Where feasible, utilize the same facilities. Maintain the site, excavations, and construction free of water.
- G. Temporary enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.

- 1. Where heat is needed, and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
- 2. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 SF or less with plywood or similar materials.
- 3. Close openings through floor or roof decks and horizontal surfaces with load-bearing, wood-framed construction.
- 4. Where temporary wood or plywood enclosure exceeds 100 SF in area, use UL labeled, fire-retardant-treated material for framing and main sheathing.
- H. Temporary lifts and hoists: Provide facilities for hoisting materials and employees. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- I. Temporary elevator use (where applicable): Refer to Division 14 Sections for elevators.
- J. Project identification and temporary signs: Prepare project identification and other signs of size indicated. Install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative-treated wood or steel. Do not permit installation of unauthorized signs.
 - 1. Project identification signs: Engage an experienced sign painter to apply graphics. Submit sketch of sign to Architect for approval prior to fabrication. Include:
 - a. Project name.
 - b. Owner: Collin County.
 - c. Architect: Spurgin & Associates Architects.
 - d. Contractor: General Contractor awarded this Project.
 - 2. Temporary signs: Prepare signs to provide directional information to construction personnel and visitors.
- K. Temporary exterior lighting: Install exterior yard and sign lights so signs are visible when Work is being performed.
- L. Collection and disposal of waste: Collect waste from construction areas and elsewhere day. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 degrees F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material lawfully.
- M. Rodent and pest control: Before deep foundation work has been completed, retain a local exterminator or pest control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Employ this service to perform extermination and control procedures at regular intervals so the Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- N. Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate. Cover finished, permanent stairs with a protective covering of plywood or similar material so finishes will be undamaged at the time of acceptance.

3.04 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion, or longer, as requested by the Architect.
- B. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations."
 - Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.
 - 2. Store combustible materials in containers in fire-safe locations.

- 3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fireprotection facilities, stairways, and other access routes for fighting fires. Prohibit smoking in hazardous fire-exposure areas.
- 4. Provide supervision of welding operations, combustion-type temporary heating units, and similar sources of fire ignition.
- C. Permanent fire protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- D. Barricades, warning signs, and lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- E. Enclosure fence: Before excavation begins, install an enclosure fence with lockable entrance gates at the entrance to the site. Provide protective fencing where required around the site as determined by Contractor sufficient to accommodate and protect construction operations. Install in a manner that will prevent people, dogs, and other animals from easily entering the site, except by the entrance gates.
 - 1. Provide open-mesh, chain link fencing with posts set in a compacted mixture of gravel and earth.
- F. Security enclosure and lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
 - 1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism
- G. Environmental protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise-making tools and equipment to hours that will minimize complaints from persons or firms near the site.

3.05 CONSTRUCTION CLEANING

A. General:

- 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
- 2. Do not allow accumulation of scrap, debris, waste material and other items not required for construction of this Work.
- 3. At least twice each month, and more often if necessary, completely remove all scrap, debris and waste material from the job site.
- 4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.

B. Site:

- Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
- 2. Maintain the site in a neat and orderly condition at all times.

C. Structures

- Weekly, and more often if necessary, inspect the structure and pick up all scrap, debris and waste material. Remove such items to the place designated for their storage.
- 2. Weekly, and more often if necessary, sweep interior spaces clean.
 - a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and a hand-held broom.

- 3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary cleanliness.
- 4. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials are installed.
 - a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from foreign material which, in the opinion of the Architect, may be injurious to the finish floor material.

3.06 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
 - 2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are the Contractor's property. The Owner reserves the right to take possession of project identification signs.
 - 2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at the temporary entrances, as required by the governing authority.
 - 3. At Substantial Completion, clean and renovate permanent facilities used during the construction period including, but not limited to, the following:
 - a. Replace air filters and clean inside of ductwork and housings.
 - b. Replace significantly worn parts and parts subject to unusual operating conditions.
 - c. Replace lamps burned out or noticeably dimmed by hours of use.

END OF TEMPORARY FACILITIES & CONTROLS

01 60 00 PRODUCT REQUIREMENTS

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
- B. Related work:
 - Section 01 33 00: Submittal Procedures: Specifies requirements for submittal of the Contractor's Construction Schedule.
 - 2. Section 01 42 00: References: Specifies the applicability of industry standards to products specified.
 - 3. Section 01 62 00: Product Options: Specifies administrative procedures for handling requests for substitutions made after award of the Contract.

1.02 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties", "systems", "structure", "finishes", "accessories", and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
 - "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material", "equipment", "system", and terms of similar intent.
 - a. "Named Products" are items identified by the manufacturer's product name, including make or model number or other designation, shown or listed in the manufacturer's published product literature, that is current as of the date of the Contract Documents.
 - b. "Foreign Products" as distinguished from "domestic products" are items substantially manufactured (50% or more of value) outside the United States and its possessions. Products produced or supplied by entities substantially owned (more than 50%) by persons who are not citizens of, nor living within, the United States and its possessions are also considered to be foreign products.
 - 2. "Materials" are products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
 - 3. "Equipment" is a product with operational parts, whether motorized or manually operated, that requires service connections, such as wiring or piping.

1.03 QUALITY ASSURANCE

- A. Source limitations: To the fullest extent possible, provide products of the same kind from a single source.
 - 1. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources producing products that possess these qualities, to the fullest extent possible.
- B. Compatibility of options: When the Contractor is given the option of selecting between two (2) or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 1. Each prime contractor is responsible for providing products and construction methods that are compatible with products and construction methods of other prime of separate contractors.
 - 2. If a dispute arises between prime contractors over concurrently selectable, but incompatible products, the Architect will determine which products shall be retained and which are incompatible and must be replaced.

- C. Foreign product limitations: Except under one or more of the following conditions, provide domestic products, not foreign products, for inclusion in the Work:
 - 1. No available domestic product complies with the Contract Documents.
 - 2. Domestic products that comply with the Contract Documents are available only at prices or terms substantially higher than foreign products that comply with the Contract Documents.
- D. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products that will be exposed to view in occupied spaces or on the exterior.
 - Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous.
 - 2. Equipment nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
 - a. Name of product and manufacturer.
 - b. Model and serial number.
 - c. Capacity.
 - d. Speed.
 - e. Ratings.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.
 - 1. Schedule delivery to minimize long-term storage at the 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 the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 5. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
 - 6. Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.
 - 7. Store products subject to damage by the elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

2.0 PRODUCTS

2.01 PRODUCT SELECTION

- A. General product requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.
 - Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
 - 2. Standard products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- B. Product selection procedures: The Contract Documents and governing regulations govern product selection. Procedures governing product selection include the following:

- 1. Proprietary specification requirements: Where Specifications name only a single product or manufacturer, provide the product indicated. No substitutions will be permitted.
- 2. Semi-proprietary specification requirements: Where Specifications name two (2) or more products or manufacturers, provide one (1) of the products indicated. No substitutions will be permitted.
 - a. Where Specifications specify products or manufacturers by name, accompanied by the term "or equal" or "or approved equal," comply with Section 01 62 00 Product Options to obtain approval for use of an unnamed product.
- 3. Nonproprietary specifications: When Specifications list products or manufacturers that are available and may be incorporated in the Work, but do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Section 01 62 00 Product Options to obtain approval for use of an unnamed product.
- 4. Descriptive specification requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
- 5. Performance specification requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated.
 - a. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
- 6. Compliance with standards, codes, and regulations: Where Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standards, codes, or regulations specified.
- 7. Visual matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.
 - a. Where no product available within the specified category matches satisfactorily and complies with other specified requirements, comply with Section 01 62 00 Product Options for selection of a matching product in another product category.
- 8. Visual selection: Where specified product requirements include the phrase "...as selected from the manufacturer's standard colors, patterns, textures ..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Architect will select the color, pattern, and texture from the product line selected.
- 9. Allowances: Refer to individual Specification Sections and Section 01 21 00 Allowances for allowances that control product selection and for procedures required for processing such selections.

3.0 EXECUTION

3.01 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.
 - 1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF PRODUCT REQUIREMENTS

01 62 00 PRODUCT OPTIONS

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. Related work:
 - Section 01 33 00: Submittal Procedures: Specifies requirements for submittal of the Contractor's Construction Schedule.
 - 2. Section 01 42 00: References: Specifies the applicability of industry standards to products specified.
 - 3. Section 01 60 00: Product Requirements: Specifies requirements governing the Contractor's selection of products and product options.

1.02 DEFINITIONS

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
 - Revisions to the Contract Documents requested by the Owner or Architect.
 - 2. Specified options of products and construction methods included in the Contract Documents.
 - 3. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.03 SUBMITTALS

- A. Substitution request submittal: The Architect will consider requests for substitution if received within sixty (60) days after commencement of the Work. Requests received more than sixty (60) days after commencement of the Work may be considered or rejected at the discretion of the Architect.
 - 1. Submit three (3) copies of each request for substitution for consideration. Submit requests on the form included at the end of this Section according to procedures required for change-order proposals.
 - 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 - 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors, that will be necessary to accommodate the proposed substitution.
 - b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
 - c. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
 - d. Samples, where applicable or requested.
 - e. A statement indicating the substitutions effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
 - f. Cost information, including a proposal of the net change, if any in the Contract Sum.

- g. The Contractor's certification that the proposed substitution proposed is equal to or better in every significant respect to that required in the Contract Documents and is appropriate for the applications indicated.
- h. The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
- 4. Architect's action: If necessary, the Architect will request additional information or documentation for evaluation. The Architect will notify the Contractor of acceptance or rejection of the substitution by return of the substitution request form
 - a. Use the product specified if the Architect cannot make a decision on the use of a proposed substitute within the time allocated.
 - b. The Architect's decision of acceptance or non-acceptance of a proposed substitution shall be final.

2.0 PRODUCTS

2.01 SUBSTITUTIONS

- A. Conditions: The Architect will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect. If the following conditions are not satisfied, the Architect will return the requests without action except to record noncompliance with these requirements.
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 - 3. The request is timely, fully documented, and properly submitted.
 - 4. The specified product or method of construction cannot be provided within the Contract Time. The Architect will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
 - 5. The request is directly related to an "or-equal" clause or similar language in the Contract Documents.
 - 6. The requested substitution offers the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume. The Owner's additional responsibilities may include compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner, and similar considerations.
 - 7. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 - 8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.
 - 9. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
 - 10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
 - 11. Where a proposed substitution involves more than one prime contractor, each contractor shall cooperate with the other contractors involved to coordinate the Work, provide uniformity and consistency, and assure compatibility of products.
- B. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

C. Failure of timely order: The Contractor is responsible for assuring the timely order of all materials specified. If a specified material, or color of material cannot be delivered by the contract completion date, due to failure to order the material in a timely manner, the Contractor shall be responsible for supplying an equal or better material. The Architect shall be the sole determinant of the approved substitute material. The Contractor shall also be charged an amount equal to five percent (5%) of the value of the specified material. This amount shall be credited to the Owner through a Change Order to the contract. The word "material", as used in this Section, includes all items specified in the Specifications or shown on the Drawings.

3.0 EXECUTION

3.01 SUBSTITUTION REQUEST FORMS

A. The Contractor shall submit requests for substitutions on the form included on the following pages.

SUBSTITUTION REQUEST FORM

| Date:_ | | | | | | | |
|---------|--|--|----|--|--|--|--|
| Archite | ect's Project No.: | | | | | | |
| Projec | t: | | | | | | |
| То: | SPURGIN & ASSOCIATES ARCHITECTS 103 W. Louisiana Street McKinney, Texas 75069-4413 | From: | | | | | |
| Contra | actor hereby requests acceptance of the followin | g product or system as substitution in accorda | | | | | |
| 1. | SPECIFIED PRODUCT OR SYSTEM: | | | | | | |
| | Substitution request for: | | | | | | |
| | Specification Section No.: | Article: | | | | | |
| 2. | SUPPORTING DATA: | | | | | | |
| | Product data adequate for evaluation of the request for proposed | | | | | | |
| | Sample is attached. | | | | | | |
| | Sample will be sent upon Arcl | nitect/Engineer's request. | | | | | |
| 3. | QUALITY COMPARISON (Add additional she | ets if necessary) | | | | | |
| | SPECIFIED PRODUC | CT SUBSTITUTION | | | | | |
| | Name, Brand: | | | | | | |
| | Catalog No.: | | | | | | |
| | Manufacturer: | | | | | | |
| | Vendor: | | | | | | |
| | Significant Variations: | | | | | | |
| | Maintenance Service Available: | Yes | No | | | | |
| | Spare Parts Source: | | | | | | |

| Warranty Prov | rided: | Yes | sYear | 'S | No | | | |
|------------------|---|-----------------------|--------------------|---------------------------------------|-------|--|--|--|
| By Whom: | | | | | | | | |
| PREVIOUS IN | ISTALLATIONS | : | | | | | | |
| Identification o | Identification of similar projects on which proposed substitution was used: | | | | | | | |
| Project: | | <i>H</i> | Architect: | | | | | |
| Address: | | | Owner: | | | | | |
| | | | Date Installed: | | | | | |
| REASON FOR | R NOT GIVING F | PRIORITY TO SPEC | CIFIED ITEM(S): | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | · · · · · · · · · · · · · · · · · · · | | | | |
| EFFECT OF S | SUBSTITUTION: | | | | | | | |
| Does the prop | osed substitution | n affect other work (| adverse or otherw | vise): | | | | |
| | No | Yes (if yes, | explain) | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Substitution C | hanges Contrac | t Time: | | | | | | |
| | No | Yes (if yes, A | .dd/Deduct | | Days) | | | |
| Substitution re | quires dimensio | nal revisions or rede | esign of the work: | | | | | |
| | No | Yes (if yes, a | ttach explanation | data) | | | | |
| | | | | | | | | |

7. CONTRACTOR'S STATEMENT OF CONFORMANCE OF PROPOSED SUBSTITUTION TO CONTRACT DOCUMENTS:

I/we have investigated the proposed substitution. I/we:

- * believe that it is equal or superior in all respects including function, appearance, and quality to specified product, except as stated above;
- will provide same warranty and servicing requirements as specified for specified product;
- * have included complete implications of the substitution;
- * will pay for changes to the building design and special inspection costs caused by the use of this product;
- * will coordinate the incorporation of the proposed substitution in the work;
- waive future claims for added cost to Contract caused by the substitution.

| Date: | By: |
|------------|---|
| incomplete | questions and complete all blanks - use "NA" if not applicable. Unresponsive or request will be rejected. |
| | T'S REVIEW AND ACTION |
| | Resubmit substitution request |
| | Provide more information in the following areas: |
| | |
| | Sign Contractor's Statement of Conformance |
| | Substitution is accepted. |
| | Substitution is accepted, with the following comments: |
| | Substitution is rejected |
| | Substitution is rejected. Substitution Request received too late. |
| | Cubstitution request received too late. |

END OF PRODUCT OPTIONS

01 73 29 CUTTING & PATCHING

1.0 GENERAL

1.01 SUMMARY

- This Section includes administrative and procedural requirements for cutting and patching.
- B. Related work:
 - In addition to other requirements specified, upon the Architect's request uncover work to provide for inspection of covered work and remove samples of installed materials for testing.
 - 2. Do not cut or alter work performed under separate contracts without the Architect's written permission.
 - 3. Section 01 31 00: Project Management & Coordination.
 - 4. Section 02 41 19: Selective Structure Demolition.
 - 5. Refer to other Sections of these Specifications for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
 - a. Requirements of this Section apply to mechanical and electrical installations. Refer to Division 21-28 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

1.02 SUBMITTALS

- A. Cutting and patching proposal: Submit a proposal describing procedures well in advance of the time cutting and patching will be performed if the Owner requires approval of these procedures before proceeding. Request approval to proceed. Include the following information, as applicable, in the proposal:
 - 1. Describe the extent of cutting and patching required. Show how it will be performed and indicate why it cannot be avoided.
 - 2. Describe anticipated results in terms of changes to existing construction. Include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
 - 3. List products to be used and firms or entities that will perform Work.
 - 4. Indicate dates when cutting and patching will be performed.
 - 5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
 - 6. Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with the original structure.
 - 7. Approval by the Architect to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of unsatisfactory work.

1.03 QUALITY ASSURANCE

- A. Requirements for structural work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
 - Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:
 - a. Foundation construction.
 - b. Bearing and retaining walls.
 - c. Structural concrete.
 - d. Structural steel.
 - e. Lintels.
 - f. Timber and primary wood framing.
 - g. Structural decking.
 - h. Stair systems.
 - i. Miscellaneous structural metals.

- j. Exterior curtain-wall construction.
- k. Equipment supports.
- I. Piping, ductwork, vessels, and equipment.
- m. Structural systems of special construction in Division 13 Sections.
- B. Operational limitations: Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased maintenance or decreased operational life or safety.
 - 1. Obtain approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:
 - Primary operational systems and equipment.
 - b. Air or smoke barriers.
 - c. Water, moisture or vapor barriers.
 - d. Membranes and flashings.
 - e. Fire protection systems.
 - f. Noise and vibration control elements and systems.
 - g. Control systems.
 - h. Communication systems.
 - Conveying systems.
 - j. Electrical wiring systems.
 - Operating systems of special construction in Division 13 Sections.
- C. Visual requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner.
 - If possible, retain the original Installer or fabricator to cut and patch the exposed Work listed below. If it is impossible to engage the original Installer or fabricator, engage another recognized experienced and specialized firm.
 - a. Processed concrete finishes.
 - b. Stonework and stone masonry.
 - c. Ornamental metal.
 - d. Matched-veneer woodwork.
 - e. Preformed metal panels.
 - f. Firestopping.
 - g. Window wall system.
 - h. Stucco and ornamental plaster.
 - i. Acoustical ceilings.
 - j. Terrazzo.
 - k. Finished wood flooring.
 - I. Fluid-applied flooring.
 - m. Carpeting.
 - n. Aggregate wall coating.
 - o. Wall covering.
 - p. Swimming pool finishes.
 - q. HVAC enclosures, cabinets or covers.

1.04 WARRANTY

A. Existing warranties: Replace, patch and repair material and surfaces cut or damaged by methods and with materials in such a manner s not to void any warranties required or existing.

2.0 PRODUCTS

2.01 MATERIALS

A. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible if identical materials are unavailable or cannot be used. Use materials whose installed performance will equal or surpass that of existing materials.

3.01 INSPECTION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.
 - 1. Before proceeding, meet at the 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.

3.02 PREPARATION

- A. Temporary support: Provide temporary support of work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Avoid cutting existing pipe, conduit, or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.

3.03 PERFORMANCE

- A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original Installer; comply with the original Installer's recommendations.
 - 1. In general, where cutting is required use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Cut through concrete and masonry using a cutting machine, such as a carborundum saw or diamond-core drill.
 - 4. Comply with requirements of applicable Division 2 Sections where cutting and patching requires excavating and backfilling.
 - 5. Where services are required to be removed, relocated or abandoned, by-pass utility services, such as pipe or conduit, before cutting. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.
- C. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
 - 2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Where removing walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

- a. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch after the area has received primer and second coat.
- 4. Patch, repair or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.04 CLEANING

A. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar items. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing material. Restore damaged pipe covering to its original condition.

END OF CUTTING & PATCHING

01 77 00 CLOSEOUT PROCEDURES

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 48.

1.02 SUBSTANTIAL COMPLETION

- A. Preliminary procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show one hundred percent (100%) completion for the portion of the Work claimed as substantially complete.
 - a. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - b. If one hundred percent (100%) completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Advise the Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Submit Record Drawings, Maintenance Manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 6. Deliver tools, spare parts, extra stock, and similar items.
 - 7. Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
 - 8. Complete startup testing of systems and instruction of the Owner's operation and maintenance personnel.
 - 9. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 - 10. Complete final cleanup requirements, including touchup painting.
 - 11. Touch up and otherwise repair and restore marred, exposed finishes.
- B. Inspection procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
 - 1. The Architect will repeat inspection when requested and assured that the Work is substantially complete.
 - 2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.03 FINAL ACCEPTANCE

- A. Preliminary procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 - Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.

- a. Submit Contractor's Affidavit of Payments of Debts and Claims (AIA Form G706).
- b. Submit Contractor's Affidavit of Release of Liens (AIA Form G706A).
- 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
- 3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
- Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion or when the Owner took possession of and assumed responsibility for corresponding elements of the Work.
- 5. Submit Consent of Surety to Final Payment (AIA Form G707).
- 6. Submit a final liquidated damages settlement statement.
- 7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Reinspection procedure: The Architect will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.
 - 1. Upon completion of reinspection, the Architect will prepare a certificate of final inspection. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 - 2. If necessary, reinspection will be repeated.
- 2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

3.01 CLOSEOUT PROCEDURES

- A. Operation and maintenance instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if Installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
 - Maintenance Manuals.
 - 2. Record Documents.
 - 3. Spare parts and materials.
 - 4. Tools.
 - 5. Lubricants.
 - 6. Fuels.
 - 7. Identification systems.
 - 8. Control sequences.
 - 9. Hazards.
 - 10. Cleaning.
 - 11. Warranties and bonds.
 - 12. Maintenance agreements and similar continuing commitments.
- B. As part of instruction for operating equipment, demonstrate the following procedures:
 - 1. Startup
 - 2. Shutdown.
 - 3. Emergency operations.
 - 4. Noise and vibration adjustments.
 - 5. Safety procedures.
 - 6. Economy and efficiency adjustments.
 - 7. Effective energy utilization.

3.02 FINAL CLEANING

- A. General: The General Conditions require general cleaning during construction. Regular cleaning is included in Section 01 50 00 Temporary Facilities & Controls.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Cleaning each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification for Substantial Completion.
 - a. Remove labels that are not permanent labels.
 - b. Clean transparent materials including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 - c. Clean exposed exterior and interior hard-surfaced finishes to a dust-free conditions, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
 - d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps. Replace all HVAC filters.
 - e. Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved or planted to a smooth, even-textured surface.
- C. Removal of protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
 - 1. Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Owner.

END OF CLOSEOUT PROCEDURES

01 78 00 CLOSEOUT SUBMITTALS

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout submittals required by the Contract Documents at the completion of the project including, but not limited to, the following:
 - 1. Project record documents, including operation and maintenance manuals.
 - 2. Warranties and bonds, including manufacturer's standard warranties on products and special warranties.

B. Related work:

- 1. Refer to General Conditions for terms of the Contractor's period for correction of the Work (one year from Date of Substantial Completion).
- 2. Section 01 33 00: Submittal Procedures: Specifies procedures for submitting warranties.
- 3. Section 01 77 00: Closeout Procedures: Specifies contract closeout procedures.
- 4. Divisions 2 through 48 Sections for specific requirements for warranties on products and installations specified to be warranted.
- 5. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.02 DEFINITIONS

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.03 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire-resistant location. Provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: Maintain a clean, undamaged set of blue- or black-line prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - 1. Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the Work.
 - 2. Mark new information that is important to the Owner but was not shown on Contract Drawings or Shop Drawings.
 - 3. Note related change order numbers where applicable.
 - Organize record drawing sheets into manageable sets. Bind sets with durablepaper cover sheets; print suitable titles, dates, and other identification on the cover of each set.
- C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda. Include with the Project Manual one copy of other written construction documents, such as Change Orders and modifications issued in printed form during construction.

- 1. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
- 2. Give particular attention to substitutions and selection of options and information on concealed construction that cannot otherwise be readily discerned later by direct observation.
- 3. Note related record drawing information and Product Data.
- 4. Upon completion of the Work, submit record Specifications to the Architect for the Owner's records.
- D. Record Product Data: Maintain one (1) copy of each Product Data submittal. Note related Change Orders and markup of Record Drawings and Specifications.
 - Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.
 - 2. Give particular attention to concealed products and portions of the Work that cannot otherwise be readily discerned later by direct observation.
 - 3. Upon completion of markup, submit complete set of record Product Data to the Architect for the Owner's records.
- E. Record Sample submittals: Immediately prior to Substantial Completion, the Contractor shall meet with the Architect and the Owner's personnel at the Project site to determine which Samples are to be transmitted to the Owner for record purposes. Comply with the Owner's instructions regarding delivery to the Owner's Sample storage area.
- F. Miscellaneous record submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping sand submittals in connection with actual performance of the Work. Immediately prior to the date of dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to the Architect for the Owner's records.
- G. Maintenance Manuals: Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, 2 IN, 3-ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information:
 - 1. List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends and holidays.
 - 2. Emergency instructions.
 - 3. Spare parts list.
 - 4. Copies of warranties.
 - 5. Wiring diagrams.
 - 6. Recommended "turn-around" cycles.
 - 7. Inspection procedures.
 - 8. Shop Drawings and Product Data.
 - 9. Fixture lamping schedule.

1.04 WARRANTY REQUIREMENTS

- A. Related damages and losses: When correcting warranted construction that has failed, remove and replace other construction that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

- D. Owner's recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.05 WARRANTY AND BOND SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate for Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen (15) days of completion of that designated portion of the Work.
- B. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
- C. Forms for special warranties are included at the end of this Section. Prepare a written document utilizing the appropriate form, ready for execution by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
 - 1. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- D. Form of submittal: At Final Completion compile two (2) copies of each required warranty and bond properly executed by the Contractor, or by the Contractor and a subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- E. Bind warranties and bonds in heavy duty, commercial quality, durable 3-ring, vinyl covered loose leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 1/2 IN x 11 IN paper.
 - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the 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 the Installer.
 - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES AND BONDS", Project title or name, and name of the Contractor.
 - 3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

2.0 PRODUCTS

Not Applicable to this Section.

3.0 EXECUTION

3.01 WARRANTIES

A. Provide warranties and bonds on products and installations as specified in other Sections of these Specifications.

END OF CLOSEOUT SUBMITTALS

01 78 33 WARRANTIES & BONDS

1.0 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
- B. Related work:
 - 1. Refer to General Conditions for terms of the Contractor's period for correction of the Work (one year from Date of Substantial Completion).
 - 2. Section 01 33 00: Submittal Procedures: Specifies procedures for submitting warranties.
 - 3. Section 01 77 00: Closeout Procedures: Specifies contract closeout procedures.
 - 4. Divisions 2 through 48 Sections for specific requirements for warranties on products and installations specified to be warranted.
 - 5. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.02 DEFINITIONS

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.03 WARRANTY REQUIREMENTS

- A. Related damages and losses: When correcting warranted construction that has failed, remove and replace other construction that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.04 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate for Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen (15) days of completion of that designated portion of the Work.
- B. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
- C. Forms for special warranties are included at the end of this Section. Prepare a written document utilizing the appropriate form, ready for execution by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
 - 1. Refer to Divisions 2 through 48 Sections for specific content requirements and particular requirements for submitting special warranties.
- D. Form of submittal: At Final Completion compile 2 copies of each required warranty and bond properly executed by the Contractor, or by the Contractor and a subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- E. Bind warranties and bonds in heavy duty, commercial quality, durable 3-ring, vinyl covered loose leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 1/2 IN x 11 IN paper.
 - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the 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 the Installer.
 - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES AND BONDS", Project title or name, and name of the Contractor.
 - 3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.
- 2.0 PRODUCTS

 Not Applicable to this Section.
- 3.0 EXECUTION
- 3.01 WARRANTIES
 - A. Provide warranties and bonds on products and installations as specified in other Sections of these Specifications.

END OF WARRANTIES & BONDS

02 41 19 SELECTIVE STRUCTURE DEMOLITION

1.0 GENERAL

1.01 SUMMARY

A. In accordance with pertinent provisions of this Section, carefully demolish and remove from the building those items scheduled to be so demolished and removed.

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

2.0 PRODUCTS

Not applicable to this Section.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 DEMOLITION

- A. By careful study of the Contract Documents, determine the location and extent of selective demolition to be performed.
- B. In company with the Architect, verify the extent and location of selective demolition required.
 - 1. Carefully identify limits of selective demolition.
 - 2. Mark interface surfaces as required to enable workmen also to identify items to be removed and items to be left in place intact.
- C. Prepare and follow an organized plan for demolition and removal of items.
 - Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid and ready to receive new materials specified elsewhere.
 - 2. Accomplish work in a careful manner to prevent damage to existing materials to remain.
 - 3. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.
- D. Demolished material shall be considered to be property of the Contractor and shall be completely removed from the job site or recycled in accordance with Paragraph 3.03 below, unless otherwise instructed in the Drawings.
- E. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors and to other work being performed on or near the site.

3.03 RECYCLING

- A. Items scheduled to be demolished and removed from the site shall be recycled or returned to manufacturers of similar products for recycling to the maximum extent practical, including but not necessarily limited to:
 - 1. Acoustical ceiling panels.
 - 2. Metal ceiling grid.
 - 3. Metal studs.

3.04 REPLACEMENTS

A. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the approval of the Architect and at no additional cost to the Owner.

END OF SECTION

07 92 00 JOINT SEALANTS

1.0 GENERAL

1.01 SUMMARY

- A. Throughout the Work, seal and calk joints where shown on the Drawings and elsewhere as required to provide a positive barrier against passage of moisture and passage of air, including but not necessarily limited to:
 - 1. Sealant at interior window, door and equipment openings.
 - 2. Other locations indicated on Drawings or required to produce a watertight building.
- B. Related work:
 - 1. Section 08 81 00: Glass Glazing: Glazing compound/sealant.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 2. Manufacturer's standard bead samples consisting of strips of actual products showing full range of colors available, for each product exposed to view, for color selection by Architect.

1.03 REFERENCES

- A. ASTM C834: Standard Specification for Latex Sealants.
- B. ASTM C920: Standard Specification for Elastomeric Joint Sealants.
- C. ASTM C1193: Standard Guide for Use of Joint Sealants.
- D. ASTM C1382: Standard Test Method for Determining Tensile Adhesion Properties of Sealants When Used in Exterior Insulation and Finish Systems Joints.
- E. ASTM D1667: Standard Specification for Flexible Cellular Materials-Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).

1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Materials shall be identified on the package with the manufacturer's name and type of material.
- C. Applicator qualifications: Firm experienced in performing the work of this Section with not less than three (3) years experience.

1.05 PROJECT CONDITIONS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Do not retain at the job site material which has exceeded the shelf life recommended by its manufacturer.

1.07 WARRANTY

A. Include coverage for installed sealants and accessories which fail to achieve airtight seal and watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

2.0 PRODUCTS

2.01 SEALANTS

- A. Provide one component, acrylic latex calk complying with ASTM C834, equal to 'AC-20' as manufactured by Pecora Corporation.
 - 1. Application: Interior window, door and equipment openings.
- B. Colors for each sealant installation will be selected by the Architect from standard colors normally available from the approved manufacturer.

2.02 OTHER MATERIALS

- A. Primer: Non-staining primers which have been tested for durability on the surfaces to be sealed and as recommended by sealant manufacturer to suit application.
- B. Joint backing: Round foam backer rod and backup materials compatible with sealant and oversized 30% to 50% larger than joint width, as recommended by sealant manufacturer to suit application, and complying with ASTM D1667.
- C. Bond-breaker tape: Pressure sensitive polyethylene tape or other plastic tape as recommended by sealant manufacturer. Provide self-adhesive tape where applicable.
- D. Masking tape: Non-staining, non-absorbent masking tape which will effectively prevent application of sealant on surfaces not scheduled to receive it, and which is removable without damage to substrate.
- E. Joint cleaner: Non-corrosive and non-staining type cleaner compatible with sealant and joint forming materials, and as recommended by sealant manufacturer.
- F. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify that substrate surfaces and joint openings are ready to receive work.
- C. Verify that joint backing and release tapes are compatible with sealant.

3.02 ENVIRONMENTAL CONDITIONS

- A. Do not apply sealant when temperature is below 40°F.
- B. Do not apply sealant when substrates are wet due to rain, frost, condensation, or other causes.

3.03 PREPARATION

- A. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- B. Remove all foreign material from joint substrate which could interfere with adhesion of joint sealer, including dust, paints (except for permanent protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealers, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
- C. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.
- D. Remove laitance and form release agents from concrete.
- E. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile and other nonporous surfaces by chemical cleaners or other means which are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.
- F. Prime joint substrates where recommended by sealant manufacturer for the particular installation, applying in strict accordance with the manufacturer's recommendations as approved by the Architect. Confine primers to areas of joint sealer bond, do not allow spillage or migration onto adjoining surfaces. Do not prime backer-rod.

G. Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears.

3.04 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions and ASTM C1193.
- B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
 - 1. Keep face of sealant recessed 1/8 IN from surface of joint.
 - 2. Minimum joint size: 1/4 IN x 1/4 IN.
 - 3. Joints 1/4 IN to 1/2 IN wide: Depth equal to width.
 - 4. Joints over 1/2 IN wide: Depth equal to 1/2 width.

C. Joint backing:

- 1. When using backup of tube or rod stock, avoid lengthwise stretching of the material.
- 2. Do not twist, braid, puncture, or tear joint fillers.
- 3. Remove absorbent joint fillers which have become wet prior to sealant application and replace with dry material.
- 4. For installation of backup material, provide a blunt-surfaced tool of wood or plastic, having shoulders designed to ride on the adjacent finished surface and a protrusion of the required dimensions to assure uniform depth of backup material below the sealant.
- 5. Do not, under any circumstance, use a screwdriver or similar tool for this purpose.
- 6. Using the approved tool, smoothly and uniformly place the backup material to the depth indicated on the Drawings or otherwise required, compressing the backup material 25% to 50% and securing a positive fit.
- D. Bond-breaker tape: Install tape where adhesion of sealant to surfaces at back of joints would result in sealant failure and other locations where recommended by the manufacturer of the sealant, adhering strictly to the manufacturers' installation recommendations.

E. Sealant:

- 1. Apply sealant under pressure with power-actuated hand gun or manually-operated hand gun, or by other appropriate means.
- 2. Use guns with nozzle of proper size and providing sufficient pressure to completely fill the joints as designed.
- 3. Install sealant free of air pockets, foreign embedded matter, ridges and sags.
- 4. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

F. Tooling:

- Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads with slightly concave surface, to eliminate air pockets and to ensure contact and adhesion of sealant with sides of joint.
- 2. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.

3.05 CLEANING

- A. Remove masking tape and protective coatings immediately after tooling joints without disturbing joint seal.
- B. Clean off excess sealants or sealant smears adjacent to joints as the installation progresses, using solvent or cleaning agent recommended by the manufacturer of the sealant used.
- C. Upon completion of the work of this Section, promptly remove from the job site all debris, empty containers, and surplus material derived from this portion of the Work.

3.06 PROTECTION

- A. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at the time of Substantial Completion.
- B. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealers immediately and reseal joints with new materials to produce joints sealer installation with repaired areas indistinguishable from original work.

END OF SECTION

08 11 13 HOLLOW METAL DOORS & FRAMES

1.0 GENERAL

1.01 SUMMARY

- A. Provide hollow metal frames where shown on the Drawings, as specified herein and as needed for a complete and proper installation.
- B. Related work:
 - 1. Section 08 14 23: Plastic-Laminate-Faced Wood Doors.
 - 3. Section 08 71 00: Door Hardware.
 - 4. Section 09 91 00: Painting; Field finishing of hollow metal frames.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - Shop Drawings showing details of each frame type, elevations of door design types, conditions at openings, and details of construction, location and installation requirements of finish hardware and reinforcements, and details of joints, connections, installation, and anchorage.
 - 2. Schedule of doors and frames using same reference numbers for details and openings as those on the Contract Drawings.
 - 3. Indicate coordination of glazing frames and stops with glass and glazing requirements.

1.03 REFERENCES

- A. ANSI 250.8: SDI-100 Recommended Specifications for Standard Steel Doors and Frames
- B. ANSI 250.10: Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
- C. DHI A115 Series: Specifications for Steel Doors and Frame Preparation for Hardware; Door and Hardware Institute.
- D. NAAMM HMMA 840: Installation and Storage of Hollow Metal Doors and Frames; The National Association of Architectural metal Manufacturers.
- E. NFPA 80: Standard for Fire Doors and Fire Windows; National Fire Protection Association.
- F. NFPA 252: Standard Methods of Fire Tests of Door Assemblies; National Fire Protection Association.
- G. UL: Building Materials Directory; Underwriters Laboratories Inc.

1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Unless specifically otherwise approved by the Architect, provide all products of this Section from a single manufacturer.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Deliver hollow metal work cartoned or crated to provide protection during transit and site storage.
- C. Inspect hollow metal work upon delivery for damage. Minor damages may be repaired provide refinished items are equal in all respects to new work and acceptable to Architect; otherwise, remove and replace damaged items as directed.
- D. Store frames at site under cover and in accordance with NAAMM HMMA 840. Place units on minimum 4 IN high wood blocking. Avoid use of non-vented plastic or canvas shelters which could create a humidity chamber. If cardboard wrapper or door becomes wet, remove carton immediately. Provide 1/4 IN spaces between stacked doors to promote air circulation.

2.0 PRODUCTS

2.01 HOLLOW METAL FRAMES

- A. Acceptable products: See Paragraph 1.04-B above.
- B. Type and design:
 - 1. Grade: Comply with ANSI A250.8 Level 3.
 - 2. Provide hollow metal frames in the dimensions and types shown on the Drawings, manufactured from 14 gage cold roll steel. Joints at header and jambs shall be mitered with integral tabs for reinforcement and secure locking. All joints shall be continuously arc welded and ground smooth. Provide removable spreader bars at bottom of frames.
 - 3. Provide fire rated frames listed and labeled by UL for class of opening scheduled on the Drawings, with temperature and rise ratings as required by code and tested in accordance with NFPA 252.
- C. Finish: Pre-clean, phosphatize and shop primed suitable as a base for finish painting which will be performed at the job site under Section 09 91 00 of these Specifications.

2.02 FINISH MATERIALS

A. Primer: Door and frame manufacturer's standard rust-inhibiting primer, complying with ANSI 250.10.

2.03 OTHER MATERIALS

- A. Anchors:
 - 1. Provide anchor at each jamb for each 30 IN of door height or fraction thereof.
 - 2. Use proper anchor types to provide positive fastenings to adjacent construction.
 - 3. Provide one (1) welded floor anchor at each jamb.
- B. Temporary frame spreader: Provide for all factory- or shop-assembled frames.
- C. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

2.04 PREPARATION FOR FINISH HARDWARE

- A. Prepare doors and frames to receive mortised and concealed finish hardware in accordance with DHI A115 Series, final Finish Hardware Schedule and templates provided by hardware supplier.
- B. Reinforce, drill, and tap doors and frames to receive surface-applied hardware.
- C. Except on weatherstripped frames, drill stops to receive 3 silencers on strike jambs of single-leaf frames and 2 silencers on heads of double-leaf frames.
- D. Inspect and field measure existing doors and finish hardware to be relocated and reused to ensure new frames are prepared accurately to receive existing doors and hardware.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify that opening sizes and tolerances are acceptable.

3.02 INSTALLATION

- A. Install in accordance with the requirements of the specified door grade standard and NAAMM HMMA 840.
- B. Install fire rated units in accordance with NFPA 80.
- C. Coordinate frame anchor placement with wall construction.
- D. Coordinate installation of hardware.
- Coordinate installation of glazing.

3.03 ERECTION TOLERANCES

- A. Clearances between door and frame: As specified in ANSI A250.8.
- B. Maximum diagonal distortion: 1/16 IN measured with straight edge, corner to corner.

3.04 ADJUST AND CLEAN

- A. Final adjustments:
 - Check and readjust operating finish hardware items in steel work just prior to final inspection.
 - 2. Leave work in complete and proper operating condition.
 - 3. Remove defective work and replace with work complying with the specified requirements.
- B. Immediately after erection, sand smooth all rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

END OF SECTION

08 14 23 PLASTIC LAMINATE FACED WOOD DOORS

1.0 GENERAL

1.01 SUMMARY

- A. Provide plastic laminate faced wood doors where shown on the Drawings, as specified herein and as needed for a complete and proper installation including.
- B. Related work:
 - Section 08 81 00: Glass Glazing.
 - 2. Section 08 71 00: Door Hardware.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 2. Shop Drawings in sufficient detail to show location, size and hand of each door, elevation of each kind of door, construction details not covered in Product Data, and the following:
 - a. Dimensions and locations of blocking.
 - b. Dimensions and locations of mortises and holes for hardware.
 - c. Dimensions and locations of cutouts.
 - d. Undercuts.
 - e. Requirements for veneer matching.
 - f. Doors to be factory finished and finish requirements.
 - g. Fire-protection ratings for fire-rated doors.
 - Samples for initial selection: High pressure decorative laminate in the full range of colors available from the proposed manufacturer in the specified product for matching to existing doors.
 - 4. Samples for verification:
 - a. Factory finishes applied to actual door face materials, approximately 8 IN x 10 IN, for each material and finish.
 - b. Provide construction samples of doors, approximately 5 IN x 5 IN, with door faces and vertical edges representing actual construction to be used.
 - c. Louver blade and frame sections, MIN 6 IN long, for each material and finish specified.
 - d. Frames for light openings, MIN 6 IN long, for each material, type, and finish required.

1.03 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Quality standard: Comply with WDMA I.S.1-A-11, Architectural Wood Flush Doors.
- C. Manufacturer qualifications:
 - 1. A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body when FSC Certified wood is specified.
 - 2. A qualified manufacturer that is a member in good standing of the Window and Door Manufacturers Association.
- Vendor qualifications: A vendor that is certified for chain of custody by an FSC-accredited certification body when FSC Certified wood is specified
- E. Product performance: Provide documents showing compliance to the following WDMA attributes, validating the specified WDMA Performance Duty Level:
 - 1. Adhesive bonding durability: WDMA TM-6.
 - 2. Cycle slam: WDMA TM-7.
 - 3. Hinge loading: WDMA TM-8.

- 4. Screw holding: WDMA TM-10.
 - a. Door face.
 - b. Vertical door edge.
 - c. Horizontal door edge (applies when hardware is attached).

1.04 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Package factory-finished doors individually in manufacturer's standard plastic bags, stretch wrap or cardboard cartons.
- C. Mark each door on top rail with opening number used on Shop Drawings. Include manufacturer's order number and date of manufacture.
- D. Deliver doors just prior to installation and store in conformance with manufacturer's recommendations.
- E. Do not drag doors across one another; lift doors and carry them into position.

1.05 FIELD CONDITIONS

A. Environmental limitations: Do not deliver or install doors until spaces are enclosed and weather tight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining temperature between 60°F and 90°F and relative humidity between 25% and 55% during remainder of construction period.

1.06 WARRANTY

- A. Special warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Warping (bow, cup, or twist) more than 1/4 IN in a 42 IN x 84 IN section.
 - b. Telegraphing of core construction in face veneers exceeding 0.01 IN in a 3 IN span.
 - 2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
 - 3. Warranty period for solid-core interior doors: Life of installation.

2.0 PRODUCTS

2.01 WOOD DOORS, GENERAL

- A. WDMA I.S.1-A Performance Grade: Heavy Duty.
 - 1. All doors must meet specified WDMA Performance Duty Level, including face screw holding requirement. Surface applied hardware shall be installed with screws; through bolts are not acceptable.
- B. Fire-rated wood doors: Doors complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 and UL 10C.
- C. Smoke- and draft-control door assemblies: Listed and labeled for smoke and draft control, based on testing according to UL 1784.
- D. Dutch doors:
 - 1. Provide Dutch doors with internal wood blocking, flush cut as required, without shelf.

Provide 20 minute fire rating where indicated on door schedule.

- E. Wood-based particleboard-core doors:
 - 1. Provide wood-based particleboard core doors with a minimum density per ANSI A208.1, Grade LD-2 as required to meet WDMA Performance Duty level specified without added blocking.

2.02 PLASTIC LAMINATE FACED WOOD DOORS

- A. Provide plastic laminate faced doors of the types and designs shown on the Drawings, labeled or non-labeled as indicated on the Drawings or as required.
 - 1. Thickness: 1-3/4 IN.
 - 2. Surface material: High Pressure Decorative Laminate (HPDL) complying with NEMA LD3. Vertical and post formable grade laminates are not acceptable.

- Color, pattern and finish: Wilsonart Tuscan Walnut #7921-38 to match existing doors to remain.
- 4. Crossbands: One-piece High Density Fiberboard (HDF).
- 5. Vertical edges: 1/8 IN thick high-impact laminate, applied after faces, matching face laminate.
- 6. Top edge: Bond smooth PVC edge band to core, providing cleanable surface.
- 7. Bottom edge: Positive sealer applied after completion of machining and fitting.
- 8. Core: Wood-based particleboard.
- 9. Construction: Five (5) plies.
- Face and core assembly adhesive: WDMA Type 1.
- B. Acceptable products:
 - 1. "Marquis Series High Pressure Decorative Laminate Door" as manufactured by Marshfield Doors, Tel. 800-869-3667, Web www.marshfielddoors.com.
 - 2. Equal products of other manufacturers approved in advance by the Architect.

2.03 LIGHT FRAMES AND LOUVERS

- A. Factory glazing: Refer to Section 08 81 00 Glass Glazing for glass view panels in flush wood doors. Factory install glass in fire rated doors and as required.
- B. Metal frames for light openings in fire-rated doors: Manufacturer's standard frame formed of 0.048 IN thick, cold-rolled steel sheet; with baked-enamel- or powder-coated finish; and approved for use in doors of fire-protection rating indicated.
- C. Metal louvers:
 - Manufacturers: Subject to compliance with requirements, provide products by Anemostat or Air Louvers, Inc.
 - 2. Blade type: Vision-proof, inverted Y.
 - 3. Metal and finish: 18 gage cold rolled steel, with manufacturer's standard color baked-enamel- or powder-coated finish.
- D. Louvers for fire-rated doors: Metal louvers with fusible link and closing device, listed and labeled for use in doors with fire-protection rating of 1-1/2 HRS and less.
 - Manufacturers: Subject to compliance with requirements, provide products by Anemostat or Air Louvers, Inc.
 - 2. Metal and finish: 18 gage cold rolled steel, with manufacturer's standard color baked-enamel- or powder-coated finish.

2.04 FABRICATION

- A. Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
 - 1. Comply with NFPA 80 requirements for fire-rated doors.
- B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings. BHMA-156.115-W. and hardware templates.
 - 1. Coordinate with hardware mortises in metal frames to verify dimensions and alignment before factory machining.
 - 2. Metal Astragals: Factory machine astragals and formed-steel edges for hardware for pairs of fire-rated doors.
- C. Transom and side panels: Fabricate matching panels with same construction, exposed surfaces, and finish as specified for associated doors. Finish bottom edges of transoms and top edges of rabbeted doors same as door stiles.
 - Fabricate door and transom panels with full-width, solid-lumber meeting rails. Provide factory-installed spring bolts for concealed attachment into jambs of metal door frames.
- D. Openings: Factory cut and trim openings through doors.
 - Light openings: Trim openings with moldings of material and profile indicated.
 - 2. Glazing: Factory install glazing in fire rated and factory finished doors. Comply with applicable requirements in Section 08 81 00 Glass Glazing.
 - 3. Louvers: Factory install louvers in prepared openings.

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Examine doors and installed door frames, with Installer present, before hanging doors.
 - 1. Verify that installed frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs. Any deficiencies must be corrected prior to door installation.
 - 2. Reject doors with defects.

3.02 INSTALLATION

- A. Hardware: See Section 08 71 00 Door Hardware.
- B. Installation instructions: Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
 - Install fire-rated doors according to NFPA 80.
 - 2. Install smoke- and draft-control doors according to NFPA 105.
- C. Factory-fitted doors:
 - Using measurements obtained in the field from installed frames, machine the doors at the factory to fit the prescribed frames with proper clearance at top, bottom, and vertical edges.
 - 2. Factory cut openings and provide glazing moldings for glass or louvers.
 - 3. Factory machine doors for application of hardware.
 - 4. Align in frames for uniform clearance at each edge.
 - 5. Replace or rehang doors which are hingebound and do not swing or operate freely.
- D. Factory-finished doors: Do not trim factory finished doors for width.

3.03 ADJUSTING

- A. Operation: Correct any deficiency that prohibits the door from swinging or operating freely. Do not remove hinge screws after initial insertion. Shims used for alignment purposes must be inserted between hinge and frame. Do not insert shims between hinge and door.
- B. To prevent stile failure, ensure that door closers are properly adjusted and do not limit the door opening swing. Limit door opening swing only with a properly located stop.
- C. Finished doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION

08 71 00 DOOR HARDWARE

1.0 GENERAL

1.01 SUMMARY

- A. Furnish and install finish hardware specified herein and as needed for a complete and proper installation.
- B. Related work:
 - 2. Section 08 11 13: Hollow Metal Doors & Frames.
 - 3. Section 08 14 23: Plastic Laminate Faced Wood Doors.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 2. Hardware schedule:
 - a. Include complete hardware for each door opening.
 - Indicate door location, size, hand, bevel, thickness, swing, and other attributes.
 - c. Provide product data for each item.
 - d. Prepare schedule listing doors according to door and room numbers designated on the Drawings.
- C. Templates: In a timely manner to assure orderly progress of the Work, deliver templates or physical samples of the approved finish hardware items to pertinent manufacturers of interfacing items such as doors and frames.

1.03 REFERENCES

- A. ANSI A117.1: American National Standard for Accessible and Usable Buildings and Facilities.
- B. ANSI 156.10: Power Operated Pedestrian Doors.
- C. ANSI 156.19: Power Assist and Low-Energy Power-Operated Doors.
- D. ASTM C920: Standard Specification for Elastomeric Joint Sealants.
- E. DHI Processing Hardware for Custom Aluminum Entrances.
- F. DHI Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames.
- G. DHI Recommended Locations for Architectural Hardware for Flush Wood Doors.
- H. NFPA 80: Standard for Fire Doors and Other Opening Protectives.
- I. NFPA 101 Life Safety Code.
- J. Texas Civil Statutes, Article 9102, Architectural Barriers Act-Texas Accessibility Standards.
- K. UL: Building Materials Directory; Underwriters Laboratories Inc.

1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Provide and locate finish hardware in accordance with Texas Civil Statutes, Article 9102, Architectural Barriers Act, Texas Accessibility Standards (TAS).
- C. Hardware installer qualifications: Personnel experienced in performing the work of this Section with 5 YRS MIN experience.
- D. Access control and low voltage installer qualifications: Personnel experienced in performing the work of this Section with 3 YRS MIN experience.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Individually package each unit of finish hardware, complete with proper fastenings and appurtenances; label and identify each package with door opening code to match hardware schedule.

1.06 COORDINATION

- A. Check the hollow metal shop drawings to assure proper function and operation of the various openings.
- B. Coordinate door hardware and factory door preparation for mortise locks, electric center hinge wire pathways, etc.
- C. Furnish templates for door and frame preparation.
- D. Coordinate Owner's keying requirements during the course of the Work.

1.07 MAINTENANCE

- A. Provide special wrenches and tools applicable to each different or special hardware component.
- B. Provide maintenance manuals, tools and accessories supplied by hardware component manufacturer.
- C. Maintenance service: Perform detailed inspection of door hardware approximately 6 months after Substantial Completion.
 - 1. Re-adjust every item of hardware and function of doors.
 - 2. Consult with and instruct Owner's personnel in recommended modifications and additions to maintenance procedures.
 - 3. Replace deteriorated or failed hardware items.
 - 4. Prepare written report of current and predictable problems in performance of hardware.

2.0 PRODUCTS

2.01 GENERAL

A. Fasteners:

- 1. Furnish necessary screws, bolts, and other fasteners of suitable size and type to anchor the hardware in position for long life under hard use.
- 2. Where necessary, furnish fasteners with toggle bolts, expansion shields, sex bolts, and other anchors approved by the Architect, according to the material to which the hardware is to be applied and according to the recommendations of the hardware manufacturer.
- 3. Provide fasteners which harmonize with the hardware as to finish and material.
- B. Where butts are required to swing 180°, furnish butts of sufficient throw to clear the trim.
- C. Furnish silencers for door frames at the rate of 3 for each single door and 2 for each door in a pair of doors; except weatherstripped doors and doors with light seals or sound seals.

2.02 MATERIAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY

- A. Thresholds at doorways: Thresholds at doorways shall not exceed 3/4 IN in height for exterior sliding doors or 1/2 IN for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2.
- B. Door hardware: Handles, pulls, latches, locks and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides. Hardware required for accessible door passage shall be mounted no higher than 48 IN AFF.
- C. Door closers: If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70°, the door will take at least 3 seconds to move to a point 3 IN from the latch, measured to the leading edge of the door.

- D. Door opening force: The MAX force for pushing or pulling open a door shall be as follows:
 - 1. Fire doors shall have the MIN opening force allowable by the appropriate administrative authority.
 - 2. Other doors:
 - a. Exterior hinged doors: Reserved.
 - b. Interior hinged doors 5 LBF
 - c. Sliding or folding doors: 5 LBF

These forces do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.

E. Automatic doors and power-assisted doors: If an automatic door is used, then it shall comply with ANSI/BHMA A156.10-1985. Slowly opening, low-powered, automatic doors shall comply with ANSI A156.19-1984. Such doors shall not open to back check faster than 3 seconds and shall require no more than 15 LBF to stop door movement. If a power-assisted door is used, its door-opening force shall comply with Paragraph D above and its closing shall conform to the requirements in ANSI A156.19-1984.

2.03 KEYING

- A. All locks to be keyed and masterkeyed "Best" Hardware to match existing masterkey system.
- B. Cylinders:
 - 1. Owner shall provide and install Best interchangeable core cylinders at Substantial Completion.
 - 2. Contractor shall provide door hardware compatible with the proper tailpiece for mortise and rim cylinders. Confirm the tailpiece and pin requirements with the Owner before submitting door hardware.
- C. Construction keying:
 - 1. Furnish a construction masterkey system with 15 keys for locks and cylinders.
 - 2. Use only the construction keys during construction.
 - 3. Upon Substantial Completion of the Work, as that Date is established by the Architect, void the construction key system and, in the presence of the Architect, demonstrate that the specified keying system is operating properly.

2.04 GENERAL REQUIREMENTS FOR HARDWARE PRODUCTS

- A. Provide products that comply with applicable provisions of the following:
 - 1. Federal, State and local codes.
 - 2. ANSI A117.1.
 - 3. NFPA 101.
 - 4. Fire rated doors; NFPA 80.
 - 5. All hardware on fire rated doors; listed and classified by UL as suitable for the purpose specified and indicated.
- B. Single source for items: To the maximum extent practicable, furnish similar items (such as "door butts") only as the product of a single manufacturer (such as "McKinney").
- C. For each of the required items of finish hardware, provide from the specified manufacturer or other manufacturer approved by the Owner or Architect prior to bidding.
- D. Finish: All hardware shall be ANSI/BHMA 626/US26D Satin Chrome, 630/US32D Satin Stainless Steel or similar, to match Owner hardware standards.

2.05 ACCEPTABLE PRODUCTS

- A. Hinges shall be McKinney, standard duty, full mortise bearing steel hinges, ball bearing type.
- B. Locksets shall be Sargent, handed as required, with key override.
- C. Closers shall be Sargent, standard surface mount, parallel arm, size and function as required.
- D. Stops shall be Rockwood, overhead type.
- E. Kick plate (push side of door only) shall be Rockwood, 10 IN high x 34 IN wide.
- F. Silencers shall be Rockwood.
- G. Door position switches shall be Securitron, DPS Series.
- H. Switching power supplies shall be Securitron, AQD Series, with either single or dual voltage configurations at 12 or 24VDC.

- I. Power transfer devices:
 - 1. Concealed quick connect electric power transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the hardware sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
 - a. Manufacturer: Securitron, EL-CEPT Series or Pemko, EL-CEPT Series.
 - 2. Electric door wire harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, MIN 2 per electrified opening.
 - a. Manufacturer: McKinney, QC-C Series.
 - b. Provide one each of the following tools as part of the base bid contract:
 - a. McKinney Electrical Connecting Kit: QC-R001.
 - b. McKinney Connector Hand Tool: QC-R003.

2.06 OTHER MATERIALS

A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify that doors and frames are ready to receive work and dimensions are as indicated on shop drawings.

3.02 DELIVERIES

A. Stockpile items sufficiently in advance to assure their availability and make necessary deliveries in a timely manner to assure orderly progress of the total Work.

3.03 COORDINATION

- A. Coordinate as necessary with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Secure templates from manufacturers as required and distribute to suppliers of doors and other items as required to assure proper fit of mill-installed units.
- C. Distribute finish hardware components to other trades as required and provide proper direction regarding correct installation and adjustment of all units.

3.04 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- C. Install hardware on fire-rated doors and frames in accordance with NFPA 80.
- D. Install hardware for barrier free access in accordance with Texas Accessibility Standards (TAS).
- E. Mounting heights for hardware from finished floor to center line of hardware item:
 - 1. For wood doors: Comply with Recommended Locations for Architectural Hardware for Flush Wood Doors, Door Hardware Institute.

3.05 ADJUSTING AND REPAIR

- A. Upon completion of installation of finish hardware, and as a condition of its acceptance, make a complete inspection of all installed items.
- B. Adjust hardware for smooth operation.
- C. Tighten screws and fasteners as necessary.
- D. Test barrier free doors for maximum 5 LB opening force, make required adjustments and achieve optimum operation.
- E. Repair scratches and abrasions or if unrepairable, replace such damaged item with new identical item at no additional cost to the Owner.

3.06 PROTECTION

A. Do not permit adjacent work to damage hardware or finish.

3.07 FINISH HARDWARE SCHEDULE

A. Furnish the following hardware at new interior single Door 01 (36 IN x 84 IN wood door/steel frame):

| 2 | Hinges | TA2714 4-1/2" x 4-1/2" |
|---|---------------------------------------|----------------------------|
| 1 | Electrified hinge | TA2714 QC8 4-1/2" x 4-1/2" |
| 1 | Electrified mortise lock, fail secure | RX 70 8271 LNL |
| 1 | SFIC Permanent Core | Match Facility Standard |
| 1 | Surface Closer | 1431 P9 |
| 1 | Overhead stop | 281 CPS |
| 1 | Kick plate | K1050 LDW CSK BEV |
| | | |

3 Silencers 608-RKW 1 ElectroLynx Harness QC-C1500P

1 ElectroLynx Harness QC-C x Length Req'd x P

1 Position Switch DPS-M-GR

Power Supply
 Card reader access control
 AQD x Amps Required
 Provided by Owner

END OF SECTION

08 81 00 GLASS GLAZING

1.0 GENERAL

1.01 SUMMARY

- A. Provide glass and glazing accessories where shown on the Drawings, as specified herein and as needed for a complete and proper installation.
- B. Related work:
 - 1. Section 08 11 13: Hollow Metal Doors & Frames.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Manufacturer's specifications and other data needed to prove compliance with the specified requirements, including installation and maintenance instructions.
 - 2. Samples:
 - a. 12 IN x 12 IN sample of 1/4 IN plate glass unit.
 - b. 12 IN x 12 IN sample of 3/8 IN pencil-polished edge glass.

1.03 REFERENCES

- A. AAMA 800: Voluntary Specifications and Test Methods for Sealants.
- ANSI Z97.1: Safety Performance Specifications and Methods of Test for Safety Glazing Used in Buildings.
- C. ASTM C509: Specification for Elastomeric Cellular Preformed Gasket and Sealing Material.
- D. ASTM C864: Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks and Spacers.
- E. ASTM C920: Standard Specification for Elastomeric Joint Sealants.
- F. ASTM C1036: Standard Specification for Flat Glass.
- G. ASTM C1048: Standard Specification for Heat-Treated Flat Glass; Kind HS, Kind FT Coated and Uncoated Glass.
- H. ASTM C115: Specification for Dense Elastomeric Silicone Rubber Gaskets and Accessories.
- I. ASTM C1193: Standard Guide for Use of Joint Sealants.
- J. ASTM C1376: Standard Specification for Pyrolitic and Vacuum Deposition Coatings on Flat Glass.
- K. ASTM E773: Standard Test Method for Accelerated Weathering of Sealed Insulating Glass Units.
- L. ASTM E774: Standard Specification for the Classification of the Durability of Sealed Insulating Glass Units.
- M. ASTM E2188: Standard Test Method for Insulating Glass Unit Performance.
- N. ASTM E2190: Standard Specification for Insulating Glass Unit Performance and Evaluation.
- O. Federal Safety Standards for Architectural Glazing Materials 16CFR1201-I.II.
- P. IGMA TM-3000: Glazing Guidelines for Sealed Insulating Units.
- Q. GANA Glazing Manual.

1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Perform work in accordance with GANA Glazing Manual, IGMA Glazing Guidelines, ASTM C1193 and other pertinent codes and regulations of governmental agencies having jurisdiction.
- C. Installer qualifications: Company specializing in performing the work of this Section with 5 YRS MIN documented experience and approved by glass product manufacturer/fabricator.

D. Source limitations for glass: Obtain the following through one source from a single manufacturer for each glass type: Clear float glass, coated float glass and insulating glass.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Delivery:
 - 1. Deliver glass to site in accordance with manufacturer's instructions.
 - 2. Deliver glass in manufacturer's or fabricator's original containers and packaging, with labels intact, indicating product name and manufacturer, strength, grade, thickness, type and quality.
 - 3. Sequence deliveries to avoid delays but minimize on-site storage.

B. Storage:

- 1. Store glass in accordance with manufacturer's instructions.
- 2. Store glass in clean, dry area indoors.
- 3. Protect from exposure to direct sunlight, freezing temperatures, moisture, excess heat, sparks and flame.
- 4. Apply temporary coverings loosely to allow adequate ventilation.
- 5. Protect from contact with corrosive chemicals.
- 6. Avoid placement of glass edge on concrete, metal and other hard objects.
- 7. Rest glass on clean, cushioned pads at 1/4-points.

C. Handling:

- 1. Handle glass in accordance with manufacturer's instructions.
- 2. Protect glass from damage during handling and installation.
- 3. Do not slide one light of glass against another.
- 4. Do not use sharp objects near unprotected glass.

1.06 PROJECT CONDITIONS

- A. Do not install glazing when ambient temperature is less than 50°F.
- B. Maintain MIN ambient temperature before, during and 24 HRS after installation of glazing.

1.07 WARRANTY

A. Provide manufacturer's standard warranty for sealed insulating glass units, signed by insulating glass product manufacturer/fabricator, agreeing to replace insulating glass units that exhibit failure of hermetic seal under normal use evidenced by the obstruction of vision by dust, moisture, or film on interior surfaces of glass, within 10 YRS of date of Substantial Completion.

2.0 PRODUCTS

2.01 GLASS

- A. Provide the type and thickness shown on the Drawings, specified herein or as directed by the Architect.
- B. Plate or float glass:
 - 1. 1/4 IN glass complying with ASTM C1036, Type I, transparent flat, Class as applicable, Quality Q3 glazing select.
 - 2. Clear or tinted bronze as scheduled.
- C. Tempered glass:
 - 1. Provide tempered or heat-strengthened glass where indicated on the Drawings, and elsewhere as required by governmental agencies having jurisdiction.
 - 2. Glass for tempering:
 - a. 1/4 IN and 3/8 IN polished plate glass complying with ASTM C1048, Condition A uncoated, Type I, transparent flat, Class as applicable, Quality Q3 glazing select.
 - 3. Sizes and cutting:
 - a. Prior to tempering or heat treating, cut glass to required sizes as determined by accurate measurements of the openings to be glazed, making allowances for required edge clearances.

- b. Cut and process edges in accordance with the glass manufacturer's recommendations.
 - Provide pencil-polished edges, ground smooth with a light curve and finished with a gloss polish where shown on the drawings for service windows with exposed edges.
- Do not cut or treat edges in the field.
- 4. Fully tempered glass:
 - a. Wherever possible, locate tong marks along an edge which will be concealed in the glazing system.
 - b. Permit minimum warpage practicable.
- 5. Heat-strengthened glass:
 - Strengthen by the manufacturer's standard heat-treating process, increasing flexural strength to not less than twice the strength before treatment.
 - b. Permit MIN warpage practicable.

2.02 GLAZING ACCESSORIES

- A. Glazing gaskets:
 - Dense compression gaskets: Comply with ASTM C864, neoprene or EPDM, or ASTM C1115, silicone or thermoplastic polyolefin rubber, as recommended by glazing product manufacturer for application, molded or extruded shape to fit glazing channel retaining slot; black color.
 - 2. Soft compression gaskets: Comply with ASTM C509, Type II, black, molded or extruded, neoprene, EPDM, silicone or thermoplastic polyolefin rubber, of profile and hardness to maintain watertight seal.
- B. Setting blocks: Neoprene, 80 to 90 shore A durometer hardness; length 4 IN, width of glazing rabbet space less 1/16 IN, height required for glazing method, pane weight, and pane area, complying with ASTM C864.
- C. Spacer shims: Neoprene, 50 to 60 Shore A durometer hardness; length 3 IN, one half height of glazing stop, thickness required for application, one face self-adhesive, complying with ASTM C864.
- D. Edge blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- E. Glazing sealants: Provide single-component, neutral curing, non-bleeding, non-staining sealant, complying with ASTM C920, Type S or M, Grade NS, Class 25, as made by Pecora Corporation, Dow Corning Corporation, GE Plastics or Tremco, Inc.
- F. Glazing tape: Closed cell polyvinyl chloride foam, MAX water absorption by volume 2%, designed for 25% compression for air barrier and vapor retarder seal, black color, coiled on release paper over adhesive on two sides; widths required for specified installation, and complying with AAMA 800.
- G. Cleaners, primers and sealers: As recommended by sealant or gasket manufacturer.

2.03 OTHER MATERIALS

- A. Sliding glass hardware assembly (at Window A): Knape & Vogt Roll-Ezy Aluminum Track System consisting of the following components:
 - 1. #1093 144 Double channel (at top and each side of frame).
 - 2. #1099 144 Double lower track.
 - 3. #1095 144 Door shoe.
 - 4. #1098 ZC steel ball-bearing rollers.
 - 5. #1085 Vinyl guides (for top edge of glass).
 - 6. #1087 Rubber bumper.
- B. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify that glazing channels are clean and ready to accept glazing installation, and that weeps are unobstructed. Confirm that MIN required face and edge clearances will be maintained. Do not proceed with glazing until unsatisfactory conditions have been corrected
- C. Examine glazing units prior to setting. Reject units that display edge or face damage that may impede performance of unit or that will be visible when installed.

3.02 PREPARATION

- A. Clean glazing channels with recommended solvent and wipe dry.
- B. Apply primers to joint surfaces to ensure adhesion of sealants, unless preconstruction sealant-substrate testing indicates no primer is required.
- C. Install sealants in accordance with ASTM C1193, GANA and IGMA.

3.03 GLAZING INSTALLATION

- A. General: Install glass and glazing materials in accordance with manufacturer's instructions and requirements of GANA Glazing Manual.
 - Install setting blocks of size and in location required by glass manufacturer. Set blocks in bed of approved sealant.
 - 2. Provide spacers for glass lites as recommended, based upon size of glass unit.
 - 3. Comply with glass manufacturer's limits on edge pressures.
 - 4. Ensure that glazing units are set with proper and consistent orientation of glass units toward interior and exterior.
 - 5. Provide edge blocking where recommended.
 - 6. Install sealants in accordance with requirements of Section 07 92 00 Joint Sealants.
- B. Tape glazing: Place tapes on fixed stops positioned to be flush or protrude slightly when compressed by glass. Install tapes continuously. Form butt joints at corners and where required, and seal tape joints with approved sealant.
 - 1. Apply heel bead of glazing sealant along intersection of permanent stop and frame for continuity of air and vapor seal.
 - 2. Set glass lites centered in openings on setting blocks.
 - 3. Install removable stops, and insert dense compression gaskets at corners, work toward centers of lites, compressing glass against tape on fixed stops.
 - Apply cap bead of elastomeric sealant over exposed edge of tape or gasket on exterior of glass unit.
- C. Sealant glazing: Install continuous spacers between glass lites and glazing stops. Install cylindrical sealant backing where recommended, in width and depth recommended to provide proper depth and width of sealant bead. Ensure sealant cannot block weep system.
 - 1. Install sealant under pressure to completely fill glazing channel without voids, with full bond to glass and channel surfaces.
 - 2. Tool sealant bead to proper profile providing wash away from glass.
- D. Sealant glazing for butt glazing:
 - 1. Brace glass in position for during of glazing process.
 - 2. Mask edges of glass at adjoining glass edges and between glass edges and framing members.
 - 3. Secure small DIA non-adhering foamed rod on back side of joint.
 - 4. Apply sealant to open side of joint in continuous operation; completely fill joint without displacing foam rod; tool sealant surface smooth to concave profile.
 - 5. Allow sealant to cure, then remove foam backer rod.
 - 6. Apply sealant to opposite side; tool sealant smooth to concave profile.
 - 7. Remove masking tape.

- E. Gasket glazing: Fabricate gaskets to fit openings exactly. Allow for stretching of gaskets during installation.
 - 1. Set soft compression gasket against fixed stop or frame, secure, with bonded miter cut joints at corners.
 - 2. Set glass lites centered in openings on setting blocks.
 - 3. Install removable stops, and insert dense compression gaskets at corners, working toward centers of lites, compressing glass against soft compression gaskets and to produce a weathertight seal. Seal joints in gaskets. Allow gaskets to protrude past face of glazing stops.

3.04 PROTECTION

- A. Protect installed glass from damage during construction. Attach streamers or warning tape to framing members, away from contact with glass. Remove nonpermanent labels.
- B. Protect installed glass from contact with contaminating substances during construction. Immediately clean glass exposed to contamination using methods recommended by glass manufacturer.
- C. Within 5 working days prior to inspection for Substantial Completion, clean all exposed glass surfaces using methods recommended by manufacturer. Remove glazing compounds from framing surfaces.
- D. Remove and replace broken or damaged glass.

END OF SECTION

09 29 00 GYPSUM BOARD

1.0 GENERAL

1.01 SUMMARY

- A. Provide metal studs, gypsum board and accessories where shown on the Drawings, as specified herein and as needed for a complete and proper installation.
- B. Related work:
 - 1. Section 07 92 00: Joint Sealants.
 - 2. Section 09 91 00: Painting: Wall texture.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Materials list of items proposed to be provided under this Section.
 - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 3. Manufacturer's instructions regarding applicable temperature and humidity ranges, special procedures, and perimeter conditions requiring special attention.

1.03 REFERENCES

- A. ASTM A780: Standard Practice for Repair of Damaged Hot-Dipped Galvanized Coatings.
- B. ASTM C475: Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- C. ASTM C645: Standard Specification for Nonstructural Steel Framing Members.
- D. ASTM C754: Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- E. ASTM C840: Standard Specification for Application and Finishing of Gypsum Board.
- F. ASTM C919: Standard Practice for Use of Sealants in Acoustical Applications.
- G. ASTM C954: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs.
- H. ASTM C1002: Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
- I. ASTM C1396: Standard Specification for Gypsum Board.
- J. GA-216: Recommended Specifications for the Application and Finishing of Gypsum Board.
- K. GA-600: Fire Resistance Design Manual.
- L. SSPC-Paint 20: Specification for Zinc-Rich Primers.

1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Single source responsibility: Except where specified otherwise, obtain gypsum board products, trim, joint treatment, and accessories from single manufacturer or from manufacturers recommended by prime manufacturer of gypsum board products.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Deliver materials to site promptly without undue exposure to weather.
- C. Deliver materials in manufacturer's original unopened containers or bundles, fully identified with name, brand, type and grade.
- D. Store materials above ground in dry, ventilated space.
- E. Protect materials against soiling or damage from weather, direct sunlight, surface contamination, corrosion, construction traffic and other causes. Remove wet gypsum board from Project site.
- F. Store and support gypsum board in flat stacks to prevent sagging.

G. Handle gypsum boards to prevent damage to edges, ends and surfaces. Do not bend or otherwise damage metal corner beads and trim.

1.06 PROJECT CONDITIONS

- A. In cold weather, the building should be heated to maintain a uniform temperature in the range of 50°F to 70°F for 48 HRS prior to commencing the application of the gypsum board and joint treatment, and until joint and finishing compounds have dried thoroughly.
- B. Ventilate building spaces to remove moisture in excess of that required for drying joint treatment materials after its application. Avoid drafts during hot, dry weather to prevent materials from drying too rapidly.

2.0 PRODUCTS

2.01 GYPSUM WALLBOARD AND ACCESSORIES

A. General:

- 1. Provide products and materials manufactured by United States Gypsum Company, Dallas, Texas, Tel. 214-490-0771, or equal products of other manufacturers approved in advance by the Architect.
- 2. Provide 5/8 IN thick gypsum board in 48 IN widths and MAX available lengths to minimize end-to-end butt joints, with tapered edges and square cut ends, complying with ASTM C1396.

B. Gypsum board:

- 1. Gypsum board: Provide 5/8 IN thick wallboard.
- 2. Fire-retardant gypsum board: Provide 5/8 IN thick Firecode Core Type X Wallboard complying with ASTM C36 where required by code.

C. Accessories:

- 1. Fastening devices:
 - Self-drilling, self-tapping, bugle head screws complying with ASTM C954 and ASTM C1002, length to suit application, cadmium plated for exterior locations.
 - b. Type S screws for 21 to 26 gage metal framing and furring.
 - c. Type S-12 screws for 12 to 20 gage metal framing and furring.
 - d. Type G screws for gypsum board to gypsum board.
 - e. Type W screws for wood framing; nails not permitted.
- 2. Casing Bead: Provide USG 200 Series.
- 3. Control Joints: Provide USG No. 093 zinc control joint.
- 4. Corner Bead: Provide USG 100 Series Dur-A-Bead.
- Compressible filler: 3.5 PCF mineral wool insulation, compressed to 7.0 PCF MIN.

2.02 METAL STUDS AND ACCESSORIES

A. General:

- 1. Provide C-shaped studs, channel shaped runners, and furring channels complying with ASTM C645.
- 2. Provide with galvanized coating complying with ASTM A525, G40 thickness unless otherwise specified; rolled channels used in ceilings may be finished with manufacturer's standard rust inhibitive paint.
- 3. At exterior walls and showers, provide galvanized coating with G60 thickness.
- Provide bracing members of same size as studs.
- B. At all interior partitions unless otherwise specified below or noted on the Drawings, provide 3-5/8 IN x 25 gage standard punched steel studs.
- C. At all interior partitions that extend to second floor deck, are scheduled to receive ceramic tile or FRP panels, or noted on the Drawings, provide 3-5/8 IN x 20 gage standard punched steel studs.
- D. At all interior metal stud framed openings, provide 3-5/8 IN or 6 IN x 20 gage standard punched steel studs, double studs at jambs, boxed stud headers at openings greater than 40 IN wide.

- E. Wall stud runners: Provide channel shaped members with 1-1/4 IN flanges, solid web, and same sheet metal thickness as wall studs.
- F. Extended leg ceiling runners: Provide channel shaped members, with MIN 2 IN flanges, solid web, and same sheet metal thickness as wall studs.
- G. Accessories, plates, gussets, clips: Provide formed sheet steel, thickness as indicated on the Drawings or determined for conditions encountered; same finish as framing members.
- H. Fasteners:
 - 1. Provide fasteners of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members securely to substrates involved.
 - 2. Comply with the gypsum board manufacturer requirements for indicated applications.

2.03 JOINTING SYSTEM

- A. Provide a jointing system, including paper reinforcing tape and ready-mixed joint compound complying with ASTM C475, designed as a system to be used together and as recommended for this use by the manufacturer of the gypsum board approved for use on this Work.
- B. Jointing compound:
 - 1. Compounds specifically manufactured for topping coats are not permitted for first coat on metal trim and taping.
 - 2. Mix compounds in strict accordance with manufacturer's directions.
 - 3. Mix only enough compound at one time to be used during recommended pot life.

2.04 OTHER MATERIALS

- A. Backer plates:
 - 1. Type: 14 gage uncoated metal thickness steel sheet, galvanized in accordance with ASTM A525 G60.
 - 2. Length: Sufficient to extend to nearest studs beyond MAX dimension of attached item and engage fasteners from attached item; span 3 studs MIN.
 - 3. Height: 6 IN MIN or higher where required to accommodate item being fastened.
 - 4. When manufacturer of attached item has more rigorous mounting plate requirements, comply with manufacturer's requirements.
- B. Provide acoustical sealant for concealed locations equal to BA-98 Acoustical Sealant as manufactured by Pecora Corporation, and with the following attributes:
 - 1. Non-hardening, non-drying, non-skinning, non-staining, non-bleeding, non-sag synthetic rubber.
 - 2. Capable of maintaining air-tight seal.
 - 3. For use in concealed locations not exposed to view.
 - 4. Specifically manufactured as acoustical sealant.
- C. Galvanizing touchup paint: Provide paint complying with ASTM A780 and SSPC-Paint 20 equal to ZRC Galvilite Galvanizing Repair, ZRC Cold Galvanizing Compound or ZRC Low VOC Cold Galvanizing Compound.
- D. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify rough-in utilities and blocking are in proper position.

3.02 PREPARATION

- A. Items which require backer plates or blocking:
 - 1. Coordinate sizes and locations.

- 2. Install additional studs for attachment of backer plates and blocking in required locations to receive surface mounted accessories as indicated or as required by accessory manufacturer.
- 3. Elimination of backer plates and blocking is not permitted.
- 4. Direct attachment of items to studs is not permitted.

3.03 FRAMING INSTALLATION

A. General:

- 1. Install framing in accordance with ASTM C754, manufacturer's printed instructions, the Drawings, local authorities having jurisdiction, and with requirements of ASTM C840 that apply to framing installation, except for more stringent requirements of these Specifications.
- Accurately layout partition and wall lines from the dimensions shown on the Drawings.
- 3. Install framing plumb, level, square, and free from warp and twist while maintaining dimensional tolerances and alignment with surrounding construction.
- 4. At interior partitions indicated on the Drawings to receive batt insulation, install acoustical sealant in accordance with manufacturer's instructions and ASTM C919.
 - a. Place one bead continuously on substrate before installation of perimeter framing members.
 - b. Place continuous bead at perimeter of each layer of gypsum board.
 - c. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes.
- 5. Touchup damaged galvanized surfaces with touchup paint.

B. Studs and runners:

- 1. Stud spacing: Unless otherwise indicated, provide studs spaced 16 IN OC.
- 2. Runner tracks: Provide continuous tracks sized to match studs.
- 3. Terminate top of partitions approximately 6 IN above ceiling construction and brace to structure unless otherwise indicated.
- 4. Where partitions are indicated to extend to roof deck, to prevent deflection transfer of structural loads or movements to partitions, provide slip joint between partition and structure using top runner nested within 3 IN long segment of extended leg ceiling runner positioned at stud spacing (or continuous extended leg ceiling runner) and fastened to overhead surface. Do not fasten top runner to extended leg ceiling runner.
- 5. Horizontally align openings in stud webs.
- 6. Use full length studs vertically positioned between runner tracks.
- 7. MIN framing at openings:
 - a. Provide two 20 gage studs at each jamb.
 - b. Provide one additional stud not more than 6 IN from jamb studs.
 - c. Provide wall framing above and below openings to match wall framing adjoining the opening. Above door openings, provide cut-to-length studs adjacent to full-height jamb studs at each jamb.
 - d. At welded frames with fixed anchor clips, secure studs to jamb anchor clips with not less than two self tapping screws per clip.
 - e. Above welded frames, provide a horizontal cut-to-length section of runner track with a web-flange bend at each end, securely screw attached to the adjacent vertical studs. Provide built-up header composed of two horizontal boxed studs and additional runner tracks as required by width of opening to support weight of partition above opening.
- 8. Fabricate corners with a MIN of three studs.
- 9. Provide additional studs and framing to support wall intersections, termination of walls, at openings and cut-outs and to support built-in anchorage and attachment devices for other work.
- Locate studs no more than 2 IN from abutting walls, wall corners and other construction. Start typical wall studs 6 IN either side of stud reinforcing or frames.

- 11. Install steel studs so that flanges point in the same direction and so that leading edges or ends of gypsum board can be attached to open (unsupported) edges of stud flanges first.
- C. Backer plates:
 - Provide backer plate for securing surface mounted fittings, fixtures, accessories, and furnishings, including, but not limited to handrails, grab bars, toilet partitions, towel bars, wall mounted door stops, bumper guards, and similar screw- and bolt-fastened items.
 - 2. Secure with sufficient quantity of self-tapping sheet metal screws to sustain loads imposed by items attached to backer plates.
- D. Blocking: Coordinate with Section 06 10 00 for installation of concealed wood blocking and furring required for securing wood trim, carpentry, woodwork, cabinets, millwork, casework, surface mounted equipment, and similar nail-fastened items.

3.04 GYPSUM BOARD INSTALLATION

A. General:

- 1. Install gypsum board in accordance with ASTM C840, manufacturer's instructions, the Drawings and these Specifications. MAX variation of finished gypsum board surface from true flatness shall be 1/8 IN in 10 FT in any direction.
- 2. Install gypsum board in accordance with GA-216, GA-600 for fire-rated assemblies.
- 3. Install gypsum board with face side out.
- 4. Use boards of maximum length to minimize end joints.
- 5. Abut boards without forcing; neatly fit ends and edges of board with gap between adjacent panels no greater than 1/16 IN.
- 6. Position boards so that like edges abut; tapered edges against tapered edges and field-cut or mill-cut edges against field-cut or mill-cut edges.
- 7. Hold bottom of board 1/4 IN above floor.
- 8. Support ends and edges of board directly on framing or furring members.
- 9. Joint staggering:
 - a. Ceilings: Stagger end joints not less than one framing member.
 - b. Walls: Stagger vertical joints on opposite side of walls to occur on alternate framing members.
 - Fire-rated assemblies: Comply with fire-rated assembly design requirements for joint staggering.
 - d. Bullet-resistant walls: Stagger vertical joints in gypsum wall board with vertical joints in bullet-resistant panels immediately behind gypsum wall board.
- 10. Do not locate gypsum board joints within 12 IN of external corners of windows, doors, or other such openings, except when control joints are installed at corners.
- 11. Cut openings in board with no greater than 1/4 IN gap around electrical outlets, plumbing, light fixtures, piping and other similar penetration items and small enough to be covered by plates and escutcheons; coordinate size of gap around penetrations in fire-rated assemblies with firestop requirements of Section 07 84 00.
- 12. Do not install imperfect, damaged, or damp boards.
- 13. In concealed spaces above ceilings where designated walls extend full height to structure above, install boards in full coverage on both faces of framing system for fire, sound, air, and smoke-rated walls.
- 14. Fit gypsum board around ducts, pipes, and conduits.
- 15. Where walls intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum board to fit profile formed by structural member; allow 1/4 to 1/2 IN wide joints to install sealant.
- 16. In concealed spaces and chase walls where gypsum board occurs on outside face of walls only, fasten horizontal studs or 1-1/2 IN wide 20 gage galvanized steel straps to inside face of studs spaced 36 IN OC vertically with top strap no more than 6 IN from top of wall to prevent stud rotation.
- 17. Attach gypsum board to steel studs so that leading edge or end of each board is attached to open (unsupported) edges of stud flanges first.

- 18. Attach gypsum board to framing provided at openings and cutouts.
- 19. Terminate gypsum board on each side of control and expansion joints.

B. Fasteners:

- Attachment methods:
 - a. Attach gypsum board to framing and furring with screws.
 - b. Attach gypsum board to gypsum board with screws.
 - c. Attach gypsum board to bullet-resistant panels with screws.
- 2. Except where indicated otherwise or required for fire rated assemblies, space fasteners in compliance with more restrictive requirements of referenced installation standard or manufacturer's requirements.
- 3. Attach board to supplementary framing and blocking which provide additional support at openings and cutouts.
- C. Ceilings: Place gypsum board with long edge perpendicular to orientation of framing or furring members.
- D. Walls: Install gypsum board vertically in manner which will minimize end-butt joints, unless specific orientation is required by fire-rating design.

3.05 METAL TRIM

A. General:

- 1. Install trim flush using longest practical length; miter corners and intersections.
- Fasten flanges by screws, stapling, or clinching in accordance with manufacturer's instructions.
- B. Install casing beads where edge of gypsum board would be exposed or semi-exposed and where gypsum board abuts dissimilar materials.
- C. Install corner beads at visually-exposed external corners, unless otherwise indicated.
- D. Control joints: Coordinate placement and locations with Architect prior to commencement of work. Install control joints in accordance with the following:
 - 1. Locate at joints of MAX stress, at points of natural weak planes, such as at openings, changes in back-up material, and at corners of offsets in walls exceeding 30 FT in length.
 - 2. In interior partitions at 30 FT OC MAX.
 - 3. In exterior partitions at 20 FT OC MAX.
 - 4. Extend control joints from both corners of door frames to top of wall, vertically aligned with the outer edge of the frame.
 - 5. Extend control joints from both corners of window frames to top of wall and bottom of wall, vertically aligned with the outer edge of the frame.
 - 6. Where gypsum board is vertically continuous, as at stairwells and other long vertical wall areas, provide horizontal control joints at each floor level.
 - 7. Locate in ceilings with area exceeding 900 SF, where framing or furring changes direction, and spaced apart not more than 30 FT.

E. Other metal trim:

- 1. The Drawings do not purport to show all locations and requirements for metal trim.
- 2. Carefully study the Drawings and the installation and provide all metal trim normally recommended by the manufacturer of the gypsum board approved for use in this Work.

3.06 JOINT TREATMENT

A. General:

- 1. Inspect areas to be joint treated, verifying that the gypsum board fits snugly against supporting framework.
- 2. Apply joint treatment to gypsum board joints (both directions); flanges of corner beads, casing beads, and control joints; penetrations; fasteners; surface defects; and elsewhere to prepare surfaces for finishes indicated.
- 3. Comply with manufacturer requirements for hardening and drying of joint treatment prior to application of succeeding coats.
- B. Internal corners: Treat as specified for joints, except fold the reinforcing tape lengthwise through the middle and fit neatly into the corner.
- C. Embedding compounds:
 - 1. Apply to gypsum board joints and fastener heads in a thin uniform layer.

- 2. Spread the compound not less than 3 IN wide at joints, center the reinforcing tape in the joint, and embed the tape in the compound. Reinforcing tape shall be properly folded at interior corners and angles to provide a true angle. Then spread a thin layer of compound over the tape.
- 3. After the treatment has dried, apply a second coat of embedding compound to joints and fastener heads, spreading a thin uniform coat of sufficient width to fill the board taper and feather edge.
- 4. Sandpaper between coats as required.
- 5. When thoroughly dry, sandpaper to eliminate ridges and high points.
- D. Finishing compounds:
 - 1. After embedding compound is thoroughly dry and has been completely sanded, apply a coat of finishing compound to joints and fastener heads.
 - 2. Feather the finishing compound to not less than 12 IN wide.
 - 3. When thoroughly dry, sandpaper to obtain a uniformly smooth surface, taking care to not scuff the paper surface of the gypsum board.

3.07 ADJUSTING

- A. Adjust and align metal framing to properly receive final finishes in accordance with required tolerances.
- B. Correct damages, defects, and leave work ready for decoration. Clean compounds from trim. Visible cracks, nail heads, tool marks, waves, distortions, or other similar defects shall not appear in finished work.

3.08 CLEANING

- A. Clean as recommended by manufacturer. Do not use materials or methods which may damage surface or surrounding construction.
- B. Promptly remove joint compound from surfaces not intended to receive compound.

3.09 PROTECTION

- A. Protect finished work.
- B. Protect metal framing so that it will be without any evidence of damage which would be detrimental to finished work.

END OF SECTION

1.0 GENERAL

1.01 SUMMARY

- A. Paint and finish exposed surfaces using the combination of materials listed on Painting Schedule in Part 3 of this Section, as specified herein and as needed for a complete and proper installation including, but not necessarily limited to:
 - Complete finishing and painting of all unfinished surfaces unless noted otherwise.
 - 2. Painting of exposed conduit and pipe/duct insulation.
- B. Related work:
 - 1. Section 09 29 00: Gypsum Board: Taping and bedding.
 - 2. Priming or priming and finishing of certain surfaces may be specified to be factory-performed or installer-performed under pertinent other Sections.
- C. Work not included: Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.
 - 1. Prefinished or factory-finished items not to be painted include:
 - a. Acoustic materials.
 - b. Architectural woodwork and casework.
 - c. Light fixtures.
 - d. Switchgear.
 - e. Distribution cabinets.
 - 2. Concealed surfaces not to be painted include wall or ceiling surfaces in the following generally inaccessible areas:
 - a. Foundation spaces.
 - b. Furred spaces.
 - c. Pipe chases.
 - d. Duct shafts.
 - 3. Finished metal surfaces not to be painted include:
 - a. Anodized aluminum.
 - b. Stainless steel.
 - c. Chromium plate.
 - d. Copper.
 - e. Bronze.
 - f. Brass.
 - 4. Operating parts not to be painted include moving parts of operating equipment including the following:
 - a. Valve and damper operators.
 - b. Linkages.
 - c. Sensing devices.
 - d. Motor and fan shafts.
 - 5. Do not paint over UL, FM, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- D. Definitions:
 - 1. "Paint", as used herein, means coating systems materials, primers, emulsions, epoxy, enamels, stains, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.02 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Submit:
 - 1. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 2. Paint schedule indicating type and location of surface, paint materials and number of coats to be applied.
 - Color charts of colors available from the approved manufacturer for selection by the Architect.

C. Samples:

- 1. Following the selection of colors and glosses by the Architect, prepare Samples of each color and texture at the job site for approval of the Architect.
- 2. Revise each Sample as requested until the required gloss, color, and texture is achieved. Such Samples, when approved, will become standards of color and finish for accepting or rejecting the work of this Section.
- 3. Do not commence finish painting until Samples are approved by the Architect.

1.03 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Paint coordination:
 - Provide finish coats which are compatible with the prime coats actually used.
 - 2. Review other Sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrates.
 - 3. Upon request, furnish information on the characteristics of the specific finish materials to assure that compatible prime coats are used.
 - 4. Provide barrier coats over noncompatible primers or remove the primer and reprime as required.
 - 5. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime-coatings supplied under other Sections.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Comply with pertinent provisions of Section 01 60 00.
- B. Delivery: Deliver materials to job site in the manufacturer's sealed containers with the manufacturer's labels intact indicating manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation and instructions for mixing and reducing.
- C. Storage: Store materials not in use in tightly covered containers in a well-ventilated area at a MIN ambient temperature of 45°F and a MAX of 90°F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
- D. Protection: Protect materials from freezing. Keep storage area neat and orderly. Remove oily or solvent soaked rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.05 PROJECT CONDITIONS

- A. Apply solvent-thinned paints only when the temperature of surfaces to be painted and the surrounding air temperatures are between 45°F and 95°F.
- B. Apply water-based paints only when the temperature of surfaces to be painted and the surrounding air temperatures are between 50°F and 90°F.
- C. Weather conditions:
 - 1. Do not apply paint in snow, rain, fog, or mist; when the relative humidity exceeds 85%; at temperatures less than 5°F above the dew point; or to damp or wet surfaces.
 - 2. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.

1.06 EXTRA STOCK

- A. Provide 1 GAL additional material of each type, color and gloss of material installed for use by Owner in building maintenance and repair.
- B. Provide sealed containers of extra materials, packaged with protective covering for storage and identified with appropriate labels.

2.0 PRODUCTS

2.01 PAINT MATERIALS

- A. Acceptable materials:
 - 1. The Painting Schedule in Part 3 of this Section is based, in general, on products of Sherwin-Williams Paint Co.
 - 2. Equal products of other manufacturers approved in advance by the Architect, may be substituted in accordance with provisions of the Contract.
 - 3. Where products are proposed other than those specified by name and number in the Painting Schedule, provide under the product data submittal required by Part 1 of this Section a new painting schedule compiled in the same format used for the Painting Schedule included in this Section.
- B. Undercoats and thinners:
 - 1. Provide undercoat paint produced by the same manufacturer as the finish coat.
 - 2. Use only the thinners recommended by the paint manufacturer and use only to the recommended limits.
 - 3. Insofar as practicable, use undercoat, finish coat, and thinner material as parts of a unified system of paint finish.

2.02 COLOR SCHEDULES

The Architect will prepare a color schedule with samples for guidance in painting.

2.03 APPLICATION EQUIPMENT

- A. For application of the approved paint, use only such equipment as is recommended for application of the particular paint by the manufacturer of the particular paint, and as approved by the Architect.
- B. Prior to use of application equipment, verify that the proposed equipment is actually compatible with the material to be applied, and that integrity of the finish will not be jeopardized by use of the proposed equipment.

2.04 OTHER MATERIALS

- A. Provide commercial quality linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified.
- B. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3.0 EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 WALL TEXTURE

A. Texture on all new gypsum board surfaces shall be produced with paint roller, medium texture, to match existing walls to remain.

3.03 MATERIALS PREPARATION

A. General:

- 1. Mix and prepare paint materials in strict accordance with the manufacturers' recommendations as approved by the Architect.
- 2. When materials are not in use, store in tightly covered containers.
- 3. Maintain containers used in storage, mixing, and application of paint in a clean condition, free from foreign materials and residue.

- B. Stirring:
 - 1. Stir materials before application, producing a mixture of uniform density.
 - 2. Do not stir into the material any film which may form on the surface, but remove the film and, if necessary, strain the material before using.

3.04 SURFACE CLEANING METHODS

- A. Solvent Cleaning, SSPC-SP1: Solvent cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants. Solvent cleaning does not remove rust or mill scale. Change rags and cleaning solution frequently so that deposits of oil and grease are not spread over additional areas in the cleaning process. Be sure to allow adequate ventilation.
- B. Hand Tool Cleaning, SSPC-SP2: Hand tool cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Before hand tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1.
- C. Power Tool Cleaning, SSPC-SP3: Power tool cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Before power tool cleaning, remove visible oil, grease, soluble welding residues, and salts by the methods outlined in SSPC-SP1.
- D. White Metal Blast Cleaning, SSPC-SP5 or NACE 1: A white metal blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.
- E. Commercial Blast Cleaning, SSPC-SP6 or NACE 3: A commercial blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 33% of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.
- F. Brush-Off Blast Cleaning, SSPC-SP7 or NACE 4: A brush-off blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose paint. Tightly adherent mill scale, rust, and paint may remain on the surface. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP 1 or other agreed upon methods.
- G. Power Tool Cleaning to Bare Metal, SSPC-SP11: Metallic surfaces that are prepared according to this specification, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxide corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portions of pits if the original surface is pitted. Prior to power tool surface preparation, remove visible deposits of oil or grease by any of the methods specified in SSPC-SP1, Solvent Cleaning, or other agreed upon methods.
- H. Near-White Blast Cleaning, SSPC-SP10 or NACE 2: A near white blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 5% of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods.
- I. High- and Ultra-High Pressure Water Jetting for Steel and Other Hard Materials SSPC-SP12 or NACE 5: This standard provides requirements for the use of high- and ultra-high pressure water jetting to achieve various degrees of surface cleanliness. This standard is limited in scope to the use of water only without the addition of solid particles in the stream.

- J. Water Blasting, NACE Standard RP-01-72: Removal of oil grease dirt, loose rust, loose mill scale, and loose paint by water at pressures of 2,000 to 2,500 PSI at a flow of 4 to 14 GAL per minute.
- K. Concrete, SSPC-SP13 or NACE 6: This standard gives requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems. The requirements of this standard are applicable to all types of cementitious surfaces including cast-in-place concrete floors and walls, precast slabs, masonry walls, and shotcrete surfaces. An acceptable prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a sound, uniform substrate suitable for the application of protective coating or lining systems.

3.05 SURFACE PREPARATION

A. General:

- 1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturers' recommendations as approved by the Architect.
- 2. Remove removable items which are in place and are not scheduled to receive paint finish; or provide surface-applied protection prior to surface preparation and painting operations.
- 3. Following completion of painting in each space or area, reinstall the removed items by using workmen who are skilled in the necessary trades.
- 4. Clean each surface to be painted prior to applying paint or surface treatment.
- 5. Remove oil and grease with clean cloths and cleaning solvent of low toxicity and flash point in excess of 200°F, prior to start of mechanical cleaning.
- 6. Remove mildew by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- 7. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.

B. Preparation of wood surfaces:

- 1. Clean wood surfaces until free from dirt, oil, and other foreign substance.
- 2. Seal knots, pitch streaks, and sappy sections with sealer.
- 3. Smooth finished wood surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred wood surface.
- 4. After priming or stain coat has been applied, all nail holes and other holes and cracks shall be flush-filled with putty in a neat and workmanlike manner. Putty shall be colored to match that of the finish.
- 5. Unless specifically approved by the Architect, do not proceed with painting of wood surfaces until the moisture content of the wood is 12% or less.

C. Preparation of metal surfaces:

- 1. Thoroughly clean surfaces until free from dirt, oil, and grease.
- Sand and scrape to remove loose primer, mill scale, weld splatter, dirt and rust.
 Where heavy coatings of scale are evident, remove by hand wire brushing or
 sandblasting; clean by washing with solvent. Feather edges to make touchup
 patches inconspicuous.
- 3. On galvanized surfaces, use solvent for the initial cleaning, and then treat the surface thoroughly with phosphoric acid etch. Remove etching solution completely before proceeding.
- 4. Allow to dry thoroughly before application of paint.
- D. Preparation of block and concrete surfaces:
 - 1. Remove loose mortar and foreign material.
 - 2. Remove efflorescence, chalk, dust, dirt, grease, oils, hardeners, curing compounds, and form release agents.
 - 3. Roughen as required to remove glaze.
 - 4. Fill bug holes, air pockets, and other voids with cement patching compound.
 - 5. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
 - 6. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's printed directions.

- 7. The pH of the surface should be between 6 and 9, unless the products are designed to be used in high pH environments.
- 8. On tilt-up and poured-in-place concrete, commercial detergents and abrasive blasting may be necessary to prepare the surface.
- E. Preparation of vinyl, plastic, and fiberglass surfaces:
 - 1. Clean thoroughly by scrubbing with a warm, soapy water solution. Rinse thoroughly.
 - 2. Do not paint vinyl siding with any color darker than the original color unless the product and colors are designed for such use. Painting with darker colors may cause siding to warp.
- F. Preparation of plaster surfaces:
 - 1. Allow to dry thoroughly for at least 30 days before painting, unless the products are designed to be used in high pH environments.
 - 2. Room must be ventilated while drying; in cold, damp weather, rooms must be heated.
 - 3. Repair damaged areas with an appropriate patching material.
 - 4. Bare plaster must be cured and hard.
 - 5. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 PT household vinegar to 1 GAL of water. Repeat until the surface is hard, rinse with clear water and allow to dry.
- G. Preparation of cement composition siding/panels:
 - 1. Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry.
 - Existing peeled or checked paint should be scraped and sanded to a sound surface.
 - 3. Pressure clean, if needed, with 2,100 PSI MIN pressure to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly.
 - 4. The pH of the surface should be between 6 and 9, unless the products are designed to be used in high pH environments.

3.06 PAINT APPLICATION

- A. General:
 - 1. Touch-up shop-applied prime coats which have been damaged, and touch-up bare areas prior to start of finish coats application.
 - 2. Sand and dust between coats to remove defects visible to the unaided eye from a distance of 5 FT.
 - 3. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
 - 4. On removable panels and hinged panels, paint the back sides to match the exposed sides.
- B. Drying:
 - 1. Allow sufficient drying time between coats, modifying the period as recommended by the material manufacturer to suit adverse weather conditions.
 - Consider oil-base and oleo-resinous solvent-type paint as dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and when the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- C. Brush application:
 - 1. Brush out and work the brush coats onto the surface in an even film.
 - 2. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, and other surface imperfections will not be acceptable.
- D. Spray application:
 - 1. Except as specifically otherwise approved by the Architect, confine spray application to metal framework and similar surfaces where hand brush work would be inferior.
 - 2. Where spray application is used, apply each coat to provide the hiding equivalent of brush coats.

- 3. Do not double back with spray equipment to build up film thickness of two coats in one pass.
- E. For completed work, match the approved Samples as to texture, color, and coverage. Remove, refinish, or repaint work not in compliance with the specified requirements.
- F. Miscellaneous surfaces and procedures:
 - Exposed mechanical and electrical items:
 - Paint access doors, conduits, pipes, ducts, vents and items of similar nature to match the adjacent wall and ceiling surfaces, or as directed.
 - b. Paint all equipment, including that which is factory-finished, exposed to view outdoors and on the roof, and in finished areas.
 - c. Paint shop-primed items occurring in finished areas.
 - d. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
 - e. Paint visible duct surfaces behind vents, registers, and grilles flat black.
 - f. Wash metal with solvent, prime, and apply two coats of alkyd enamel.
 - 2. Exposed pipe and duct insulation:
 - a. Apply 1 coat of latex paint on insulation with has been sized or primed under other Sections, apply 2 coats on such surfaces when unprepared.
 - b. Match color of adjacent surfaces.
 - c. Remove band before painting and replace after painting.
 - Hardware:
 - a. Paint prime coated hardware to match adjacent surfaces.
 - Paint metal portions of head, jamb and astragal seals to match the color of the door frame unless otherwise directed by the Architect.
 - 4. Backboards:
 - a. Paint both sides and edges of plywood backboards for electrical and telephone equipment prior to installing equipment.
 - 5. Wet areas:
 - a. In janitor's closet, toilet rooms and contiguous areas, add an approved fungicide to paints.

3.07 LABELING FIRE AND SMOKE PARTITIONS

- A. Label fire and smoke partitions in plenum spaces and above ceiling in 2 IN high red letters spaced 20 FT OC MAX.
- B. Label fire rated partitions "FIRE PARTITION DO NOT PENETRATE".
- C. Label smoke barrier partitions "SMOKE PARTITION DO NOT PENETRATE".

3.08 PAINTING SCHEDULE

- A. Provide the following paint finishes.
- B. Interior metal, ferrous:
 - 1. First Coat: Touchup shop primer.
 - 2. Second Coat: S-W All Surface Enamel Latex Primer, 1.6 mils DFT.
 - 3. Third Coat: S-W ProMar 200 Latex Eg-Shel, 1.5 mils DFT.
 - 4. Fourth Coat: Same as third coat.
- C. Interior gypsum board walls:
 - 1. First Coat: S-W PrepRite High Build Latex Primer/Surfacer, 1.2 mils DFT.
 - 2. Second Coat: S-W ProMar 200 Latex Eg-Shel Enamel, 1.2 mils DFT.
 - 3. Third Coat: Same as second coat.
- D. Miscellaneous: Items not scheduled above shall be painted with like quality materials recommended by the manufacturer for the type of surface to be finished.

END OF SECTION

| project completion. | | | | | | |
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