DOCUMENT 00 8000 SUPPLEMENTARY CONDITIONS

AMENDMENTS TO GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction," AIA Document A201-2007. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect. To any extent that these Supplementary Conditions may conflict with the Owner-Contractor Agreement or the Specifications, these Supplementary Conditions shall control.

A. MODIFICATION OF PARAGRAPH 1.1 BASIC DEFINITIONS

1. Clause 1.1.9

Add a new clause to read as follows: The term "product" as used in the Project Manual includes materials, systems and equipment.

2. Clause 1.1.10

Add a new clause to read as follows: The term "provide" as used in the Project Manual means to furnish and install.

3. Clause 1.1.11

Add a new clause to read as follows: The term "final acceptance" as used in the Project Manual means agreement by the Owner that the Work, or any portion thereof to which this term is applied, has been satisfactorily completed, providing that any subsequent failure or other latent defect apparent within the Contractor's warranty period shall invalidate a previous acceptance.

4. Clause 1.1.12

Add a new clause to read as follows: The term "CM Agent" as used in the Project Manual means a professional Construction Manager (CM or CM Agent) acts as an extension of staff to the Owner and manages the entire project with pre-planning, design, construction, engineering and management expertise that can assure the best possible project outcome no matter what type of project delivery method used. A CM is NOT a general contractor. CM is often used interchangeably with Project Manager.

B. MODIFICATION OF PARAGRAPH 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

1. Subparagraph 1.2.4

Add the following: Sections of Division One - General Requirements govern the execution of all sections of the Specifications.

2. Subparagraph 1.2.5

Add a new subparagraph to read as follows: The headings of this Contract are for the convenience of reference only and shall not affect in any manner any of the terms and conditions hereof.

3. Subparagraph 1.2.6

Add a new subparagraph to read as follows: If any of the terms, paragraphs, sections, provisions, covenants or conditions of the Contract are held for any reason to be invalid, void or unenforceable, the remainder of the terms, paragraphs, sections, provisions, covenants or conditions will remain in full force and effect and shall in no way be affected, impaired or invalidated.

4. Subparagraph 1.2.7

Add a new subparagraph to read as follows: When the terms "or equal," "approved," "acceptable," "necessary," "suitable," "as directed," "good and sufficient" or other such general qualifying terms are used in the Contract, they shall be construed as though followed by the words "in the opinion of the Owner through the Architect," or "by the Owner through the Architect," as the case may be.

5. Subparagraph 1.2.8

Add a new subparagraph to read as follows: Standard specifications and manuals of technical societies, organizations or associations, or statutes and regulations of governmental agencies used as a reference in the Contract Documents, either by specific statement or implication, shall mean the latest standard specification, manual, code, statute, or regulation in effect at the time of opening of Bids. No provision of any such reference used in the Contract Documents shall change or reassign the duties and responsibilities of the Owner, Contractor, Architect, or any consultants and agents of any of them from those set forth in the Contract Documents.

C. MODIFICATION OF PARAGRAPH 1.4 INTERPRETATION

1. Subparagraph 1.4.1

Add a new subparagraph to read as follows: Where any portion of the Contract Documents is contradicted by another, the more expensive or larger quantity shall prevail. Upon receiving a written request, the Architect shall issue a written clarification for the matter in question. Where any discrepancy or conflict may occur between the General Conditions and these Supplementary Conditions, these Supplementary Conditions shall have priority.

D. MODIFICATION OF PARAGRAPH 2.1 DEFINITION

1. Subparagraph 2.1.1

Delete this subparagraph in its entirety.

- E. MODIFICATION OF PARAGRAPH 2.3 OWNER'S RIGHT TO STOP THE WORK
 - 1. Subparagraph 2.3.1

Add a new subparagraph to read as follows: Failure of the Contractor to comply with the Owner's order to stop the Work may be considered a substantial violation of the Contract. When the Owner has stopped the Work as provided in this subparagraph, the Contractor shall not be entitled to any extension of the Contract Time, or damages for delay, related to the stoppage.

F. MODIFICATION OF PARAGRAPH 2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

- Subparagraph 2.4 Delete sentence: "Such action by the Owner and amounts charged to the Contractor are both subject to the prior approval of the Architect."
- 2. Subparagraph 2.4.1

Add a new subparagraph to read as follows: If the Contractor fails to begin the delivery or commence Work as provided in the Contract, or fails to make deliveries of materials promptly as ordered, or to maintain the rate of delivery of material or progress of the Work in such manner as in the opinion of the Architect to ensure a full compliance with the Contract within the time limit, or if, in the judgment of the Architect, the Contractor is not carrying out the provisions of the Contract and of the plans and specifications, written notice may be served by the Architect on the Contractor, or Contractor's agent or representative, to provide within a specified time a revised schedule and plan showing how the Work will be completed for a satisfactory compliance with the Contract. If the Contractor neglects or refuses to comply with such notice, the Owner may cancel or suspend the operation of all or any part of the Contract and the Work hereunder, or it may, in its discretion, after such notice, purchase any or all of the material without suspending the Contract.

3. Subparagraph 2.4.2

Add a new subparagraph to read as follows: Upon the suspension of a Contract for furnishing material or machinery, the Owner may purchase the material or machinery necessary in the opinion of the Architect to complete the Contract in such manner as the Architect may deem proper, and the cost and expense thereof may be charged to the Contractor and/or Contractor's surety. Upon suspension of a Contract for construction or installation, the Owner may, in its discretion, take possession of all or any part of the machinery, tools, appliances, materials and supplies used on the Work covered by the Contract, or that have been shipped or delivered by or on account of the Contractor for use in connection therewith, and the same may be used either directly by the Owner, or by other parties for it, for the completion of the Work so suspended; or the Owner may employ other parties to perform the Work, or may substitute other machinery or materials, purchase the material contracted for in such manner as it may deem proper, or hire such parties and buy such machinery, tools, appliances, materials and supplies, at the Contractor's expense, as may be necessary in the opinion of the Architect, for the proper conduct and completion of the Work.

4. Subparagraph 2.4.3

Add a new subparagraph to read as follows: If, in the opinion of the Owner, there is an emergency for the furnishing of certain material, or the performance of certain Work, in order to ensure compliance with the terms of the Contract, and if the Contractor fails to furnish such material or to perform such Work within a reasonable time fixed by written

notice from the Architect to the Contractor, then the Owner shall have the power to and it may at its election furnish such material and/or perform such Work at the expense of the Contractor and/or Contractor's sureties, who shall be liable therefore. In the determination of the question whether there has been such non-compliance with the Contract as to warrant its suspension or the furnishing of material, or the performance of Work by the Owner as herein provided, the decision of the Owner shall be final. The enumeration of the options and privileges of the Owner as hereinbefore set forth is not and shall never be considered as the only rights, options or remedies of the Owner, and it is expressly agreed that the Owner may pursue any other and further option, right and remedy accorded to it at law and in equity.

5. Subparagraph 2.4.4

Add a new subparagraph to read as follows: Any cost, damage and expense to the Owner above the Contract price arising out of the happening of any or all of the contingencies above specified and contemplated shall be charged to and paid in full by the Contractor and/or Contractor's surety. Any other loss, of any nature, occasioned to the Owner by reason of default or failure of the Contractor and/or by any breach of this Contract shall also be borne and paid by the Contractor and/or Contractor's surety. In the event that the Owner shall suspend the Contract or take over the Work in whole or in part, such action shall not relieve either the Contractor or Contractor's surety from any of the covenants, conditions, obligations or liabilities imposed upon them by this Contract and/or by the Contractor's bond.

6. Subparagraph 2.4.5

Add a new subparagraph to read as follows: It is expressly agreed by the Contractor and Contractor's surety that they and each of them will be fully and completely bound by each and every decision of the Architect in all matters pertaining to this Contract unless the Contractor or Contractor's surety shall prove by clear, convincing and unmistakable proof that such decision is arbitrary and not grounded upon any evidence of facts reasonably calculated to support such decisions.

G. MODIFICATIONS OF PARAGRAPH 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

1. Clause 3.2.4

Replace the final sentence of this clause with the following sentence: If the nature of the error, inconsistency or omission is such that it would have reasonably been discovered by a competent, experienced Contractor, then the Contractor shall be responsible just as if construction activity were performed with the Contractor's knowledge of the condition.

2. Clause 3.2.4.1

Add a new clause to read as follows: Errors, inconsistencies or omissions discovered in the Contract Documents which are reported to the Architect seven (7) days or more before the bid opening shall be corrected by addendum and the Contractor shall not be held responsible. Except for any such reported errors, inconsistencies or omissions, the Contractor shall signify by the fact of submitting his bid that he considered that the entire Work can and will be administered, constructed and completed as described, with

interpretation by the Architect where necessary, and that Contractor has satisfactorily provided for such in his bid.

3. Subparagraph 3.2.4.2

Add a new subparagraph to read as follows: All site grade elevations shown on the Drawings shall be checked from established bench marks and shall be confirmed by the Contractor. Discrepancies discovered shall be reported to the Architect for adjustment before any Work begins. The Contractor's commencement of the Work shall constitute Contractor's acceptance of all existing site grade elevations as correct or otherwise workable. The Contractor shall not be due additional compensation for grade variations or discrepancies except by written agreement before construction begins.

4. Subparagraph 3.2.4.3

Add a new subparagraph to read as follows: During the course of the Work, should any discrepancy be found in or between the Drawings and Specifications, the Contractor, by the fact of submitting Contractor's bid, shall be deemed to have estimated the more expensive way of completing the Work, unless Contractor shall have reported the discrepancy prior to bid openings as provided in Clause 3.2.3.1. The Architect, in case of such discrepancy, will interpret the Drawings and Specifications to secure the most appropriate and complete performance of the Work. In that matter, the Architect shall be the sole judge.

5. Subparagraph 3.2.5

Add a new subparagraph to read as follows: Written measurements and dimensions shall be followed at all times. Except where directed by the Architect, dimensions shall not be determined by scale or rule. The Contractor shall verify all dimensions by measurements at the job site, and shall take any and all other measurements necessary to verify the Drawings and to properly lay out the Work. Any discrepancy affecting the layout of the Work shall immediately be reported to the Architect for interpretation.

6. Subparagraph 3.2.6

Add a new subparagraph to read as follows: The Contractor signifies by the fact of submitting Contractor's bid: that Contractor has, to Contractor's full satisfaction, examined the site of the Work and all geotechnical data in the bid documents, including drawings and reports describing the surface and subsurface nature of the site; that Contractor has determined the general and local conditions, the type and extent of equipment and facilities needed in preparation for and prosecution of the Work, and all other such matters which will in any way affect the Work under the Contract; and that Contractor considers the site suitable for the Work intended and has provided in Contractor's bid for all equipment, facilities, labor and expertise necessary to properly fit the Work to the site.

7. Subparagraph 3.2.7

Add a new subparagraph to read as follows: The Contractor shall investigate maps, plans, and records maintained by utility companies to ascertain the location of all utilities prior to beginning new or alteration work. Locations of utility lines, whether shown on the Drawings or not, shall be verified and marked prior to start of construction. Any damage caused to any utility as a result of Work on this Project shall be promptly repaired or replaced at the sole expense of the Contractor and no additional money will be paid by the Owner.

H. MODIFICATION OF PARAGRAPH 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

1. Subparagraph 3.3.1

Replace the final sentence of this subparagraph with the following: The Owner shall not be responsible for any loss or damage resulting from the Contractor's actions as directed by the Architect.

2. Subparagraph 3.3.4

Add a new subparagraph to read as follows: The Contractor shall determine that project requirements expressed in specified procedures, instructions, manufacturer's recommendations or referenced standards are reasonable and appropriate. Where the Contractor considers any such requirements to be unreasonable or inappropriate, the Contractor shall, prior to performing that portion of the Work, identify to the Architect whether the requirement appears to conflict with accepted construction practice, or will invalidate any required warranty, or may be acceptably achieved with an alternative procedure or installation. The Contractor shall propose an alternative procedure or installation only if he warrants the end result to be equal or superior to the original requirement.

3. Subparagraph 3.3.5

Add a new subparagraph to read as follows: 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 Contractor's personal superintendence to the Work, the Contractor shall provide a competent superintendent or general foreman on the Work at all times during progress with full authority to act for Contractor. The Contractor shall also provide an adequate staff for the coordination and expediting of Contractor's 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 removed 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.

4. Subparagraph 3.3.6

Add a new subparagraph to read as follows: The Contractor shall employ only competent, efficient workers and shall not use on the Work any unfit person or one not skilled in the Work assigned to the worker; and shall at all times maintain good order among Contractor's employees.

Whenever the Owner shall inform the Contractor in writing that, in Owner's 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.

5. Subparagraph 3.3.7

Add a new subparagraph to read as follows: The Contractor shall, before closing any street or causing any obstruction to traffic on any street, furnish and erect suitable barricades and

warning signs to protect the traveling public, as set forth in the latest edition of the Texas Manual on Uniform Traffic Control Devices for Streets and Highways. In the event it becomes necessary to close any streets during the construction of this Work, the Contractor shall contact The City of Killeen Transportation Engineer for approval of a detour and barricade plan. No additional compensation will be made to the Contractor for furnishing, installing, and maintaining barricades and warning signs and their subsequent removal.

I. MODIFICATION OF PARAGRAPH 3.5 WARRANTY

1. Subparagraph 3.5.1

Add a new subparagraph to read as follows: In addition to any specific guarantees required by the Contract Documents, Contractor hereby guarantees to perform the Work in a firstclass, workmanlike manner and guarantees all Work against defects in workmanship for a period of one (1) year after the date of Final Acceptance of the Work by the Owner. <u>Final Acceptance of the Work shall be established as the date that, except for adjustments and repairs to be completed under warranty provisions, the Work has been fully accomplished. The Contractor shall repair and make good, without expense to the Owner, any and all defects in his Work which may become apparent within that time. Any such repair, including adjustment or replacement, of Work previously accepted shall be similarly warranted by the Contractor for an additional year.</u>

2. Subparagraph 3.5.2

Add a new subparagraph to read as follows: Specific and special warranties required in the Contract Documents are in addition to, and not in lieu of, the Contractor's general warranty. The Contractor shall not be relieved of general warranty obligation by the statement of specific products or procedures.

3. Subparagraph 3.5.3

Add a new subparagraph to read as follows: <u>Warranty Service Clause</u>: Under the terms of the warranties which arise from these Contract Documents and/or by the terms of any applicable special warranties required by the Contract Documents, if any of the Work in accordance with this Contract is found to <u>not</u> be in accordance with the requirements of the Contract Documents, the Contractor shall correct such Work promptly after receipt of written notice from the Owner or the Architect, Engineer or other entity as the Contract Documents may provide. This obligation shall survive acceptance of the Work under the Contract and termination of the Contract. If Contractor fails within a reasonable time after written notice to correct defective Work or to remove and replace rejected Work, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if a comply with any provision in the Contract Documents, either the Owner or its designee may, after seven (7) days' written notice to Contractor, correct and remedy any such deficiency at the expense of the Contractor.

J. MODIFICATION OF PARAGRAPH 3.6 TAXES

1. Subparagraph 3.6

Add the following: The Contractor shall be responsible to pursue with the State Comptroller any tax exemption for equipment and materials to be incorporated into this project.

K. MODIFICATION OF PARAGRAPH 3.7 PERMITS, FEES, NOTICES AND COMPLIANCE WITH LAWS

1. Subparagraph 3.7.1

Add the following: Unless otherwise provided, fees to be secured and paid by the Contractor shall include, but not be limited to, water taps, sewer taps, water meters, fire hydrants, detector check devices, temporary sanitary facilities, and the like. Contractor shall comply with The City of Killeen standard procedures. Contractor shall secure the building permit, but no fee will be required.

2. Subparagraph 3.7.3

Amend this subparagraph in its entirety to read as follows: It shall be the obligation of the Contractor to review the Contract Documents to determine and to notify the Owner and the Architect of any discrepancy between the Contract Documents and building codes or regulations of which the Contractor has knowledge or should be reasonably able to determine. The Contractor shall not violate any zoning, setback or other locational requirements of applicable laws, codes and ordinances, or of any recorded covenants of which the Contractor has knowledge. If the Contractor observes that portions of the Contract Documents are at variance with applicable laws, statutes, ordinances, building codes, rules or regulations, the Contractor shall promptly notify the Owner and Architect in writing, and necessary changes shall be accomplished by appropriate modification.

L. MODIFICATION OF PARAGRAPH 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

1. Subparagraph 3.10.1

Add the following: The construction schedule shall be subject to approval of the Architect. A revised construction schedule shall be submitted at any time the Architect determines the status of the Work to be more than three weeks ahead of or behind the current schedule.

M. MODIFICATION OF PARAGRAPH 3.18 INDEMNIFICATION

1. Amend Subparagraphs 3.18.1 and 3.18.2 in their entirety to read as follows:

Subparagraph 3.18.1

Contractor does hereby agree to waive all claims, release, indemnify, defend and hold harmless Owner and all of Owner's officials, officers, agents, employees, in both their public and private capacities, from and against any and all liability, claims, losses, damages, suits, demands or causes of action including all expenses of litigation and/or settlement, court costs and attorney fees which may arise by reason of injury to or death of any person or for loss of, damage to, or loss of use of property occasioned by error, omission, or negligent act of Contractor, Contractor's officers, agents, employees, subcontractors, invitees or any other persons, arising out of or in connection with the performance of this Contract, and Contractor will at Contractor's own cost and expense defend and protect Owner from any and all such claims and demands.

Subparagraph 3.18.2

In any and all claims against any party indemnified hereunder by any employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under worker's compensation acts or other employee benefit acts.

N. MODIFICATION OF PARAGRAPH 4.1 General

1. Subparagraph 4.1.3

Delete this subparagraph in its entirety.

O. MODIFICATION OF PARAGRAPH 4.2 ADMINISTRATION OF THE CONTRACT

1. Subparagraph 4.2.3

Delete this subparagraph in its entirety.

2. Subparagraph 4.2.4

Amend this subparagraph in its entirety to read as follows: Except as otherwise provided in the Contract Documents or when directed communications have been specifically authorized by the Owner, the Architect and Contractor shall endeavor to communicate with each other through the CM Agent about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contactor. Communications by and with separate contractors shall be through the CM Agent. Any direct communication between the Owner and Contractor which may affect the administration or performance of the Contract shall be made or confirmed in writing, with copies to the Architect.

3. Subparagraph 4.2.12

Amend this subparagraph in its entirety to read as follows,: Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor.

4. Subparagraph 4.2.13

Delete this subparagraph in its entirety.

P. MODIFICATION OF PARAGRAPH 4.3 CLAIMS AND DISPUTES

1. Subparagraph 4.3.4

Add the following: If the Contractor alleges that Contractor has incurred or will incur additional costs because of concealed or unknown conditions, the Contractor shall be due additional compensation for such costs only where it is shown to the satisfaction of the Architect that a competent, experienced contractor would not have reasonably discovered or otherwise accounted for the concealed or unknown condition.

Q. MODIFICATION OF PARAGRAPH 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

1. Subparagraph 5.2.2

Amend this subparagraph in its entirety to read as follows The Contractor shall not contract with any person or entity declared ineligible under Federal laws or regulations from participating in Federally assisted construction projects or to whom the Owner or the Architect has made reasonable objection under the provisions of Subparagraph 5.2.1. The Contractor shall not be required to contract with anyone to whom the Contractor has a reasonable objection.

2. Subparagraph 5.2.3

Delete this subparagraph in its entirety.

3. Subparagraph 5.2.4

Add the following: The Contractor shall notify the Owner, through the Architect, in writing when the Contractor proposes to change any subcontractor, person or entity previously selected.

R. MODIFICATION OF PARAGRAPH 5.3 SUBCONTRACTUAL RELATIONS

1. Subparagraph 5.3

Amend this subparagraph in its entirety to read as follows: The Contractor shall not make any subcontract for performing any portion of the Work included in the Contract without written notice to the Owner.

The Contractor shall, as soon as practicable after signing the Contract, submit a separate written notice to the Owner identifying each proposed subcontractor.

If a subcontractor fails to properly perform the Work undertaken, subcontractor 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. Replacement of the subcontractor shall not provide a basis for an increase or decrease of the Contract amount.

Each subcontract entered into shall provide that the provisions of this Contract shall apply to such subcontractor and subcontractor's officers and employees in all respects as if subcontractor 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 Contractor's responsibilities, duties and liabilities hereunder. The Contractor shall be solely responsible for the acts, omissions, negligence or defaults of Contractor's 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 sub-subcontracts.

S. MODIFICATION OF PARAGRAPH 6.2 MUTUAL RESPONSIBILITY

1. Subparagraph 6.2.4

Add the following: If a separate Contractor initiates legal or any other proceedings against the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor, who shall defend such proceedings at the Contractor's own expense, and if any judgment or award against the Owner arises there from, the Contractor shall pay or satisfy it and shall reimburse the Owner for all attorneys' fees and court or other costs which the Owner has incurred over and above those paid for directly by the Contractor.

T. MODIFICATION OF PARAGRAPH 6.3 OWNER RIGHT TO CLEAN UP

1. Subparagraph 6.3

Amend this subparagraph to read as follows: If a dispute arises among the Contractor, separate Contractor and the Owner as to responsibility for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and allocate the cost among those responsible.

U. MODIFICATION OF PARAGRAPH 7 CHANGES IN THE WORK

1. Subparagraph 7.1.4

Add a new subparagraph to read as follows: The Owner reserves the right to make changes in the quantities 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 Owner reserves the right to decrease the Work under this Contract. Payment to the Contractor for the Contract items shall be made for the actual quantities of Work performed and material furnished at the unit prices set forth in the Contract, except as provided below.

When the quantity of Work to be done or of materials to be furnished under any item of the Contract is more than one hundred twenty-five percent (125%) of the quantity stated in the Contract, then either party to the Contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of Work above one hundred twenty-five percent (125%) of the quantity stated in the Contract.

When the quantity of Work to be done or of materials to be furnished under any item of the Contract is less than seventy-five percent (75%) of the quantity stated in the Contract, then either party to the Contract, upon demand, shall be entitled to negotiate for revised consideration on the Work performed.

The foregoing notwithstanding, the total original Contract amount shall not be increased more than twenty-five percent (25%).

V. MODIFICATION OF PARAGRAPH 7.4 MINOR CHANGES IN THE WORK

1. Subparagraph 7.4.1

Amend this subparagraph to read as follows: The Architect will have authority, if approved by Owner, to make minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such change shall be affected by written order and shall be binding on the Contractor. The Contractor shall carry out such written orders promptly.

W. MODIFICATION OF PARAGRAPH 8.1 DEFINITIONS

1. Subparagraph 8.1.5

Add a new subparagraph to read as follows: Unless otherwise specified, where any action, submittal or response falls due on a Saturday, Sunday or legal holiday, such action, submittal or response shall be considered due on the next day which is not a Saturday, Sunday nor a legal holiday.

2. Subparagraph 8.1.6

Add a new subparagraph to read as follows: The following days shall be considered legal holidays:

New Year's Day	January 1
Martin Luther King's Birthday	3 rd Monday in January
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1 st Monday in September
Thanksgiving Day	4 th Thursday in November
Thanksgiving Friday	Friday following Thanksgiving Day
Christmas Day	December 25

If a holiday falls on a Saturday, it will be observed on the preceding Friday. If a holiday falls on a Sunday, it will be observed on the following Monday.

X. MODIFICATION OF PARAGRAPH 8.2 PROGRESS AND COMPLETION

1. Subparagraph 8.2.4

Add the following: If the Contractor fails, without adequate justification, to maintain the progress required by the construction schedule, the Owner may choose to delay payment of all or any part of the Contractor's progress payment (pursuant to Clause 9.5.1.8) until the Contractor's progress is consistent with the construction schedule.

Y. MODIFICATION OF PARAGRAPH 8.3 DELAYS AND EXTENSIONS OF TIME

- 1. Subparagraph 8.3.1 Delete this subparagraph in its entirety.
- 2. Subparagraph 8.3.4

Add a new subparagraph to read as follows: The Contractor assumes the risk of all suspensions of or delays in performance of the Contract, regardless of length thereof, arising from all causes whatsoever, whether or not relating to this Contract, including wrongful acts or omissions of its subcontractors except only to the extent, if any, that compensation or an extension of time may be due as expressly provided for elsewhere in the Contract for such suspension or delays. And subject only to such exception, the Contractor shall bear the burden of all costs, expenses and liabilities which he may incur in connection with such suspensions or delays, and all such suspensions, delays, costs, expenses and liabilities of any nature whatsoever, whether or not provided for in this Contract, shall conclusively be deemed to have been within the contemplation of the parties.

3. Subparagraph 8.3.5

Add a new subparagraph to read as follows: Unless specifically stated in another provision(s) of this Contract, whether relating to time of performance or otherwise, Owner makes no representation or guarantee as to when the construction site or any part thereof will be available for the performance of the Contract, or as to whether conditions at the construction site will be such as to permit the Contract to be performed thereon without interruption or by any particular sequence or method or as to whether the performance of the Contract can be completed by the time required under this Contract or by any other time.

- 4. Subparagraph 8.3.6 Add a new subparagraph to read as follows: The Contractor shall receive no compensation for delays or hindrances to the Work except as otherwise provided herein. No such extension of time shall release the Contractor or the surety on his performance bond from all his obligations hereunder, which shall remain in full force until the discharge of the Contract.
- 5. Subparagraph 8.3.7

Add a new subparagraph to read as follows: Wherever in connection with this Contract it is required, expressly or otherwise, that Owner shall perform any act relating to the Contract, including making available or furnishing any real property, materials or other things, no guarantee is made by the Owner as to the time of such performance and the delay of Owner in fulfilling such requirement shall not result in liability of any kind on the part of Owner except only to the extent, if any, that an extension of time or compensation may be due as expressly provided for in this Contract.

6. Subparagraph 8.3.8

Add a new subparagraph to read as follows: The time of completion is of the essence of this Contract. For each calendar day that any Work shall remain incomplete 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 which shall be deducted from the monies due the Contractor is one thousand (\$1,000.00) per day.

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 amounts 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 Contractor's surety shall pay any additional amounts due.

Z. MODIFICATION OF PARAGRAPH 9.3 APPLICATIONS FOR PAYMENT

1. Subparagraph 9.3.1

Add the following: The form of application for payment shall be the latest edition of AIA Document G702, Application and Certificate for Payment, supported by the latest edition of AIA Document G703, Continuation Sheet.

AA. MODIFICATION OF PARAGRAPH 9.4 CERTIFICATES FOR PAYMENT

1. Subparagraph 9.4.2

Amend this subparagraph in its entirety to read as follows: The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's observations at the site and the data comprising the application for Payment, that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information and belief, quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified.

AB. MODIFICATION OF PARAGRAPH 9.5 DECISIONS TO WITHHOLD CERTIFICATION

1. Clause 9.5.1.8

Add a new clause to read as follows: Unsatisfactory progress of the Work not caused by conditions beyond the Contractor's control.

2. Clause 9.5.1.9

Add a new clause to read as follows: Contractor's failure to carry out instructions or orders of the Owner or Owner's representative.

3. Clause 9.5.1.10

Add a new clause to read as follows: Unsafe working conditions allowed to persist by the Contractor.

4. Clause 9.5.1.11

Add a new clause to read as follows: Failure of the Contractor to provide Work schedules as required by the Owner.

5. Clause 9.5.1.12

Add a new clause to read as follows: Use of subcontractors without the Architect's approval.

6. Clause 9.5.1.13

Add a new clause to read as follows: 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.

7. Subparagraph 9.5.4

Add a new subparagraph to read as follows: If the Work has not been completed by the date agreed upon and set forth in the Contract, the Architect shall not be obligated to issue any further monthly Certificates for Payment, after expiration of the Contract Time, until final completion of all the Work.

8. Subparagraph 9.5.5

Add a new subparagraph to read as follows: Retainage: As security for the faithful completion of the Work by the Contractor, the Owner shall retain five percent (5%) of the total dollar amount of Work. When Work progress is substantially complete, the retainage may reduced to only that amount necessary to assure completion as determined by the Architect.

9. Subparagraph 9.5.6

Add a new subparagraph to read as follows: The Owner shall not be deemed to be in breach of this Contract by reason of the withholding of any payment pursuant to any provision of the Contract Documents provided the Work for which payment is being withheld shall have been rejected by any governmental authority, the Owner or the Architect.

AC. MODIFICATION OF PARAGRAPH 9.7 FAILURE OF PAYMENT

Subparagraph 9.7.

Delete this paragraph in its entirety.

AD. MODIFICATION OF PARAGRAPH 9.10 FINAL COMPLETION AND FINAL PAYMENT

1. Subparagraph 9.10.2

Add the following: The acceptance by the Contractor of the final payment shall operate as and shall be a release to the Owner from all claims or liabilities under the Contract for anything done or furnished or relating to the Work under the Contract or for any act or neglect of the Owner relating to or connected with the Contract. 2. Subparagraph 9.10.4

Add .4 liquidated damages and additional costs due the Owner.

AE. MODIFICATION OF PARAGRAPH 10.1 SAFETY PRECAUTIONS AND PROGRAMS

1. Subparagraph 10.1.1

Add a new subparagraph to read as follows: It shall be the Contractor's responsibility to ensure that no building materials containing any form of asbestos are incorporated into the Work. Any such material shall be removed and satisfactorily replaced without additional cost to the Owner.

2. Subparagraph 10.1.2

Add a new subparagraph to read as follows: Attention is called to the regulations issued by the Secretary of Labor pursuant to Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333) entitled "Safety and Health Regulations for Construction" (29 CFR Part 1926). The Contractor shall be required to comply with those regulations to the extent that any resulting Contract involves construction.

AF. MODIFICATION OF PARAGRAPH 10.2 SAFETY OF PERSONS AND PROPERTY

1. Subparagraph 10.2.4

Add the following: Explosives shall not be used or delivered to the site without the written approval of the Owner and issuance of required permits from governmental authorities.

1. Subparagraph 10.2.5

Amend this subparagraph to read as follows: The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by contractual documents) to property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible for under Clauses 10.2.1.2 and 10.2.1.3.

AG. MODIFICATION OF PARAGRAPH 10. 3 HAZARDOUS MATERIALS

- 1. Subparagraph 10.3.2 Amend this subparagraph in its entirety to read as follows: The Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that.
- 2. Subparagraph 10.3.3 Delete this subparagraph in its entirety.
- 3. Subparagraph 10.3.5 Delete this subparagraph in its entirety.

AH. MODIFICATION ADDING SUBPARAGRAPH 10.4.1 TRENCH SAFETY

1. Subparagraph 10.4.1

Add the following: The Work performed under this section of the Specifications consists of providing site specific excavation safety plans and systems consisting of shoring, sheeting, trench shield, and/or laid back slopes to meet the safety requirements of the Occupational Safety and Health Administration, as required for this project and specified herein.

(1) <u>General</u>

Trench safety systems shall be provided by the Contractor in accordance with the applicable subpart related to Excavation, Trenching, and Shoring of the OSHA Standards as published in Federal Register, Volume 54, No. 209 dated October 31, 1989, and revised effective January 2, 1990. These standards describe safety and health regulations as administered by the U.S. Department of Labor Occupational Safety and Health Administration (OSHA). The standards specified by the OSHA Regulations shall be the minimum allowed on this project. It shall be the responsibility of the Contractor to provide a design and to install adequate trench safety systems for all trenches excavated on this project.

The Contractor shall furnish to the Owner for review, after award of the Contract by the City Council and prior to execution of the Contract by the Owner, a Site Specific Excavation Safety System Plan for the entire project. The safety plan must be prepared and sealed by a Professional Engineer registered in the State of Texas with professional experience in soil mechanics and structural design. In addition, all safety systems utilized in this project must be designed by a Professional Engineer registered in the State of Texas. The Contractor shall be totally responsible for the safety of all persons involved in the construction of this project.

After review of the excavation safety plan, the City Engineer will forward the reviewed plan to the appropriate Owner construction division for use in inspection. Plans for construction will not be released by the City Engineer until this plan is reviewed. Changes in the excavation safety plan after initiation of construction may not be cause for extension of time or change order and will require the same review process. The Contractor accepts sole responsibility of compliance with all applicable safety requirements. The review is only for general conformance with OSHA safety standards. Release of the excavation safety plan by the City Engineer does not relieve Contractor from any or all construction means, methods, techniques and procedures; and any property damage or bodily injury (including death) that arises from use of the excavations safety plan, from Contractor's negligence in performance of Contract Work, or from Owner's failure to note exceptions to the excavation plan, shall remain the sole responsibility and liability of the Contractor.

(2) <u>Core Borings</u>

Any core borings and soil data furnished by the Owner are for the convenience of the Contractor. The Contractor shall be responsible for any additional soil or geotechnical information required. The Contractor shall be responsible for properly designed excavation safety systems to be utilized for any type of subsurface condition found on this project. The furnishing of soil information by the Owner in no way relieves the Contractor of this obligation.

If no core borings or soil data are furnished by the Owner, it shall be the Contractor's responsibility to obtain whatever geotechnical information required for preparation of the excavation safety systems.

(3) <u>Submittal Data</u>

The following information shall be included in the Contractor's safety plan:

- (a) A site-specific excavation safety plan prepared, sealed and signed by a Professional Engineer registered in the State of Texas. Such a plan shall cover how the Contractor intends to implement the trench safety plan in the field.
- (b) A signed certification from the Excavation Safety Design Engineer declaring that his plan has been prepared in accordance with current OSHA Regulations and State of Texas Excavation Safety Laws.
- (c) A signed statement from the Contractor declaring that Contractor accepts and will follow the submitted safety plan.
- (d) A signed statement from the Contractor acknowledging Contractor is totally responsible for the safety of all persons involved in the construction of this project.
- (e) A waiver claim for delay and time.
- (4) <u>Inspections</u>

In addition to the inspections of the excavation and excavation safety systems required of the Contractor by OSHA Regulations, the Owner may further inspect the Work. The Owner shall have the right to reject any safety systems which it finds to be inadequate, and the Contractor shall immediately improve the system to comply with this specification.

(5) Details

The standard detail plans for Sheeting, Trench Shield, and Trench Jacks as shown in the OSHA Regulations previously referenced are included as part of this specification, as well as Table P-1, approximate angle of repose for sloping of sides of excavations, and Table P-2, Trench Shoring-Minimum Requirements. The design of the members shown in Table P-2 is the minimum acceptable on this project.

(6) <u>Measurement and Payment</u>

Payment for trench safety design and installation shall be subsidiary to the Base Bid.

AI. MODIFICATION OF PARAGRAPH 11 INSURANCE AND BONDS

Add the following Clause 11.1.5 and delete subparagraphs 11.2 through 11.4 in their entirety.

A. Insurance

The Contractor shall carry insurance in the following types and amounts for the duration of the Contract, which shall include items owned by the Owner in care, custody and control of the Contractor prior and during construction and warranty period, and furnish Certificates of Insurance

on the forms provided as evidence thereof. Copies of policy declaration pages and all policy endorsements to be furnished upon request.

- 1. Worker's Compensation Insurance Coverage.
 - a. Definitions:

Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory worker's compensation insurance coverage for the person's or entity's employees providing services in a project, for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the Owner.

Persons providing services on the project ("subcontractor" in Texas Labor Code Section 406.096) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owners-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- b. The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code Section 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.
- c. The Contractor must provide a certificate of coverage to the Owner prior to being awarded the contract.
- d. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the Owner showing that coverage has been extended.
- e. The Contractor shall obtain from each person providing services on a project, and provide to the Owner:
 - (1) a certificate of coverage, prior to that person beginning work on the project, so the Owner will have on file certificates of coverage showing coverage for all persons providing services on the project; and
 - (2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

- f. The Contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.
- g. The Contractor shall notify the Owner in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.
- h. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- i. The Contractor shall contractually require each person with whom it contracts to provide services on a project, to:
 - (1) provide coverage based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code Section 401.011(44) for all of it's employees providing services on the project, for the duration of the project;
 - (2) provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
 - (3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (4) obtain from each other person with whom it contracts, and provide to the Contractor:
 - (a) a certificate of coverage, prior to the other person beginning work on the project; and
 - (b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
 - (6) notify the Owner, in writing, by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project;

- (7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- j. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor who will provide services on the project will be covered by worker's 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 appropriate insurance carrier or, in 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.
- k. 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 days after receipt of notice of breach from the Owner.
- 2. Commercial General Liability Insurance with minimum limits of:

General Aggregate	\$1,000,000
Products & Completed Operations Aggregate	1,000,000
Personal & Advertising Injury	500,000
Each Occurrence	500,000 50,000
Fire Damage (Any One Fire)	1,000
Medical Expense (Any One Person)	1,000

3. Owner's and Contractor's protective liability insurance policy naming the Owner as insured. 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. Minimum limits of liability shall be as follows:

Per Occurrence	\$1,000,000
Aggregate	500,000

- 4. Automobile Liability Insurance for all owned, non-owned and hired vehicles with minimum limits for Bodily Injury of \$250,000 for each person and \$500,000 for each occurrence and Property Damage limits of \$100,000 or a Combined Single Limit of \$600,000.
- 5. On all new or remodeling building projects; All Risk Builders Risk Insurance for insurable building projects shall be insured in the amount of the contract price for such improvements. The Owner and Contractor waive all rights against each other for damages caused by fire or other perils to the extent covered by Builders Risk Insurance required under this section, except as to such rights as they may have in the proceeds of such insurance. Contractor shall require similar waivers by Subcontractors and Subsubcontractors.

If insurance policies are not written for amount specified in 2 and 3 above, Contractor is required to carry an Excess Liability Insurance Policy for any difference in amounts specified.

Contractor shall be responsible for deductibles and self-insured retentions, if any, stated in policies. Any self-insured retention shall not exceed ten percent (10%) of minimum required limits. All deductibles or self-insured retentions shall be disclosed on Certificate of Insurance required above.

Contractor shall not commence work at site under this Contract until he has obtained required insurance and until such insurance has been reviewed by the Owner. Contractor shall not allow any Subcontractors to commence work until insurance required has been obtained and approved. Approval of insurance by the Owner shall not relieve or decrease liability of Contractor hereunder.

Insurance to be written by a company licensed to do business in the State of Texas at the time policy is issued and acceptable to the Owner.

Contractor shall produce an endorsement to each affected policy:

- 1. Naming City of Killeen, P.O. Box 1329, Killeen, Texas 76540, as additional insured (except Workers' Compensation and Builders Risk).
- 2. To provide a waiver of subrogation to the City of Killeen.
- 3. That obligates the insurance company to notify the Owner, City of Killeen, P.O. Box 1329, Killeen, Texas 76540, that no policies will be cancelled or reduced, restricted or limited until thirty (30) days after the Owner has received written notice as evidenced by return receipt of registered or certified letter.
- 4. That the "other" insurance clause shall not apply to the Owner where City of Killeen is an additional insured shown on policy. It is intended that policies required in this agreement, covering both the Owner and Contractor, shall be considered primary coverage as applicable.

Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during term of this Contract or as required in the Contract.

If Contractor is underwritten on a claim-made basis, the retroactive date shall be prior to, or coincident with, the date of this Contract and the Certificate of Insurance shall state that coverage is claims made and also the retroactive date. Contractor shall maintain coverage for duration of this Contract. Contractor shall provide the Owner annually a Certificate of Insurance as evidenced of such insurance. It is further agreed that Contractor shall provide the Owner a 30-day notice of aggregate endorsement, an advance of the retroactive date, cancellation and/or renewal.

It is also agreed that Contractor will invoke the tail option at request of the Owner and that Extended Reporting Period (ERP) premium shall be paid by the Contractor.

The Owner reserves the right to review and renegotiate the insurance requirements of this section during effective period of the Contract and to make reasonable adjustments to insurance coverages and their limits when deemed necessary and prudent by the Owner based upon changes in statutory law, court decisions or the claims history of the industry as well as Contractor.

The Owner shall be entitled, upon request, and without expense, to receive copies of policies and all endorsement thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations or exclusions, except where policy provisions are established by law or regulation binding upon either of the parties hereto or the underwriter on any of such policies.

Actual losses not covered by insurance as required by this section shall be paid by Contractor.

B. Performance and Payment Bonds

If the bid amount is less than \$25,000, the bidder is not required to provide Performance and Payment Bonds. Payment for the Project will be made by the Owner only upon completion and acceptance of the work on the Project by the Owner.

If the bid amount exceeds \$25,000, the Owner will require 100% Performance and Payment Bonds for the Project.

If the Performance and Payment Bonds are to be provided, the successful bidder must furnish the bonds from a surety company authorized to do business in the State of Texas and appearing on the U.S. Treasury list. Such bonds must be on the forms provided by the Owner in the amount of one hundred percent (100%) of the contract price, conditioned that the Contractor will faithfully perform the contract executed, in accordance with Texas Government Code Chapter 2253

AJ. MODIFICATION OF PARAGRAH 12 UNCOVERING AND CORRECTION OF WORK

1. Subparagraph 12.1.2

Amend this subparagraph in its entirety to read as follows: If a portion of the Work has been covered which the Architect, CM Agent or Owner has not specifically requested to examine prior to its being covered, the Architect and CM Agent may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which the Owner shall be responsible for payment of such costs.

2. Subparagraph 12.2.2.1

Delete the following sentence from this subparagraph: During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the right to require correction by the Contractor and to make a claim for breach of Warranty.

AK. MODIFICATION OF PARAGRAPH 13.1 GOVERNING LAW

1. Amend this paragraph to read: Venue will be in Bell County and the contract will be governed by Texas Law.

AL. MODIFICATION OF PARAGRAPH 13.3 WRITTEN NOTICE

1. Subparagraph 13.3.1

Add a new subparagraph to read as follows: Written notification shall be required for any party considered to be in breach of the Contract. Such notification shall give at least seven (7) days' written notice of the alleged breach of the Contract, specifying in what point the Contract has been violated and identifying appropriate measures for compliance with the Contract. Failure of the notified party to respond within the specified time may be cause for considering the notified party to be guilty of a substantial breach of a provision of the Contract Documents.

AM. MODIFICATION OF PARAGRAPH 13.5 TESTS AND INSPECTIONS

1. Subparagraph 13.5.1

Amend this subparagraph to read as follows: Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing agency hired by the Owner, or with the appropriate public authority. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so the Architect may observe such procedures. Approved inspections of the Work or portions thereof by a public authority inspecting under a specific construction code shall not be considered final acceptance of the Work. Final acceptance of the Work shall be the authority of the Architect and the Owner. Unless otherwise provided, the Owner shall bear costs of services of the independent testing agency when such services are specified by the Contract Documents and result in evidence that the Work complies with requirements established in the Contract Documents. The Contractor shall bear costs of all other services of the independent testing agency, including but not limited to retesting of Work that has failed or been rejected, retesting of Work not meeting requirements of the Contract, and expenses of the testing agency related to the Contractor's miscoordination of the Work to be observed or tested, and costs thereof deducted from the Contract Sum.

2. Subparagraph 13.5.2

Amend this subparagraph to read as follows: If the Architect determines that any Work requires special inspection, testing, or approval which Subparagraph 13.5.1 does not include, Architect will, upon written authorization from the Owner, order such special inspection, testing or approval. The Contractor shall give notice as provided in Subparagraph 13.5.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect's additional services and additional engineering services made necessary by such failure, and an appropriate Change Order shall be issued. Otherwise, the Owner shall bear such costs.

3. Subparagraph 13.5.7

Add a new subparagraph to read as follows: The temporary or trial usage by the Owner of any mechanical device, machinery, apparatus, equipment, or any Work or materials supplied under this Contract before completion and final acceptance of the Project shall not be construed as an evidence of acceptance of any of these items by the Architect. The Owner shall have the privilege of such temporary and trial usage for such reasonable length of time as the Architect shall deem to be proper for making a complete and thorough test of these items. No claim for damage shall be made by the Contractor for the injury to or breaking of any parts of such Work which may be caused by weakness or inadequacy of structural parts or by defective material or workmanship related to these items. If the Contractor so elects, Contractor may, at Contractor's own expense, appoint and place a competent person or persons, satisfactory to the Architect, to make such trial usage, such trial being under the supervision of the Architect.

AN. MODIFICATION OF PARAGRAPH 13.6 INTEREST

1. Subparagraph 13.6.

Amend this subparagraph to read as follows: Interest will be paid, if required by law, should any interest be due and payable by the Owner to the Contractor, any subcontractor or any other party on any of the sums payable by the Owner under this Contract, including, without limitation, the sums which the Owner is authorized to retain pursuant to the Contract Documents.

AO. MODIFICATION ADDING PARAGRAPH 13.8 NONDISCRIMINATION

1. Subparagraph 13.8.1

Add a new subparagraph to read as follows: The Contractor shall maintain policies of employment as follows:

- a. The Contractor and the Contractor's subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, disability or national origin. The Contractor shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, disability or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of nondiscrimination.
- b. The Contractor and the Contractor's subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, disability or national origin.

AP. MODIFICATION ADDING PARAGRAPH 13.9 SUSPENSION BY COURT ORDER AGAINST THE OWNER

1. Subparagraph 13.9.1

Add a new subparagraph to read as follows: 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.

AQ. MODIFICATION OF PARAGRAPH 14.1 TERMINATION BY THE CONTRACTOR

1. Subparagraphs 14.1.1. – 14.1.4

Delete these subparagraphs in their entirety.

AR. MODIFICATION ADDING PARAGRAPH 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

1. Subparagraph 14.4.1

Add a new subparagraph to read as follows: This Contract provides for Termination for Convenience. The Contract may be terminated by the Owner if the need for the completed project is obviated or the funds required to complete the project are no longer available or for other reasons related to the Owner's needs or convenience. Such action by the Owner may be taken after the schedule of notification specified in Subparagraph 14.2.2. The Owner shall be responsible to the Contractor for payments for all portions of the Work acceptably completed at the time of the notification, including payment of materials and equipment which have been purchased by the Contractor for incorporation into the Work. Under this termination, the Owner shall not be responsible to the Contractor for anticipated profits or other expenses of the project related to the future Work not to be performed.

2. Subparagraph 14.4.2

Add a new subparagraph to read as follows: If, after notice of termination of the employment of the Contractor pursuant to Subparagraph 14.2.2, it is determined for any reason that the Contractor was not in default of the Contract, or other specified reason for termination has been found to be invalid, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Termination for Convenience as provided in Subparagraph 14.4.1. The Contract shall be equitably adjusted to compensate for such termination and the Contract modified accordingly.

3. Subparagraph 14.4.3

Delete this subparagraph in its entirety.

AS. MODIFCATION OF PARAGRAPH 15 CLAIMS AND DISPUTES

1. Subparagraph 15.1.4

Add a new clause to read as follows: Any request for a change in the Work exceeding \$500.00 in value shall be submitted in the form of a lump sum proposal with an itemized breakdown of all increases or decreases in the cost of the Contractor's Work and all subcontractors' Work, in at least the following detail:

- a. Material quantities and unit costs
- b. Labor costs (identified with specific item of material to be placed or operation to be performed)
- c. Construction equipment
- d. Workmen's compensation and public liability insurance
- e. Overhead
- f. Profit
- g. Employment taxes under FICA and FUTA

2. Subparagraph 4.3.7 Claims for Additional Time

Amend this subparagraph in its entirety to read as follows: In addition to the requirements of §1.36 of NCTCOG Specifications, Part I, Division I "Delays; Extension of Time; Liquidated Damages."

The term "unforeseeable cause" shall mean:

- 1. An act of God in the form of unusually severe weather conditions, including storms, flood, fire or similar event, that could not have been anticipated or guarded against and which materially affects the Work site, including access or egress thereto;
- 2. A riot or war situation actually involving the site or actually preventing the Contractor from working on the site, but not including any situation involving suppliers off-site other than those essential suppliers as supplied to City; or
- 3. An unanticipated strike involving the forces actually working on the project or involving the employees of those essential suppliers, but no other labor stoppage.

*Contractor must set forth essential suppliers in writing within five (5) days of the Notice to Proceed.

No event shall be deemed an Unforeseeable Cause for the purposes of this Agreement unless it actually and directly necessitates a delay in the Work which could not be otherwise remedied by taking reasonably prudent steps, and the Contractor could not reasonably adjust the schedule of the remaining Work to deal with, make up for, or otherwise work around the delays resulting from the Unforeseeable Cause(s).

The notice shall, in writing, specify the Unforeseeable Cause(s) and the anticipated effect it will have on that Contractor's abilities to perform Contractor's obligations along with a plan to deal with the effects of such Unforeseeable Causes and proposed amendments to all affected schedules necessarily resulting there from.

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 the adjustment of the working time, due to any of the factors outlined within this Section and/or Item 1.36.

Extensions for weather related delays will only be granted when those days exceed the following:

January – 4 February – 5 March – 5 April – 6 May – 6 June – 4 July – 4 August – 3 September – 5 October – 4 November – 3 December – 3

Claims for extension of time must be submitted within seven (7) days after the beginning of the delay, and shall be in whole- or half-day increments. No adjustment shall be made to the Contract Price for additional weather related delays. Time extensions will not be considered for weather days which occur on weekends and holidays, unless contractor is regularly working on these days.

3. Subparagraph 15.1.6

Delete "Claims for Consequential Damages" in its entirety.

AT MODIFICATION OF PARAGRAPH 15.2 INTIAL DECISION

- 1. Subparagraph 15.2.1
 - Amend this subparagraph in its entirety to read as follows: Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10 shall be referred to the Initial Decision Maker for the initial decision. The CM Agent will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. The parties agree to submit claims to the Initial Decision Maker, but an initial decision shall not be required as a condition precedent to mediation of any Claim arising prior to or after the date of final payment id due. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner or the Architect.
- 2. Subparagraphs 415.2.6 and 15.2.6.1

Delete these subparagraphs in their entirety.

AU. MODIFICATION OF PARAGRAPH 15.3 MEDIATION

1. Paragraph 15.3 Delete this paragraph in its entirety.

AV. MODIFICATION OF PARAGRAPH 15.4 ARBITRATION

1. Paragraph 15.4 Delete this paragraph in its entirety.

AW. MODIFICATION ADDING PARAGRAPH 15 PREVAILING WAGE RATES

15. Contractor and subcontractors shall comply with Government Code Chapter 2258, as amended, in performing this project. In accordance with Government Code Chapter 2258, as amended, the prevailing wage rates as set forth in the Contract Documents shall be

paid on this project. For overtime work and legal holidays, the hourly rate shall be one and one-half times the basic hourly rate set forth in the schedule of prevailing wage rates, which is incorporated herein for all purposes. The Owner may require an affidavit stating that the Contractor has complied with the prevailing wage rate provision of the Contract Documents prior to acceptance of the project or at any time during or after completion of the Contract.

The Owner reserves the right to conduct interviews with the Contractor's and subcontractors' employees to insure compliance with Government Code Chapter 2258, as amended and with all applicable local, state and federal laws. Upon written request by Owner, the General Contractor shall be responsible for submitting payroll information to the Owner for all employees performing work on the project, whether employed by the General Contractor or a subcontractor. Each submittal shall be certified by the General Contractor as to completeness and accuracy.

A Contractor or subcontractor in violation of Government Code Chapter 2258, as amended, is liable for a penalty. That Contractor or subcontractor shall pay to the Owner Sixty and 00/100 Dollars (\$60.00) for each laborer, worker, or mechanic employed for each calendar day, or portion thereof, that such laborer, worker, or mechanic is paid less than the prevailing wage rates specified herein for Work done under this Contract. Nothing herein shall preclude the Contractor or subcontractor from paying higher wages than specified herein.

A Contractor or subcontractor violating a requirement of this Paragraph may be determined ineligible to bid on or receive any additional work during the calendar year following the year in which the violation occurred.

END OF DOCUMENT

THIS PAGE INTENTIONALLY BLANK

Exhibit B – Specifications Index

Killeen Fire Station No. 9 Specifications dated July 17, 2015 WHJ Project Number: 1422

- 00 0010 TABLE OF CONTENTS
- 00 0020 PROFESSIONAL SEALS

DIVISION 00 – BIDDING AND CONTRACTING REQUIREMENTS

- 00 0100 ADVERTISEMENT FOR BIDS
- 00 0800 NOTICE TO BIDDERS
- 00 0900 BID FORM
- 00 1000 INSTRUCTIONS TO BIDDERS
- 00 1100 PERFORMANCE BOND
- 00 1200 PAYMENT BOND
- 00 2200 SOIL INVESTIGATION DATA
- 00 6000 CONTRACT FOR CONSTRUCTION
- 00 6020 INSURANCE REQUIREMENTS
- 00 7000 GENERAL CONDITIONS
- 00 8000 SUPPLEMENTARY CONDITIONS

DIVISION 01 – GENERAL REQUIREMENTS

- 01 1000 SUMMARY
- 01 2100 ALLOWANCES
- 01 2300 ALTERNATES
- 01 2500 SUBSTITUTION PROCEDURES DURING BIDDING
- 01 2600 CONTRACT MODIFICATION PROCEDURES
- 01 2900 PAYMENT PROCEDURES
- 01 3100 PROJECT MANAGEMENT AND COORDINATION
- 01 3200 CONSTRUCTION PROGRESS DOCUMENTATION
- 01 3300 SUBMITTAL PROCEDURES
- 01 4000 QUALITY REQUIREMENTS
- 01 4200 REFERENCES
- 01 5000 TEMPORARY FACILITIES AND CONTROLS
- 01 5100 TEMPORARY UTILITIES
- 01 5600 TEMPORARY BARRIERS AND ENCLOSURES
- 01 5713 TEMPORARY EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION
- 01 6100 PRODUCT REQUIREMENTS
- 01 7300 EXECUTION REQUIREMENTS
- 01 7329 CUTTING AND PATCHING
- 01 7700 CLOSEOUT PROCEDURES
- 01 7810 PROJECT RECORD DOCUMENTS
- 01 7820 OPERATION AND MAINTENANCE DATA
- 01 8200 DEMONSTRATION AND TRAINING

DIVISION 03 – CONCRETE

03 3000	CAST-IN-PLACE CONCRETE
03 3549	SEALED CONCRETE FLOORS

DIVISION 04 – MASONRY

04 0526	MASONRY CLEANING
04 2200	CONCRETE UNIT MASONRY
04 4313	STONE MASONRY VENEER
04 7000	

04 7200 CAST STONE MASONRY

DIVISION 05 – METALS

- 05 3100 STEEL DECKING
- 05 4000 COLD-FORMED METAL FRAMING
- 05 4400 COLD-FORMED METAL TRUSSES
- 05 5000 METAL FABRICATIONS
- 05 5133 METAL SHIPS LADDER

DIVISION 06 – WOOD AND PLASTICS

- 06 1053 MISCELLANEOUS ROUGH CARPENTRY
- 06 1323 HEAVY TIMBER FRAMING
- 06 1643 GYPSUM SHEATHING
- 06 4023 INTERIOR ARCHITECTURAL WOODWORK
- 06 6116 SOLID SURFACING FABRICATIONS

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

- 07 2100 THERMAL INSULATION
- 07 2617 BELOW SLAB VAPOR RETARDER
- 07 2726 FLUID-APPLIED MEMBRANE AIR BARRIERS
- 07 4114 STANDING SEAM METAL ROOF PANELS
- 07 5419 POLYVINYL-CHLORIDE (PVC) ROOFING
- 07 5423 THERMOPLASTIC POLYOLEFIN (TPO) ROOFING
- 07 6200 FLASHING AND SHEET METAL
- 07 9200 JOINT SEALANTS

DIVISION 08 – DOORS AND WINDOWS

- 08 1113 HOLLOW METAL DOORS AND FRAMES
- 08 1216 KNOCK-DOWN ALUMINUM DOOR FRAMES
- 08 1416 FLUSH WOOD DOORS
- 08 3113 ACCESS DOORS
- 08 3323 INSULATED ROLLING SERVICE DOORS
- 08 3613 OVERHEAD SECTIONAL DOORS
- 08 3906 TORNADO RESISTANT DOORS AND FRAMES
- 08 4113 ALUMINUM FRAMED ENTRANCES AND STOREFRONTS
- 08 4413 GLAZED ALUMINUM CURTAIN WALL
- 08 7100 DOOR HARDWARE
- 08 8000 GLAZING
- 08 8300 MIRRORS

DIVISION 09 – FINISHES

- 09 2423 CEMENT STUCCO
- 09 2900 GYPSUM BOARD ASSEMBLIES
- 09 3000 TILING
- 09 5113 ACOUSTICAL PANEL CEILINGS
- 09 6020 VAPOR TESTING CONCRETE FLOOR SLABS
- 09 6513 RESILIENT BASE AND ACCESSORIES
- 09 6566 RUBBER FLOORING
- 09 6813 TILE CARPETING
- 09 9113 EXTERIOR COATINGS
- 09 9123 INTERIOR PAINTING

DIVISION 10 – SPECIALTIES

- 10 1416 DEDICATION PLAQUE
- 10 1419 DIMENSIONAL LETTER SIGNAGE
- 10 1423 INTERIOR SIGNAGE
- 10 2619 CORNER GUARDS
- 10 2813 TOILET AND BATH ACCESSORIES
- 10 4400 FIRE PROTECTION SPECIALTIES
- 10 5636 PROTECTIVE GEAR AND HOSE STORAGE SYSTEM
- 10 7113 EXTERIOR SUN CONTROL DEVICES
- 10 7316 CANOPIES
- 10 7516 FLAGPOLES

DIVISION 11 – EQUIPMENT

11 3113 KITCHEN APPLIANCES

11 5233 TELEVISION MOUNTING BRACKETS

DIVISION 12 – FURNISHINGS

12 2113	HORIZONTAL LOUVER BLINDS
12 3616	STAINLESS STEEL FABRICATIONS
12 3660	QUARTZ AGGLOMERATE COUNTERTOPS

DIVISION 21 - FIRE PROTECTION

21 1000 FIRE PROTECTION SYSTEM

DIVISION 22 - PLUMBING

22 0523 GENERAL DUTY VALVES FOR PLUMBING PIPING	
 HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT VIBRATION AND SEISMIC CONTROLS FOR PLUMBING PIPING AND EQUIPME IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT PLUMBING INSULATION FACILITY WATER DISTRIBUTION 	ΞNT

- 22 1123 DOMESTIC WATER PUMPS
- 22 1300 FACILITY SANITARY SEWERAGE
- 22 3436 DOMESTIC WATER HEATER
- 22 4200 COMMERCIAL PLUMBING FIXTURES

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

- 23 0500 COMMON WORK RESULTS FOR HVAC
- 23 0513 COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT
- 23 0529 HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT
- 23 0548 VIBRATION AND SEISMIC CONTROLS FOR HVAC PIPING AND EQUIPMENT
- 23 0553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT
- 23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC
- 23 0700 HVAC INSULATION
- 23 0993 SEQUENCE OF OPERATIONS
- 23 2300 REFRIGERANT PIPING
- 23 3113 METAL DUCTS
- 23 3423 HVAC POWER VENTILATORS
- 23 3713 DIFFUSERS, REGISTERS AND GRILLES
- 23 8149 REFRIGERATION EQUIPMENT

DIVISION 26 - ELECTRICAL

- 26 0500 COMMON WORK RESULTS FOR ELECTRICAL
- 26 0503 FIRESTOPPING
- 26 0505 SITE ELECTRICAL
- 26 0519 LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
- 26 0526 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
- 26 0529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
- 26 0533.13 CONDUIT FOR ELECTRICAL SYSTEMS
- 26 0533.16 BOXES FOR ELECTRICAL SYSTEMS
- 26 0553 IDENTIFICATION FOR ELECTRICAL SYSTEMS
- 26 0573 OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY
- 26 0593 ELECTRICAL TESTING
- 26 0620 DISCONNECT SWITCHES
- 26 2116 LOW VOLTAGE UNDERGROUND ELECTRIC SERVICE ENTRANCE
- 26 2413 SWITCHBOARDS
- 26 2416 PANELBOARDS
- 26 2422 MOTOR STARTERS
- 26 2716 ELECTRICAL CABINETS AND ENCLOSURES
- 26 2726 WIRING DEVICES
- 26 3213 PACKAGED GENERATOR SET NATURAL GAS
- 26 3623 AUTOMATIC TRANSFER SWITCH
- 26 4100 FACILITY LIGHTNING PROTECTION
- 26 4300 SURGE PROTECTIVE DEVICES
- 26 5000 LIGHTING
- 26 5090 DIGITAL NETWORK CONTROL SYSTEM

DIVISION 27 - COMMUNICATION

27 0528 TELEPHONE RACEWAY

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

28 0510 COMMON WORK RESULTS FOR SECURITY SYSTEMS

28 3110 FIRE DETECTION AND ALARM SYSTEM

DIVISION 31 - EARTHWORK

- 31 1100 SITE CLEARING AND GRUBBING
- 31 2000 EARTH MOVING
- 31 2313 EXCAVATION, BACKFILL AND GRADING FOR SITE WORK OUTSIDE BUILDING
- 31 2316 EXCAVATION, BACKFILL AND COMPACTING FOR UTILITIES
- 31 2319 EXCAVATION, BACKFILL AND COMPACTING FOR PAVEMENT
- 31 3116 TERMITE CONTROL
- 31 6329 DRILLED CONCRETE PIERS

DIVISION 32 - EXTERIOR IMPROVEMENTS

- 32 1313 PORTLAND CEMENT CONCRETE PAVING
- 32 9200 GRASS SEEDING FOR SLOPE PROTECTION AND EROSION CONTROL

DIVISION 33 - UTILITIES

- 33 1100 WATER SYSTEMS
- 33 3000 FACILITY SANITARY SEWERS
- 33 4100 STORM DRAINAGE PIPE AND APPURTENANCES

Exhibit C – Drawing Index

City of Killeen Fire Station No. 9 Drawings dated July 17, 2015 WHJ Project Number: 1422

COVER

C0.01 COVER SHEET C0.11 GENERAL NOTES C1.01 SITE PLAN C2.01 EROSION CONTROL PLAN C2.02 EROSION CONTROL DETAILS C3.01 GRADING PLAN C4.01 UTILITY PLAN C4.02 WASTE WATER PROFILE C5.01 DRAINAGE AREA CALCS. C5.02 DRAINAGE AREA CALCS. C5.03 DRAINAGE AREA CALCS. C6.01 STORM DRAIN PLAN C6.02 STORM DRAIN PROFILE C6.03 STORM DRAIN PROFILE C6.04 STORM DETAILS C6.05 STORM DETAILS C6.06 STORM DETAILS C7.01 PAVING PLAN C7.02 PAVING DETAILS C7.03 PAVING DETAILS C7.04 PAVING DETAILS C7.05 PAVING DETAILS C7.06 PAVING DETAILS C7.07 PAVING DETAILS C8.01 TRAFFIC CONTROL PLAN **C9.01 UTILITY DETAILS** C9.02 UTILITY DETAILS C9.03 UTLITY DETAILS L1.01 PLANTING PLAN L2.01 PLANTING DETAILS **IR1.01 IRRIGATION PLAN IR2.01 IRRIGATION DETAILS** A0.1 TAS REQUIREMENTS **GENERAL NOTES, LEGENDS & CODE** A0.2 A1.1 **FLOOR PLAN** A1.2 **ENLARGED PLANS** A1.3 **DIMENSION PLAN** A2.1 DOOR & WINDOW SCHED & FRAME TYPES A2.2 **DOOR & WINDOW DETAILS** A2.3 **DOOR & WINDOW DETAILS** A2.4 **FINISH PLAN & SCHEDULE** A3.1 EXTERIOR ELEVATIONS A3.2 ISOMETRIC VIEWS OF BUILDING A4.1 **REFLECTED CEILING PLAN** A5.1 **ROOF PLAN** A6.1 INTERIOR ELEVATIONS A6.2 INTERIOR ELEVATIONS A6.3 INTERIOR ELEVATIONS A6.4 MILLWORK SECTIONS A6.5 MILLWORK SECTIONS A7.1 **BUILDING SECTIONS** A7.2 **BUILDING SECTIONS** A8.1 WALL SECTIONS A8.2 WALL SECTIONS A8.3 WALL SECTIONS A8.4 WALL SECTIONS A8.5 WALL SECTIONS A8.6 WALL SECTIONS A8.7 WALL SECTIONS A8.8 WALL SECTIONS & MONUMENT A8.9 SITE ENCLOSURE PLANS & DETAILS A9.1 PLAN DETAILS A9.2 **PLAN & SECTION DETAILS** A9.3 SECTION DETAILS A9.4 SECTION DETAILS A10.1 3D VIEWS S1.0 **GENERAL NOTES** S1.1 **GENERAL NOTES** S2.1 FOUNDATION PLAN S2.2 FRAMING PLAN S2.3 HIGH ROOF FRAMING PLAN S3.1 FOUNDATION DETAILS S3.2 DETAILS S4.1 DETAILS S4.2 **TYPICAL DETAILS** S4.3 DETAILS S4.4 **TYPICAL DETAILS** S5.0 SPECIAL INSPECTIONS MP0.0 MECHANICAL LEGEND MP0.1 PLUMBING SCHEDULES MP0.2 MECHANICAL SCHEDULES M2.1 **FIRST FLOOR PLAN - HVAC** M2.2 **ROOF PLAN - HVAC** M3.1 FLOOR PLAN - HVAC PIPING

Exhibit B –Drawing Index City of Killeen Fire Station No. 9 WHJ Project Number: 1422

- M4.1 MECHANICAL DETAILS
- M4.2 VRV PIPING AND WIRING DIAGRAM
- M6.1 AXONOMETRIC DUCT
- E0.0 ELECTRICAL LEGEND
- E0.1 ONE LINE AND LIGHT FIXTURE SCHEDULE
- E0.2 PANEL SCHED AND POWER TO MECH SCHED
- E1.0 ELECTRICAL SITE PLAN
- E2.1 FLOOR PLANS LIGHTING
- E2.1C LIGHTING CONTROL
- E3.1 FLOOR PLANS POWER
- E3.2 ROOF PLAN POWER
- E4.1 FLOOR PLAN POWER TO MECHANICAL
- E4.2 ROOF PLAN POWER TO MECHANICAL
- E5.1 FLOOR PLAN SECURITY
- E6.1 ELECTRICAL DETAILS
- P2.0 FLOOR PLAN UNDERFLOOR PLUMBING
- P2.1 FLOOR PLAN ABOVE FLOOR PLUMBING
- P2.2 ROOF PLAN PLUMBING
- P4.1 PLUMBING DETAILS
- P5.0 PLUMBING RISERS
- FP2.0 FIRE PROTECTION



ADDENDUM NO. 1 for BID 16-01 Today's Date: September 29, 2015

KILLEEN NEW FIRE STATION #9 BID CLOSING DATE: October 1, 2015 @ 2:00 p.m.

This addendum forms a part of the contract and clarifies, corrects or modifies the original contract drawings and project manual dated July 17, 2015.

Acknowledge receipt of this addendum in space provided on the bid form. Failure to do so may subject bidder to disqualification.

This addendum consists of:

- 1. Revised Specification Section 00 0900 Bid Form dated September 28, 2015 (5 Pages)
- Wiginton Hooker Jeffry, PC Architects (WHJ) Addendum Number One dated September 28, 2015 (10 Pages)

Køfnlud Huner Mus Rosalind Graves-Mills Senior Purchasi

Senior Purchasing Specialist City of Killeen Purchasing Division

Acknowledgement:		
Signature:	175	
Print Name:		
Title:		
Company:		
Date:		

DOCUMENT 00 0900 BID FORM

KILLEEN FIRE STATION #9 - THE CITY OF KILLEEN, TEXAS

The undersigned, as bidder, declares (1) that the only person or parties interested in this bid as principals are those named herein; (2) that this bid is made without collusion with any other person, firm, or corporation; (3) that bidder has carefully examined the Form of Contract (AIA Document A101-2007), Notice to Bidders, specifications and the plans therein referred to; and (4) that bidder has carefully examined the locations, conditions, and classes of materials of the proposed work. The undersigned agrees that bidder will provide all the necessary labor, machinery, tools apparatus, and other items incidental to construction and will do all work and furnish all the materials called for in the contract drawings and specifications in the manner prescribed therein.

It is further agreed that the quantities of work to be done at unit prices and material to be furnished may be increased or decreased as may be necessary to complete the work fully as planned and contemplated, and that all quantities of work increased or decreased, are to be performed at the unit prices set forth below except as provided for in the specifications.

It is further agreed that lump sum prices may be increased to cover additional work not shown on the plans or required by the specifications, in accordance with the provisions of the <u>General Conditions</u>. Similarly, they may be decreased to cover deletions of work so ordered.

It is understood that the work is to be completed in full within the time designated.

Accompanying this bid is a cashier's check, certified check, or a bid bond in the amount of five percent (5%) of the bid amount (of the greater amount, including any additive alternates).

The bid security accompanying this bid shall be returned to the unsuccessful bidder. In the event the City accepts the bid and the bidder fails to execute a contract, and file a performance bond and a payment bond and/or maintenance bond, if required, within ten (10) days after acceptance, the bid security shall become the property of the OWNER and shall be considered as payment for damages due to delay and inconveniences suffered by OWNER on account of such failure of the bidder. A Performance Bond and Payment Bond is required for this project.

It is understood that the OWNER reserves the right to reject any and all bids.

Signature

Date

Name and Title

WHJ PROJECT NO. 1217

SEPTEMBER 28, 2015 AD 1

KILLEEN FIRE STATION NO. 9

BID TABULATION FORM

Killeen Fire Station #9

Killeen, Texas

Date: _____, 2015

Bid of

(hereinafter called "Bidder"), a (corporation) (partnership) (sole proprietorship) (individual) (*Bidder strike out inapplicable terms*).

City Manager of the City of Killeen, Texas (hereinafter called "Owner").

1. The undersigned, in compliance with the "Notice to Bidders" for the construction of the new Fire Station #9, to be located at 5400 Bunny Trail, Killeen, Texas submits the following Bid.

Representations: Bidder hereby represents that Bidder:

- A. Accepts the provisions of the Bidding Documents.
- B. Will enter into and execute a Contract with the Owner ten (10) days after Notification of Award and will furnish the required bonds.
- C. Will accomplish the work in accordance with the Contract Documents.
- D. Will not withdraw this bid for a period of ninety (90) days from the date of Bid opening.
- E. Acknowledges that time is of the essence of this Contract, and that Bidder understands and accepts the liquidated damages clause stipulated in the Contract Documents.
- 2. Time of Completion and Liquidated Damages: Bidder will commence work upon receipt of a Notice to Proceed from the Owner and will achieve Substantial completion of the Work as follows:

the Notice to Proceed. Schedule is based on the greater scope of Work.

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within the number of consecutive calendar days identified in the Bidder's Proposal

3. Base Bid Amount: Bidder proposes to construct the new Killeen Fire Station #9, for the stipulated sum of

and 00/100 Dollars

(\$_____).

UNIT PRICES AND ALTERNATES TABULATION FORM

New Killeen Fire Station #9

Killeen, Texas

Unit Prices: Bidder hereby guarantees the following unit prices to apply throughout the project for changing work upon written instruction of the Owner.

Α.	Duplex Outlet	Cost per Outlet				
	Duplex Outlet Installed				(\$)
В.	Quad Outlet	Cost per Outlet				
	Quad Outlet Installed	7.F	~	- 04	(\$)
C.	Data Outlet	Cost per Outlet				
	Data Outlet Installed		2 - 140-141		(\$)
D.	Concrete Sidewalk	Cost per Square Yard		1.0427 - 11		
	Sidewalk Installed				(\$)
E.	Drilled Piers – P1	Cost per VLF				
	Add / Deduct				(\$)
F	Drilled Piers – P2	Cost per VLF				
	Add / Deduct				(\$)
G	Casings for P1 Drilled Piers	Cost per VLF				
	Add for Casings	u = 55	2	e ¹¹⁻	(\$)
F.	Casings for P2 Drilled Piers	Cost per VLF				
	Add for Casings				(\$	

Alternate Price: Bidder hereby proposes the following alternate prices:

<u>Alternate No. 1:</u> In lieu of quartz agglomerate, countertops fabricated according to Section 06 6116 – Solid Surfacing Fabrications.

DEDUCT

_(\$_____

).

WHJ PROJECT NO. 1217

SEPTEMBER 28, 2015 AD 1

).

(\$

(\$

<u>Alternate No. 2:</u> In lieu of PVC roof, provide TPO roof as specified in Section 07 5423 - THERMOPLASTIC POLYOLEFIN (TPO) ROOFING.

DEDUCT

<u>Alternate No. 3:</u> In lieu of as shown in the drawings, provide an exterior wall veneer as a combination of stone and stucco with metal parapet cap similar to as shown in Section 5/A8.4. The structural portion of the wall (metal stud or cmu construction) shall remain as originally shown in the documents. Only the veneer/parapet construction shall change. Provide at the following locations:

- Single story exterior walls at low slope roof construction generally between Door 120 and Apparatus Bay 132. Exterior veneer at High Apparatus Bay 132 walls shall remain as shown.
- b. Single story exterior walls at low slope roof construction generally between Door 132D and Door 132H. Exterior veneer at High Apparatus Bay 132 walls shall remain as shown.

DEDUCT

In the event of the award of a contract to the undersigned, the undersigned will (1) furnish a performance bond for the full amount of the contract, (2) a payment bond for the full amount of the contract, (3) secure proper compliance with the terms and provisions of the contract, (4) insure and guarantee the work until final completion and acceptance and (5) guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

The work proposed to be done shall be accepted when the City is satisfied that work is fully completed and finished in accordance with the plans and specifications.

The undersigned certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final.

NOTE: Unit and Lump sum prices must be shown in words and figures for each item listed in this bid and in the event of discrepancy the words shall control.

Receipt is hereby acknowledged for the following addenda to the bid:

Addendum No. 1 Dated	Received	
Addendum No. 2 Dated	Received	
Addendum No. 3 Dated	Received	
Addendum No. 4 Dated	Received	

WHJ PROJECT NO. 1217

SEPTEMBER 28, 2015 AD 1

 CONTRACTOR

 By:

 Title

 Address

 City, State, Zip

 City, State, Zip

 Telephone / Fax

 Seal and Authorization

 (If a Corporation)

 Email Address

END OF DOCUMENT

WHJ PROJECT NO. 1217

SEPTEMBER 28, 2015 AD 1

ADDENDUM NUMBER ONE

The plans and specifications for the Killeen Fire Station No. 9 facility shall be modified, amended, deleted from and/or added to in accordance with the following items:



SPECIFICATIONS

ITEM 1.

SECTION 00 0010 - TABLE OF CONTENTS - Add Section 07 5423 - THERMOPLASTIC POLYOLEFIN (TPO) ROOFING.

ITEM 2.

SECTION 01 2300 – ALTERNATES – ITEM 3.1 – Add the following:

- B. ALTERNATE NO. 2:
 - 1. Base Bid: Provide PVC roof as specified in Section 07 5419 POLYVINYL-CHLORIDE (PVC) ROOFING.
 - Deduct Alternate: In lieu of PVC roof, provide TPO roof as specified in Section 07 5423 -THERMOPLASTIC POLYOLEFIN (TPO) ROOFING.

C. ALTERNATE NO. 3:

- 1. Base Bid: Provide exterior stone veneer walls as indicated in the drawings.
- 2. Deduct Alternate: In lieu of as shown in the drawings, provide an exterior wall veneer as a combination of stone and stucco with metal parapet cap similar to as shown in Section 5/A8.4. The structural portion of the wall (metal stud or cmu construction) shall remain as originally shown in the documents. Only the veneer/parapet construction shall change. Provide at the following locations:
 - a. Single story exterior walls at low slope roof construction generally between Door 120 and Apparatus Bay 132. Exterior veneer at High Apparatus Bay 132 walls shall remain as shown.
 - b. Single story exterior walls at low slope roof construction generally between Door 132D and Door 132H. Exterior veneer at High Apparatus Bay 132 walls shall remain as shown.

ITEM 3.

SECTION 06 4023 – INTERIOR ARCHITECTURAL WOODWORK – CLARIFICATION – Cabinets indicated to receive a stained finish shall be factory finished. Field finishing shall not be permitted.

ITEM 4.

SECTION 07 5423 - THERMOPLASTIC POLYOLEFIN (TPO) ROOFING – Add this section in its entirety. Reference attached section.

WIGINTON HOOKER JEFFRY, PC ARCHITECTS

500 N. Central Expressway Suite 300 Plano, Texas 75074 ph 972.665.0657 fx 972.665.0656 www.whjarch.com

ITEM 5.

SECTION 09 9123 – INTERIOR PAINTING – ITEM 3.1.A.1 – Rooms Designated as Potentially Humid or Wet Locations: Rooms; revise list as follows:

- a. 101 Toilet.
- b. 102 Exam.
- c. 105 Vestibule.
- d. 106 E.M.S. Supply Closet.
- e. 118 Accessible Toilet.
- f. 122 Officer's Toilet.
- g. 127 Staff Toilet.
- h. 128 Staff Toilet.
- i. 130 Vestibule.
- j. 131 Mech.
- k. 132 Apparatus Bay.
- I. 133 S.C.B.A. Compressor Room.
- m. 134 S. C. B. A. Workroom.
- n. 135 Bunker Gear.
- o. 136 Tool Room.
- p. 137 Corridor.
- q. 138 Hazmat Equipment Storage.
- r. 139 Workroom.
- s. 140 Lawn Equipment Storage.
- t. 141 Extractor/Drying Room.
- u. 142 Decon/Infection.
- v. 143 Decon

ITEM 6.

SECTION 10 2813 – TOILET AND BATH ACCESSORIES – ITEM 2.1.B – Add item: 14. Drawing Designation HH – Paper Towel Dispenser: Basis of Design Product: Bobrick B-2974.

ITEM 7.

SECTION 10 7516 – FLAGPOLES – ITEM 2.2.B – Revise to read: Exposed height shall be 35'-0".

ARCHITECTURAL DRAWINGS

ITEM 8.

SHEET A1.1 - FLOOR PLAN - Revisions include:

- A.) ACCESSORIES LEGEND:
 - i. Correct spelling of the word "TOWEL" in description of Mark "A"
 - ii. Add Mark "HH" PAPER TOWEL DISPENSER (SURFACE MOUNTED)
 - iii. Add Mark "JJ" DEDICATION PLAQUE
- B.) DRAWING 2:
 - i. Delete window tag 104 between Dining and Patio, type 104 is not used.
 - ii. Window Types 108 & 109 are in Watch Room 104 and are shown on 6/A1.2. Window Type 108 is similar in this location, and is 3'-10" wide in lieu of 4'-0".
 - Window Type 110 is in the wall between Corridor 103 and Fitness Room 107 next to door 107A.
 - iv. The window between Apparatus Bay 132 and Fitness Room 107 is Window Type 108.

WIGINTON HOOKER JEFFRY, PC ARCHITECTS

500 N. Central Expressway Suite 300 Plano, Texas 75074 ph 972.665.0657 fx 972.665.0656 www.whjarch.com

ITEM 9.

SHEET A1.2 - ENLARGED FLOOR PLANS:

- A.) DRAWING 4 CHANGE Item labeled as "H" shall be "HH". Reference Specification and Accessories Legend modifications above for description and model number.
- B.) DRAWING 5 CHANGE Toilet dispensers in Toilets 127 & 128 should be labeled "F" in lieu of "C".
- C.) DRAWING 6 CHANGE Item labeled as "ZZZ" shall be "C". Move Soap Dispenser "E" to opposite side of sink and add Paper Towel Dispenser "B" in its location.

ITEM 10.

SHEET A2.1 – DOOR & WINDOW SCHED & FRAME TYPES

- A.) CLARIFICATION Window Type Elevations Window Type 104 is not used.
- B.) CLARIFICATION Window Type Elevations Window Type 105 is the elevation of the exterior louver at the Mechanical Mezzanine 200.
- C.) CHANGE Window Type Elevations Window Type 108 shall be storefront, as detailed. Delete note "HM FRAME" under the elevation.

<u>ITEM 11.</u>

SHEET A2.4 – FINISH PLAN AND SCHEDULE – Office 119 shall have PNT-2 accent on wall adjacent to door.

ITEM 12.

SHEET A6.1 – INTERIOR ELEVATIONS

- A.) Drawing 6 Wall visible in this view to be PNT-2 accent.
- B.) Drawings 1, 5, 6, 7 & 8 Painted gyp bd walls shall be PNT-3.

STRUCTURAL DRAWINGS

ITEM 13.

SHEET S2.1 – FOUNDATION PLAN

- A.) CLARIFICATION TAs noted on the pier in the lower right hand corner of the foundation plan, Pier Type 1, Typical Unless Noted Otherwise.
- B.) DRAWING 2, Generator Enclosure Foundation Plan: Add typical pier note reading "18" DIA. PIER "P1" TYP. U.N.O."
- C.) DRAWING 3, Dumpster Enclosure Foundation Plan: Add typical pier note reading "18" DIA. PIER "P1" TYP. U.N.O."

<u>ITEM 14.</u>

SHEET S4.4 – TYPICAL DETAILS – DRAWING 5, Typical Drilled Pier Detail – Revise dimension note reading "ESTIMATED DEPTH TO BEARING STRATUM 17'-0" " to read "FOR BIDDING PURPOSES ESTIMATED DEPTH TO BEARING STRATUM SHALL BE 15'-0" "

END OF ADDENDUM NUMBER ONE

WIGINTON HOOKER JEFFRY, PC ARCHITECTS

500 N. Central Expressway Suite 300 Plano, Texas 75074 ph 972.665.0657 fx 972.665.0656 www.whjarch.com

THIS PAGE INTENTIONALLY BLANK

SECTION 07 5423 THERMOPLASTIC POLYOLEFIN (TPO) ROOFING

PART 1 - GENERAL

1.1 SUMMARY

Section Includes: Adhered thermoplastic polyolefin (TPO) membrane roofing system, Α. associated flashings, and accessories indicated, specified, or required for installation.

1.2 PERFORMANCE REQUIREMENTS

- General Performance: Α.
 - Installed membrane roofing shall withstand specified uplift pressures, thermally induced 1. movement, and exposure to weather without water penetration or failure due to defective manufacture, fabrication, installation, or other defects in construction.
 - Membrane roofing and base flashings shall remain watertight. 2.
- Roofing System Design: Membrane roofing identical to systems successfully tested by a Β. qualified testing and inspecting agency to resist uplift pressure and external fire exposure specified.
- C. FM Approvals Listing: 1.
 - System Quality Standards: Membrane roofing, base flashings, and accessories complying with following requirements:
 - FM Approvals 4450. a.
 - b. FM Approvals 4470.
 - 2. Fire/Windstorm Classification: Class 1-75.
 - 3. Hail Resistance: SH.
- Energy Performance: Initial solar reflectance index not less than 78 when calculated according D. to ASTM E 1980, based on testing identical products by a qualified testing agency.

1.3 SUBMITTALS

- Product Data: Manufacturer's technical literature for each product indicated, specified, or A required.
 - Include manufacturer's written installation application instructions. 1.
 - Include material descriptions, individual components, profiles, accessories, and finishes. 2.
 - Include manufacturer's written instructions for evaluating, preparing, and treating 3. substrate onto which work will be applied.
 - Include manufacturer's standard drawing details recommended for each condition 4. encountered in work.
- Shop Drawings: Detailed plans, sections, and large-scale details of products. Β.
 - Base flashings and membrane terminations. 1.
 - 2. Tapered insulation, including slopes.
 - Orientation of steel roof deck and orientation of membrane roofing and fastening 3. spacings and patterns for mechanically fastened membrane roofing.
 - Insulation fastening patterns for corner, perimeter, and field-of-roof locations. 4.
- C. Samples for Verification: 1.
 - Sheet roofing, of color specified, including T-shaped side and end lap seam.
 - 2. Substrate board.
- Maintenance Data: For inclusion maintenance manual required by appropriate Division 01 D. Section.
 - Include manufacturer's instructions for maintenance of installed work 1.
 - Include methods and frequency recommended for maintaining optimum condition under 2. anticipated use.
 - Include precautions against cleaning products and methods which may be detrimental to 3. finishes and performance.
 - Include name, address, and telephone number of manufacturer's nearest authorized 4. service representative.
- E. Warranty: Copy of specified warranty 14
 - QUALITY ASSURANCE
 - A. Installer Qualifications:

- Experience: Company with not less than 5 years experience in performing specified work similar in design, products, and extent to scope of this Project; with a record of successful in-service performance; and with sufficient production capability, facilities, and trained and skilled personnel.
- Supervision: Maintain a competent supervisor who is at Project during times specified work is in progress, and, who is experienced in installing work similar in design, products, and extent to scope of this Project.
- Manufacturer Qualification: Certified, licensed, approved, or acceptable to manufacturer to install specified work.
- B. Pre-Installation Conference: Before beginning work of this Section, conduct conference at site to comply with requirements of appropriate Division 01 Sections.
 - 1. Required Attendees:
 - a. Owner.
 - b. Architect.
 - c. Contractor, including supervisor.
 - d. Roof decking installer, including supervisor.
 - e. Installers of adjacent work, including supervisors.
 - f. Testing agency personnel, including supervisors.
 - g. Manufacturer's technical representative.
 - 2. Minimum Agenda:
 - a. Review Contract Document requirements.
 - b. Review approved submittals.
 c. Review installation procedures
 - Review installation procedures, including, but not limited to, following:
 - 1) Manufacturer's methods and procedures.
 - 2) Structural loading limitations of roof deck during and after roofing
 - Preparation of substrates to receive membrane roofing.
 - Substrate conditions and finishes for compliance with requirements, including flatness and fastening.
 - 5) Placement and attachment of roof membrane.
 - 6) Base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
 - 7) Roof accessories and roof-mounted equipment.
 - Repair procedures after roofing installation.
 - d. Review forecasted weather conditions and procedures for coping with unfavorable conditions.
 - e. Tour representative areas of required Work, discuss and evaluate for compliance with Contract Documents, including substrate conditions, surface preparations, sequence of installation and other preparatory Work performed by other installers.
 - Reports: Record discussions, including decisions and agreements reached, and prepare report.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
 - B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - C. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.
- 1.6 PROJECT CONDITIONS
- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.
- 1.7 WARRANTY

- A. Manufacturer's Extended Warranty: Furnish executed copy of roofing manufacturer's "No Dollar Limit" warranty agreement signed by authorized representative of thermoplastic polyolefin single-ply membrane roofing manufacturer against defective material and faulty workmanship for 15 years from date of substantial completion.
- B. Installer's Extended Warranty: Furnish executed copy of roofing installer's "edge-to-edge" warranty agreement signed by authorized representative of roofing installer against faulty workmanship for 2 years from date of substantial completion.
- PART 2 PRODUCTS 2.1 MANUFACTI
 - MANUFACTURERS
 - A. Acceptable Manufacturers: Subject to compliance with requirements of Contract Documents, provide product by one of manufacturers named alphabetically below.
 - 1. Carlisle SynTec Incorporated.
 - 2. Dow Roofing Systems.
 - 3. Firestone Building Products Company.
 - 4. GAF Materials Corporation.
 - Johns Manville.
- 2.2 MATERIALS, GENERAL
 - A. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by membrane roofing manufacturer based on testing and field experience.

2.3 TPO MEMBRANE ROOFING

- A. Fabric-Reinforced Thermoplastic Polyolefin Sheet:
 - 1. Product Quality Standard: ASTM D 6878.
 - 2. Description: Internally fabric or scrim reinforced, uniform, flexible TPO sheet.
 - 3. Thickness: 60 mils, nominal.
 - 4. Exposed Face Color: White.
- 2.4 AUXILIARY MEMBRANE ROOFING MATERIALS
 - A. General: Auxiliary membrane roofing materials recommended by roofing system manufacturer for intended use, and compatible with membrane roofing.
 - B. Sheet Flashing: Manufacturer's standard unreinforced thermoplastic polyolefin sheet flashing, 55 mils thick, minimum, of same color as sheet membrane.
 - C. TPO Metal Flashing: Manufacturer's standard TPO coated G90 galvanized sheet metal flashing, minimum 25 gage, of same color as sheet membrane.
 - D. Bonding Adhesive: Manufacturer's standard.
 - E. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 in thick; with anchors.
 - F. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.
 G. Miscellaneous Accessories: Provide pourable coolers.
 - G. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.
- 2.5 ROOF INSULATION
 - A. General: Preformed roof insulation boards manufactured or approved by TPO membrane roofing manufacturer, selected from manufacturer's standard sizes suitable for application, of thicknesses indicated.
 - B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces; thickness as indicated.
 C. Provide preformed saddles, crickets, tapared adapted adapted in the state.
 - C. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.
 - D. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosionresistance provisions in FM Approvals 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.
- 2.6 COVER BOARDS
 - A. Gypsum Sheathing Board:

- Product Quality Standard: ASTM C 1177, Type X. 1.
- Description: Fiberglass mats on each face of gypsum board with non-asphalt coating on 2. one side, 5/8 in thick.
- Basis of Design: Contract Documents are based on manufacturers named below to 3. establish a standard of quality. Other available manufacturers with products having equivalent characteristics may be considered, provided deviations are minor and does not change concept as expressed in Contract Documents as judged by Architect.
 - Manufacturer: Georgia-Pacific Gypsum LLC a. b.
 - Model: Dens-Deck Prime Roof Boards.
- Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-Β. resistance provisions in FM Approvals 4470, designed for fastening substrate board to roof deck, and acceptable to roofing system manufacturer.

PART 3 - EXECUTION

3.1 **EXAMINATION** Α.

- Acceptance of Surfaces and Conditions:
 - Examine substrates to receive thermoplastic polyolefin roofing and associated work will 1. be applied for compliance with requirements and other conditions affecting performance.
 - Proceed only when unsatisfactory conditions have been corrected in a manner complying 2. with Contract Documents.
 - Starting work within a particular area will be construed as acceptance of surface 3. conditions.
- Verifications: Verify following for compliance with requirements and other conditions affecting B. performance of roofing system:
 - Roof openings and penetrations are in place and curbs are set and braced and that roof 1. drain bodies are securely clamped in place.
 - Wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and 2. terminations and that nailers match thicknesses of insulation.
 - Surface plane flatness and fastening of steel roof deck complies with requirements in 3. Division 05 Section "Steel Deck."

3.2 PREPARATION

- Clean substrate of dust, debris, moisture, and other substances detrimental to roofing Α. installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- Β. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- Complete terminations and base flashings and provide temporary seals to prevent water from C. entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- 3.3 INSTALLING INSULATION
 - Coordinate installing membrane roofing system components so insulation is not exposed to Α. precipitation or left exposed at the end of the workday.
 - Comply with membrane roofing system and insulation manufacturer's written instructions for Β. installing roof insulation.
 - Install insulation under area of roofing to achieve required thickness. Install two or more layers C. with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.
 - Trim surface of insulation where necessary at roof drains so completed surface is flush and D. does not restrict flow of water.
 - Install insulation with long joints of insulation in a continuous straight line with end joints E. staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.

WHJ PROJECT NO. 1422

SEPTEMBER 28, 2015

07 5423 - 4

- Mechanically Fastened Insulation: Install each layer of insulation and secure to deck using F. mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.
- 3.4 INSTALLING COVER BOARD
 - Install cover boards over insulation with long joints in continuous straight lines with end joints Α. staggered between rows. Offset joints of insulation below a minimum of 6 inches in each direction. Loosely butt cover boards together.
- Attached cover boards over roof insulation with fasteners. Β. 3.5
 - INSTALLING ADHERED MEMBRANE ROOFING
 - Adhere membrane roofing over area to receive roofing and install according to membrane Α. roofing system manufacturer's written instructions.
 - Start installation of membrane roofing in presence of membrane roofing system manufacturer's Β. technical personnel.
 - Accurately align membrane roofing and maintain uniform side and end laps of minimum C. dimensions required by manufacturer. Stagger end laps.
 - Apply bonding adhesive to substrate and underside of membrane roofing at rate required by D. manufacturer and allow to partially dry before installing membrane roofing. Do not apply to splice area of membrane roofing.
 - In addition to adhering, mechanically fasten membrane roofing securely at terminations, E. penetrations, and perimeter of roofing.
 - Apply membrane roofing with side laps shingled with slope of roof deck where possible. F. G
 - Clean seam areas, overlap membrane roofing, and hot-air weld side and end laps of membrane roofing and sheet flashings according to manufacturer's written instructions to ensure a watertight seam installation.
 - Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut 1. edges of sheet membrane. 2.
 - Verify field strength of seams a minimum of twice daily and repair seam sample areas.
 - Repair tears, voids, and lapped seams in roofing that does not comply with requirements. 3.
 - Spread sealant bed over deck drain flange at roof drains and securely seal membrane roofing in H. place with clamping ring.
- 3.6 INSTALLING BASE FLASHING
 - Install sheet flashings and preformed flashing accessories and adhere to substrates according Α. to membrane roofing system manufacturer's written instructions. Β.
 - Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.
 - Flash penetrations and field-formed inside and outside corners with cured or uncured sheet C. flashing.
 - Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side D. and end laps to ensure a watertight seam installation.
 - Terminate and seal top of sheet flashings and mechanically anchor to substrate through Ε. termination bars.

3.7 PROTECTION

Protect membrane roofing system from damage and wear during remainder of construction Α. period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner

END OF SECTION

07 5423 - 5

SEPTEMBER 28, 2015

THIS PAGE INTENTIONALLY BLANK

SEPTEMBER 28, 2015