

CONSTRUCTION OF VETERANS MEMORIAL MONUMENT (REBID)

24-CG00852/EK

County of Hernando
15470 Flight Path Drive
Brooksville, FL 34604



County of Hernando
Construction of Veterans Memorial Monument (Rebid)

I.	SOLICITATION
II.	INTRODUCTION.....
III.	AWARD
IV.	DEFINITIONS AND SOLICITATION INSTRUCTIONS.....
V.	GENERAL CONDITIONS.....
VI.	SPECIAL CONDITIONS.....
VII.	SCOPE AND SPECIFICATIONS.....
VIII.	General State of Florida Required Terms
IX.	Pricing Proposal
X.	Vendor Questionnaire.....

Attachments:

- A - Sample_Construction_Contract 24-CG00852
- B - Construction Documents required after Award
- C - Hernando Veteran Memorial Park - ARCH
- D - Hernando Veteran Memorial Park - ELEC
- E - Hernando Veteran Memorial Park - STR
- F - 22087 Veterans Memorial Park-Civil-SS
- G - Veterans Memorial 100% Spec Revised

1. SOLICITATION

ISSUED BY:

BOARD OF COUNTY COMMISSIONERS

HERNANDO COUNTY, FLORIDA

Elizabeth Narverud, Chair

Brian Hawkins, Vice Chair

Jerry Campbell, Second Vice Chair

John Allocco

Steve Champion

SUBMIT BID OFFER TO:

HERNANDO COUNTY

PROCUREMENT DEPARTMENT

via Hernando County's [eProcurement Portal](#)

Carla Rossiter-Smith

Chief Procurement Officer

SEALED OFFERS, FOR FURNISHING THE SERVICES, SUPPLIES OR EQUIPMENT DESCRIBED HEREIN WILL BE RECEIVED BY THE OFFICE OF PROCUREMENT, VIA THE COUNTY'S [eProcurement Portal](#) UNTIL 10:00 a.m., LOCAL TIME ON Monday, September 23, 2024. NO BID OFFERS WILL BE ACCEPTED AFTER THE ABOVE STIPULATED DATE AND TIME. THIS IS AN ADVERTISED SOLICITATION AND THE RESPONDING BIDDERS WILL BE PUBLICLY READ IN THE PROCUREMENT CONFERENCE ROOM AT 10:00 a.m. ON Monday, September 23, 2024. PURSUANT TO FS 119.071 (current version) SEALED BIDS, PROPOSALS, OR REPLIES RECEIVED BY AN AGENCY PURSUANT TO A COMPETITIVE SOLICITATION ARE EXEMPT FROM FINAL INSPECTION UNTIL SUCH TIME AS THE AGENCY PROVIDES NOTICE OF AN INTENDED DECISION OR UNTIL THIRTY (30) DAYS AFTER OPENING THE BIDS, PROPOSALS, OR FINAL REPLIES, WHICHEVER IS EARLIER.

2. INTRODUCTION

2.1. ADVERTISEMENT OF BID

INVITATION TO BID

NOTICE IS HEREBY GIVEN that the Board of County Commissions of Hernando County, Florida, is accepting Bids for:

CONSTRUCTION CONTRACT ITB NO. 24-CG00852/EK

FOR

Construction of Veterans Memorial Monument (Rebid)

Hernando County Board of County Commissioners is soliciting licensed professionals in General Contractors, Underground Utility Contractors, Electrical Contractors that are active in construction activities to erect a Veterans Memorial Monument in Veterans Memorial Park in Spring Hill, Florida.

Offers for furnishing the above will be received and accepted up to 10:00 am, Monday, September 23, 2024, via Hernando County Procurement Department's [eProcurement Portal](#). Only electronic submittals through the eProcurement Portal will be accepted by the County.

The Board of County Commissioners of Hernando County, Florida reserves the right to accept or reject any or all bids and waive informalities and minor irregularities in offers received in accordance with the bid documents and the Hernando County Procurement Ordinance.

Interested firms may secure the bid documents and plans and drawings and all other pertinent information by visiting the County's eProcurement Portal. For additional project information, please visit the Hernando County Board of County Commissioners Procurement Department at www.hernandocounty.us, or by submitting a question via the Q&A Tab in the County's [eProcurement Portal](#).

Bid offers shall be accompanied by either a Bid Bond, Certified Check, Cashier's Check, or Official Bank Check in the dollar amount representing not less than five percent (5%) of the total amount bid as a guarantee to enter into a contract and furnish a contract performance and payment bond in the amount of one hundred percent (100%) of the total bid price within fifteen (15) calendar days from the date of notification of the award.

Ex parte Communication: Please note that to ensure the proper and fair evaluation of a submittal, the County prohibits ex parte communication (i.e., unsolicited) initiated by the Respondent to the County official or employee evaluating or considering the submittals prior to the time a decision has been made. Communication between Respondent and the County will be initiated by the appropriate County official or employee in order to obtain information or clarification needed to develop a proper and accurate evaluation of the submittal. Ex parte communication may be grounds for disqualifying the offending Respondent from consideration or award of the solicitation or any future solicitation.

Procurement Department will post addenda on [eProcurement Portal](#) to all questions in accordance with the Solicitation Instructions. It is the responsibility of prospective Bidders to visit the County's portal to ensure that they are aware of all Addenda issued relative to this Solicitation.

Pursuant to Florida Statutes section 119.071 sealed bids, proposals or replies received by an agency pursuant to a competitive Solicitation are exempt from inspection until such time as the agency provides notice of an intended decision or until thirty (30) days after opening the bids, proposals, or final replies whichever is earlier.

BOARD OF COUNTY COMMISSIONERS

HERNANDO COUNTY

CARLA ROSSITER-SMITH

CHIEF PROCUREMENT OFFICER, HERNANDO COUNTY

NOTICE TO BIDDERS

To ensure that your bid is responsive, you are urged to request clarification or guidance on any issues involving this Solicitation before submission of your response. Your method of contact for this solicitation is the Q&A Tab in the County's [eProcurement Portal](#).

2.2. [NON-MANDATORY Pre-Bid Conference](#)

NON-MANDATORY Pre-Bid Conference will be held

Wednesday, August 28, 2024,

10:00 am,

at the

Hernando County Administration Building 15470 Flight Path Dr. Brooksville, FL 34604. Non - Mandatory Site Visit will be held immediately after the Pre-Bid Conference at Veterans Memorial Park..

Representatives of Owner will be present to discuss the project. Bidders are recommended to attend and participate in the conference. THIS CONFERENCE WILL BE HELD ONLY ONCE.

3. AWARD

UPON AWARD, PLEASE SUBMIT INVOICES TO:

Hernando County
Parks and Recreation
16161 Flight Path Dr.
Brooksville, FL 34604

4. DEFINITIONS AND SOLICITATION INSTRUCTIONS

4.1. DEFINITION OF TERMS

DEFINITION OF TERMS Where the following terms, or their pronouns, occur herein, the intent and meaning shall be as follows:

- A. **ADDENDA:** Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding requirements or the proposed Contract Documents.
- B. **AGREEMENT:** The written instrument which is evidence of the Agreement between Owner and Vendor/Contractor covering the work.
- C. **APPLICATION FOR PAYMENT:** The form acceptable to Engineer which is to be used by Vendor/Contractor during the course of the work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- D. **BID:** The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the work to be performed.
- E. **BID BOND/GUARANTEE:** The certified check or surety bond furnished by the Bidder with his bid as evidence of good faith.
- F. **BID DOCUMENTS:** The bidding requirements and the proposed Contract Documents, including all addenda.
- G. **BIDDER:** The term "Bidder" used herein refers to the dealer/manufacturer or business organization submitting a bid to the County in response to this Solicitation.
- H. **CHANGE ORDER:** A document recommended by Engineer which is signed by Vendor/Contractor and Owner and Agency and authorizes an addition, deletion, or revision in the work or an adjustment in the contract price or the contract times, issued on or after the Effective Date of the Agreement.
- I. **CONSTRUCTION ADMINISTRATOR:** Keith Larson, shall act as the "Construction Administrator" for the work relative to the acceptance and approval of Applications for Payment pursuant to the provisions of the Florida Prompt Payment Act, Part VII, Ch. 218.735, F.S (current version).
- J. **CONTRACT:** The Agreement executed by the Owner and Vendor/Contractor for the performance of work and the other Contract Documents (plans, specifications, notice to Bidders, proposal, surety bonds, addenda and other incorporated or referenced documents) whether attached thereto or not.
- K. **CONTRACT PRICE:** The moneys payable by Owner to Vendor/Contractor for completion of the work in accordance with the Contract Documents as stated in the Agreement.

- L. **CONTRACT TIMES:** The number of days within which, or the dates by which, the work is to be substantially completed and ready for final payment as set forth in the Agreement. The contract times will commence on the date indicated in the Notice to Proceed.
- M. **CONTRACT WORK:** Any and all obligations, duties and responsibilities necessary to the successful completion of the project assigned to or undertaken by the Vendor/Contractor under the Contract Documents, including the furnishing of all labor, materials, equipment, and other incidentals.
- N. **CONTRACTOR:** The individual or entity with whom the County has entered into the Agreement.
- O. **COUNTY:** The Board of County Commissioners, Hernando County, or its duly authorized representative.
- P. **ENGINEER:** Under Contract to the Owner, the Engineer in the administration of this Contract and any references to the Engineer or the Professional shall be deemed to mean Coastal Engineer Associates, Tina Malmberg, P.E., for the plans and specifications referenced in these contract documents. Engineer may delegate or designate certain duties to be performed by other qualified professionals.
- Q. **F.S.:** Florida Statutes; version in effect on the effective date of the Contract.
- R. **FDEP:** Florida Department of Environmental Protection
- S. **FDOT:** Florida Department of Transportation.
- T. **FIELD ORDER:** A written order issued by Engineer which requires minor changes in the work but which does not involve a change in the contract price or the contract times.
- U. **ISSUING OFFICE:** The office from which the bid documents are to be issued and where the bidding procedures are to be administered. Specifically - Hernando County, Procurement Department, 15470 Flight Path Drive, Brooksville, Florida 34604.
- V. **MUTCD:** Manual on Uniform Traffic Control Devices <https://mutcd.fhwa.dot.gov>
- W. **NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:** NPDES
- X. **NOTICE-WRITTEN:** Notice shall be served upon the Vendor/Contractor either personally or by leaving the said notice at his residence or with his Agent in charge of the work, or addressed to the Vendor/Contractor at the residence or place of business given in the bid and deposited in a postpaid wrapper in any post box regularly maintained by the United States Post Office.
- Y. **MOT:** Maintenance of Traffic.
- Z. **NOTICE OF AWARD:** The written notice by Owner to the successful Bidder stating that upon timely compliance by the successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

AA. **NOI:** Notice of Intent to Award.

BB. **NOTICE TO PROCEED:** A written notice given by Owner to Vendor/Contractor fixing the date on which the contract times will commence to run and on which Vendor/Contractor shall start to perform the work under the Contract Documents. A Notice to Proceed may be given at any time after the effective date of the Agreement.

CC. **OCCUPATIONAL SAFETY AND HEALTH ACT:** OSHA.

DD. **OWNER:** Hernando County Board of County Commissioners (County).

EE. **OWNER DESIGNATED REPRESENTATIVE:** The Owner Designated Representative will act as the Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to the Owner Designated Representative in the Contract Documents in connection with the completion of the work in accordance with their respective scope of work and the contract documents. Keith Larson, shall act as the Owner Designated Representative for the work relative to this contract.

FF. **PAYMENT AND PERFORMANCE BONDS:** The approved forms of security furnished by the Vendor/Contractor and his surety as a guaranty on the part of the Vendor/Contractor to execute the work in accordance with the terms of the contract and to pay all obligations associated with the project.

GG. **PROJECT BUDGET/ESTIMATE:** The project budget and/or estimate is the amount of funds the county has projected for this solicitation. The County estimates this solicitation to fall within the following dollar Threshold C: \$250,000.01- \$500,000. **Note: This is only an estimate and should not be the basis to determine the Vendor/Contractor bid submission amount.**

1. Threshold A: less than \$100,000
2. Threshold B: \$100,000.01- \$250,000
3. Threshold C: \$250,000.01- \$500,000
4. Threshold D: \$500,000.01 - \$1,000,000
5. Threshold E: \$1,000,000.01 - \$1,500,000
6. Threshold F: \$1,500,000.01- \$2,500,000
7. Threshold G: \$2,500,000.01- \$5,000,000
8. Threshold H: greater than \$5,000,000.01

HH. **PROFESSIONAL:** The professional independent **Architectural/Engineering firm** designated to be the Engineer of Record (per Florida Administrative Code). Any references to the Engineer or the Professional shall be deemed to mean Coastal Engineer Associates, Tina Malmberg, P.E., and its designee for the plans and specifications referenced in these Contract Documents.

- II. **PROJECT MANAGER:** The duly authorized representative of the County during the construction period. The Project Manager of record for this Solicitation is: Keith Larson.
- JJ. **SCOPE OF WORK:** All materials, labor and equipment in order to accomplish the Project, as described in the specifications and construction plans showing the proposed improvements. The Vendor/Contractor shall accomplish the work in a manner providing for the safety of their equipment and workers and for the safety of the general public.
- KK. **SHOP DRAWINGS:** All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Vendor/Contractor, a subcontractor, a manufacturer, supplier or distributor and which illustrate the equipment, material and/or some portion of the work.
- LL. **SITE:** Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Vendor/Contractor. The site or location for the work to be performed in this Contract will be 12254 Spring Hill Dr, Spring Hill, FL 34609.
- MM. **SUBCONTRACTOR:** Any person, firm or corporation other than employees of the Vendor/Contractor who or which contracts with the Vendor/Contractor to furnish, or actually furnishes labor, materials and/or equipment for the performance of a part of the work on the project.
- NN. **SURETY:** Any person, firm or corporation which is bound by Public Construction Bond and Payment Bond with and for the Vendor/Contractor and which engages to be responsible for his acceptable performance of the work and for payment of all debts pertaining thereto.
- OO. **VENDOR/CONTRACTOR:** The individual or entity with whom the County has entered into the Agreement.
- PP. **WORK:** The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

4.2. AVAILABILITY OF BIDDING DOCUMENTS:

Interested firms may secure bid documents, plans, drawings, site locations, and other pertinent information by visiting Hernando County's [eProcurement Portal](#). For additional information please contact the Hernando County Board of County Commissioners, Procurement Department via the County's [eProcurement Portal](#) Q&A Tab.

4.3. PREPARATION OF BID

To ensure acceptance of your bid, please follow these instructions:

- A. Interested firms are required to register via the County's [eProcurement Portal](#) . Once registered, to submit a response please click on the "DRAFT RESPONSE" button and provide an answer to all of the prompts/questions. You must respond to all required questions, and, if any, acknowledge addenda so that your response will be considered complete by the County. Bidders submitting more than one (1) bid with different pricing shall cause the Bidder to be rejected. All bids are subject to the conditions specified herein. Those, which do not comply with these conditions, may be subject to rejection.
- B. Submit Bids via the Hernando County's [eProcurement Portal](#). The responsibility for delivering the bid to the County on or before the stated time and date will be solely and strictly the responsibility of the Bidder.
 1. Bids will be rejected unless submitted electronically via the County's eProcurement Portal along with all required bid line items. All bid forms enclosed are required to be completed and submitted using the instructions listed herein.
 2. The County will not honor any explanation or change in the bid documents unless a written addendum has been issued.
 3. The County reserves the right to reject any and all bids and to waive any informalities related thereto.
 4. All bids must be firm for a period of one hundred twenty (120) days after the time set for opening bids. Upon award, prices quoted will be in effect for the term of the contract.
 5. No material, labor, or facilities will be furnished by the County unless specifically stated.
 6. Blank spaces in the bid must be properly filled in and the phraseology of the bid must not be changed. Additions must not be made to items mentioned therein and any unauthorized conditions, limiting any provision, attached to a bid shall render irregular and may cause its rejection.
 7. Communications: All technical, scope, and/or project related questions shall be submitted through the project [Q&A Tab](#) before the deadline and according to these specifications herein. Any and all other bidding communications shall only be the County using the contact information herein. Companies bidding on this project shall not communicate with any other County Staff members or they risk being disqualified.

4.4. BID OPENING

Bids received after the date and time disclosed in this Solicitation will not be accepted. Bids will be opened immediately after this date and time, and will remain binding upon the Bidder for a period of one hundred twenty (120) days thereafter. Pursuant to Florida Statutes 119.071 (current version) sealed

bids, proposals, or replies received by an agency pursuant to a competitive solicitation are exempt from inspection until such time as the agency provides notice of an intended decision or until thirty (30) days after opening the bids, proposals, or final replies whichever is earlier.

4.5. SITE VISIT

Bidder may request access to the site to conduct examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a bid by contacting the Procurement Department via the County's [eProcurement Portal Q&A tab](#), if no mandatory site visit is scheduled. All questions after the site visit shall be submitted to the Procurement Department in writing via the County's [eProcurement Portal Q&A tab](#). The Procurement Department will coordinate a site visit between the Bidder and the Project Manager for this project. Bidder agrees to restore the site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable laws and regulations relative to excavation and utility locates while accessing the site.

4.6. BIDDER'S RESPONSIBILITIES

It is the responsibility of each Bidder before submitting a bid to:

- A. Read and completely understand the requirements and the specifications of the items bid.
- B. Use complete sets of bid documents in preparing bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of bid documents.
- C. Examine and carefully study the bid documents, other related data identified in the bid documents, and any Addenda.
- D. Make all investigations necessary to thoroughly inform themselves regarding all drawings, specifications, delivery requirements, performance requirements, site locations, and all solicitation instruction to satisfy themselves of conditions affecting submission of their bid and the terms and cost of performing the contract. No pleas of ignorance by the Bidder of conditions that exist or may hereafter exist as a result of failure or omission on the part of the Bidder to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the Contract Documents, will be accepted as a basis of varying the requirements of the County or the compensation of the Bidder. Bidder agrees that submittal of a bid for the work is prima facie evidence they have conducted such examinations.
- E. Request access to the site to become familiar with general, local, and site conditions that may affect cost, progress, and performance of the work.
- F. Become familiar with all Federal, State, and local laws and regulations that may affect cost, progress, or performance of the work.
- G. Obtain and carefully study all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site which may affect cost, progress, or

performance of the work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by the Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the bid documents, and safety precautions and programs incident thereto.

- H. Agree at the time of submitting its bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its bid for performance of the work at the price(s) bid and within the times and in accordance with the other terms and conditions of the bid documents.
- I. Become aware of the general nature of the work to be performed by Owner and others at the site that relates to the work as indicated in the bid documents.
- J. Correlate the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the bid documents, and all additional examinations, investigations, explorations, tests, studies, and data with the bid documents.
- K. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the bid documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder.
- L. Determine that the bid documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the work.
- M. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of bid security. This bid will remain subject to acceptance for one hundred twenty (120) days after the bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- N. Bidder has enclosed a Certified check, Cashier's Check or Bid Bond in the amount of not less than the five percent (5%) of the Total Base Bid Amount payable to the Hernando County Board of County Commissioners as a guarantee for the purpose set out in the Instructions to Bidders.

4.7. QUESTIONS REGARDING SPECIFICATIONS OR BIDDING PROCESS:

To ensure fair consideration for all Bidders, the County prohibits communication to or with any department, division or employee during the bid process, except as provided below:

- A. All questions relative to interpretation of the specifications or the bid process shall be addressed in writing via Hernando [County's eProcurement Portal Q&A Tab](#), prior to the date set for submittal and opening of the bids.
- B. Any interpretation or clarification made to prospective Bidders will be expressed in the form of an addendum which, if issued, will be posted on the County's [eProcurement Portal Q&A tab](#):. Oral answers will not be authoritative.

- C. It will be the responsibility of the Bidder to visit <https://secure.procurenow.com/portal/hernandocounty> to insure they are aware of all addenda issued for this solicitation.
- D. Questions will only be accepted through the Tuesday, September 3, 2024
- E. All addenda must be acknowledged via the County's eProcurement Portal. Failure of any Bidder to acknowledge any addenda may be found non-responsive and subject to rejection.

4.8. COMMUNICATION

There shall be no communication between the Vendor/Contractor, their employees or subcontractors and County employees and elected officials (hereafter referred to as "County Representative"), except through the Procurement Department. Any attempt to communicate with any County Representative outside the Procurement Department will be considered a violation of the Procurement Policy and may result in the rejection of your bid.

4.9. WITHDRAWAL OF BIDS:

Bids may be withdrawn prior to Monday, September 23, 2024, 10:00 am via the County's [eProcurement Portal](#). Negligence on the part of the Bidder in preparing the bid confers no right for the withdrawal of the Bid after it has been opened. Faxed or electronically mailed withdrawals will not be recognized. No Bidder may withdraw their bid after the scheduled opening time for receipt of bids.

4.10. BID PROTESTS

Any Bidder who protests the Bid Specifications or Award or Intent to Award, must file with the County a notice of protest and formal written protest in compliance with the Hernando County Procurement Manual, Section 22, which can be found at <http://www.hernandocounty.us/home/showpublisheddocument/9013>. Failure to timely file such documents will constitute a waiver of proceedings. Failure to file a protest within the time prescribed by, or failure to post the bond or other security in strict accordance with, the Hernando County Procurement Manual, Section 22, shall constitute a waiver of protest proceedings.

4.11. QUALIFICATION OF BIDDERS

- A. The Vendor/Contractor shall have previous experience in the type of construction work specified herein, and experience in the installation of the materials to be provided for the project specified herein.
- B. The Vendor/Contractor and/or subcontractors shall be an appropriately licensed Contractor in the State of Florida at the time of the bid and must have successfully completed a minimum of two (2) projects of similar size and complexity in the past seven (7) years.
- C. The Vendor/Contractor's Project Superintendent must have a minimum of three (3) years' experience as Project Superintendent and must have directed at least two (2) previous projects of similar size and complexity.

1. Overview of construction experience, including a list of projects successfully completed and indicating Owner, location, contract value and completion date.
2. Documentation of two (2) projects, similar in scope and complexity to this project, which have been successfully completed by the Bidder within the past seven (7) years.
3. Identification of firms comprising the Vendor/Contractor's team.
4. Resumes of the Vendor/Contractor's Project Superintendent documenting the experience required for these individuals.

D. **Failure to submit this information may be basis for rejection of the bid.**

4.12. QUALIFICATION OF SUBCONTRACTORS, MATERIAL VENDOR, SUPPLIERS, AND OTHERS:

- A. The Vendor/Contractor will, within ten (10) days after execution of the Agreement, submit to the County through the Owner Designated Representative for acceptance a list of the names of subcontractors and such other persons and organizations proposed for those portions of the work as to which the identity of the subcontractors and other persons and organizations must be submitted as specified in the Contract Documents. The Owner Designated Representative will notify the Vendor/Contractor in writing if the Owner Designated Representative, after due investigation, has reasonable objection to any subcontractor, person or organization on such list. The failure of the Owner Designated Representative to make objections to any subcontractor, person or organization on the list shall constitute an acceptance of such subcontractor, person or organization. Acceptance of any such subcontractor, person or organization shall not constitute a waiver of any right of the County to reject defective work, material or equipment, or work material or equipment not in conformance with the requirements of the Contract Documents.
- B. If the apparent successful Bidder declines to make any such substitution, County may award the Contract to the next lowest responsive, responsible Bidder that proposes to use acceptable subcontractors, suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the bid security of any Bidder. Any subcontractor, supplier, individual, or entity so listed and against which the County and Owner Designated Representative makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to the County and Owner Designated Representative subject to revocation of such acceptance after the effective date of the Agreement.
- C. Vendor/Contractor shall not be required to employ any subcontractor, supplier, individual, or entity against whom Vendor/Contractor has reasonable objection.
- D. The Vendor/Contractor agrees that he is as fully responsible to the County for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. Nothing contained in

the Contract Documents shall create any contractual relation between any subcontractor and the County.

4.13. EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE:

A. Subsurface and Physical Conditions:

1. The Technical Specifications will identify:

- a. Any reports of explorations and tests of subsurface conditions at or contiguous to the site that Engineer has used in preparing the bid documents.
- b. Any drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the site (except underground facilities) that Engineer has used in preparing the bid documents.

2. Copies of any reports and drawings referenced in the solicitation documents will be made available by Owner to any Bidder via the County's [eProcurement Portal](#). Bidder is responsible for any interpretation or conclusion Bidder draws from any technical data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

B. Underground Facilities:

1. Information and data shown or indicated in the bid documents with respect to existing underground facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such underground facilities, including Owner, or others.

C. Hazardous Environmental Condition:

1. The Technical Specifications identify any reports and drawings relating to a hazardous environmental condition identified at the site that Engineer has used in preparing the bid documents.

4.14. BID GUARANTEE/BID BOND:

- A. Each bid must be accompanied by a Certified Check, Cashier's Check, Official Bank Check or Bid Bond payable to the Owner for an amount equal to at least five percent (5%) of the amount of bid, as guarantee that the Bidder will within fifteen (15) consecutive calendar days after award, enter into a written contract with the County for the performance of the work as awarded.

- B. **Any submitted Bid Bond must be submitted to the County.**

- C. Any submitted checks shall be drawn on a solvent bank or trust company to the order the Hernando County Board of County Commissioners and shall have all necessary documentary revenue stamps attached, if required by law.
- D. Surety of Bid Bonds shall be a duly authorized surety company authorized to do business in the State of Florida; all such bonds being issued or countersigned by a local producing agent who is a resident of the State of Florida and satisfactory evidence of the authority of the person or persons executing such bond being submitted with the bond. Personal checks are not acceptable to Hernando County.
- E. The County will, within ten (10) days after the Notice of Intent to Award, return the deposit of all Bidders except those posted by the three (3) lowest acceptable Bidders, whose deposit will be returned upon the final award and execution of the Contract between the successful Bidder and County, and after a satisfactory Performance Bond and Payment Bond have been executed.
- F. Attorneys-in-fact who sign bonds or other surety instruments must attach with each bond or surety instrument a certified and effectively dated copy of their power of attorney.
- G. If the successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within fifteen (15) days after the Notice of Award, Owner may withdraw the Notice of Award and the Bid Bond of that Bidder will be forfeited. The Bid Bond of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven (7) days after the effective date of the Agreement or sixty-one (61) days after the bid opening, whereupon Bid Bonds furnished by such Bidders will be returned.
- H. Bid Bonds of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within thirty (30) days after the Bid opening.
- I. Bidders desiring their original Bid Bonds returned shall enclose a self-addressed stamped envelope with their bids marked "Bid Bond" in the lower left corner.

4.15. PERFORMANCE AND PAYMENT BOND:

- A. Performance and Payment Bond issued in a sum equal to one hundred percent (100%) of the total awarded contract amount by a surety company considered satisfactory by the County and otherwise authorized to transact business in the State of Florida will be required from the successful Bidder for purposes of insuring the faithful performance of the obligations imposed by the resulting contract and for purposes of protecting the County from lawsuits for non-payment of debts as might be incurred during the successful Bidder's performance under such contract. When applicable, the performance and payment bond form will be included in the contract documents and said form must be properly executed by the surety company and

successful Bidder within fifteen (15) calendar days after notification by the County of the County's intent to award the contract.

- B. If, within fifteen (15) calendar days after notification by the County of the County's intent to award a contract, the successful Bidder refuses or otherwise neglects to execute the required written contract or fails to furnish the required performance and payment bond, the amount of the Bidder's bid security (check or Bid Bond) shall be forfeited and the same shall be retained by the County. No plea of mistake in the Bid or misunderstanding of the conditions of forfeiture shall be available to the Bidder for the recovery of his bid security or as a defense to any action based upon the neglect or refusal to execute a written contract.
- C. The surety company must provide an Increase Rider to the Performance and Payment Bond or execute the Consent of Surety and Increase of Penalty form provided by the County if the contract is increased by change order.

5. GENERAL CONDITIONS

5.1. CONTRACT DOCUMENTS

The following constitute the Contract Documents (Title, Subtitles, Headings, Running Headlines, Table of Contents, and Indexes are used merely for convenience purposes):

Solicitation

Introduction

Definitions and Solicitation Instructions

General Conditions

Special Conditions

Scope and Specifications

General State of Florida Required Terms

Contract executed by the parties

Fully executed Solicitation-Offer-Award

Attachments

Exhibit A--General Requirements and Technical Specifications

Exhibit B--Plans/Drawings

- A. All addenda issued by the County prior to the receipt of bids and all supplementary drawings issued after award of the Contract become part of the Contract Document.
- B. Amending and Supplementing Contract Documents:
 1. The Contract Documents may be amended to provide for additions, deletions, and revisions in the work or to modify the terms and conditions thereof by Change Order.
 2. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the work may be authorized, by one (1) or more of the following ways:
 - a. A field order;
 - b. Engineer's approval of a shop drawing or sample; or
 - c. Engineer's written interpretation or clarification per the provisions described in the Contract Documents.
 3. In resolving such conflicts, errors and discrepancies, the documents shall be given preference in the following order: Agreement, Specifications, Drawings, Solicitation Instructions. Within the specifications the order of preference shall be as follows: Addenda,

- General Conditions, Technical Specifications. Figure dimensions on drawings shall govern over scale dimensions, and the detailed drawings shall govern over general drawings. Any work that may reasonably be inferred from the specifications or drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work materials or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. In case of conflict the more stringent requirements shall take precedence and govern.
4. The Vendor/Contractor shall take no advantage of any error or omission in the plans or of any discrepancy between the plans and specifications, and the Engineer shall make such interpretation as may be deemed necessary for the fulfillment of the intent of the plans and specifications as construed by him and his decision shall be final.
- C. All provisions required by law to be inserted in this Contract, whether actually inserted or not.
 - D. Exhibits to this Agreement (as follows):
 1. Vendor/Contractor's Pricing Proposal (Bid).
 2. Documentation submitted by Vendor/Contractor after the Notice of Award:
 - a. Insurance Certificate.
 - b. Payment and Performance Bond.
 3. The following which may be delivered or issued on or after the effective date of the Agreement and are not attached hereto:
 - a. Notice to Proceed.
 - b. Change Order(s).
 - E. The documents listed in this paragraph are attached to the Agreement (except as expressly noted otherwise).
 - F. There are no Contract Documents other than those listed in this paragraph.
 - G. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract Documents.

5.2. BID PRICE/SUBMITTAL REQUIREMENTS:

- A. The prices bid shall remain firm during the period of the Contract. The prices bid shall be inclusive of all labor, equipment, and materials as specified within this Solicitation. The price bid constitutes the total compensation payable to the Vendor/Contractor for performing the work.

- B. Unless otherwise stated, the prices bid shall include all costs of packing, transporting, delivery, and services to the designated point within Hernando County.
- C. The Bidder hereby certifies that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, services, or equipment and is in all respects fair and without collusion or fraud. Further, the Bidder hereby agrees to abide by all terms and conditions of this bid and certifies that the person executing the Bid Form is authorized to sign this bid for the Bidder.
- D. Bidders shall submit a lump sum bid based on unit price line item components as indicated on the Bid Form, and include a separate price for each alternate described in the bid documents and provided for in the Bid Form. The sum of each unit price line item will be the Total Base Bid. The price for each alternate will be the amount added to or deducted from the Total Base Bid if the County selects the alternate.
- E. Discrepancies between the multiplication of units of work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- F. Bidder must submit the Solicitation-Offer-Award Cover Sheet, Bid Form and all Required Forms and Certifications. Failure to submit these forms may render the bid non-responsive.

5.3. HOURS

All work is to be performed during regular working hours, 7:00am - 5:30pm; Monday through Friday, except County holidays. The County may, on certain occasions, approve work outside of these times. Such exception(s) must be approved in writing by the County at least one (1) day in advance. Vendor/Contractor should provide five (5) days' notice when scheduling a County employee to be available outside the normal work hours.

5.4. REJECTION OF BID:

The County reserves the right to reject any and all bids. Bids which are incomplete, unbalanced, conditional, obscure or which contain additions not required, or irregularities of any kind, or which do not comply with every aspect of this Solicitation, may be rejected at the option of the County. A Bidder shall not be qualified to bid when an investigation by the Chief Procurement Officer finds the Bidder delinquent with a previously awarded contract or in litigation with Hernando County on a previously awarded contract.

5.5. MINOR INFORMALITIES AND IRREGULARITIES:

Hernando County has the right to waive minor defects or variations of a bid from the exact requirements of the specifications that do not affect price, quality, quantity, delivery, or performance time of the services being procured. If insufficient information is submitted by a Bidder with the bid for Hernando County to properly evaluate the bid, Hernando County has the right to require such additional information as it may deem necessary after the time set for receipt of bids, provided that the information requested does not change the price, quality, quantity, delivery or performance time of the services being procured. The Board of County Commissioners reserves the right to reject any or all bids in whole or in part; to award by any item, group(s) of items or in the aggregate whichever is most advantageous to the County.

5.6. NON-EXCLUSIVE CONTRACT:

Award of a contract resulting from this bid imposes no obligation on the County to utilize the Vendor/Contractor for all work of this type, which may develop during the contract period. This is not an exclusive contract. The County specifically reserves the right to contract with another company for similar work if it deems such action to be in the County's best interest.

5.7. NON-PERFORMANCE:

- A. Time is of the essence in this Contract and failure to deliver the services specified within the time period required shall be considered a default.
- B. In case of default, the County may procure the services from other sources and hold the Vendor/Contractor responsible for all costs occasioned thereby and may immediately cancel the Contract.

5.8. ASSIGNMENT

The successful Bidder is required to perform this Contract and may not assign, transfer, convey, sublet or otherwise dispose of any award or any or all of its rights, title, or interest therein, or the resulting Contractual Agreement in whole or in part without prior written authorization given at the sole discretion of Hernando County.

5.9. PUBLIC ENTITY CRIMES:

Any person submitting a bid or proposal in response to this invitation certifies that they are aware of, and in compliance with, all requirements under Section 287.133, Florida Statutes, on Public Entity Crimes. Bidders must provide a response to the section titled VENDOR QUESTIONNAIRE, Sworn Statement to Public Entity Crimes included in these bid documents.

5.10. LICENSES AND PERMITS:

- A. Prior to furnishing the requested product(s) or service(s), it shall be the responsibility of the awarded Vendor/Contractor to obtain, at no additional cost to Hernando County, any and all

licenses and permits required to complete this contractual service, unless otherwise stated in the Contract Documents. These licenses and permits shall be readily available for review by the Chief Procurement Officer or his/her designee. Failure to have and/or furnish the required licenses or permits may be cause for rejection.

- B. The Vendor/Contractor is hereby notified that a list of fees for construction related County certified licenses and County issued permits can be located at:
<https://www.hernandocountygis-fl.us/BldgDept/General>.
- C. The following permits are necessary for prosecution of the work. It is the Vendor/Contractor's responsibility to determine whether additional permits are required. Vendor/Contractor and/or subcontractors shall obtain and pay for required permits. Notice to Proceed will not be issued until the permits are provided to the Project Manager.
 - 1. NPDES-NOI Permit - The NPDES-FDEP legislation and permit information can be found on this site: <http://www.dep.state.fl.us/water/stormwater/npdes/construction1.htm>
 - 2. Building Permit.
- D. Vendor/Contractor and/or subcontractors shall be responsible for complying with all State of Florida and Hernando County license requirements prior to bidding on County projects and shall submit proof of licenses with the Bid. All licenses shall be in the Bidder's name or the key subcontractor's name, as listed in Questionnaire. Failure to submit proof of the required licenses shall deem the Bidder non-responsive. The following is a non-exhaustive list of the licenses necessary for prosecution of the work. It is the Vendor/Contractor's responsibility to determine if additional licenses are necessary.
 - 1. General Contractors, Underground Utility Contractors, Electrical Contractors
- E. Vendor/Contractors and/or subcontractors who are not properly licensed and/or do not furnish proof thereof with their bid, may be deemed non-responsive and may be rejected.
- F. Owner shall assist Vendor/Contractor, when necessary, in obtaining such permits and licenses. Vendor/Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the work which are applicable at the time of opening of bids. Owner shall pay all charges of utility owners for connections for providing permanent service to the work.

5.11. LAWS, REGULATIONS, PERMITS AND TAXES:

- A. Vendor/Contractor shall abide by all applicable Federal and State laws, municipal and county ordinances, and the rules and regulations of all authorities having jurisdiction over any part of the project throughout performance of the Contract, and such laws, ordinances, rules and regulations are deemed to be included in the Contract the same as though herein written.

- B. Vendor/Contractor shall comply with County's jobsite procedures and regulations and with all applicable local, State and Federal laws, rules and regulations and shall obtain all permits required for any of the work performed hereunder. Vendor/Contractor shall procure and pay for all permits and inspections required for any of the work performed hereunder and shall furnish any bonds, security or deposits required to permit performance of the work. Vendor/Contractor shall, to the extent permissible under applicable law, comply with the jobsite provisions which validly and lawfully apply to work on the specific jobsite being performed under this Contract. County of Hernando is exempt from Federal excise taxes and all sales taxes.
- C. Vendor/Contractor shall give all notices required by and shall comply with all laws and regulations applicable to the performance of the work. Except where otherwise expressly required by applicable laws and regulations, neither Owner nor Engineer shall be responsible for monitoring Vendor/Contractor's compliance with any laws or regulations.
- D. If Vendor/Contractor performs any work knowing or having reason to know that it is contrary to laws or regulations, Vendor/Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such work. However, it shall not be Vendor/Contractor's primary responsibility to make certain that the specifications and drawings are in accordance with laws and regulations, but this shall not relieve Vendor/Contractor of Vendor/Contractor's obligations of reporting discrepancies.
- E. Changes in laws or regulations not known at the time of opening of bids having an effect on the cost or time of performance of the work shall be the subject of an adjustment in contract price or contract times. If Owner and Vendor/Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a claim may be made therefore as provided in the Contract Documents.

5.12. SITE AND OTHER AREAS

The site is identified in the Bid documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bid documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the work are to be obtained and paid for by Vendor/Contractor.

5.13. TAXES

- A. The Board of County Commissioners, Hernando County, Florida, has the following tax exemption certificates assigned:

1. Sales and Use Tax Exemption Certificate No. 85-8012556945C-8, effective 1/31/2024 – expiring on 1/31/2029.

- B. This exemption does not apply to purchases of tangible personal property made by Vendor/Contractors who use the tangible personal property in the performance of contracts for improvements of County owned real property (Chapters 192 and 212, F.S. (current version) and applicable rules of the Department of Revenue).
- C. State sales tax and use taxes on materials and equipment are to be incorporated in the price bid.
- D. Vendor/Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Vendor/Contractor in accordance with the laws and regulations of the place of the project which are applicable during the performance of the work.

5.14. MANUFACTURERS' NAME AND APPROVED EQUIVALENTS:

Whenever a particular brand or make of material, equipment, or other item is specified, or is indicated on the drawings, it is for the purpose of establishing a standard of quality, design, and type desired and to supplement the detailed specifications. Any other brand or make which is equivalent to that specified or indicated may be offered as an equivalent prior to the Solicitation Question Submission Deadline, for review and approval by Hernando County subject to the following provisions:

- A. The Vendor/Contractor shall submit for each proposed equivalent sufficient details, complete descriptive literature, and performance data together with samples of the materials, where feasible, to enable the Engineer of Record to determine if the proposed equivalent is equal, in all respects including, but not limited to, quality, performance, ease of maintenance, availability of spare parts, and experience record.
- B. The Vendor/Contractor shall submit certified tests, where applicable, by an independent laboratory attesting that the proposed equivalent is equal.
- C. A list of installations where the proposed equivalent is used. Such listing shall cover a minimum of the previous three (3) years and will furnish project names and contact phone numbers.
- D. Where the acceptance of an equivalent requires excessive review by the Engineer of Record, revision or redesign of any part of the work, all such additional review costs, revisions and redesign, and all new drawings and details required therefore, shall be at the Vendor/Contractor's expense.
- E. The Engineer of Record and Hernando County will have sole discretion to accept or deny any proposed equivalent.
- F. Acceptance of any proposed equivalent shall in no way release the Vendor/Contractor from any of the provisions of the Contract Documents.

- G. Hernando County may require, at Vendor/Contractor's expense, a special performance guarantee or other surety with respect to any equivalent.
- H. Bids which do not comply with these requirements are subject to rejection.

5.15. BID EVALUATION AND AWARD:

- A. At the time of submitting a bid response, the County requires that the Bidder to be properly licensed and registered to do business in the State of Florida in accordance with applicable Florida Statutes (F.S.). Bid responses that fail to provide the required forms listed in [Vendor Questionnaire](#) may be rejected as non-responsive. Bidders whose responses, past performance, or current status do not reflect the capability, integrity or reliability to fully and in good faith perform the requirements of the bid may be rejected as non-responsible. The County reserves the right to determine which responses meet the requirements of this Solicitation, and which Bidders are responsive and responsible. The County reserves the right before awarding the bid, to require a Bidder to submit such evidence of their qualifications as it may deem necessary, and may consider any evidence available to it of the financial, technical, and other qualifications and abilities of a Bidder to perform the work in a satisfactory manner and within the time specified. The Bidder is assumed to be familiar with all Federal, State or local laws, ordinances, rules and regulations that in any manner affect the work, and to abide thereby if awarded the bid. Ignorance of legal requirements on the part of the Bidder will in no way relieve responsibility.
- B. Bid evaluation will be based on price, conformance with specifications and the Bidder's ability to perform the Contract in accordance with the terms and conditions required. Bidders must submit all data necessary to evaluate and determine the quality of the item(s) and/or services they are bidding.
- C. The County intends to award this Contract to the lowest, responsive and responsible Bidder or Bidders. However, the County reserves the right to reject any and all bids in accordance with the Hernando County Procurement Ordinance.
- D. The ability of a Bidder to obtain a performance and payment bond shall not be regarded as the sole test of such Bidder's competency or responsibility.
- E. Nothing contained herein shall place a duty upon the Hernando County Board of County Commissioners to reject bids or award a contract based upon anything other than its sole discretion as described herein.
- F. Bidders are not permitted to submit more than one (1) bid for this project. Reasonable grounds for believing that any Bidder has an interest in more than one (1) bid for this project may be cause for disqualification of that Bidder and the rejection of all bids in which that Bidder has an interest.

- G. Owner will consider whether or not the bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- H. Owner will consider the qualifications of Bidders and may consider the qualifications and experience of subcontractors, suppliers, and other individuals or entities proposed for those portions of the work for which the identity of subcontractors, suppliers, and other individuals or entities must be submitted.
- I. The County reserves the right to investigate the competency and financial ability of any Bidder, proposed subcontractors, suppliers, or individuals that will perform the work; and, if after investigation, the evidence of competency or financial ability is not satisfactory, the County reserves the right to reject the bid.
- J. If two (2) or more fully responsive, responsible bids are received for the same total amount or unit price, quality and service being equal, the County reserves the right to award the contract to the Bidder whose place of business is located within the boundaries of Hernando County, Florida. Should tie bids, as described above, be received from either two (2) or more Hernando County Bidders or from non-local Bidders when no Hernando County Bidder has submitted a tie bid, then the Board of County Commissioners shall award the contract to one (1) Vendor/Contractor by drawing lots in a public meeting.

5.16. QUALIFICATIONS OF SURETY COMPANIES

In order to be acceptable to the Owner, a surety company issuing bid guaranty bonds, or 100% Performance/Payment Bonds, called for in these Contract Documents, shall meet and comply with the following minimum standards:

- A. Surety must be admitted to do business in the State of Florida and shall comply with the provisions of Florida Statute 255.05 (current version).
- B. Surety companies executing bonds must appear on the United States Treasury Departments most current list (CIRCULAR 570 AS AMENDED).
- C. Attorneys-in-fact who sign Bid Bonds or Performance/Payment Bonds must file with such bond a certified copy of their power of attorney to sign such bond.
- D. Agents of surety companies must list their name, address and telephone number on all bonds.
- E. If the surety on any bond furnished by the successful Bidder is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the project is located or it ceases to meet the requirements provided in this paragraph, Bidder (Vendor/Contractor) shall within five (5) days thereafter, substitute another bond and surety, both of which must be acceptable to the County.

5.17. LITIGATION/WAIVER OF JURY TRIAL

This Agreement shall be governed by and construed according to Florida law. Venue for any dispute or formal litigation concerning this Agreement shall be in the appropriate court with territorial jurisdiction over Hernando County, Florida. In the event of a dispute or litigation, each party to such dispute or litigation shall be solely responsible for its own attorneys' fees and costs. This Agreement shall not be construed for or against any party hereto, regardless of which party is wholly or partly responsible for its drafting. Each party acknowledges that it is aware of and has had the opportunity to seek advice of counsel of its choice with respect to its rights to trial by jury, and each party, for itself and its successors, creditors, and assigns, does hereby expressly and knowingly waive and release all such rights to trial by jury in any action, proceeding or counterclaim brought by any party hereto against the other (and/or against its officers, directors, employees, agents, or subsidiary or affiliated entities) on or with regard to any matters whatsoever arising out of or in any way connected with this Contract and/or any other claim of injury or damage.

5.18. MAINTENANCE OF RECORDS

The Vendor/Contractor will keep adequate records and supporting documents applicable to this Contract. Said records and documentation will be retained by the Vendor/Contractor for a minimum of five (5) years from the date of final payment on this Contract. The County and its authorized agents shall have the right to audit, inspect and copy records and documentation as often as the County deems necessary during the period of this Contract and a period of five (5) years after completion of contract performance; provided however, such activity shall be conducted only during normal business hours. The County during the period of time defined by the preceding sentence, shall also have the right to obtain a copy of and otherwise inspect any audit made at the direction of the Vendor/Contractor as concerns the aforesaid records and documentation. Pursuant to Section 119.0701, Florida Statutes, Consultant/Firm shall comply with the Florida Public Records' laws and shall:

- A. Keep and maintain records that ordinarily and necessarily would be required by the public agency in order to perform the service;
- B. Provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in Chapter 119, F.S., or as otherwise provided by law.
- C. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirement are not disclosed except as authorized by law; and,
- D. Meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the Consultant/Firm upon termination of the Contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the public agency in a format that is compatible with the information technology systems of the public agency.

- E. Failure to comply with this section shall be deemed a breach of the Contract and enforceable as set forth in Section 119.0701, Florida Statutes.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 352-754-4020, PURCHASING@HERNANDOCOUNTY.US, WITH AN OFFICE LOCATED AT 15470 FLIGHT PATH DR., BROOKSVILLE, FL 34604.

Per Florida Statute section 20.055(5), it is the duty of every State officer, employee, agency, special district, board, commission, Contractor, and subcontractor to cooperate with the Inspector General in any investigation, audit, inspection, review, or hearing pursuant to this section.

5.19. FISCAL NON-FUNDING:

In the event sufficient budgeted funds are not available for a new fiscal period, the County must notify the Vendor/Contractor of such occurrence and Contract shall terminate on the last day of current fiscal period without penalty or expense to the County.

5.20. CONFLICT OF INTEREST

- A. Conflict of Interest of Officers or Employees of the Contracting Entity/Local Jurisdiction, Members of the Local Governing Body, or Other Elected Officials: No member or employee of the contracting entity/local jurisdiction or its designees or agents; no member of the governing body; and no other public official of Hernando County who exercises any function or responsibility with respect to this Contract, during his/her tenure or for one (1) year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed. Further, the Vendor/Contractor shall cause to be incorporated in all Sub-contracts, the language set forth in this paragraph prohibiting conflict of interest.
- B. Employee Conflict of Interest: It shall be unethical for any Hernando County employee to participate directly or indirectly in a procurement contract when Hernando County employee knows that:
 - 1. Hernando County employee or any member of Hernando County employee's immediate family has a financial interest in the procurement contract; or
 - 2. Any other person, business, or organization with whom Hernando County employee or any member of a Hernando County employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement contract; or
 - 3. A Hernando County employee or any member of a Hernando County employee's immediate family who holds a financial interest in a disclosed blind trust shall not be deemed to have a conflict of interest with regard to matters pertaining to that financial interest.

- C. **Former Employee Conflict of Interest:** It shall be a violation for any person, business or organization contracting with County to employ in any capacity, any former County employee or member of County employee's immediate family within one (1) year of that employee's separation from employment with the County, unless the employer or the former County employee files with this solicitation, the County's Employment Disclosure Statement. The penalty for this violation may include disqualification of the bid submission .

5.21. **GRATUITIES AND KICKBACKS:**

- A. **Gratuities:** It shall be unethical for any person to offer, give, or agree to give any County employee or former County employee, or for any County employee or former County employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity to the County.
- B. **Kickbacks:** It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a Sub-Contractor under a contract to the prime Vendor/Contractor or higher tier Sub-Contractor or any person associated therewith, as an inducement for the award of a Sub-Contract or order.

5.22. **E-VERIFY**

- A. Vendor/Contractor is advised that the County has entered into an agreement with U.S. Immigration and Customs Enforcement (ICE) wherein the County will, in part, seek to promote the principles of ethical business conduct, prevent the knowing hiring of unauthorized workers through self-governance, and encourage voluntary reporting of the discovery of unauthorized workers to ICE (the IMAGE Agreement). Accordingly, by submitting your bid/proposal, Vendor/Contractor represents and warrants (a) that the Vendor/Contractor is in compliance with all applicable Federal, State and local laws, including, but not limited to, the laws related to the requirement of an employer to verify an employee's eligibility to work in the United States, (b) that all of the Vendor/Contractor employees are legally eligible to work in the United States, and (c) that the Vendor/Contractor has actively and affirmatively verified such eligibility utilizing the Federal Government's Employment Verification Eligibility Form (I-9 Form).
- B. A mere allegation of Vendor/Contractor's intent to use and/or current use of unauthorized workers may not be a basis to delay the County's award of a contract to the Vendor/Contractor unless such an allegation has been determined to be factual by ICE pursuant to an investigation conducted by ICE prior to the date the contract is scheduled to be awarded by the County.

- C. Legitimate claims of the Vendor/Contractor's use of unauthorized workers must be reported to both of the following agencies:
 - 1. The County's Procurement Department at (352) 754-4020: and
 - 2. ICE (Immigration and Customs Enforcement) at 1-866-DHS-2-ICE.

- D. In the event it is discovered that the Vendor/Contractor's employees are not legally eligible to work in the United States, then the County may, in its sole discretion, demand that the Vendor/Contractor cure this deficiency within a specified time frame, and/or immediately terminate the Contract without any cost or penalty to the County, and/or debar the Vendor/Contractor from bidding on all County contracts for a period up to twenty-four (24) months, and/or take any and all legal action deemed necessary and appropriate.

- E. Vendor/Contractor is required to incorporate the following IMAGE Best Practices into its business and, when practicable, incorporate verification requirements into its agreements with subcontractors:
 - 1. Use the Department of Homeland Security employment eligibility verification program (E-Verify) to verify the employment eligibility of all new hires.
 - 2. Use the Social Security Number Verification Service and make good faith effort to correct and verify the names and Social Security Numbers of the current workforce.
 - 3. Establish a written hiring and employment eligibility verification policy.
 - 4. Establish an internal compliance and training program related to the hiring and employment verification process, to include, but not limited to, completion of Form I-9, how to detect fraudulent use of documents in the verification process, and how to use E-Verify and the Social Security Number Verification Service.
 - 5. Require the Form I-9 and E-Verify process to be conducted only by individuals who received appropriate training and include secondary review as of each employee's verification to minimize the potential for a single individual to subvert the process.
 - 6. Arrange for annual Form I-9 audits by an external auditing firm or a trained employee not otherwise involved in the Form I-9 process.
 - 7. Establish a procedure to report to ICE credible information of suspected criminal misconduct in the employment eligibility verification process.
 - 8. Establish a program to assess subcontractors' compliance with employment eligibility verification requirements. Encourage Vendor/Contractors to incorporate the IMAGE Best Practices contained in this paragraph and, when practicable, incorporate the verification requirements in subcontractor agreements.

9. Establish a protocol for responding to letters received from Federal and State government agencies indicating that there is a discrepancy between the agency's information and the information provided by the employer or employee; for example, "no match" letters received from the Social Security Administration.
10. Establish a tip line mechanism (inbox, e-mail, etc.) for employees to report activity relating to the employment of unauthorized workers, and a protocol for responding to employee tips.
11. Establish and maintain appropriate policies, practices, and safeguards against use of the verification process for unlawful discrimination, and to ensure that U.S. citizens and authorized workers do not face discrimination with respect to hiring, firing, recruitment or referral for a fee because of citizenship status or national origin.
12. Maintain copies of any documents accepted as proof of identify and/or employment authorization for all new hires.

5.23. INSURANCE REQUIREMENTS

A. INDEMNITY, SAFETY AND INSURANCE PROVISIONS:

1. Indemnity: To the fullest extent permitted by Florida law, the Vendor/Contractor covenants, and agrees that it will indemnify and hold harmless the County and all of the County's officers, agents, and employees from any claim, loss, damage, cost, charge, attorney's fees and costs, or any other expense arising out of any act, action, neglect, or omission by Vendor/Contractor during the performance of the contract, whether direct or indirect, and whether to any person or property to which the County or said parties may be subject, except that neither the Vendor/Contractor nor any of its subcontractors, or assignees, will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the County or any of its officers, agents, or employees.
2. Protection of Person and Property:
 - a. The Vendor/Contractor will take all reasonable precautions for, and will be responsible for initiating, maintaining and supervising all programs relating to the safety of all persons and property affected by, or involved in, the performance of his operations under this Contract.
 - b. The Vendor/Contractor will take all reasonable precautions to prevent damage, injury or loss to: (a) all persons who may be affected by the performance of his operations, including employees; (b) all materials and equipment; and (c) all property at or surrounding the work site. In an emergency affecting the safety of persons or property, the Vendor/Contractor will act, with reasonable care and discretion, to prevent any threatened damage, injury or loss.

B. MINIMUM INSURANCE REQUIREMENTS: Vendor/Contractor shall procure, pay for and maintain at least the following insurance coverage and limits. Said insurance shall be evidenced by delivery to the County of a certificate(s) of insurance executed by the insurers listing coverage and limits, expiration dates and terms of policies and all endorsements whether or not required by the County, and listing all carriers issuing said policies. The insurance requirements shall remain in effect throughout the term of this Contract.

1. Workers' Compensation: As required by law:

- a. State.....Statutory
- b. APPLICABLE FEDERAL.....Statutory
- c. EMPLOYER'S LIABILITY.....Minimum:
 - i. \$100,000.00 each accident
 - ii. \$100,000.00 by employee
 - iii. \$500,000.00 policy limit
- d. Exemption per Florida Statute 440: If a Vendor/Contractor has less than three (3) employees and states that they are exempt per Florida Statute 440, they must provide an exemption certificate from the State of Florida. Otherwise, they will be required to purchase Workers' Compensation Insurance and provide a copy of Workers Compensation Insurance.
<https://www.myfloridacfo.com/Division/WC/Employer/Exemptions/>

2. General Liability: Comprehensive General Liability including, but not limited to, Independent Contractor, Contractual Premises/Operations, and Personal Injury covering the liability assumed under indemnification provisions of this Contract, with limits of liability for personal injury and/or bodily injury, including death.

- a. Coverage as follows:
 - i. EACH OCCURRENCE.....\$1,000,000.00
 - ii. GENERAL AGGREGATE\$2,000,000.00
 - iii. PERSONAL/ADVERTISING INJURY.....\$1,000,000.00
 - iv. PRODUCTS-COMPLETED OPERATIONS AGGREGATE.....\$2,000,000.00 Per Project Aggregate (if applicable)
- b. ALSO, include in General Liability coverage for the following areas based on limits of policy, with:
 - i. FIRE DAMAGE (Any one (1) fire.....\$50,000.00

- ii. MEDICAL EXPENSE (Any one (1) person)..... \$5,000.00
- 3. Additional Insured: Vendor/Contractor agrees to endorse Hernando County as an additional insured on the Comprehensive General Liability. The Additional Insured shall read "Hernando County Board of County Commissioners." Proof of Endorsement is required.
- 4. Waiver of Subrogation: Vendor/Contractor agrees by entering into this Contract to a Waiver of Subrogation for each required policy herein. When required by the insurer, or should a policy condition not permit Vendor/Contractor to enter into a pre-loss agreement to waive subrogation without an endorsement, then Vendor/Contractor agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Vendor/Contractor enter into such an agreement on a pre-loss basis.
- 5. AUTOMOBILE LIABILITY: Comprehensive automobile and truck liability covering any auto, all owned autos, scheduled autos, hired autos, and non-owned autos. Coverage shall be on an "occurrence" basis. Such insurance to include coverage for loading and unloading hazards. Coverage as follows:
 - a. COMBINED SINGLE LIMIT (CSL)..... \$1,000,000.00 or:
 - i. BODILY INJURY (Per Person)..... \$1,000,000.00
 - ii. BODILY INJURY (Per Accident)..... \$1,000,000.00
 - iii. PROPERTY DAMAGE.....\$1,000,000.00
- 6. PROFESSIONAL LIABILITY (if applicable it will be noted below separately):
- 7. BUILDERS RISK INSURANCE (if applicable it will be noted below separately):
- 8. CRIME PREVENTION – BOND (if applicable it will be noted below separately):
- 9. EXCESS/UMBRELLA LIABILITY (if applicable it will be noted below separately):
- 10. POLLUTION LIABILITY (if applicable it will be noted below separately):
- 11. SUBCONTRACTORS (if applicable): All subcontractors hired by said Contractor are required to provide Hernando County Board of County Commissioners a Certificate of Insurance with the same limits required by the County as required by the Contract. All subcontractors are required to name Hernando County Board of County Commissioners as additional insured and provide a Waiver of Subrogation in regards to General Liability.
- 12. RIGHT TO REVISE OR REJECT: County reserves the right, but not the obligation, to revise any insurance requirement, not limited to limits, coverages and endorsements, or to reject any insurance policies which fail to meet the criteria stated herein. Additionally, County reserves

the right, but not the obligation, to review and reject any insurer providing coverage due of its poor financial condition or failure to operating legally.

C. EACH INSURANCE POLICY SHALL INCLUDE THE FOLLOWING CONDITIONS BY ENDORSEMENT TO THE POLICY:

1. Vendor/Contractor agrees to provide County with a Certificate of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect, and the Certificate of Insurance shall provide a minimum thirty (30) day endeavor to notify, when available by Vendor/Contractor's insurer. If the Vendor/Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives noticed that coverage no longer complies with the insurance requirements herein, Vendor/Contractor agrees to notify the County by email within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. The Certificate Holder shall read: **Hernando County Board of County Commissioners Attention: Human Resources/Risk Department 15470 Flight Path Drive, Brooksville, Florida 34604**
2. Companies issuing the insurance policy, or policies, shall have no recourse against the County for payment of premiums or assessments for any deductibles which all are the sole responsibility and risk of Vendor/Contractor.
3. The term "County" or "Hernando County" shall include all authorities, boards, bureaus, commissions, divisions, departments, and offices of the County and individual members, employees and agents thereof in their official capacities, and/or while acting on behalf of Hernando County.
4. The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County, to any such future coverage, or to County's Self-Insured Retentions of whatever nature.

D. The Vendor/Contractor shall be required to provide a current Certificate of Insurance to the County prior to commencement of services.

E. Bidders may, at the County's request, be required to provide proof that their firm meets the preceding insurance requirements, by submission of a Certificate Of Insurance coverage(s), prior to award of the Contract.

F. Failure of the Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Vendor/Contractor's obligation to maintain such insurance.

5.24. INSURANCE REQUIREMENTS (continued)

INSTALLATION FLOATER POLICY: Combined single limit must equal value of the construction, per project aggregate. The policy shall cover portions of the work in transit, property scaffolding, false work and temporary buildings located at the site. The policy must cover the cost of removing debris, including demolition as may be made legally necessary by the operation of any law, ordinance or regulation. The insurance required herein must be on an All Risk Form and must be written to cover all risks of physical loss or damage to the insured party and must insure at least against the perils of fire and extended coverage, theft, vandalism, malicious mischief, collapse, lightning, earthquake, flood, water damage and windstorm. If there are any deductibles applicable to the insurance required herein, Vendor/Contractor must pay any part of any loss not covered because of the operation of such deductibles. The insurance as required herein must be maintained in effect until the earliest of the following date:

- A. Date which all persons and organization that are insured under the policy agree in writing that it must be terminated;
- B. Date on which final payment of this Contract has been made by County to Vendor/Contractor;
or
- C. Date on which the insurable interests in the property of all insured other the County have ceased.
- D. Wind coverage to be included with a minimum deductible to be determined based on the project. Deductible will be a percentage based upon the total insured value.

5.25. INSURANCE REQUIREMENTS (continued)

EXCESS/UMBRELLA LIABILITY: Vendor/Contractor shall provide proof of Excess/Umbrella Liability coverage with minimum limits of \$1,000,000.00. Limits can be increased, based on Contract.

5.26. EXECUTION OF WRITTEN CONTRACT

The successful Bidder will be required to sign a written contract, in two (2) copies, which has been made a part of this bid package and identified as the Sample Construction Agreement in Questionnaire. Said written Contract will evidence in written form the agreement between the parties pursuant to the award having been therefore made by the County to this Bidder; said signing to be accomplished within ten (10) days after Notice of Award.

5.27. CONE OF SILENCE

- A. This Solicitation falls under the Hernando County Procurement Ordinance 93-16. All Vendors and Bidders, and representatives of same, are hereby placed on formal notice that a lobbying cone of silence period shall commence upon issuance of this Solicitation until the Board selects the successful Bidder. If Board is not involved in selecting the successful Bidder, the cone of silence period commences upon issuance of Solicitation and concludes upon award of Contract. During the cone of silence period, no Vendor/Bidder, or representative of the Vendor/Bidder, to this Solicitation may seek information or clarification or in any way contact any official or employee of the County concerning this Solicitation with the exception of the Chief

Procurement Officer, County Attorney, or an individual specifically designated in this document for dissemination of information. A copy of any written communication concerning this Solicitation shall be filed with the Procurement Department and shall be made available to the public upon request. A violation of the cone of silence renders any award voidable at the discretion of the Chief Procurement Officer with approval from the Board and may subject the Vendor/Bidder who violated it to debarment. Nothing in the Ordinance prevents a Vendor/Bidder or representative from taking part in a public meeting concerning the Solicitation. B. Neither the members of the Board nor candidates for County Commission, nor any employees from the Hernando County Government, Hernando County staff members, nor any members of the evaluation team are to be lobbied, either individually or collectively, before or during the cone of silence concerning this project. Vendors/Bidders, or representatives of same, who intend to submit bids, or have submitted bids, for this project are hereby placed on formal notice that they are not to contact County personnel for such purposes as holding meetings of introduction, meals, or meetings relating to the selection process outside of those specifically scheduled by the County. Any such lobbying activities may cause immediate disqualification of this project.

5.28. OWNER DIRECT PURCHASE:

The County reserves the right to directly purchase certain materials, supplies, and goods, or to require Vendor/Contractor to assign some or all of its Sub-contractors or other Agreements with material suppliers, including equipment, directly to the County. Any materials purchased by the County pursuant to such Agreements or assignments will be referred to as "Owner Direct Purchases" (ODP) and is a method that may be utilized to create saving for the County. The responsibilities of both the County and the Vendor/Contractor relating to such ODP will be governed by the terms and conditions of these Owner Direct Purchase Conditions, which will take precedence over other conditions and terms of the Contract Documents where inconsistencies or conflicts exist. Owner Direct Purchases shall be made in accordance with Florida Administrative Code Rule 12A-1.094.

- A. Material suppliers shall be selected by Vendor/Contractor using competitive bidding/proposals. Supply Contracts shall be awarded by the Vendor/Contractor to the supplier whose Bid/Proposal is most advantageous to the County, price and other factors considered.
- B. The Vendor/Contractor shall include the price for all construction materials in lump sum price in bid. Bidder shall also include all Florida State sales and other taxes normally applicable to such material and equipment. The County may consider purchasing any item but does not expect to issue purchase orders for less than \$5,000. County-Purchasing of selected construction materials will be administered on a deductive Change Order basis.
- C. Vendor/Contractor shall provide County a list of all intended suppliers, vendors, and material men for consideration as ODP. This list shall be submitted at the same time as the preliminary schedule of values and the project CPM schedule. The Vendor/Contractor shall submit price

quotes from the vendors, as well as a description of the materials to be supplied, estimated quantities and prices.

- D. Upon request from County, and in a timely manner, Vendor/Contractor shall prepare a Purchasing Requisition Request Form which shall, in form and detail acceptable to County, specifically identify the materials which County may, in its discretion, elect to purchase directly. The Purchasing Requisition Request Form shall include:
1. the name, address, telephone number and contact person for the material supplier
 2. manufacturer or brand, model or specification number of the item
 3. quantity needed as estimated by Vendor/Contractor
 4. the price quoted by the supplier for the materials identified therein
 5. any sales tax associated with such quote
 6. delivery dates as established by Vendor/Contractor
 7. any reduction in Vendor/Contractor's cost for both the Payment Bond and the Performance Bond
 8. shipping, handling and insurance costs
 9. detail concerning bonds or letters of credit provided by the supplier if included in his/her proposal
 10. Special terms and conditions which have been negotiated with the supplier relative to payment terms, discounts, rebates, warranty, credits or other terms and conditions which will revert to the Owner.
 11. Vendor/Contractor shall include copies of Vendor/Contractor's quotations and specifically reference any terms and conditions, which have been negotiated with the Vendor/Contractor concerning letters of credit, terms, discounts, or special payments.
- E. After receipt of the Purchasing Requisition Request Form, County shall prepare a Purchase Order for all items of material, which County chooses to purchase directly. The purchase order shall be sent to the Vendor/Contractor with a copy sent to the Vendor/Contractor. Pursuant to the Purchase Order, the Vendor/Contractor will provide the required quantities of material at the price established in the Vendor/Contractor's quote to the Vendor/Contractor, excluding any sales tax associated with such price. The Project Manager shall be the approving authority for the County on Purchase Orders in conjunction with ODP. The Purchase Order shall also require the delivery of the ODP on the delivery dates provided by the Vendor/Contractor in the Purchasing Requisition Request Form.
- F. In conjunction with the execution of the Purchase Orders by the suppliers, Vendor/Contractor shall execute and deliver to County one or more deductive Change Orders, referencing the full

value of all ODP to be provided by each supplier from whom the County elected to purchase material directly, plus all sales taxes associated with such materials in Vendor/Contractor's bid to County, plus any savings to Vendor/Contractor in the cost of Payment and Performance Bonds associated with such ODP. To compensate the Vendor/Contractor for the warranty enforcement obligation the Vendor/Contractor's overhead and profit associated with ODP shall not be deducted from the Contract. The Project Manager shall be the approving authority for the County on deductive Change Orders in conjunction with ODP.

- G. Vendor/Contractor shall be fully responsible for all matters relating to the procurement of materials furnished by and incorporated into the Project in accordance with these Supplementary Conditions including, but not limited to, assuring the correct quantities, placing the order in a timely manner, and assuring coordination of purchases, providing and obtaining all warranties and guarantees required by the Contract Documents, inspection and acceptance of the goods at the time of delivery. The Vendor/Contractor shall coordinate delivery schedules, sequence of delivery, loading orientation, and other arrangements normally required by the Vendor/Contractor for the particular materials furnished. The Vendor/Contractor shall provide all services required for the unloading, handling and storage of materials through installation. The County assumes the risk of loss of building material through their incorporation into the installation.
- H. As ODP are delivered to the jobsite, the Vendor/Contractor shall visually inspect all shipments from the suppliers, and sign off on the receiving reports for material delivered. The Vendor/Contractor shall assure that each delivery of ODP is accompanied by documentation adequate to identify the Purchase Order against which the purchase is made. This documentation may consist of a delivery ticket and an invoice from the supplier conforming to the Purchase Order together with such additional information as the County may require. The Vendor/Contractor will then forward the receiving report to the County Project Manager to match up with the invoice for payment.
- I. The Vendor/Contractor shall insure that ODP conform to the Specifications, and determine prior to incorporation into the Work if such materials are patently defective, and whether such materials are identical to the materials ordered and match the description on the bill of lading. If the Vendor/Contractor discovers defective or non-conformities in ODP upon such visual inspection, the Vendor/Contractor shall not utilize such nonconforming or defective materials in the Work and instead shall promptly notify the County of the defective or nonconforming condition so that repair or replacement of those materials can occur without any undue delay or interruption to the Project. If the Vendor/Contractor fails to perform such inspection and otherwise incorporates into the work such defective or nonconforming ODP, the condition of which it either knew or should have known by performance of an inspection, Vendor/Contractor shall be responsible for all damages to County resulting from Vendor/Contractor's incorporation of such materials into the Project, including liquidated or delay damages.

- J. The Vendor/Contractor shall maintain records of all ODP it incorporates into the Work from the stock of ODP in its possession. The Vendor/Contractor shall account monthly to the County for any ODP delivered into the Vendor/Contractor's possession, indicating portions of all such materials which have been incorporated into the work.
- K. The Vendor/Contractor shall be responsible for obtaining and managing all warranties and guarantees for all materials and products as required by the Contract Documents. All repair, maintenance or damage-repair calls shall be forwarded to the Vendor/Contractor for resolution with the appropriate supplier, vendor, or Sub-contractor. Additionally, ODP items shall be warranted by the Vendor/Contractor as part of the Vendor/Contractor's warranty. The Vendor/Contractor agrees and understands that it shall undertake all warranty enforcement and other related duties of the County for its Owner Direct Purchase equipment and materials. These duties shall be governed by and carried out pursuant to, Bid Specifications. To that end, the Vendor/Contractor expressly agrees it shall make no distinction in discharging such warranty duties between Owner Direct Purchase equipment and materials and equipment and materials otherwise supplied by the Vendor/Contractor.
- L. Notwithstanding the transfer of ODP by the County to the Vendor/Contractor's possession, the County shall retain legal and equitable title to any and all ODP.
- M. The transfer of possession of ODP from the County to the Vendor/Contractor shall constitute a bailment for the mutual benefit of the County and the Vendor/Contractor. The County shall be considered the bailor and the Vendor/Contractor the bailee of the ODP. ODP shall be considered returned to the County for purposes of their bailment at such time as they are incorporated into the Project.
- N. The County shall purchase and maintain builders risk insurance sufficient to protect against any loss of or damage to ODP. Such insurance shall cover the full value of any ODP not yet incorporated into the Project during the period between the time the County first takes title to any of such ODP and the time when the last of such is incorporated into the Project. The Vendor/Contractor shall purchase and maintain builders' risk, all risk, insurance based on the completed value of project, less the County's ODP values. The Vendor/Contractor must name Hernando County as additional insured on its policy.
- O. The County shall in no way be liable for any interruption or delay in the Project, for any defects or other problems with the Project, or for any extra costs resulting from any delay in the delivery of, or defects in, ODP. Vendor/Contractor's sole or exclusive remedy shall be an extension of the Contract Time for such reasonable time as determined by Project Manager.
- P. Vendor/Contractor shall be required to review invoices submitted by all suppliers of ODP delivered to the project sites and either concur or object to the County's issuance of payment to the suppliers, based upon Vendor/Contractor's records of materials delivered to the site and any defects detected in such materials.

- Q. In order to arrange for the prompt payment to the supplier, prompt submittal of a copy of the applicable Purchase Order as receiving report, invoices, delivery tickets, written acceptance of the delivered items, and such other documentation as may be reasonably required by the County. Upon receipt of the appropriate documentation, the County shall prepare a check drawn to the supplier based upon the data provided. This check will be released and remitted directly to the supplier. The Vendor/Contractor agrees to assist the County to immediately obtain partial or final release of waivers as appropriate.

- R. At the end of the project Vendor/Contractor will be provided with a deductive Change Order for the costs incurred by County to provide all ODP, not covered by previous change orders. Salvage materials shall be stored or removed from the site at the County's direction, or may be turned over to the Vendor/Contractor by the County for salvage or disposal at the Vendor/Contractor's option.

6. SPECIAL CONDITIONS

6.1. TIME OF COMPLETION

Bidder agrees that the work will be substantially complete within One Hundred Fifty (150) calendar days after the commencement date indicated in the Notice to Proceed and ready for final payment within One Hundred Eighty (180) calendar days after the date indicated on the Notice to Proceed. The timeframe between substantial and final is thirty Thirty (30) calendar days. Completion time includes material ordering lead times. Materials shall not be ordered by the Vendor/Contractor until the Notice to Proceed has been issued.

6.2. STARTING THE WORK

- A. Before undertaking each part of the work, the Vendor/Contractor shall:
1. Carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. Vendor/Contractor shall promptly report in writing to the Project Manager any conflict, error or discrepancy which the Vendor/Contractor may discover and shall obtain a written interpretation or clarification from the Project Manager before proceeding with any work affected thereby; however, Vendor/Contractor shall not be liable to County for failure to report any conflict, error or discrepancy in the Contract Documents, unless Vendor/Contractor had actual knowledge, or should reasonably have known thereof.
 2. Within ten (10) calendar days after the effective date of the Agreement (unless otherwise specified), Vendor/Contractor shall submit to the Engineer for review:
 - a. A preliminary Progress Schedule indicating the times (number of days or dates) for starting and completing the various stages of the work, including milestones specified in the Contract Documents;
 - b. A preliminary schedule of shop drawings and sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
 - c. A preliminary Schedule of Values for all the work which will include quantities and prices of items aggregating the contract price and will subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of work.
- B. The Vendor/Contractor will start the work within ten (10) calendar days of the official Notice to Proceed date. The Contract Time shall commence to run from the date of the Notice to Proceed.

6.3. LIQUIDATED DAMAGES

- A. Bidders hereby agree that time is of the essence and that a precise determination of actual damages which could be incurred by the County for delay in the completion of the work provided herein would be difficult to ascertain. Accordingly the parties agree that the liquidated damages for those items of damage not otherwise provided for by the bid documents, for each and every day that the time consumed in completing the work provided for herein exceeds the time allowed in achieving substantial completion and/or final completion therefore shall be in accordance with the amount(s) set forth in Construction Agreement, Article 3, Paragraph 3.03, of the contract documents. The parties specifically agree that the liquidated damages provided herein do not constitute a penalty. The amount of liquidated damages occasioned by the Vendor/Contractor's delay will be deducted and retained out of the monies payable to the Vendor/Contractor. If not so deducted the Vendor/Contractor and sureties for the Vendor/Contractor shall be liable thereof.
- B. Vendor/Contractor and Owner agree for each consecutive calendar day that the work remains incomplete after the Contract date established for Substantial Completion and/or Final Completion, the County will retain from the compensation otherwise to be paid to the Vendor/Contractor the sum of **\$500.00**. This amount is the minimum measure of damages the County will sustain by failure of the Vendor/Contractor to complete all remedial work, correct deficient work, clean up the project and other miscellaneous tasks as required to complete all work specified.

6.4. INTERPRETATION AND INTENT OF THE CONTRACT DOCUMENTS

- A. It is the intent of the specifications and drawings to describe a complete project to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.
- B. The Contract Documents are complementary; what is called for by one (1) is as binding as if called for by all.
- C. Reference Standards:
 - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to laws or regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or laws or regulations in effect at the time of opening of bids (or on the effective date of the Agreement if there were no bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard, specification, manual or code, or any instruction of a supplier shall be effective to change the duties or responsibilities of Owner,

- Vendor/Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of their related entities, any duty or authority to supervise or direct the performance of the work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.
- D. If, during the performance of the work, the Vendor/Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any law or regulation applicable to the performance of the work or of any standard, specification, manual or code, or of any instruction of any supplier, Vendor/Contractor shall promptly report it to Engineer in writing. Vendor/Contractor shall not proceed with the work affected thereby until an amendment or supplement to the Contract Documents has been issued. The more stringent requirements shall apply unless otherwise approved.
- E. The Vendor/Contractor shall take no advantage of any error or omission in the plans or of any discrepancy between the plans and specifications, and the professional shall make such interpretation as may be deemed necessary for the fulfillment of the intent of the plans and specifications as construed by him and his decision shall be final.
- F. Vendor/Contractor shall make reasonable efforts to identify potential changes which may enhance efficiency, reliability, serviceability or economy of operation, accelerate the construction schedule, reduce cost of construction, or otherwise enhance any benefits to Hernando County. The Vendor/Contractor, in its reasonable judgment, may propose in writing to Hernando County any such potential change, along with its proposed effect on the cost of the work or the installation schedule. Hernando County shall consider any such proposed change in good faith and may, in its sole discretion, approve in writing any such change.
- G. Reuse of Documents:
1. Vendor/Contractor and any subcontractor or supplier shall not:
 - a. Have or acquire any title to or ownership rights in any of the drawings, specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
 - b. Reuse any of such drawings, specifications, other documents, or copies thereof on extensions of the project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.
 2. The prohibition of this paragraph will survive final payment, or termination of the Contract. Nothing herein shall preclude Vendor/Contractor from retaining copies of the Contract Documents for record purposes.
- H. Electronic Data:

1. Copies of data furnished by Owner or Engineer to Vendor/Contractor that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
2. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the sixty (60) day acceptance period will be corrected by the transferring party.
3. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

6.5. COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

All construction practices, material, equipment, etc., as proposed and offered by Bidders must meet and conform to all OSHA. requirements; the Bidder's signature upon the Bid Form in these bid documents, being by this reference considered a certification of such fact.

6.6. OWNER'S RESPONSIBILITIES AFTER AWARD

- A. Communications to Vendor/Contractor: Except as otherwise provided in these Contract Documents, Owner shall issue all communications to Vendor/Contractor through designated Authorized Owner Representative.
- B. Furnish Data: Owner shall promptly furnish the data required of Owner under the Contract Documents.
- C. Pay When Due: Owner shall make payments to Vendor/Contractor when they are due as provided in the Contract Documents.
- D. Lands and Easements; Reports and Tests: Owner's duties to provide lands and easements and to provide engineering surveys to establish reference points are set forth in the Contract Documents. Owner shall identify and make available to Vendor/Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating

to existing surface or subsurface structures at or contiguous to the site that have been utilized by the Engineer in preparing the Contract Documents.

- E. Change Orders: Owner is obligated to execute change orders as indicated in the Contract Documents.
- F. Inspections, Tests, and Approvals: Owner's responsibility regarding certain inspections, tests, and approvals is set forth in the Contract Documents.
- G. Limitations on Owner's Responsibilities: The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Vendor/Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Vendor/Contractor to comply with laws and regulations applicable to the performance of the work. Owner will not be responsible for Vendor/Contractor's failure to perform the work in accordance with the Contract Documents.
- H. Undisclosed Hazardous Environmental Condition: Owner's responsibility regarding undisclosed hazardous environmental conditions is set forth in the Contract Documents.
- I. Evidence of Financial Arrangements: Owner's responsibility, if any, to furnish Vendor/Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents will be as set forth in the Contract Documents

6.7. OWNER DESIGNATED REPRESENTATIVE'S STATUS DURING CONSTRUCTION

- A. Owner Designated Representative: The duties and responsibilities and the limitations of authority of the Owner Designated Representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner.
- B. Visits to Site:
 - 1. Owner's Designated Representative will make visits to the site at intervals appropriate to the various stages of construction as the Owner Designated Representative deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Vendor/Contractor's executed work. Based on information obtained during such visits and observations, the Owner Designated Representative will determine, in general, if the work is proceeding in accordance with the Contract Documents. The Owner Designated Representative will not be required to make exhaustive or continuous inspections on the site to check the quality or quantity of the work. Owner Designated Representative's efforts will be directed toward providing for Owner a greater degree of confidence that the completed work will conform generally to the Contract Documents. On the basis of such visits and observations, Owner Designated Representative will keep Owner informed of the progress of the work and will endeavor to guard Owner against defective work.

2. Owner Designated Representative's visits and observations are subject to all the limitations on Owner Designated Representative's authority and responsibility set forth in paragraph titled "LIMITATIONS ON OWNER DESIGNATED REPRESENTATIVE'S AUTHORITY AND RESPONSIBILITIES". Particularly, but without limitation, during or as a result of Owner Designated Representative's visits or observations of Vendor/Contractor's work Owner Designated Representative will not supervise, direct, control, or have authority over or be responsible for Vendor/Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Vendor/Contractor to comply with laws and regulations applicable to the performance of the work.
- C. Project Representative: If Owner and Owner Designated Representative agree, Owner Designated Representative will furnish a Resident Project Representative to assist Owner Designated Representative in providing more extensive observation of the work. The authority and responsibilities of any such Resident Project Representative and assistants is provided in paragraph titled "LIMITATIONS ON OWNER DESIGNATED REPRESENTATIVE'S AUTHORITY AND RESPONSIBILITIES", and limitations on the responsibilities thereof are provided below. If Owner designates another representative or agent to represent Owner at the site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Contract Documents.
 - D. Authorized Variations in Work: Owner Designated Representative may authorize minor variations in the work from the requirements of the Contract Documents which do not involve an adjustment in the contract price or the contract times and are compatible with the design concept of the completed project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a field order and will be binding on Owner and also on Vendor/Contractor, who shall perform the work involved promptly. If Owner or Vendor/Contractor believes that a field order justifies an adjustment in the contract price or contract times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a claim may be made therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS" paragraph entitled "CLAIMS".
 - E. Rejecting Defective Work: Owner Designated Representative will have authority to reject work which Owner Designated Representative believes to be defective, or that Owner Designated Representative believes will not produce a completed project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed project as a functioning whole as indicated by the Contract Documents. Owner Designated Representative will also have authority to require special inspection or testing of the work as provided in Section titled "TESTS AND INSPECTIONS; CORRECTIONS, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK: paragraph titled "TESTS AND INSPECTIONS", whether or not the work is fabricated, installed, or completed.

- F. Determinations for Unit Price Work: Owner Designated Representative will determine the actual quantities and classifications of unit price work performed by Vendor/Contractor. Owner Designated Representative will review with Vendor/Contractor the Owner Designated Representative's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an application for payment or otherwise). Owner Designated Representative's written decision thereon will be final and binding (except as modified by Owner Designated Representative to reflect changed factual conditions or more accurate data) upon Owner and Vendor/Contractor, subject to the provisions Section titled "COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK" paragraph titled "VENDOR/CONTRACTOR'S FEE".
- G. Decisions on Requirements of Contract Documents and Acceptability of Work:
1. Owner Designated Representative will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder. All matters in question and other matters between Owner and Vendor/Contractor arising prior to the date final payment is due relating to the acceptability of the work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the work, will be referred initially to Owner Designated Representative in writing within thirty (30) days of the event giving rise to the question.
 2. Owner Designated Representative will, with reasonable promptness, render a written decision on the issue referred and obtain Owner's approval to issue decision. If Owner or Vendor/Contractor believes that any such decision entitles them to an adjustment in the contract price or contract times or both, a claim may be made under the provision stated in Section titled "CHANGES IN THE WORK; CLAIMS" paragraph entitled "CLAIMS".
 3. Owner Designated Representative's written decision on the issue referred will be final and binding on Owner and Vendor/Contractor, subject to the provisions in paragraph titled "LIMITATIONS ON OWNER DESIGNATED REPRESENTATIVE'S AUTHORITY AND RESPONSIBILITIES".
 4. When functioning as interpreter and judge under paragraph titled "DECISIONS ON REQUIREMENTS OF CONTRACT DOCUMENTS AND ACCEPTABILITY OF WORK", Owner Designated Representative will not show partiality to Owner or Vendor/Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.
- H. Limitations on Owner Designated Representative's Authority and Responsibilities:
1. Neither Owner Designated Representative's authority or responsibility under this paragraph or under any other provision of the Contract Documents nor any decision made by Owner Designated Representative in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility

- by Owner Designated Representative shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Owner Designated Representative to Vendor/Contractor, any subcontractor, any supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
2. Owner Designated Representative will not supervise, direct, control, or have authority over or be responsible for Vendor/Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Vendor/Contractor to comply with laws and regulations applicable to the performance of the work. Owner Designated Representative will not be responsible for Vendor/Contractor's failure to perform the work in accordance with the Contract Documents.
 3. Owner Designated Representative will not be responsible for the acts or omissions of Vendor/Contractor or of any subcontractor, any supplier, or of any other individual or entity performing any of the work.
 4. Owner Designated Representative's review of the application for payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Section titled "PAYMENTS TO CONTRACTOR AND COMPLETION" paragraph titled "REVIEW OF APPLICATIONS" will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
 5. The limitations upon authority and responsibility set forth in this paragraph shall also apply to the Resident Project Representative, if any, and assistants, if any.

6.8. CONTRACTOR'S RESPONSIBILITIES

A. Supervision and Superintendence:

1. The Vendor/Contractor will supervise and direct the work efficiently and with his best skill and attention. He will be solely responsible for the means, methods, techniques, sequences and procedure of construction, unless otherwise specified. The Vendor/Contractor will be responsible to see that the finished work complies accurately with the Contract Documents.
2. The Vendor/Contractor will keep on the site at all times during its progress a competent, Resident Superintendent who shall not be replaced without written notice to the Project Manager. The superintendent will be the Vendor/Contractor's representative at the site and shall have authority to act on behalf of the Vendor/Contractor. All communications given to the superintendent shall be as binding as if given to the Vendor/Contractor.

B. Labor, Materials and Equipment:

1. The Vendor/Contractor will provide competent, suitable, qualified personnel to lay out the work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site.
2. Unless otherwise specified in the Contract Documents, Vendor/Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and incidentals necessary for the execution, testing, initial operation and completion of the work.
3. All materials and equipment will be new except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the specifications shall expressly run to the benefit of Owner. If required by the Owner, the Vendor/Contractor will furnish satisfactory evidence (including reports of required tests and/or purchase receipts) as to the source, kind and quality of materials and equipment furnished.
4. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, supplier, fabricator or processors except as otherwise provided in the Contract Documents.

C. Progress Schedule:

1. Vendor/Contractor shall adhere to the Progress Schedule requirements established in the Contract Documents as it may be adjusted from time to time as provided below.
 - a. Vendor/Contractor shall submit to Owner Designated Representative for acceptance proposed adjustments in the Progress Schedule that will not result in changing the contract times. Such adjustments will comply with any provisions of the Contract Documents applicable thereto.
 - b. Proposed adjustments in the Progress Schedule that will change the contract times shall be submitted in accordance with the requirements stated in the Contract Documents. Adjustments in contract times may only be made by a change order.
 - c. All work of this Contract shall be scheduled and monitored by the Vendor/Contractor using the Critical Path Method (CPM). The Vendor/Contractor shall prepare the schedule for the project a minimum of two (2) weeks before starting any work and shall submit an updated schedule with each monthly pay request. The Vendor/Contractor will prepare revisions of the schedule to reflect changes in the Vendor/Contractor's plan of performance or changes in the work and submit these revisions to the Owner Designated Representative for acceptance.
 - d. The Vendor/Contractor shall prepare schedules as a time scale logic diagram and bar chart unless otherwise approved by the Owner Designated Representative. Each major

and minor portion of work or operation shall be clearly identified and tied by logical sequence to the shop drawing schedule and schedule of values. All schedules shall be prepared and submitted on 11 inch by 17 inch (11" X 17") paper.

D. Concerning Subcontractors, Suppliers and Others:

1. The Vendor/Contractor will not employ any subcontractor, supplier, other person or entity, whether initially or as a replacement, against whom the Owner may have reasonable objections, nor will the Vendor/Contractor be required to employ any subcontractor, supplier, or other individual or entity, against whom the Vendor/Contractor has reasonable objection.
2. The Vendor/Contractor will not make any substitution for any subcontractor who has been accepted by the Owner, unless the Owner determines that there is good cause for doing so.
3. The Vendor/Contractor will be fully responsible for all acts and omissions of his subcontractors, suppliers, and other individuals or entities performing or furnishing any of the work just as Vendor/Contractor is responsible for Vendor/Contractor's own acts and omissions. Nothing contained in the Contract Documents:
 - a. Shall create for the benefit of any such subcontractor, supplier, or other individual or entity any contractual relationship between Owner or Owner Designated Representative and any such Subcontractor, supplier or other individual or entity, nor
 - b. Shall anything in the Contract Documents create any obligation on the part of Owner or Owner Designated Representative to pay or to see to the payment of any moneys due any such subcontractor, supplier, or other individual or entity except as may otherwise be required by laws and regulations.
4. Vendor/Contractor shall be solely responsible for scheduling and coordinating the work of subcontractors, suppliers, and other individuals or entities performing or furnishing any of the work under a direct or indirect contract with Vendor/Contractor.
5. Vendor/Contractor shall require all subcontractors, suppliers, and such other individuals or entities performing or furnishing any of the work to communicate with Owner Designated Representative through Vendor/Contractor.
6. The divisions and sections of the specifications and the identifications of any drawings shall not control Vendor/Contractor in dividing the work among subcontractors or suppliers or delineating the work to be performed by any specific trade.
7. All work performed for Vendor/Contractor by a subcontractor or supplier will be pursuant to an appropriate agreement between Vendor/Contractor and the subcontractor or supplier which specifically binds the subcontractor or supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Owner Designated Representative.

- Whenever any such agreement is with a subcontractor or supplier who is listed as an additional insured on the property insurance as provided in the Contract Documents, the agreement between the Vendor/Contractor and the subcontractor or supplier will contain provisions whereby the subcontractor or supplier waives all rights against Owner, Vendor/Contractor, and Owner Designated Representative, and all other individuals or entities identified in the Contract Documents to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the work. If the insurers on any such policies require separate waiver forms to be signed by any subcontractor or supplier, Vendor/Contractor will obtain the same.
8. The Vendor/Contractor agrees to bind specifically every subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the Owner.
 9. The Vendor/Contractor shall not award work valued at more than fifty percent (50%) of the contract price to subcontractor(s), without prior written approval of the Owner.

6.9. CONTRACTOR'S RESPONSIBILITIES (continued)

- A. Patent Fees And Royalties:
 1. Vendor/Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the work or the incorporation in the work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the work and if to the actual knowledge of Owner or Owner Designated Representative its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
 2. To the fullest extent permitted by laws and regulations, Vendor/Contractor shall indemnify and hold harmless Owner and Owner Designated Representative, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, product, or device not specified in the Contract Documents.

B. Use Of Premises:

1. The Vendor/Contractor will confine his equipment, the storage of materials and equipment, and the operations of his workers to the areas permitted by law, ordinances, permits or the requirements of the Contract Documents and shall not unreasonably encumber the premises with materials or equipment.
2. The Vendor/Contractor shall confine the operation of workmen and equipment, and the storage of materials and equipment to the County's property or to other non-County property or in public right-of-way areas indicated on the contract drawings as including work to be done pursuant to the Contract Documents. In the event the Vendor/Contractor desires to have access to the project site, or perform work or operations pertaining to the Contract on, over or from non-County property adjacent to the project site, the Vendor/Contractor shall obtain written authorization to do so from the respective adjacent property owner(s) prior to using such property. Such written authorization shall include a provision whereby the property owner agrees to hold the County harmless, and to defend the County, in the event of any liability, loss, injury, or claim incurred as a result of the Vendor/Contractors work or operations involving the use of the adjacent non-County property. The County shall be provided with a notarized, certified copy of such written authorization(s) before the Vendor/Contractor commences work or operations or use of such property in connection with work or operations pursuant to this Contract.

C. Record Documents:

1. Vendor/Contractor shall maintain in a safe place at the site one (1) record copy of all drawings, specifications, addenda, change orders, field orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved samples and a counterpart of all approved shop drawings will be available to Engineer for reference. Upon completion of the work, these record documents, samples, and shop drawings will be delivered to Engineer for Owner.
2. Record Drawings: The Engineer will prepare a set of record drawings for the project which will include the changes made in materials, equipment, locations, and dimensions of the work. Each month or as otherwise agreed, the Vendor/Contractor shall submit to the Engineer a current listing and description (written and graphic) of each change incorporated into the work since the preceding submittal.

D. Safety And Protection:

1. Vendor/Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. Vendor/Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- a. All employees on the site and other persons who may be affected by the work:
 - b. All the work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
 - c. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.
2. Vendor/Contractor shall comply with all applicable laws and regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Vendor/Contractor shall notify owners of adjacent property and of underground facilities and other utility owners when prosecution of the work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
 3. All damage, injury, or loss to any property referred to above; caused directly or indirectly, in whole or in part, by Vendor/Contractor, any subcontractor, supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the work, or anyone for whose acts any of them may be liable, shall be remedied by Vendor/Contractor (except damage or loss attributable to the fault of drawings or specifications or to the acts or omissions of Owner or Engineer, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Vendor/Contractor or any subcontractor, supplier, or other individual or entity directly or indirectly employed by any of them).
 4. Vendor/Contractor's duties and responsibilities for safety and for protection of the work shall continue until such time as all the work is completed and Engineer has issued final acceptance.
 5. Vendor/Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- E. Emergencies: In emergencies affecting the safety or protection of persons or the work or property at the site or adjacent thereto, Vendor/Contractor is obligated to act to prevent threatened damage, injury, or loss. Vendor/Contractor shall give Owner Designated Representative prompt written notice if Vendor/Contractor believes that any significant changes in the work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Owner Designated Representative determines that a change in the Contract Documents is required because of the action taken by Vendor/Contractor in response to such an emergency, a change order will be issued.

6.10. CONTRACTOR'S RESPONSIBILITIES (continued)

A. Shop Drawings, Samples and Test Specimens, Additional and Special Submittals:

1. Vendor/Contractor shall submit all shop drawings, samples and test specimens, additional and special submittals to Owner Designated Representative for review and approval in accordance with the acceptable Schedule of Submittals. The Vendor/Contractor's attention is directed to the individual specification sections in these Contract Documents which may contain additional and special submittal requirements.

a. Shop Drawings:

- i. Submit number of copies specified in the specifications.
- ii. Data shown on the shop drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Owner Designated Representative the services, materials, and equipment Vendor/Contractor proposes to provide and to enable Owner Designated Representative to review the information for the limited purposes of establishing a reporting procedure and is intended for the Vendor/Contractor's convenience in organizing his work and to permit the Owner Designated Representative to monitor the Vendor/Contractor's progress and understanding of the design.
- iii. Should the Vendor/Contractor propose any item on his field drawings, or incorporate an item into the work, and that item should subsequently prove to be defective or otherwise unsatisfactory, (regardless of the Owner Designated Representative 's preliminary review), the Vendor/Contractor shall, at his own expense, replace the item with another item that will perform satisfactorily.
- iv. The Vendor/Contractor agrees that shop drawing submittals processed by the Owner Designated Representative do not become Contract Documents and are not change orders.

b. Samples and Test Specimens:

- i. Submit number of samples and/or test specimens as required in the specifications. Where required in the specifications, and as determined necessary by the Owner Designated Representative, test specimens or samples of materials, appliances, and fittings to be used or offered for use in connection with the work shall be submitted to the Owner Designated Representative at the Vendor/Contractor's expense, with all cartage charges prepaid, and in such quantities and sizes as may be required for proper examination and tests to establish the quality or equality thereof, as applicable.

- ii. Clearly identify each as to material, supplier, pertinent data such as catalog numbers, the use for which intended and other data as Owner Designated Representative may require enabling Owner Designated Representative to review the submittal for the limited purposes of establishing a reporting procedure and is intended for the Vendor/Contractor's convenience in organizing his work and to permit the Owner Designated Representative to monitor the Vendor/Contractor's progress and understanding of the design.
 - iii. All samples and test specimens shall be submitted in ample time to enable the Owner Designated Representative to make any examinations necessary, without delay to the work. The Vendor/Contractor will be held responsible for any loss of time due to his neglect or failure to deliver the required samples to the Owner Designated Representative, as specified.
 - iv. The Vendor/Contractor shall submit additional samples as required by the Owner Designated Representative to ensure equality with the original approved sample and/or for determination of specification compliance.
 - v. Laboratory tests and examinations that the Owner elects to have made by an independent testing laboratory will be made at no cost to the Vendor/Contractor, except that, if a sample of any material or equipment proposed for use by the Vendor/Contractor fails to meet the specifications, the cost of testing subsequent samples shall be borne by the Vendor/Contractor.
 - vi. All tests required by the specifications to be performed by an independent laboratory shall be made by an Owner approved laboratory. Certified test results of all specified tests shall be submitted in duplicate to the Owner Designated Representative. The samples furnished and the cost for the laboratory services shall be at the expense of the Vendor/Contractor and included in the prices bid for the associated work.
 - vii. Sample items (fixtures, hardware, etc.) may be incorporated into the work upon approval, and when no longer needed by the Owner Designated Representative for reference.
- c. Submittals:
- i. All technical submittals shall be fully sufficient in detail for determination of compliance with the Contract Documents.
 - ii. Review or acceptance of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by the Vendor/Contractor shall not add to the Contract amount, and all additional costs which may result therefrom shall be solely the obligation of the Vendor/Contractor.

- iii. The Owner is not precluded, by virtue of review, acceptance, or approval, from obtaining a credit for construction savings resulting from allowed concessions in the work or materials therefore.
 - iv. No equipment or material for which listings, drawings, or descriptive material is required shall be fabricated, purchased, or installed until the Owner Designated Representative has reviewed same and returned copies with stamp and signature indicating action taken.
 - 2. Where shop drawings, samples, additional technical or special submittals are required by the Contract Documents or the Schedule of Submittals, any related work performed prior to Owner Designated Representative's review and approval of the pertinent submittal will be at the sole expense and responsibility of Vendor/Contractor.
 - 3. Submittal Procedures:
 - a. Submittals shall be addressed to the Owner Designated Representative as defined in these construction documents. Before submitting each shop drawing, sample, test specimens or other technical submittal, Vendor/Contractor shall have determined and verified:
 - i. All field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - ii. The suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the work;
 - iii. All information relative to Vendor/Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
 - iv. Shall also have reviewed and coordinated each shop drawing or sample with other shop drawings and samples and with the requirements of the work and the Contract Documents.
 - b. Each submittal shall bear a stamp or specific written certification that Vendor/Contractor has satisfied Vendor/Contractor's obligations under the Contract Documents with respect to Vendor/Contractor's review and approval of that submittal. The practice of submitting incomplete or unchecked shop drawings for the Owner Designated Representative to correct or finish will not be acceptable. shop drawings which, in the opinion of the Owner Designated Representative, clearly indicate that they have not been checked by the Vendor/Contractor will be considered as not complying

with the intent of the Contract Documents and will be returned to the Vendor/Contractor for resubmission in the proper form.

- c. With each submittal, Vendor/Contractor shall give Owner Designated Representative specific written notice of any variations, that the shop drawing or sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the shop drawings or sample submittal; and, in addition, by a specific notation made on each shop drawing or sample submitted to Owner Designated Representative for review and approval of each such variation.
 - d. The Vendor/Contractor shall submit to the Owner Designated Representative for his review five (5) copies of shop drawings, electrical diagrams, performance data and pump curves, wiring and control diagrams, special features, interface schematic diagrams, catalog information and cuts for fabricated items and manufactured items including structural, mechanical, electrical, plumbing, process, instrumentation and control systems and equipment furnished under this Contract. Shop drawings shall be submitted in sufficient time to allow the Owner Designated Representative not less than twenty (20) regular working days for examining the drawings.
4. Owner Designated Representative's Review:
- a. Owner Designated Representative will provide timely review of shop drawings and samples in accordance with the Schedule of Submittals acceptable to Owner Designated Representative. Owner Designated Representative's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed project as a functioning whole as indicated by the Contract Documents.
 - b. Owner Designated Representative's review and approval shall not relieve Vendor/Contractor from responsibility for any variation from the requirements of the Contract Documents unless Vendor/Contractor has complied with the requirements and Owner Designated Representative has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the shop drawing or sample. Owner Designated Representative's review and approval shall not relieve Vendor/Contractor from responsibility for complying with the requirements stated above.
 - c. Owner Designated Representative's review and approval shall not relieve Vendor/Contractor from responsibility for any variation from the requirements of the Contract Documents unless Vendor/Contractor has complied with the requirements and Owner Designated Representative has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the shop drawing or

sample. Owner Designated Representative's review and approval shall not relieve Vendor/Contractor from responsibility for complying with the requirements stated above.

5. Re-submittal Procedures:

- a. Vendor/Contractor shall make corrections required by Owner Designated Representative and shall return the required number of corrected copies of shop drawings and submit, as required, new samples for review and approval. Vendor/Contractor shall direct specific attention in writing to revisions other than the corrections called for by Owner Designated Representative on previous submittals. Costs incurred by Owner Designated Representative, and/or Owner, related to review and approval of additional submittals beyond that associated with the original submittal and one (1) re-submittal will be the responsibility of the Vendor/Contractor.

6. Certificates of Compliance:

- a. A Certificate of Compliance shall be furnished for materials specified to a recognized standard or code prior to the use of any such materials in the work. The Owner Designated Representative may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirement of the specifications. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.
- b. All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Vendor/Contractor of responsibility for incorporating material in the work which conforms to the requirements of the Contract Documents and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- c. The Owner Designated Representative reserves the right to refuse permission for use of material on the basis of a Certificate of Compliance.
- d. The form of the Certificate of Compliance and its disposition shall be as directed by the Owner Designated Representative.

6.11. CONTRACTOR'S RESPONSIBILITIES (continued)

- A. Continuing the Work: Vendor/Contractor shall carry on the work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No work shall be delayed or

postponed pending resolution of any disputes or disagreements, except as permitted in Section titled "CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES" paragraph entitled "DELAYS" or as Owner and Vendor/Contractor may otherwise agree in writing.

B. Use of Site and Other Areas:

1. Limitation on Use of Site and Other Areas:

- a. Vendor/Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the site and other areas permitted by laws and regulations, and shall not unreasonably encumber the site and other areas with construction equipment or other materials or equipment. Vendor/Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the work.
- b. Should any claim be made by any such owner or occupant because of the performance of the work, Vendor/Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- c. To the fullest extent permitted by laws and regulations, Vendor/Contractor shall indemnify and hold harmless Owner and Owner Designated Representative, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Owner Designated Representative, or any other party indemnified hereunder to the extent caused by or based upon Vendor/Contractor's performance of the work.

2. Removal of Debris During Performance of the Work: During the progress of the work Vendor/Contractor shall keep the site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable laws and regulations.

3. Clean Up: The Vendor/Contractor will keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the work; at the completion of the work he will remove all waste materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and surplus materials, and will leave the site clean and ready for occupancy by the County. The Vendor/Contractor will restore to their original condition those portions of the site not designated for alteration by the Contract Documents. If at any time during construction of this project, the

Vendor/Contractor fails to clean up on a daily basis, the County may do so. All costs associated with the County's cleanup activities on behalf of the Vendor/Contractor shall be deducted from amounts due to the Vendor/Contractor. Prior to Substantial Completion of the work, Vendor/Contractor shall clean the site and the work and make it ready for utilization by Owner. At the completion of the work Vendor/Contractor shall remove from the site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

4. Loading Structures: Vendor/Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Vendor/Contractor subject any part of the work or adjacent property to stresses or pressures that will endanger it.

C. Vendor/Contractor's General Warranty and Guarantee:

1. Vendor/Contractor warrants and guarantees to Owner that all work will be in accordance with the Contract Documents and will not be defective. Owner Designated Representative and its related entities shall be entitled to rely on representation of Vendor/Contractor's warranty and guarantee. All unsatisfactory work, all faulty work, and all work not conforming to the requirements of the Contract Documents or any inspections, test or approvals shall be considered defective. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in the Bid Specification.
2. Vendor/Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - a. Abuse, modification, or improper maintenance or operation by persons other than Vendor/Contractor, subcontractors, suppliers, or any other individual or entity for whom Vendor/Contractor is responsible; or
 - b. Normal wear and tear under normal usage.
3. Vendor/Contractor's obligation to perform and complete the work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of work that is not in accordance with the Contract Documents or a release of Vendor/Contractor's obligation to perform the work in accordance with the Contract Documents:
 - a. Observations by Owner Designated Representative;
 - b. Recommendation by Owner Designated Representative or payment by Owner of any progress or final payment;

- c. The issuance of a certificate of Substantial Completion by Owner Designated Representative or any payment related thereto by Owner;
 - d. Use or occupancy of the work or any part thereof by Owner;
 - e. Any review and approval of a shop drawing or sample submittal or the issuance of a notice of acceptability by Owner Designated Representative;
 - f. Any inspection, test, or approval by others; or
 - g. Any correction of defective work by Owner.
4. The Vendor/Contractor shall provide and maintain in a neat and sanitary condition, such accommodations for the use of his employees as may be necessary to comply with the requirements of the state board of health or of the Owner Designated Representative.
 5. The Vendor/Contractor shall be responsible for installing, operating and maintaining all traffic control associated with the project, including detours, advance warnings, channelization or other features, both at the immediate work site and at any outlying points determined by the Owner to be necessary to satisfy project requirements and to maintain safe operations at the landfill. If traffic control is necessary, the Vendor/Contractor shall prepare a detailed traffic control plan. This plan shall be approved in writing by the Owner prior to implementation by the Vendor/Contractor.

D. Delegation of Professional Design Services:

1. Vendor/Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the work or unless such services are required to carry out Vendor/Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Vendor/Contractor shall not be required to provide professional services in violation of applicable law.
2. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Vendor/Contractor by the Contract Documents, Owner and Owner Designated Representative will specify all performance and design criteria that such services must satisfy. Vendor/Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, shop drawings and other submittals prepared by such professional. Shop drawings and other submittals related to the work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Owner Designated Representative.
3. Owner and Owner Designated Representative shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such

design professionals, provided Owner and Owner Designated Representative have specified to Vendor/Contractor all performance and design criteria that such services must satisfy.

4. Owner Designated Representative's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Owner Designated Representative's review and approval of shop drawings and other submittals (except design calculations and design drawings) will be only for the purpose of determining if the items covered by the submittals will, after installation or incorporation in the work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed project as a functioning whole as indicated by the Contract Documents.
5. Vendor/Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

6.12. AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS:

A. Availability of Lands:

1. Owner shall furnish the site. Owner shall notify Vendor/Contractor of any encumbrances or restrictions not of general application but specifically related to use of the site with which Vendor/Contractor must comply in performing the work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Vendor/Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the contract price or contract times, or both, as a result of any delay in Owner's furnishing the site or a part thereof, Vendor/Contractor may make a claim therefore as provided in the Contract Documents.
2. Upon reasonable written request, Owner shall furnish Vendor/Contractor with a current statement of record legal title and legal description of the lands upon which the work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable laws and regulations.
3. Vendor/Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

B. Subsurface and Physical Conditions:

1. Reports and Drawings:

- a. Those reports of explorations and tests of subsurface conditions at or contiguous to the site that Owner Designated Representative has used in preparing the Contract Documents; and
 - b. Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except underground facilities) that Engineer has used in preparing the Contract Documents will be included in the Contract Documents as Attachments.
2. Limited reliance by Vendor/Contractor on technical data authorized: Vendor/Contractor may rely upon the general accuracy of the technical data contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such technical data is identified in the Contract Documents. Except for such reliance on such technical data, Vendor/Contractor may not rely upon or make any claim against Owner or Engineer, or any of their related entities with respect to:
 - a. The completeness of such reports and drawings for Vendor/Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Vendor/Contractor,
 - b. Other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - c. Any Vendor/Contractor interpretation of or conclusion drawn from any technical data or any such other data, interpretations, opinions, or information.
 - d.
3. Differing Subsurface or Physical Conditions:
 - a. Notice: If Vendor/Contractor believes that any subsurface or physical condition at or contiguous to the site that is uncovered or revealed either:
 - i. Is of such a nature as to establish that any technical data on which Vendor/Contractor is entitled to rely as provided in Titled "UNDERGROUND FACILITIES" is materially inaccurate; or
 - ii. Is of such a nature as to require a change in the Contract Documents; or
 - iii. Differs materially from that shown or indicated in the Contract Documents; or
 - iv. Is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Vendor/Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any work in connection therewith, notify Owner and Owner Designated Representative in writing about such condition.

Vendor/Contractor shall not further disturb such condition or perform any work in connection therewith until receipt of written order to do so.

- b. Owner Designated Representative's Review: After receipt of written notice, Owner Designated Representative will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Vendor/Contractor) of Owner Designated Representative's findings and conclusions.
- c. Possible Price and Times Adjustments:
 - i. The contract price or the contract times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Vendor/Contractor's cost of, or time required for, performance of the work; subject, however, to the following:
 - I. Such condition must meet any one (1) or more of the categories described in Section Titled "CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES" paragraph titled "DELAYS" and
 - II. With respect to work that is paid for on a unit price basis, any adjustment in contract price will be subject to the provisions of stated in the Contract Documents.
 - ii. Vendor/Contractor shall not be entitled to any adjustment in the contract price or contract times if:
 - I. Vendor/Contractor knew of the existence of such conditions at the time Vendor/Contractor made a final commitment to Owner with respect to contract price and contract times by the submission of a bid or becoming bound under a negotiated Contract; or
 - II. The existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the site and contiguous areas required by the bidding requirements or Contract Documents to be conducted by or for Vendor/Contractor prior to Vendor/Contractor's making such final commitment; or
 - III. Vendor/Contractor failed to give the written notice as required by provisions above.
 - iii. If Owner and Vendor/Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the contract price or contract times, or both, a claim may be made therefore as provided in Contract Documents. However, Owner and Owner Designated Representative, and any of their related

entities shall not be liable to Vendor/Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Vendor/Contractor on or in connection with any other project or anticipated project.

4. Underground Facilities:

- a. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based on information and data furnished to Owner or Engineer by the owners of such underground facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Bid documents:
 - i. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
 - ii. The cost of all of the following will be included in the contract price, and Vendor/Contractor shall have full responsibility for:
 - I. Reviewing and checking all such information and data,
 - II. Locating all underground facilities shown or indicated in the Contract Documents,
 - III. Coordination of the work with the owners of such underground facilities, including Owner, during construction, and
 - IV. The safety and protection of all such underground facilities and repairing any damage thereto resulting from the work.
 - iii. The Vendor/Contractor shall locate all existing utilities, vertical and horizontal, prior to commencement of construction and any excavation.
- b. Not Shown or Indicated:
 - i. If an underground facility is uncovered or revealed at or contiguous to the site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Vendor/Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any work in connection therewith, identify the owner of such underground facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the underground facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the underground facility. During such

time, Vendor/Contractor shall be responsible for the safety and protection of such underground facility.

- ii. If Engineer concludes that a change in the Contract Documents is required, a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the contract price or contract times, or both, to the extent that they are attributable to the existence or location of any underground facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Vendor/Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Vendor/Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in contract price or contract times, Owner or Vendor/Contractor may make a claim therefore as provided in the Contract Documents.
- c. Obstructions:
- i. Any pipes, conduits, wires, mains, footings, driveways, or other structures encountered shall be carefully protected from injury or displacement. Any damage thereto shall be fully, promptly, and properly repaired by the Vendor/Contractor to the satisfaction of the Owner Designated Representative and the Owner thereof. Should it become necessary to change the position of water or gas or other pipes, sewer drains, or poles, the Engineer shall be at once notified of the locality and circumstances, and no claims for damages arising from the delay in adjusting the pipe, sewer drains or poles shall be made. Failure of the plans to show the locations, nature or extent of any existing structures or obstructions shall not be the basis of a claim for extra work. Any survey monument or bench mark which must be disturbed shall be carefully referenced before removal, and unless otherwise provided for, shall be replaced upon completion of the work by a registered land surveyor. Any survey monuments or bench markers which are disturbed shall be replaced by a Florida registered land surveyor.

6.13. AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS: (continued)

A. Reference Points:

- 1. Owner shall provide engineering surveys to establish reference points for construction which in Owner Designated Representative's judgment are necessary to enable Vendor/Contractor to proceed with the work. Vendor/Contractor shall be responsible for laying out the work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written

- approval of Owner. Vendor/Contractor shall report to Owner Designated Representative whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.
2. Vendor/Contractor will furnish all surveys and construction stakeouts unless otherwise specified. The Vendor/Contractor will provide horizontal control and bench marks or elevations for vertical control. The number and extent of such control will be designated to the Vendor/Contractor by the Owner Designated Representative prior to bid opening, upon request. It shall be the responsibility of the Vendor/Contractor to check all stakes as set by the Engineer for possible error. The Vendor/Contractor shall furnish, free of charge, all additional stakes, all templates, and other materials necessary for marking and maintaining points and lines given. The Vendor/Contractor shall be held responsible for the preservation of all stakes and marks, and if any of the stakes or marks are destroyed or disturbed, the cost of replacing them shall be charged against, and shall be deducted from the payment for the work. The Vendor/Contractor shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
 3. The Vendor/Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. He shall not proceed until he has made timely demand upon the Owner Designated Representative for, and received from him, such points as may be necessary as the work progresses. The work shall be done in strict conformity with such points.
 - a. Alignment Markers. The markers for alignment and location information which are shown on the plans have been previously established by a Florida registered land surveyor. Monuments and other field markers consist of railroad spikes, iron pins, concrete monuments, and other markers in customary use in the area. The Vendor/Contractor shall lay out his work from these markers, and shall be responsible for all measurements in connection therewith. The Vendor/Contractor shall preserve all alignment and right-of-way markers, and shall reset or replace at his own expense, any and all which are removed, destroyed or covered up by his work. In the event that additional markers, stakes or monuments are required, or in the event that previously established markers must be replaced, the Vendor/Contractor shall employ a Florida registered land surveyor to reset or replace them.
 - b. Bench Marks. The Vendor/Contractor shall lay out his work from bench marks and elevations set by the Engineer. Bench marks and elevations set by the Engineer will be shown and explained to the Vendor/Contractor. Thereafter, these bench marks and elevations become the sole responsibility of the Vendor/Contractor, and if replacement is required, either at the request of the Vendor/Contractor or in the judgment of the

Owner Designated Representative, the Vendor/Contractor shall pay for the cost of replacement. The Vendor/Contractor shall furnish, at his own expense, all templates, stakes, equipment, labor and materials as may be required in laying out any part of the work.

B. Hazardous Environmental Condition at Site:

1. Reports and Drawings: Any reports and drawings relating to a hazardous environmental condition identified at the site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents will be included in the Contract Documents as Attachments under Reference Documents.
2. Limited Reliance by Vendor/Contractor on Technical Data Authorized: Vendor/Contractor may rely upon the general accuracy of the technical data contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such technical data is identified in the Technical Specifications. Except for such reliance on such technical data, Vendor/Contractor may not rely upon or make any claim against Owner or Engineer, or any of their related entities with respect to:
 - a. The completeness of such reports and drawings for Vendor/Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Vendor/Contractor and safety precautions and programs incident thereto; or
 - b. Other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings;
3. Vendor/Contractor shall not be responsible for any hazardous environmental condition uncovered or revealed at the site which was not shown or indicated in drawings or specifications or identified in the Contract Documents to be within the scope of the work. Vendor/Contractor shall be responsible for a hazardous environmental condition created with any materials brought to the site by Vendor/Contractor, subcontractors, suppliers, or anyone else for whom Vendor/Contractor is responsible.
4. If Vendor/Contractor encounters a hazardous environmental condition or if Vendor/Contractor or anyone for whom Vendor/Contractor is responsible creates a hazardous environmental condition, Vendor/Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all work in connection with such condition and in any area affected thereby; and (iii) notify Owner and Owner Designated Representative (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Owner Designated Representative concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

5. Vendor/Contractor shall not be required to resume work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Vendor/Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of work; or (ii) specifying any special conditions under which such work may be resumed safely. If Owner and Vendor/Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in contract price or contract times, or both, as a result of such work stoppage or such special conditions under which work is agreed to be resumed by Vendor/Contractor, either party may make a claim therefore as provided in the Contract Documents.
6. If after receipt of such written notice Vendor/Contractor does not agree to resume such work based on a reasonable belief it is unsafe, or does not agree to resume such work under such special conditions, then Owner may order the portion of the work that is in the area affected by such condition to be deleted from the work. If Owner and Vendor/Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in contract price or contract times as a result of deleting such portion of the work, then either party may make a claim therefore as provided in the Contract Documents. Owner may have such deleted portion of the work performed by Owner's own forces or others in accordance with Section "Other Work at the Site".
7. The provisions in this paragraph do not apply to a hazardous environmental condition uncovered or revealed at the site.

6.14. PRE-CONSTRUCTION CONFERENCE

Within fourteen (14) calendar days after the effective date of the contract, but before Vendor/Contractor starts the work at the site, a conference attended by Vendor/Contractor, Owner Designated Representative, and other County staff personnel as appropriate will be held to discuss such topics as may include, but not limited to; schedules, procedures for handling shop drawings and other submittals and for processing Applications for Payment, MOT, initiation of coordination with affected utilities, agreement upon the Notice to Proceed date, and to establish a working understanding among the parties as to the work.

6.15. INITIAL ACCEPTANCE OF SCHEDULES:

At least ten (10) days before submission of the first application for payment, a conference attended by Vendor/Contractor, Owner Designated Representative, and others as appropriate will be held to review for acceptability to Owner Designated Representative. Vendor/Contractor shall have an additional ten (10) days to make corrections and adjustments and to complete and re-submit the schedules. No progress payment shall be made to Vendor/Contractor until acceptable schedules are submitted to Owner Designated Representative.

- A. The Progress Schedule will be acceptable to Owner Designated Representative if it provides an orderly progression of the work to completion within the contract times. Such acceptance will not impose on Owner Designated Representative responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the work nor interfere with or relieve Vendor/Contractor from Vendor/Contractor's full responsibility therefore.
- B. Vendor/Contractor's Schedule of Submittals will be acceptable to Owner Designated Representative if it provides a workable arrangement for reviewing and processing the required submittals.
- C. Vendor/Contractor's Schedule of Values will be acceptable to Owner Designated Representative as to form and substance if it provides a reasonable allocation of the contract price to component parts of the work.

6.16. CHANGES IN THE WORK; CLAIMS:

- A. Authorized Changes in the Work:
 - 1. Without invalidating the Contract and without notice to any surety, Owner may, subject to written approval by Agency at any time or from time to time, order additions, deletions, or revisions in the work by a Change Order. Upon receipt of any such document, Vendor/Contractor shall promptly proceed with the work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
 - 2. If Owner and Vendor/Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the contract price or contract times, or both, that should be allowed as a result of a change order, a claim may be made therefor as provided in the Paragraph titled: "CLAIMS" below.
- B. Unauthorized Changes in the Work: Vendor/Contractor shall not be entitled to an increase in the contract price or an extension of the contract times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented, except in the case of an emergency as stated in Paragraph titled "EMERGENCIES" above, or in the case of uncovering work as stated in Paragraph titled "UNCOVERING WORK", below.
- C. Execution of Change Orders:
 - 1. Owner and Vendor/Contractor shall execute appropriate change orders recommended by Owner Designated Representative covering:
 - a. Changes in the work which are: (i) ordered by Owner pursuant to Paragraph titled "AUTHORIZED CHANGED IN THE WORK" above, (ii) required because of acceptance of defective work pursuant to Paragraph titled "ACCEPTANCE OF DEFECTIVE WORK", below

or Owner's correction of defective work pursuant to Paragraph titled "OWNER MAY CORRECT DEFECTIVE WORK" , below or (iii) agreed to by the parties;

- b. Changes in the contract price or contract times which are agreed to by the parties, including any undisputed sum or amount of time for work actually performed in accordance with a change order; and
 - c. Changes in the contract price or contract times which embody the substance of any written decision rendered by Owner Designated Representative pursuant to Section titled "TESTS AND INSPECTIONS: CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK", below ; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable laws and regulations, but during any such appeal, Vendor/Contractor shall carry on the work and adhere to the Progress Schedule as provided in Section titled "STARTING THE WORK", above.
2. The contract price constitutes the total compensation payable to the Vendor/Contractor for performing the work. All duties, responsibilities and obligations assigned to or undertaken by the Vendor/Contractor shall be at his expense without change in the contract price. The Contract Price may only be changed by a change order. Any claim for an increase in the Contract Price shall be in writing and delivered to the Owner Designated Representative within fifteen (15) days of the occurrence of the event giving rise to the claim. All claims for adjustment in the contract price shall be determined by the Owner Designated Representative. Any change in the contract price shall be incorporated in a change order.
- D. Notification to Surety: If notice of any change affecting the general scope of the work or the provisions of the Contract Documents (including, but not limited to, contract price or contract times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Vendor/Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.
- E. Claims:
1. Chief Procurement Officer's Decision Required: All claims, except those waived pursuant to Paragraph titled "WAIVER OF CLAIMS", below, shall be referred to the Chief Procurement Officer for decision. A decision by the Chief Procurement Officer shall be required as a condition precedent to any exercise by Owner or Vendor/Contractor of any rights or remedies either may otherwise have under Paragraph titled "OWNER MAY CORRECT DEFECTIVE WORK", below or by laws and regulations in respect of such claims.
 2. Notice: Written notice stating the general nature of each claim shall be delivered by the claimant to the Chief Procurement Officer and the other party to the Contract promptly (but in no event later than thirty (30) days) after the start of the event giving rise thereto. The responsibility to substantiate a claim shall rest with the party making the claim. Notice of

- the amount or extent of the claim, with supporting data shall be delivered to the Chief Procurement Officer and the other party to the Contract within sixty (60) days after the start of such event (unless the Chief Procurement Officer allows additional time for claimant to submit additional or more accurate data in support of such claim). A claim for an adjustment in contract price shall be prepared in accordance with the provisions of Paragraph titled "CHANGE OF CONTRACT PRICE", above. A claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph titled "CHANGE OF CONTRACT TIMES". Each claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to the Chief Procurement Officer and the claimant within thirty (30) days after receipt of the claimant's last submittal (unless the Chief Procurement Officer allows additional time).
3. Chief Procurement Officer's Action: Chief Procurement Officer will review each claim and, within thirty (30) days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one (1) of the following actions in writing:
 - a. Deny the claim in whole or in part,
 - b. Approve the claim, or
 - c. Notify the parties that the Chief Procurement Officer is unable to resolve the claim if, in the Chief Procurement Officer's sole discretion, it would be inappropriate for the Chief Procurement Officer to do so. For purposes of further resolution of the claim, such notice shall be deemed a denial.
 4. In the event that Chief Procurement Officer does not take action on a claim within said thirty (30) days, the claim shall be deemed denied.
 5. Chief Procurement Officer's written action or denial pursuant to Paragraphs 3. and 4., above will be final and binding upon Owner and Vendor/Contractor, unless Owner or Vendor/Contractor invoke the dispute resolution procedure set forth in Section titled "DISPUTE RESOLUTION" within thirty (30) days of such action or denial.
 6. No claim for an adjustment in contract price or contract times will be valid if not submitted in accordance with the provisions stated in Section titled "CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES" .

6.17. COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

A. Cost of the Work:

1. Costs Included: The term cost of the work means the sum of all costs, except those excluded according to Section titled "COSTS EXCLUDED" below, necessarily incurred and paid by Vendor/Contractor in the proper performance of the work. When the value of any work

covered by a change order or when a claim for an adjustment in contract price is determined on the basis of cost of the work, the costs to be reimbursed to Vendor/Contractor will be only those additional or incremental costs required because of the change in the work or because of the event giving rise to the claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the project, shall include only the following items, and shall not include any of the costs itemized in Section titled "COSTS EXCLUDED".

- a. Payroll costs for employees in the direct employ of Vendor/Contractor in the performance of the work under schedules of job classifications agreed upon by Owner and Vendor/Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the site. Payroll costs for employees not employed full time on the work shall be apportioned on the basis of their time spent on the work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include Social Security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
- b. Cost of all materials and equipment furnished and incorporated in the work, including costs of transportation and storage thereof, and suppliers' field services required in connection therewith. All cash discounts shall accrue to Vendor/Contractor unless Owner deposits funds with Vendor/Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Vendor/Contractor shall make provisions so that they may be obtained.
- c. Payments made by Vendor/Contractor to subcontractors for work performed by subcontractors. If required by Owner, Vendor/Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Vendor/Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Owner Designated Representative, which bids, if any, will be acceptable. If any subcontract provides that the subcontractor is to be paid on the basis of cost of the work plus a fee, the subcontractor's cost of the work and fee shall be determined in the same manner as Vendor/Contractor's cost of the work and fee as provided in this Section titled "COST OF THE WORK".
- d. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the work.

- e. Supplemental costs including the following:
 - i. The proportion of necessary transportation, travel, and subsistence expenses of Vendor/Contractor's employees incurred in discharge of duties connected with the work.
 - ii. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the site, and hand tools not owned by the workers, which are consumed in the performance of the work, and cost, less market value, of such items used but not consumed which remain the property of Vendor/Contractor.
 - iii. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Vendor/Contractor or others in accordance with rental agreements approved by Owner with the advice of the Owner Designated Representative, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the work.
 - iv. Sales, consumer, use, and other similar taxes related to the work, and for which Vendor/Contractor is liable, imposed by laws and regulations.
 - v. Deposits lost for causes other than negligence of Vendor/Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - vi. Losses and damages (and related expenses) caused by damage to the work, not compensated by insurance or otherwise, sustained by Vendor/Contractor in connection with the performance of the work (except losses and damages within the deductible amounts of property insurance established in accordance with the Contract Documents), provided such losses and damages have resulted from causes other than the negligence of Vendor/Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the cost of the work for the purpose of determining Vendor/Contractor's fee.
 - vii. The cost of utilities, fuel, and sanitary facilities at the site.
 - viii. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressages, and similar petty cash items in connection with the work.

- ix. Vendor/Contractor is required by the Contract Documents to purchase and maintain all bonds and insurance.
 2. Costs Excluded: The term cost of the work shall not include any of the following items:
 - a. Payroll costs and other compensation of Vendor/Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, procurement and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Vendor/Contractor, whether at the site or in Vendor/Contractor's principal or branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 1. (in this section) or specifically covered by Paragraph 1. d. (in this section), all of which are to be considered administrative costs covered by the Vendor/Contractor's fee.
 - i. Expenses of Vendor/Contractor's principal and branch offices other than Vendor/Contractor's office at the site.
 - ii. Any part of Vendor/Contractor's capital expenses, including interest on Vendor/Contractor's capital employed for the work and charges against Vendor/Contractor for delinquent payments.
 - iii. Costs due to the negligence of Vendor/Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - iv. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 1. and 2. (in this section).
3. Vendor/Contractor's Fee: When all the work is performed on the basis of cost-plus, Vendor/Contractor's fee shall be determined as set forth in the Agreement. When the value of any work covered by a change order or when a claim for an adjustment in contract price is determined on the basis of cost of the work, Vendor/Contractor's fee shall be determined as set forth in Section titled: "CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES" Paragraph titled: "VENDOR/CONTRACTOR'S FEE".
4. Documentation: Whenever the cost of the work for any purpose is to be determined pursuant to Paragraph 1.(in this section), Vendor/Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Owner Designated Representative an itemized cost breakdown together with supporting data.

B. Allowances:

1. It is understood that Vendor/Contractor has included in the contract price all allowances so named in the Contract Documents and shall cause the work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
2. Cash Allowances:
 - a. Vendor/Contractor agrees that:
 - i. The cash allowances include the cost to Vendor/Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
 - ii. Vendor/Contractor's costs for unloading and handling on the site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
3. Contingency Allowance: Vendor/Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
4. Prior to final payment, an appropriate change order will be issued as recommended by Engineer to reflect actual amounts due Vendor/Contractor on account of work covered by allowances, and the contract price shall be correspondingly adjusted.

C. Unit Price Work:

1. Where the Contract Documents provide that all or part of the work is to be unit price work, initially the contract price will be deemed to include for all unit price work an amount equal to the sum of the unit price for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Agreement.
2. The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial contract price. Determinations of the actual quantities and classifications of unit price work performed by Vendor/Contractor will be made by Owner Designated Representative subject to the provisions stated in the Contract Documents.
3. Each unit price will be deemed to include an amount considered by Vendor/Contractor to be adequate to cover Vendor/Contractor's overhead and profit for each separately identified item.

6.18. CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

Change of Contract Price:

- A. The Contract Price may only be changed by a change order. Any claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the claim to the Owner Designated Representative and the Chief Procurement Officer to the Contract in accordance with Section titled "CHANGES IN THE WORK; CLAIMS" Paragraph titled "Claims" above .
- B. The value of any work covered by a change order or of any claim for an adjustment in the Contract Price will be determined as follows:
 1. Where the work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions stated in Section titled: "COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK" Paragraph titled: "UNIT PRICE WORK"; or
 2. Where the work involved is not covered by unit prices contained in the Contract Documents, but by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with above Section titled: COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK" Paragraph titled "CASH ALLOWANCES"); or
 3. Where the work involved is not covered by unit prices contained in the Contract Documents and Agreement to a lump sum is not reached under above Section titled: "COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK" Paragraph titled: "COST OF THE WORK" , on the basis of the cost of the work, plus a Vendor/Contractor's fee for overhead and profit as described in this Section, Paragraph titled "VENDOR/CONTRACTOR'S FEE" , immediately below.
- C. Vendor/Contractor's Fee: The Vendor/Contractor's fee for overhead and profit shall be determined as follows:
 1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the cost of the work:
 - a. For costs incurred under Paragraphs B.1. and B.2. (in this section), the Vendor/Contractor's fee shall be fifteen percent (15%);
 - b. For costs incurred under Paragraph B.3. (in this section) , the Vendor/Contractor's fee shall be five percent (5%);
 - c. Where one (1) or more tiers of Sub-Contracts are on the basis of cost of the work plus a fee and no fixed fee is agreed upon, the intent of Paragraph C.2.a. above (in this section) is that the subcontractor who actually performs the work, at whatever tier, will be paid a fee of fifteen percent (15%) of the costs incurred by such subcontractor under Paragraphs B.1 and B.2. (in this section) and that any higher tier subcontractor and

Vendor/Contractor will each be paid a fee of five percent (5%) of the amount paid to the next lower tier subcontractor;

- d. No fee shall be payable on the basis of costs itemized under Section titled "COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK" Paragraph titled "COST OF THE WORK", "COSTS INCLUDED" paragraph 1.A.4, 1.A.5 and 1.B.;
 - e. The amount of credit to be allowed by Vendor/Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Vendor/Contractor's fee by an amount equal to five percent (5%) of such net decrease; and
 - f. When both additions and credits are involved in any one (1) change, the adjustment in Vendor/Contractor's fee shall be computed on the basis of the net change in accordance with above Paragraphs (in this section) C.2.a. through C.2.f., inclusive.
- D. In such case, the Vendor/Contractor will submit in the form prescribed by the Owner, an itemized cost breakdown together with supporting data. The amount of credit to be allowed by the Vendor/Contractor to the Owner for any such change which results in a net decrease in cost, will be the amount of the actual net decrease as determined by the Owner. When both additions and credits are involved in any one (1) change, the combined overhead and profit shall be figured on the basis of the net decrease, if any.

6.19. CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES (continued)

A. Change of Contract Times:

- 1. The Contract Times may only be changed by a change order. Any claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the claim to the Engineer and the other party to the Contract in accordance with the provisions of Section titled " CHANGES IN THE WORK; CLAIMS" paragraph titled "CLAIMS".
- 2. Any adjustment of the contract times covered by a change order or any claim for an adjustment in the contract times will be determined in accordance with the provisions of this paragraph.

B. Delays:

- 1. Where Vendor/Contractor is prevented from completing any part of the work within the contract times due to delay beyond the control of Vendor/Contractor, the contract times will be extended in an amount equal to the time lost due to such delay if a claim is made therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS, paragraph titled "CLAIMS". Delays beyond the control of Vendor/Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other Vendor/Contractors

performing other work, fires, floods, epidemics, abnormal weather conditions, or acts of God.

2. If Owner, Engineer, or other Vendor/Contractors or utility owners performing other work for Owner, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the work, then Vendor/Contractor shall be entitled to an equitable adjustment in the contract price or the contract times, or both.
Vendor/Contractor's entitlement to an adjustment of the contract times is conditioned on such adjustment being essential to Vendor/Contractor's ability to complete the work within the contract times.
3. If Vendor/Contractor is delayed in the performance or progress of the work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Vendor/Contractor, then Vendor/Contractor shall be entitled to an equitable adjustment in contract times, if such adjustment is essential to Vendor/Contractor's ability to complete the work within the Contract Times. Such an adjustment shall be Vendor/Contractor's sole and exclusive remedy for the delays described in this paragraph.
 - a. Time Extensions for Delays Caused by Weather - Extensions of Contract Time for delays caused by the effects of inclement weather are justified only when inclement weather conditions or related adverse soil conditions prevent the Contractor from productively performing controlling items of work resulting in:
 - i. The Vendor/Contractor being unable to work at least fifty percent (50%) of the normal work day on the predetermined controlling work items; or
 - ii. The Vendor/Contractor must make major repairs to work damaged by weather, providing the damage was not attributable to a failure to perform or neglect by the Contractor.
 - iii. Vendor/Contractor must submit a written notice along with their updated Progress Schedule with their monthly progress payment request. If no monthly progress payment is being submitted for the month, then a written notice within thirty (30) days after occurrence of the event(s) giving rise to the weather delays must be submitted to the Owner, Engineer or designated person.
 - b. Project Manager/Inspector - Daily reports shall be maintained for all projects by the Project Manager/Inspector. This shall include weather conditions, working conditions, erosion control, and effects of weather on major work items identified on the progress schedule and general comments as a minimum.
 - c. Project Manager/Inspector - Daily reports shall be maintained for all projects by the Project Manager/Inspector. This shall include weather conditions, working conditions,

erosion control, and effects of weather on major work items identified on the progress schedule and general comments as a minimum.

- d. Weather Delays for Projects - Time extensions will be granted on a contract day per delayed day.
 - i. The Contractor provides a schedule which identifies the intended work week, thus determining the scheduled work days and the controlling items of work. The initial progress schedule must be approved and agreed to by Owner, Engineer, or designated person and Contractor's Representative prior to the notice to proceed being issued and before any work has been performed and monthly when submitted with the pay request if any changes have occurred during the reporting period. No weather delays will be recognized before the Vendor/Contractor actually begins work or attempts to begin work in accordance with the approved project work schedule. Weather delays will be granted only during the authorized contract time period.
 - ii. The Owner, Engineer or designated person shall review the request and the daily reports and determine if these delays are authorized. A written response will be given to the Contractor/Vendor within five (5) business days after receipt of the request. The Chief Procurement Officer will be provided a copy of this letter and any related correspondence.
4. Owner, Engineer and the related entities of each of them shall not be liable to Vendor/Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Vendor/Contractor on or in connection with any other project or anticipated project.
5. Vendor/Contractor shall not be entitled to an adjustment in contract price or contract times for delays within the control of Vendor/Contractor. Delays attributable to and within the control of a subcontractor or supplier shall be deemed to be delays within the control of Vendor/Contractor.

6.20. TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK:

- A. Notice of Defects: Prompt notice of all defective work of which Owner or Engineer has actual knowledge will be given to Vendor/Contractor. All defective work may be rejected, corrected, or accepted as provided in this Paragraph.
- B. Access to Work: Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional

interests will have access to the site and the work at reasonable times for their observation, inspecting, and testing. Vendor/Contractor shall provide them proper and safe conditions for such access and advise them of Vendor/Contractor's site safety procedures and programs so that they may comply therewith as applicable.

C. Tests and Inspections:

1. Vendor/Contractor shall give Engineer timely notice of readiness of the work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
2. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - a. For inspections, tests, or approvals covered by Paragraphs D. and E. below;
 - b. That costs incurred in connection with tests or inspections conducted pursuant to Paragraph C.2. shall be paid according to Paragraph E.; and
 - c. As otherwise specifically provided in the Contract Documents.
3. If laws or regulations of any public body having jurisdiction require any work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Vendor/Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Owner Designated Representative the required certificates of inspection or approval.
4. Vendor/Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Owner Designated Representative's acceptance of materials or equipment to be incorporated in the work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Vendor/Contractor's purchase thereof for incorporation in the work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Owner Designated Representative.
5. If any work (or the work of others) that is to be inspected, tested, or approved is covered by Vendor/Contractor without written concurrence of Owner Designated Representative, it must, if requested by Owner Designated Representative, be uncovered for observation.
6. Uncovering work as provided in Paragraph D. shall be at Vendor/Contractor's expense unless Vendor/Contractor has given Engineer timely notice of Vendor/Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

7. Periodic inspections will be held throughout the work at the discretion of the Owner and Engineer to verify progress and compliance to Contract Documents, pay requests and general quality control.
8. Pre-final inspections are held for the purpose of substantiating completion of the work and preparing a punch-list of any deficiencies or corrections to be made. Pre-finals should be made with a representative of the Vendor/Contractor, Owner Designated Representative and Owner.
9. Final inspections will be held prior to acceptance in order to verify that all corrections and/or deficiencies have been performed or resolved and such inspection shall be mandatory prior to approval of final pay request. Finals shall be made with a representative of the Vendor/Contractor, Engineer and Owner.

D. Uncovering Work:

1. If any work is covered contrary to the written request of Owner Designated Representative, it must, if requested by Owner Designated Representative, be uncovered for Owner Designated Representative's observation and replaced at Vendor/Contractor's expense.
2. If Owner Designated Representative considers it necessary or advisable that covered work be observed by Owner Designated Representative or inspected or tested by others, Vendor/Contractor, at Owner Designated Representative's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Owner Designated Representative may require, that portion of the work in question, furnishing all necessary labor, material, and equipment.
3. If it is found that the uncovered work is defective, Vendor/Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the contract price. If the parties are unable to agree as to the amount thereof, Owner may make a claim therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS" paragraph titled "CLAIMS".
4. If, the uncovered work is not found to be defective, and there are no related inspection requirements in the contract documents, Vendor/Contractor shall be allowed an increase in the contract price or an extension of the contract times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Vendor/Contractor may make a claim therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS" paragraph titled "CLAIMS".

- E. Owner Designated Representative May Stop the Work: If the work is defective, or Vendor/Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the work in such a way that the completed work will conform to the contract documents, Owner may order Vendor/Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Vendor/Contractor, any subcontractor, any supplier, any other individual or entity, or any surety for, or employee or agent of any of them.
- F. Correction or Removal of Defective Work:
1. Promptly after receipt of notice, Vendor/Contractor shall correct all defective work, whether or not fabricated, installed, or completed, or, if the work has been rejected by Owner Designated Representative, remove it from the project and replace it with work that is not defective. Vendor/Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
 2. When correcting defective work under the terms of this paragraph or the paragraph below, Vendor/Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said work.
- G. Correction Period:
1. If within one (1) year after the date of substantial completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the contract documents, any work is found to be defective, or if the repair of any damages to the land or areas made available for Vendor/Contractor's use by Owner or permitted by laws and regulations as contemplated in the Contract Documents is found to be defective, Vendor/Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - a. Repair such defective land or areas; or
 - b. Correct such defective work; or
 - c. If the defective work has been rejected by Owner, remove it from the project and replace it with work that is not defective, and
 - d. Satisfactorily correct or repair or remove and replace any damage to other work, to the work of others or other land or areas resulting therefrom.

2. If Vendor/Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective work corrected or repaired or may have the rejected work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Vendor/Contractor.
 3. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the work, the correction period for that item may start to run from an earlier date if so provided in the specifications.
 4. Where defective work (and damage to other work resulting therefrom) has been corrected or removed and replaced under above paragraph F, the correction period hereunder with respect to such work will be extended for an additional period of one (1) year after such correction or removal and replacement has been satisfactorily completed.
 5. Vendor/Contractor's obligations under above paragraph F. are in addition to any other obligation or warranty. The provisions of Paragraph F. shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.
- H. Acceptance of Defective Work: If, instead of requiring correction or removal and replacement of defective work, Owner (and, prior to Owner Designated Representative's recommendation of final payment, Owner Designated Representative) prefers to accept it, Owner may do so. Vendor/Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective work (such costs to be approved by Owner Designated Representative as to reasonableness) and the diminished value of the work to the extent not otherwise paid by Vendor/Contractor pursuant to this sentence. If any such acceptance occurs prior to Owner Designated Representative's recommendation of final payment, a change order will be issued incorporating the necessary revisions in the contract documents with respect to the work, and Owner shall be entitled to an appropriate decrease in the contract price, reflecting the diminished value of work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a claim therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS", paragraph titled "CLAIMS". If the acceptance occurs after such recommendation, an appropriate amount will be paid by Vendor/Contractor to Owner.
- I. Owner May Correct Defective Work:
1. If Vendor/Contractor fails within a reasonable time after written notice from Owner Designated Representative to correct defective work or to remove and replace rejected

- work as required by Owner Designated Representative in accordance with Paragraph F., or if Vendor/Contractor fails to perform the work in accordance with the contract documents, or if Vendor/Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven (7) days written notice to Vendor/Contractor, correct or remedy any such deficiency.
2. In exercising the rights and remedies under this paragraph, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Vendor/Contractor from all or part of the site, take possession of all or part of the work and suspend Vendor/Contractor's services related thereto, take possession of Vendor/Contractor's tools, appliances, construction equipment and machinery at the site, and incorporate in the work all materials and equipment stored at the site or for which Owner has paid Vendor/Contractor but which are stored elsewhere. Vendor/Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other Vendor/Contractors, and Engineer and Engineer's consultants access to the site to enable Owner to exercise the rights and remedies under this paragraph.
 3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under Paragraph I. will be charged against Vendor/Contractor, and a change order will be issued incorporating the necessary revisions in the Contract Documents with respect to the work; and Owner shall be entitled to an appropriate decrease in the contract price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a claim therefore as provided in Section titled "CHANGES IN THE WORK; CLAIMS", paragraph titled "CLAIMS. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Vendor/Contractor's defective work.
 4. Vendor/Contractor shall not be allowed an extension of the contract times because of any delay in the performance of the work attributable to the exercise by Owner of Owner's rights and remedies under Paragraph I.

6.21. PAYMENTS TO CONTRACTOR AND COMPLETION

- A. Schedule of Values: The Schedule of Values established as provided in Section titled "STARTING THE WORK", paragraph A. 2. c. will serve as the basis for progress payments and will be incorporated into a form of application for payment acceptable to Owner Designated Representative. Progress payments on account of unit price work will be based on the number of units completed.
- B. Progress Payments:
 1. Application for Payments:

- a. At least twenty (20) business days before the date established in the Agreement for each progress payment (but not more often than once a month), Vendor/Contractor shall submit to Owner Designated Representative for review an application for payment filled out and signed by vendor/contractor covering the work completed as of the date of the application and accompanied by such supporting documentation as is required by the contract documents. If payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at the site or at another location agreed to in writing, the application for payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment all of which must be satisfactory to Owner.
 - b. Beginning with the second application for payment, each application shall include an affidavit of Vendor/Contractor stating that all previous progress payments received on account of the work have been applied on account to discharge Vendor/Contractor's legitimate obligations associated with prior applications for payment.
 - c. The amount of retainage with respect to progress payments will be as stipulated in Article 5.02 of the construction agreement.
 - d. All progress payments will be subject to withholding and payment of retainage as specified under the provisions of Ch. 218.735, F.S., and as stipulated in the Contract Agreement attached herein. Payment requests will be processed within the time periods established by applicable provisions of the Florida Prompt Payment Act, Part VII, Ch. 218.735, F.S.
2. Review of Applications:
- a. Owner Designated Representative will, within five (5) business days after receipt of each application for payment, either indicate in writing a recommendation of payment and present the application to Owner or return the application to Vendor/Contractor indicating in writing Owner Designated Representative's reasons for refusing to recommend payment. In the latter case, Vendor/Contractor may make the necessary corrections and resubmit the application.
 - b. Owner Designated Representative's recommendation of any payment requested in an application for payment will constitute a representation by Owner Designated Representative to Owner, based on Owner Designated Representative's observations on the site of the executed work as an experienced and qualified design professional and on Owner Designated Representative's review of the application for payment and the accompanying data and schedules, that to the best of Owner Designated Representative's knowledge, information and belief:
 - i. The work has progressed to the point indicated;

- ii. The quality of the work is generally in accordance with the Contract Documents (subject to an evaluation of the work as a functioning whole prior to or upon substantial completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for unit price work under above Section titled: "COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK",, and to any other qualifications stated in the recommendation); and
 - iii. The conditions precedent to Vendor/Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Owner Designated Representative's responsibility to observe the work.
 - c. By recommending any such payment Owner Designated Representative will not thereby be deemed to have represented that:
 - i. Inspections made to check the quality or the quantity of the work as it has been performed have been exhaustive, extended to every aspect of the work in progress, or involved detailed inspections of the work beyond the responsibilities specifically assigned to Owner Designated Representative in the Contract Documents; or
 - ii. That there may not be other matters or issues between the parties that might entitle Vendor/Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Vendor/Contractor.
 - d. Neither Owner Designated Representative's review of Vendor/Contractor's work for the purposes of recommending payments nor Owner Designated Representative's recommendation of any payment, including final payment, will impose responsibility on Owner Designated Representative:
 - i. To supervise, direct, or control the work, or
 - ii. For the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - iii. For Vendor/Contractor's failure to comply with laws and regulations applicable to Vendor/Contractor's performance of the work, or
 - iv. To make any examination to ascertain how or for what purposes Vendor/Contractor has used the moneys paid on account of the contract price, or
 - v. To determine that title to any of the work, materials, or equipment has passed to Owner free and clear of any liens.
 - e. Owner Designated Representative may refuse to recommend the whole or any part of any payment if, in Owner Designated Representative's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 2.b., above. Owner Designated

Representative may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Owner Designated Representative's opinion to protect Owner from loss because:

- i. The work is defective, or completed work has been damaged, requiring correction or replacement;
 - ii. The contract price has been reduced by change orders;
 - iii. Owner has been required to correct defective work or complete work in accordance with above Paragraph titled "Owner May Correct Defective Work" in Section titled: "TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK"; or
 - iv. Owner Designated Representative has actual knowledge of the occurrence of any of the events enumerated in below Paragraph titled "Owner May Terminate for Cause: " in Section titled: "TERMINATION AND SUSPENSION OF WORK".
3. Payment Becomes Due: The application for payment, and all of the required Federal and State submittals, with the Owner Designated Representative's recommendations will be presented to the Owner for consideration. If the Owner finds the application for payment acceptable, the recommended amount, less any reduction under the provisions of Paragraph B. 2. (in this section), will become due twenty-five (25) business days after the application for payment is presented to the Owner, and the Owner will make payment to the Vendor/Contractor.
4. Payment to Vendor/Contractor by Electronic Payment Solution: ACH (Direct Deposit): If the Vendor/Contractor is enrolled in the County's ACH electronic payment solution, all payments will be made using the direct deposit which may or may not include a pre-note transaction. The Vendor/Contractor's bank account information will remain confidential to the extent provided by law and necessary to make direct deposit payments. Once the County has approved payment, an electronic remittance advice will be sent to the Vendor/Contractor via e-mail.
5. Reduction in Payment:
 - a. Owner may refuse to make payment of the full amount recommended by Owner Designated Representative because:
 - i. Claims have been made against Owner on account of Vendor/Contractor's performance or furnishing of the work;

- ii. Liens have been filed in connection with the work, except where Vendor/Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such liens;
 - iii. The Vendor/Contractor's performance or furnishing of the work is inconsistent with funding agency requirements;
 - iv. There are other items entitling Owner to a set off against the amount recommended; or
 - v. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs B. 2. e. i. through B. 2. e. iii. (in this section) or below Paragraph titled "Owner May Terminate for Cause" in Section titled: "TERMINATION AND SUSPENSION OF WORK."
- b. If Owner refuses to make payment of the full amount recommended by Owner Designated Representative, Owner will (in no case more than twenty (20) business days after receipt and twenty-five (25) business days for payment) give Vendor/Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Vendor/Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Vendor/Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Vendor/Contractor, when Vendor/Contractor corrects to Owner's satisfaction the reasons for such action.
 - c. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph B. 3. (in this section).
 - d. No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Vendor/Contractor.
- C. Vendor/Contractor's Warranty of Title:
- 1. Vendor/Contractor warrants and guarantees that title to all work, materials, and equipment covered by any application for payment, whether incorporated in the project or not, will pass to Owner prior to the making of the application for payment, free and clear of all liens, claims, security interests and encumbrances; and that no work, materials or equipment covered by an application for payment will have been acquired by the Vendor/Contractor or by any other person performing the work at the site or furnishing materials and equipment for the project subject to an Agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Vendor/Contractor or such other person.

2. In compliance with the above and as verification of the Vendor/Contractor's compliance with applicable provisions of the Florida Prompt Payment Act, section 218.735, F.S., concerning payment to subcontractors and suppliers, the Vendor/Contractor, in addition to any other payment provisions set in this contract, shall prior to submission of the second application for payment, produce for the Owner evidence, in the form of releases of lien or subcontractor(s)/suppliers affidavits of payment received, that all subcontractors and suppliers have been paid any sum or sums then due within the time periods so specified. This reporting process shall be repeated following each succeeding payment to the Vendor/Contractor throughout the life of the Contract. A failure on the part of the Vendor/Contractor to provide the releases as required herein shall result in further progress or partial payments being withheld until the releases or payment affidavits are provided.

D. Partial Utilization:

1. Prior to Substantial Completion of all the work, Owner may use or occupy any substantially completed part of the work which has specifically been identified in the Contract Documents, or which Owner, Owner Designated Representative, and Vendor/Contractor agree constitutes a separately functioning and usable part of the work that can be used by Owner for its intended purpose without significant interference with Vendor/Contractor's performance of the remainder of the work, subject to the following conditions.
 - a. Owner at any time may request Vendor/Contractor in writing to permit Owner to use or occupy any such part of the work which Owner believes to be ready for its intended use and substantially complete. If and when Vendor/Contractor agrees that such part of the work is substantially complete, Vendor/Contractor will certify to Owner and Owner Designated Representative that such part of the work is substantially complete and request Owner Designated Representative to issue a certificate of substantial completion for that part of the work.
 - b. Vendor/Contractor at any time may notify Owner and Owner Designated Representative in writing that Vendor/Contractor considers any such part of the work ready for its intended use and is thus substantially complete and may request Owner Designated Representative to issue a certificate of substantial completion for that part of the work.
 - c. Within a reasonable time after either such request, Owner, Vendor/Contractor, and Owner Designated Representative shall make an inspection of that part of the work to determine its status of completion. If Owner Designated Representative does not consider that part of the work to be substantially complete, Owner Designated Representative will notify Owner and Vendor/Contractor in writing giving the reasons therefore. If Owner Designated Representative considers that part of the work to be substantially complete, the provisions stated herein will apply with respect to

certification of Substantial Completion of that part of the work and the division of responsibility in respect thereof and access thereto.

- d. No use or occupancy or separate operation of part of the work may occur prior to compliance with the requirements of the contract documents regarding property insurance.

E. Substantial Completion:

1. When Vendor/Contractor considers the entire work ready for its intended use Vendor/Contractor shall notify Owner and Owner Designated Representative in writing that the entire work is substantially complete (except for items specifically listed by Vendor/Contractor as incomplete) and request that the Owner issue a certificate of substantial completion.
2. Promptly after Vendor/Contractor's notification, Owner, Agency, Vendor/Contractor, and Owner Designated Representative shall make a pre-final inspection of the work to determine the status of completion. If Owner Designated Representative does not consider the work substantially complete, Owner Designated Representative will notify Vendor/Contractor in writing giving the reasons therefore.
3. If the Owner Designated Representative considers the work substantially complete, Owner Designated Representative will deliver to Owner a tentative certificate of substantial completion which shall fix the date of substantial completion. there shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven (7) days after receipt of the tentative certificate during which to make written objection to Owner Designated Representative as to any provisions of the certificate or attached list. If, after considering such objections, Owner Designated Representative concludes that the work is not substantially complete, Owner Designated Representative will within fourteen (14) days after submission of the tentative certificate to Owner notify Vendor/Contractor in writing, stating the reasons therefore. If, after consideration of Owner's objections, Owner Designated Representative considers the work substantially complete, Owner Designated Representative will within said fourteen (14) days execute and deliver to Owner and Vendor/Contractor a definitive certificate of substantial completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Owner Designated Representative believes justified after consideration of any objections from Owner.
4. At the time of delivery of the tentative certificate of Substantial Completion, Owner Designated Representative will deliver to Owner and Vendor/Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Vendor/Contractor with respect to security, operation, safety, and protection of the work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner

and Vendor/Contractor agree otherwise in writing and so inform Owner Designated Representative in writing prior to Owner Designated Representative's issuing the definitive certificate of substantial completion, Owner Designated Representative's aforesaid recommendation will be binding on Owner and Vendor/Contractor until final payment.

5. Owner shall have the right to exclude Vendor/Contractor from the site after the date of Substantial Completion subject to allowing Vendor/Contractor reasonable access to complete or correct items on the tentative list.

F. Final Inspection: Upon written notice from Vendor/Contractor that the entire work or an agreed portion thereof is complete, Owner Designated Representative will promptly make a final inspection with Owner, Agency, and Vendor/Contractor and will notify Vendor/Contractor in writing of all particulars in which this inspection reveals that the work is incomplete or defective. Vendor/Contractor shall immediately take such measures as are necessary to complete such work or remedy such deficiencies.

6.22. PAYMENTS TO CONTRACTOR AND COMPLETION (continued)

A. Final Payment:

1. Application for Payment:

- a. After Vendor/Contractor has, in the opinion of Owner Designated Representative, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the contract documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked up record documents, and other documents, Vendor/Contractor may make application for final payment following the procedure for progress payments.
- b. The final application for payment shall be accompanied (except as previously delivered) by:
 - i. All documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by above Section titled: "INSURANCE REQUIREMENTS";
 - ii. Consent of the surety, if any, to final payment;
 - iii. A list of all claims against Owner that Vendor/Contractor believes are unsettled; and
 - iv. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of or liens filed in connection with the work.
- c. In lieu of the releases or waivers of liens specified in above Paragraph A. 1. b. iv. and as approved by Owner, Vendor/Contractor may furnish receipts or releases in full and an affidavit of Vendor/Contractor that: (i) the releases and receipts include all labor,

services, material, and equipment for which a lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any subcontractor or supplier fails to furnish such a release or receipt in full, Vendor/Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any lien.

2. Owner Designated Representative's Review of Application and Acceptance:

- a. If, on the basis of Owner Designated Representative's observation of the work during construction and final inspection, and Owner Designated Representative's review of the final application for payment and accompanying documentation as required by the Contract Documents, Owner Designated Representative is satisfied that the work has been completed and Vendor/Contractor's other obligations under the Contract Documents have been fulfilled, Owner Designated Representative will, within ten (10) days after receipt of the final application for payment, indicate in writing Owner Designated Representative's recommendation of payment and present the application for payment to Owner for payment. At the same time Owner Designated Representative will also give written notice to Owner and Vendor/Contractor that the work is acceptable to the provisions as described in above Paragraph A titled "Final Payment" (in this section). Otherwise, Owner Designated Representative will return the application for payment to Vendor/Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Vendor/Contractor shall make the necessary corrections and resubmit the application for payment.

3. Payment Becomes Due: After the presentation to Owner of the application for payment and accompanying documentation to include all of the required Federal and State submittals, the Owner will, within the time periods established by applicable provisions of the Florida Prompt Payment Act, section 218.735, F.S., pay the Vendor/Contractor the amount recommended by Owner Designated Representative, less any sum Owner is entitled to set off against Owner Designated Representative's recommendation, including but not limited to liquidated damages.

- B. Final Completion Delayed: If, through no fault of Vendor/Contractor, final completion of the work is significantly delayed, and if owner designated representative so confirms, owner shall, upon receipt of vendor/contractor's final application for payment (for work fully completed and accepted) and recommendation of Owner Designated Representative, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance to be held by Owner for work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in above Section titled "PERFORMANCE AND PAYMENT BOND", the written consent of the surety to the payment of the balance due for that portion of the work

fully completed and accepted shall be submitted by Vendor/Contractor to Owner Designated Representative with the application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims. The remaining balance of any sum included in the final application for payment but held by Owner for work not fully completed and accepted will become due when the work is fully completed and accepted.

- C. Waiver of Claims: The making and acceptance of final payment will constitute:
1. A waiver of all claims by Owner against Vendor/Contractor, except claims arising from unsettled liens, from defective work appearing after final inspection pursuant to above Section titled "TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK", paragraph titled "CORRECTION OR REMOVAL OF DEFECTIVE WORK", from failure to comply with the contract documents or the terms of any special guarantees specified therein, or from Vendor/Contractor's continuing obligations under the contract documents; and
 2. A waiver of all claims by Vendor/Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.
- D. Vendor/Contractor's Continuing Obligation: The Vendor/Contractor's obligation to perform the work and complete the work in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by the County, the issuance of Certificate of Completion, any payment by the County to the Vendor/Contractor under the contract documents, any use or occupancy of the work or any part thereof by the County, any act of acceptance by the County, any failure to do so, nor any correction of defective work by the County shall constitute an acceptance of work not in accordance with the contract documents.
1. Contract Closeout:
 - a. Pre-final and Final Inspections:
 - i. Upon completion of work, Vendor/Contractor shall submit written certification that the Contract Documents have been reviewed, the work has been inspected by the Vendor/Contractor, and that the work is substantially complete in accordance with the contract document and ready for Engineer/Owner Designated Representative's inspection.
 - ii. At this time the representatives of the Vendor/Contractor, Engineer/Owner Designated Representative's and Owner shall make a pre-final/substantial completion inspection with reasonable promptness. If the work is complete or defective, Engineer/Owner Designated Representative will notify the Contractor to remedy these deficiencies by insurance of a pre-final punch-list.

- iii. Upon written notification from the Vendor/Contractor of substantial complete of the pre-final punch list items, the Engineer/Owner Designated Representative will coordinate the re-inspection of the work by conducting a final inspection. Representatives of the Contract, Engineer, and Owner Designated Representative shall be present for the final inspection.
- iv. Vendor/Contractor shall submit the final signed and sealed As-Built drawings ten (10) days prior to the final inspection and provide all other submittals to the Engineer/Owner Designated Representative's that are required.
- b. Project Record Documents: The Vendor/Contractor shall maintain on site, one (1) set of the following record documents; recording actual revisions of the work commensurate with the construction progress:
 - i. Contract Drawings
 - ii. Specifications
 - iii. Addenda
 - iv. Change Orders and other modification to the Contract
 - v. Reviewed (and approved) Shop Drawings and Product Data
 - vi. Permits
- c. Closeout Submittals: When the Engineer/Owner Designated Representative's has determined that the work is acceptable under the Contract Documents, and the contract is fully performed, the Vendor/Contractor shall prepare and submit his final applicable for payment to the Engineer/Owner Designated Representative's with the following:
 - i. Contractor's Lien Waiver in the full amount of the contract sum.
 - ii. Lien waivers from all subcontractors and material suppliers who have furnished for the work under contract with the Contactor or subcontractor. The lien waivers shall be in the full amount of the Contract involved.
 - iii. Consent of Surety to final payment.
 - iv. Evidence of compliance with governing authorities.
 - v. Certifications of inspections from all required agencies and departments, as needed.
 - vi. Warranties and Maintenance Bond.
 - vii. Confirmation from Florida Department of Environmental Protection the National Pollution Discharge Elimination System Notice of Termination (NOT) has been filed.

- viii. Any outstanding documentation and/or reports necessary to ensure compliance with FDOT requirements.
- ix. As-Built documents prepared in accordance with the contract documents and signed and sealed by a professional surveyor and mapper, registered in the State of Florida and all other requirements as set forth in the contract documents.

6.23. PAYMENTS TO CONTRACTOR AND COMPLETION (continued)

A. Final Payment:

1. Application for Payment:

- a. After Vendor/Contractor has, in the opinion of Owner Designated Representative, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the contract documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked up record documents, and other documents, Vendor/Contractor may make application for final payment following the procedure for progress payments.
- b. The final application for payment shall be accompanied (except as previously delivered) by:
 - i. All documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by above Section titled: "INSURANCE REQUIREMENTS" ;
 - ii. Consent of the surety, if any, to final payment;
 - iii. A list of all claims against Owner that Vendor/Contractor believes are unsettled; and
 - iv. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of or liens filed in connection with the work.
- c. In lieu of the releases or waivers of liens specified in above Paragraph A. 1. b. iv. and as approved by Owner, Vendor/Contractor may furnish receipts or releases in full and an affidavit of Vendor/Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any subcontractor or supplier fails to furnish such a release or receipt in full, Vendor/Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any lien.

2. Owner Designated Representative's Review of Application and Acceptance:

- a. If, on the basis of Owner Designated Representative's observation of the work during construction and final inspection, and Owner Designated Representative's review of the final application for payment and accompanying documentation as required by the Contract Documents, Owner Designated Representative is satisfied that the work has been completed and Vendor/Contractor's other obligations under the Contract Documents have been fulfilled, Owner Designated Representative will, within ten (10) days after receipt of the final application for payment, indicate in writing Owner Designated Representative's recommendation of payment and present the application for payment to Owner for payment. At the same time Owner Designated Representative will also give written notice to Owner and Vendor/Contractor that the work is acceptable to the provisions as described in above Paragraph A titled "Final Payment" (in this section). Otherwise, Owner Designated Representative will return the application for payment to Vendor/Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Vendor/Contractor shall make the necessary corrections and resubmit the application for payment.
3. Payment Becomes Due: After the presentation to Owner of the application for payment and accompanying documentation to include all of the required Federal and State submittals, the Owner will, within the time periods established by applicable provisions of the Florida Prompt Payment Act, section 218.735, F.S., pay the Vendor/Contractor the amount recommended by Owner Designated Representative, less any sum Owner is entitled to set off against Owner Designated Representative's recommendation, including but not limited to liquidated damages.
- B. Final Completion Delayed: If, through no fault of Vendor/Contractor, final completion of the work is significantly delayed, and if owner designated representative so confirms, owner shall, upon receipt of vendor/contractor's final application for payment (for work fully completed and accepted) and recommendation of Owner Designated Representative, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance to be held by Owner for work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in above Section titled "PERFORMANCE AND PAYMENT BOND", the written consent of the surety to the payment of the balance due for that portion of the work fully completed and accepted shall be submitted by Vendor/Contractor to Owner Designated Representative with the application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims. The remaining balance of any sum included in the final application for payment but held by Owner for work not fully completed and accepted will become due when the work is fully completed and accepted.
- C. Waiver of Claims: The making and acceptance of final payment will constitute:

1. A waiver of all claims by Owner against Vendor/Contractor, except claims arising from unsettled liens, from defective work appearing after final inspection pursuant to above Section titled "TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK", paragraph titled "CORRECTION OR REMOVAL OF DEFECTIVE WORK", from failure to comply with the contract documents or the terms of any special guarantees specified therein, or from Vendor/Contractor's continuing obligations under the contract documents; and
 2. A waiver of all claims by Vendor/Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.
- D. Vendor/Contractor's Continuing Obligation: The Vendor/Contractor's obligation to perform the work and complete the work in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by the County, the issuance of Certificate of Completion, any payment by the County to the Vendor/Contractor under the contract documents, any use or occupancy of the work or any part thereof by the County, any act of acceptance by the County, any failure to do so, nor any correction of defective work by the County shall constitute an acceptance of work not in accordance with the contract documents.
1. Contract Closeout:
 - a. Pre-final and Final Inspections:
 - i. Upon completion of work, Vendor/Contractor shall submit written certification that the Contract Documents have been reviewed, the work has been inspected by the Vendor/Contractor, and that the work is substantially complete in accordance with the contract document and ready for Engineer/Owner Designated Representative's inspection.
 - ii. At this time the representatives of the Vendor/Contractor, Engineer/Owner Designated Representative's and Owner shall make a pre-final/substantial completion inspection with reasonable promptness. If the work is complete or defective, Engineer/Owner Designated Representative will notify the Contractor to remedy these deficiencies by insurance of a pre-final punch-list.
 - iii. Upon written notification from the Vendor/Contractor of substantial complete of the pre-final punch list items, the Engineer/Owner Designated Representative will coordinate the re-inspection of the work by conducting a final inspection. Representatives of the Contract, Engineer, and Owner Designated Representative shall be present for the final inspection.

- iv. Vendor/Contractor shall submit the final signed and sealed As-Built drawings ten (10) days prior to the final inspection and provide all other submittals to the Engineer/Owner Designated Representative's that are required.
 - b. Project Record Documents: The Vendor/Contractor shall maintain on site, one (1) set of the following record documents; recording actual revisions of the work commensurate with the construction progress:
 - i. Contract Drawings
 - ii. Specifications
 - iii. Addenda
 - iv. Change Orders and other modification to the Contract
 - v. Reviewed (and approved) Shop Drawings and Product Data
 - vi. Permits
 - c. Closeout Submittals: When the Engineer/Owner Designated Representative's has determined that the work is acceptable under the Contract Documents, and the contract is fully performed, the Vendor/Contractor shall prepare and submit his final applicable for payment to the Engineer/Owner Designated Representative's with the following:
 - i. Contractor's Lien Waiver in the full amount of the contract sum.
 - ii. Lien waivers from all subcontractors and material suppliers who have furnished for the work under contract with the Contactor or subcontractor. The lien waivers shall be in the full amount of the Contract involved.
 - iii. Consent of Surety to final payment.
 - iv. Evidence of compliance with governing authorities.
 - v. Certifications of inspections from all required agencies and departments, as needed.
 - vi. Warranties and Maintenance Bond.
 - vii. Confirmation from Florida Department of Environmental Protection the National Pollution Discharge Elimination System Notice of Termination (NOT) has been filed.
 - viii. Any outstanding documentation and/or reports necessary to ensure compliance with FDOT requirements.
 - ix. As-Built documents prepared in accordance with the contract documents and signed and sealed by a professional surveyor and mapper, registered in the State of Florida and all other requirements as set forth in the contract documents.

- d. Performance Evaluation: At the end of the contract, the receiving Department will evaluate the successful Vendor/Contractor's performance. This evaluation will become public record.

6.24. TERMINATION AND SUSPENSION OF WORK

A. Termination for Default:

1. The County may, by written notice to the Vendor/Contractor, terminate this Contract for default in whole or in part (delivery orders, if applicable) if the Vendor/Contractor fails to:
 - a. Provide products or services that comply with the specifications herein or fails to meet the County's performance standards.
 - b. Deliver the supplies or to perform the services within the time specified in this Contract or any extension.
 - c. Make progress so as to endanger performance of this Contract.
 - d. Perform any of the other provisions of this Contract.
2. Prior to termination for default, the County will provide adequate written notice to the (Vendor/Contractor/Consultant) through the Chief Procurement Officer, Procurement Department, affording him/her the opportunity to cure the deficiencies or to submit a specific plan to resolve the deficiencies within ten (10) days (or the period specified in the notice) after receipt of the notice. Failure to adequately cure the deficiency shall result in termination action. Such termination may also result in suspension or debarment of the Vendor/Contractor in accordance with the County's Procurement Ordinance. The Vendor/Contractor and its sureties (if any) shall be liable for any damage to the County resulting from the Vendor/Contractor's default of the contract. This liability includes any increased costs incurred by the County in completing contract performance.
3. In the event of termination by the County for any cause, the Vendor/Contractor will have, in no event, any claim against the County for lost profits or compensation for lost opportunities. After a receipt of a termination notice and except as otherwise directed by the County the Vendor/Contractor shall:
 - a. Stop work on the date and to the extent specified.
 - b. Terminate and settle all orders and subcontracts relating to the performance of the terminated work.
 - c. Transfer all work in process, completed work, and other materials related to the terminated work as directed by the County.
 - d. Continue and complete all parts of that work that have not been terminated.

4. If the Vendor/Contractor's failure to perform the Contract arises from causes beyond the control and without the fault or negligence of the Vendor/Contractor, the Contract shall not be terminated for default. Examples of such causes include (1) acts of God or the public enemy, (2) acts of a government in its sovereign capacity, (3) fires, (4) floods, (5) epidemics, (6) strikes and (7) unusually severe weather.
- B. Termination for Convenience: The County, by written notice, may terminate this Contract, in whole or in part, when it is in the County's interest. If this Contract is terminated, the County shall be liable only for goods or services delivered and accepted. The county notice of termination may provide the Vendor/Contractor thirty (30) days prior notice before it becomes effective. A termination for convenience may apply to individual delivery orders, purchase orders or to the Contract in its entirety.
- C. Vendor/Contractor May Stop Work or Terminate:
1. If, through no act or fault of Vendor/Contractor, (i) the work is suspended for more than ninety (90) consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any application for payment within thirty (30) days after it is submitted, or (iii) Owner fails for thirty (30) days to pay Vendor/Contractor any sum finally determined to be due, then Vendor/Contractor may, upon seven (7) days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner.
 2. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an application for payment within thirty (30) days after it is submitted, or Owner has failed for thirty (30) days to pay Vendor/Contractor any sum finally determined to be due, Vendor/Contractor may, seven (7) days after written notice to Owner and Engineer, stop the work until payment is made of all such amounts due Vendor/Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Vendor/Contractor from making a claim as described in above Section titled "CHANGES IN THE WORK; CLAIMS", paragraph titled "Claims", for an adjustment in contract price or contract times or otherwise for expenses or damage directly attributable to Vendor/Contractor's stopping the work as permitted by this paragraph.
- D. Owner May Suspend Work: Owner may suspend work at any time and without cause, for a period of not more than ninety (90) consecutive days by notice in writing to Vendor/Contractor and Engineer which will fix the date on which work will be resumed. Vendor/Contractor shall resume the work on the date so fixed. Vendor/Contractor shall be granted an adjustment in the contract price or an extension of the contract times, or both, directly attributable to any such suspension if Vendor/Contractor makes a claim therefore as provided in above Section titled: "CHANGES IN THE WORK; CLAIMS".
- E. Owner May Terminate for Cause:

1. The occurrence of any one (1) or more of the following events will justify termination for cause:
 - a. Vendor/Contractor's persistent failure to perform the work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under above Section titled "STARTING THE WORK" Paragraph A. 2. a. as adjusted from time to time pursuant to above Section titled "CONTRACTOR'S RESPONSIBILITY" Paragraph titled "Progress Schedule";
 - b. Vendor/Contractor's disregard of laws or regulations of any public body having jurisdiction;
 - c. Vendor/Contractor's disregard of the authority of Engineer; or
 - d. Vendor/Contractor's violation in any substantial way of any provisions of the Contract Documents.
2. If one (1) or more of the events identified in above Paragraph E. 1. occur, Owner may, after giving Vendor/Contractor (and surety) seven (7) days written notice of its intent to terminate the services of Vendor/Contractor:
 - a. In exercising the rights and remedies under above Section titled "TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK" Paragraph titled "Owner May Correct Defective Work", Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Vendor/Contractor from all or part of the site (without liability to Vendor/Contractor for trespass or conversion), take possession of all or part of the work and suspend Vendor/Contractor's services related thereto, take possession of Vendor/Contractor's tools, appliances, construction equipment and machinery at the site, and incorporate in the work all materials and equipment stored at the site or for which Owner has paid Vendor/Contractor but which are stored elsewhere. Vendor/Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other Vendor/Contractors, and Engineer and Engineer's consultants access to the site to enable Owner to exercise the rights and remedies under above Section titled "TESTS AND INSPECTIONS; CORRECTION, REMOVAL/ACCEPTANCE OF DEFECTIVE WORK" Paragraph titled "Owner May Correct Defective Work".
 - b. Complete the work as Owner may deem expedient.
3. If Owner proceeds as provided in Paragraph E. 2 above, Vendor/Contractor shall not be entitled to receive any further payment until the work is completed. If the unpaid balance of the contract price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court

- or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the work, such excess will be paid to Vendor/Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Vendor/Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a change order. When exercising any rights or remedies under this paragraph Owner shall not be required to obtain the lowest price for the work performed.
4. Notwithstanding above Paragraphs E. 2. and E. 3., Vendor/Contractor's services will not be terminated if Vendor/Contractor begins within seven (7) days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than thirty (30) days of receipt of said notice.
 5. Where Vendor/Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Vendor/Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Vendor/Contractor by Owner will not release Vendor/Contractor from liability.
 6. If and to the extent that Vendor/Contractor has provided a Performance Bond under the provisions of above section, titled: "PERFORMANCE AND PAYMENT BOND", the termination procedures of that bond shall supersede the provisions of above Paragraphs E. 2. and E. 3.

F. Litigation:

1. Should the Owner be temporarily prohibited or enjoined from proceeding with the work herein contemplated, the Vendor/Contractor shall not be entitled to any claim or damages, or otherwise, nor may the Vendor/Contractor withdraw from the Contract except by and with the consent of the Owner. The Vendor/Contractor shall, however, be entitled to an extension of time for completion of the work equal to the time of such interruption or delay as determined and certified by the Owner Designated Representative.
2. If the Owner is permanently prohibited or enjoined from proceeding with the work herein contemplated, the Owner may terminate this Contract and pay the Vendor/Contractor a sum equal to all expenses legitimately incurred by him in connection with this work, plus ten percent (10%) of such expenses, less an amount equal to the sum of all partial payments previously made to the Vendor/Contractor. The sum thus computed shall be paid to the Vendor/Contractor within thirty (30) days after the Owner shall have terminated this Contract and the payment of said sum shall be payment in full for any and all liquidated damages for the termination of this Contract and shall constitute full settlement of all claims in connection with this Contract.

6.25. DISPUTE RESOLUTION

- A. Owner and Vendor/Contractor may mutually request mediation of any claim submitted to the Owner for a decision as provided in above Section titled "CHANGES IN THE WORK; CLAIMS:" Paragraph entitled "Claims" before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the effective date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association. Timely submission of the request shall stay the effect as described in said "Claims" Paragraph .
- B. Owner and Vendor/Contractor shall participate in the mediation process in good faith. The process shall be concluded within sixty (60) days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the claim is not resolved by mediation, Chief Procurement Officer's action or denial pursuant to above Section entitled "CHANGES IN THE WORK; CLAIMS" Paragraph titled "Execution of Change Orders" paragraph C. or Paragraph Titled "Notification of Surety" Paragraph D. shall become final and binding thirty (30) days after termination of the mediation unless, within that time period, Owner or Vendor/Contractor:
 - 1. Agrees with the other party to submit the claim to another dispute resolution process, or
 - 2. Gives written notice to the other party of their intent to submit the claim to a court of competent jurisdiction.

6.26. MISCELLANEOUS

- A. Giving Notice:
 - 1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - a. Delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
 - b. Delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.
- B. Computation of Times: When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.
- C. Cumulative Remedies: The duties and obligations imposed by these Contract Documents and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or

guarantee, or by other provisions of the Contract Documents. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

- D. Survival of Obligations: All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the work or termination or completion of the Contract or termination of the services of Vendor/Contractor.
- E. Headings: Article and paragraph headings are inserted for convenience only and do not constitute parts of these Contract Documents.
- F. Specification and Drawings Furnished by the Owner: All specifications, drawings and copies thereof furnished by the Owner shall remain its property. They shall not be used on another project and, with the exception of those sets which have been signed in connection with the execution of the Agreement, shall be returned to the Owner upon completion of the project.
- G. Laws and Ordinances: The Contract Documents shall be governed by the laws of the State of Florida and the ordinances of Hernando County.
- H. Vehicle Licensing: All prime Vendor/Contractors, including their subs, must obtain a temporary vehicle license for each and every out-of-state vehicle, personal or business (including trailers) that will be operating on-site. The cost shall be borne by the Vendor/Contractor. You must present evidence of title to the Tax Collector's Office to obtain the required temporary licenses.
- I. Handicapped Non-discrimination: The Vendor/Contractor will not discriminate against any employee or applicant for employment because he or she is handicapped in regards to any position for which the employee or applicant for employment is qualified.

6.27. OTHER WORK AT THE SITE

OTHER WORK AT THE SITE:

- A. Related Work at Site:
 - 1. Owner may perform other work related to the project at the site with Owner's employees, or via other direct contracts therefore, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - a. Written notice thereof will be given to Vendor/Contractor prior to starting any such other work; and
 - b. If Owner and Vendor/Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the contract price or contract times that should be allowed as a result of such other work, a claim may be made therefore as

provided in above Section titled: "CHANGES IN THE WORK; CLAIMS" Paragraph titled: "Claims".

2. Vendor/Contractor shall afford other Vendor/Contractors who are a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the work with theirs. Vendor/Contractor shall do all cutting, fitting, and patching of the work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Vendor/Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Owner Designated Representative and the others whose work will be affected. The duties and responsibilities of Vendor/Contractor under this paragraph are for the benefit of such utility owners and other Vendor/Contractors to the extent that there are comparable provisions for the benefit of Vendor/Contractor in said direct contracts between Owner and such utility owners and other Vendor/Contractors.
3. If the proper execution or results of any part of Vendor/Contractor's work depends upon work performed by others under this section titled "OTHER WORK AT THE SITE", Vendor/Contractor shall inspect such other work and promptly report to Owner Designated Representative in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Vendor/Contractor's work. Vendor/Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Vendor/Contractor's work except for latent defects and deficiencies in such other work.

B. Coordination:

1. If Owner intends to contract with others for the performance of other work on the project at the site, the following will be set forth in the Contract Documents:
 - a. The individual or entity who will have authority and responsibility for coordination of the activities among the various Vendor/Contractors will be identified;
 - b. The specific matters to be covered by such authority and responsibility will be itemized; and
2. Unless otherwise provided in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.

6.28. MATERIAL SAFETY DATA SHEETS

MATERIAL SAFETY DATA SHEETS:

- A. In accordance with Florida Emergency Planning and Community Right-to-Know Act, Chapter 252, Part II, Florida Statutes, it is the seller's duty to advise Hernando County if a product is a listed toxic substance and to provide a material safety data sheet (MSDS) at the time of delivery. Vendor/Contractors must comply with this procedure along with the Federal Emergency Planning and Community Right-to-Know Act (42 U.S.C. Ch 116 (Current Edition)) and the Federal Hazard Communications Standards (29CFR sec.1910.1200) all other applicable laws.

6.29. TRENCH SAFETY ACT

Bidder shall be solely responsible for complying with the Florida Trench Safety Act as established under 553.60 through 553.64, Florida Statutes, and under the OSHA excavation safety standards as established under 29 CFR 1926.650 (Sub-Part P) as amended. All costs associated with complying with these requirements shall be included in the bid. The Trench Safety Act Compliance Form attached in Questionnaire, must be submitted with the bid.

6.30. SCRUTINIZED COMPANIES Pursuant to Florida Statute 287.135 And 215.473 (Current Edition)

Vendor/Contractor must certify that the company is not participating in a boycott of Israel. Vendor/Contractor must also certify that Vendor/Contractor is not on the Scrutinized Companies that Boycott Israel List, not on the Scrutinized Companies with Activities in Sudan List, and not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Subject to limited exceptions provided in State law, the County will not contract for the provision of goods or services with any scrutinized company referred to above. Vendor/Contractor must submit the certification form included as an attachment to this Solicitation. Submitting a false certification shall be deemed a material breach of contract. The County shall provide notice, in writing, to the Vendor/Contractor of the County's determination concerning the false certification. The Vendor/Contractor shall have five (5) days from receipt of notice to refute the false certification allegation. If such false certification is discovered during the active contract term, the Vendor/Contractor shall have ninety (90) days following receipt of the notice to respond in writing and demonstrate that the determination of false certification was made in error. If the Vendor/Contractor does not demonstrate that the County's determination of false certification was made in error, then the County shall have the right to terminate the contract and seek civil remedies pursuant to Section 287.135, Florida Statutes, as amended from time to time.

7. SCOPE AND SPECIFICATIONS

7.1. SCOPE OF WORK

The Vendor/Contractor will supply all materials, labor, and equipment in order to accomplish the Construction of Veterans Memorial Monument (Rebid) , as described in the specifications and construction plans showing the proposed improvements in Hernando County, Florida.

7.2. PROJECT DESCRIPTION:

- A. This project consists of construction activities to erect a Veterans Memorial Monument in Veterans Memorial Park in Spring Hill, Florida..
- B. It will be the Vendor/Contractor's responsibility to provide an acceptable MOT plan at the Pre-Construction meeting along with a chart showing the project schedule.
- C. The Vendor/Contractor shall comply with all applicable OSHA workplace safety requirements and shall accomplish the work in a manner providing for the safety of their equipment and workers and for the safety of the general public.

7.3. LOCATION OF THE WORK:

The work to be performed in this contract will be performed on 12254 Spring Hill Dr, Spring Hill, FL 34609, in Hernando County, Florida.

7.4. TECHNICAL SPECIFICATIONS

Refer to Attachments Section.

7.5. SURVEY CONTROL

Vendor/Contractor will furnish all surveys and construction stakeouts unless otherwise specified. The Vendor/Contractor will provide horizontal control and bench marks or elevations for vertical control. The Vendor/Contractor shall furnish, free of charge, all stakes, all templates, and other materials necessary for marking and maintaining points and lines given. The Vendor/Contractor shall be held responsible for the preservation of all stakes and markers, and if the stakes or markers are destroyed or disturbed, the cost of replacing them shall be charged against the Vendor/Contractor, and shall be deducted from the payment for the work. The Vendor/Contractor shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

7.6. TRAFFIC CONTROL

- A. The Vendor/Contractor shall be responsible for installing, operating, and maintaining all traffic control associated with the project, including detours, advance warnings, channelization, or other features, both at the immediate work site and at outlying points as detailed on the construction plans or as referenced by the FDOT indexes.
- B. Vendor/Contractor shall prepare a detailed traffic control plan designed to accomplish the level of performance outlined in the scope of work, and incorporating the methods and criteria contained in the Manual on Uniform Traffic Control Devices published by the U.S. Department of Transportation and adopted as amended by the FDOT. This plan must be approved in writing by the Engineer.
- C. The Engineer may inspect and monitor the traffic control scheme and devices of the Vendor/Contractor and shall, through the Project Manager or County's Designated Inspector assigned to the project, make known his requirements for any alterations and adjustments to the control plan or devices. The Vendor/Contractor shall take direction only as appropriately expressed by the Inspector or Engineer.

8. General State of Florida Required Terms

The below will need to be completed by awardee if a Task Order/Contract is funded through State Funding.

8.1. Public Entity Crimes

The Proposer/Consultant/Contractor understands and acknowledges that this Agreement with the COUNTY will be void, in the event the conditions under Section 287.133, Florida Statutes applies to the Proposer/Consultant/Contractor, relating to conviction for a public entity crime.

8.2. Records and Ownership of Documents

1. Upon completion or termination of this Contract, all records, documents, tracings, plans, specifications, maps, evaluations, reports, computer assisted design or drafting disks and other technical data, other than working papers, prepared or developed by Consultant under this Contract shall be delivered to and become the property of County. Consultant, at its own expense, may retain copies for its files and internal use. Consultant assumes no liability for the use of such documents by the County or others for purposes not intended under this Contract.

2. In addition to other requirements provided herein, Proposer/Consultant/Contractor shall comply with public records laws embodied in chapter 119, Florida Statutes, and specifically shall:

- Keep and maintain public records required by the County in order to perform the Scope of Services identified herein.
- Upon request from the County provide the County with any requested public records or allow the requested records to be inspected or copied within a reasonable time by the County.
- Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and thereafter if the Consultant does not transfer all records to the County.
- Transfer, at no cost, to County all public records in possession of the Consultant upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the County, upon request from the County, in a format that is compatible with the information technology systems of the County. If the Consultant keeps and maintains public records upon the conclusion of this Agreement, the Consultant shall meet all applicable requirements for retaining public records that would apply to the County.
- If Consultant does not comply with a public records request, the County shall treat that omission as breach of this Agreement and enforce the contract provisions accordingly. Additionally, if the Consultant fails to provide records when requested, the Consultant may be subject to penalties under section 119.10, Florida Statutes and reasonable costs of enforcement, including attorney fees.

IF THE PROPOSER/CONSULTANT/CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE VENDOR/CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE HERNANDO COUNTY PUBLIC INFORMATION OFFICE AT (352) 540-6426 OR VIA EMAIL AT PUBLICINFORMATION@HERNANDOCOUNTY.US.

8.3. Scrutinized Companies

By its execution of this Agreement, Proposer/Consultant/Contractor certifies that it is not ineligible to submit a bid or proposal for, or enter into a contract or renewal thereof, with any local government entity as a result of the application of Section 287.135, Fla. Stat. In addition, Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List, is not on the Scrutinized Companies with Activities in the Iran Petroleum Sector List, and does not have business operations in Cuba or Syria, and is not participating in a boycott of Israel, as required by Section 287.135(5), Fla. Stat. In addition, Proposer/Consultant/Contractor understands that this reference allows for termination of this Agreement, at the option of the County, if Proposer/Consultant/Contractor is found to have submitted a false certification.

8.4. Civil Rights

The Proposer/Consultant/Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision binds the Proposer/Consultant/Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

8.5. Responsible Vendor Determination

Proposer/Consultant/Contractor is hereby notified that Section 287.05701, Florida Statutes, requires that the County may not request documentation of or consider a vendor's social, political, or ideological interests when determining if the vendor is a responsible vendor.

8.6. E-Verify

As a condition precedent to entering into this Agreement and in compliance with Section 488.095, Fla. Stat., Proposer/Consultant/Contractor, and its subcontractors shall, register with and use the E-Verify system to verify work authorization status of all employees hired after January 1, 2021.

- Proposer/Consultant/Contractor shall require each of its subcontractors to provide Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. Contractor shall maintain a copy of the subcontractor's affidavit as part of and pursuant to the records retention requirements of this Agreement.
- The County, Proposer/Consultant/Contractor, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Section 448.09(1), Fla. Stat. or the provisions of this section shall terminate the contract with the person or entity.

- The County, upon good faith belief that a subcontractor knowingly violated the provisions of this section, but Contractor otherwise complied, shall promptly notify Contractor and Contractor shall immediately terminate the contract with the subcontractor.
- A contract terminated under the provisions of this section is not a breach of contract and may not be considered such. Any contract termination under the provisions of this section may be challenged pursuant to Section 448.095(2)(d), Fla. Stat. Contractor acknowledges that upon termination of this Agreement by the County for a violation of this section by Contractor, Contractor may not be awarded a public contract for at least one (1) year. Contractor further acknowledges that Proposer/Consultant/Contractor is liable for any costs incurred by the County as a result of termination of any contract for a violation of this section.
- Proposer/Consultant/Contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section, including this subsection, requiring the subcontractors to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.

9. Pricing Proposal

The Vendor/Contractor shall provide all labor and other resources necessary to provide the supplies, equipment and/or services in strict accordance with the specifications defined in this Solicitation for the amounts specified in this Pricing Proposal, inclusive of overhead, profit and any other costs.

Vendor/Contractor is to understand that the total bid price is based on the estimated quantities indicated as follows and will control in awarding the Contract as provided in the Solicitation Instructions. It is further understood that the quantities stated in the Pricing Proposal for various items are estimated only and may be increased or decreased as provided in the Contract.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
General Conditions					
1	Mobilization	1	LS		
Demolition					
2	Site-Selective Demolition Remove & Store (Plaques, Flag Poles, Benches, Etc.)	1	LS		
3	Concrete Demolition & Removal	90	SY		
4	Asphalt Demolition and Removal	16	SY		
5	Existing Striping Removal (Waterblast Only)	1	LS		
Concrete Foundation Systems					
6	Foundation Systems (1.5WF3.0-Strip Ftg, 1.5WF2.0-Strip Ftg, Flagpole Ftg)	26	CY		
Concrete, Cast in Place Systems					
7	16-inch Concrete Slab (Flagpole Curb)	125	SF		
8	Walls 8" AC-1 Architectural Concrete	340	SF		
9	Seating	25	CY		
10	Stairs	105	SF		

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
11	Monument Curb DB-1 Decorative Ground Face Block	27	LF		
12	Sidewalks CB-1 Broom finished Concrete	1,870	SF		
13	Trench Drain Systems	94	LF		
14	PVC Trench Drain Connections	24	LF		
Masonry					
15	12-inch CMU Wall	229	SF		
16	12-inch Decorative Block	67	SF		
Metals					
17	Handrails (Wall Mounted)	26	LF		
Electrical					
18	Electrical Services (Disconnect Switch, New Pedestal, Time Clock/Photocell, Power Supply, Cabinet, and Battery Inverter)	1	LS		
19	Light Fixtures, Materials, and Installation: (Walkway Bollard lights, Flagpole well lights, Step Lights, Small on Ground Flood Lights, Linear Under Seat and Ground Mounted Flood Lights)	1	LS		
Earthwork					
20	Silt Fencing	450	LF		
21	Tree Removal	2	EA		
22	Earthwork (Add & Remove) and Grading (Rough and Final)	1	LS		

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
Exterior Improvements					
23	30-FT Flag Pole(s)	6	EA		
24	40-FT Flag Pole(s)	1	EA		
24	Restriping Parking Spots	1	LS		
Landscaping					
26	Top Soil Placement & Grading	1,860	SF		
27	Sodding (Bahia Grass)	13,840	SF		
28	Temporary Water for Irrigation of Landscape	1	LS		
Exterior Finishes					
29	GR-1 Gravel	5	CY		
30	AT-1-Synthetic Turf	300	SF		
31	LT-1 Limestone Tile	500	SF		
32	PAV-1 Concrete Pavers	525	SF		
33	Granite Stone (2'x2'x18")	1	EA		
TOTAL					

10. Vendor Questionnaire

10.1. Company Information

10.1.1. *Vendor Registration**

Please download the below documents, complete, and upload.

- [Vendor-Registration-Form.pdf](#)

*Response required

10.1.2. *W9 Form **

Please upload your company's W9 information

*Response required

10.1.3. *Upload Florida Permit*

Bidders who are non-resident corporations shall furnish to the Owner a duly certified copy of their permit to transact business in the State of Florida along with the bid. Failure to submit this evidence or qualification to do business in the State of Florida may be basis for rejection of the bid.

10.2. Authorizations

10.2.1. *Authorized Representative**

Are you fully authorized to bind this company, or corporation.

Yes

No

*Response required

10.2.2. *Authorized Signatory/Negotiator**

Please provide the information to support the statement below:

The Firm/Contractor represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the Firm/Contractor will be duly bound:

Name(s)

Title(s)

Email(s)

Phone(s)

Business Address(s)

*Response required

10.2.3. *Corporate Affidavit**

Please download the below documents, complete, and upload.

*Response required

10.3. Confirmations

10.3.1. *Pricing Offered**

THE UNDERSIGNED, BEING DULY AUTHORIZED TO SUBMIT THIS BID ON BEHALF OF THE BIDDER, AGREES THAT THIS OFFER IF ACCEPTED WITHIN ONE HUNDRED TWENTY (120) DAYS FROM THE BID OPENING DATE, TO FURNISH TO HERNANDO COUNTY ANY AND ALL ITEMS FOR WHICH PRICES ARE OFFERED IN THIS BID SOLICITATION AT THE PRICE(S) SO OFFERED, DELIVERED AT DESIGNATED POINT(S), WITHIN THE TIME PERIOD SPECIFIED, AND AT THE TERMS AND CONDITIONS SO STIPULATED IN THE SOLICITATION FOR BIDS.

Please confirm

*Response required

10.3.2. *Acceptance of Terms and Conditions**

By responding to this Solicitation, the bidder certifies that he/she has reviewed the sample contract, and its exhibits contained herein, and is familiar with their terms and conditions and finds them expressly workable without change or modification.

We certify and declare that the foregoing is true and correct.

Please acknowledge below that you confirm the above statement:

Please confirm

*Response required

10.3.3. *Acknowledgement**

Agree at the time of submitting its bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its bid for performance of the work at the price(s) bid and within the times and in accordance with the other terms and conditions of the bid documents.

Please confirm

*Response required

10.3.4. *Submission Confirmation**

The undersigned, hereinafter called "Bidder", having visited the site of the proposed project and familiarized himself with the local conditions, nature and extent of the work, and having examined carefully the agreement form, General Conditions, Special Conditions, Supplementary Conditions for Federal/State Requirements, plans and specifications and other contract documents, with the bond requirements herein, proposed to furnish all labor, materials, equipment and other necessary items, facilities and services for the proper execution and completion of the subject project in full accordance with the drawings and specifications prepared in accordance with your Advertisement of Bids, instruction to bidders, agreement and all other documents related thereto on file in the office of the Hernando County Procurement Department and if awarded the Contract, to complete said work within the time limits specified for their bid price.

Please confirm

*Response required

10.3.5. Drug Free Workplace Certification *

I have read and attest to, in accordance with Florida Statute 287.087 (current version), hereby certify that bidder:

Publishes a written statement notifying that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace named above, and specifying actions that will be taken against violations of such prohibition.

Informs employees about the dangers of drug abuse in the workplace, the firm's policy of maintaining a drug free working environment, and available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug use violations.

Gives each employee engaged in providing commodities or contractual services that are under proposal a copy of the statement specified above.

Notifies the employees that as a condition of working on the commodities or contractual services that are under proposal, the employee will abide by the terms of the statement and will notify the employer of any conviction of, pleas of guilty or nolo contendere to, any violation of Chapter 893, or of any controlled substance law of the State of Florida or the United States, for a violation occurring in the workplace, no later than five (5) days after such conviction, and requires employees to sign copies of such written statement to acknowledge their receipt.

Imposes a sanction on, or requires the satisfactory participation in, a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.

Makes a good faith effort to continue to maintain a drug free workplace through the implementation of the Drug Free Workplace Program.

"As a person authorized to sign this statement, I certify that the above named business, firm or corporation complies fully with the requirements set forth herein".

Please Confirm that you have read and attest to this Drug Free Workplace Certificate

Please confirm

*Response required

10.3.6. VENDOR CERTIFICATION REGARDING SCRUTINIZED COMPANIES*

Section 287.135 (Current Edition), Florida Statutes, prohibits agencies from contracting with companies for goods or services of \$1,000,000.00 or more, that are on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector Lists which are created pursuant to s. 215.473 F.S. (Current Edition), or the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 F.S. (Current Edition), or companies that are engaged in a boycott of Israel or companies engaged in business operations in Cuba or Syria.

As the person authorized to bind on behalf of respondent, I hereby certify that the company identified above in the section entitled "Respondent Vendor Name" is not listed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List. I further certify that the company is not engaged in a boycott of Israel. I understand that pursuant to section 287.135 (Current Edition), Florida Statutes, the submission of a false certification may subject company to civil penalties, attorney's fees, and/or costs and does not have business operations in Cuba or Syria.

I have read and attest that I confirm the above is acknowledged.

Please confirm

*Response required

10.3.7. Award*

Every Bidder must take notice of the fact that even though his proposal be accepted and the documents signed by the Bidder to whom an award is made and by those officials authorized to do so on behalf of Hernando County, Florida, that no such award or signing shall be considered a binding contract without a certificate from the Finance Director that funds are available to cover the cost of the work to be done, or without the approval of the County Attorney as to the form and legality of the Contract and all the pertinent documents relating thereto having been approved by said County Attorney; and such Bidder is hereby charged with this notice.

The signer of the proposal, as Bidder, also declares that the only person, persons, company or parties interested in this proposal, are named in the proposal, that he has carefully examined the Advertisement of Bid, Solicitation Instructions, Contract Specifications, Plans, Supplementary Conditions for Federal/State Requirements, General Conditions, Special Conditions, Special Provisions and contract bond, that he or his representative has made such investigation as is necessary to determine the character and extent of the work and he proposes and agrees that if the proposal be accepted, he will contract with Hernando County, Florida in the form of contract hereto annexed, to provide the necessary labor, materials, machinery, equipment, tools or apparatus, do all the work required to complete the Contract within the time mentioned in the Contract Documents according to the requirements of Hernando County, Florida, as herein and hereinafter set forth, and furnish the required surety bonds for the following prices to wit:

Please confirm

*Response required

10.3.8. E-Verify Certification *

Vendor/Contractor acknowledges and agrees to the following:

Vendor/Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of:

All persons employed by the Vendor/Contractor during the term of the Contract to perform employment duties within Florida; and

All persons, including subcontractors, assigned by the Vendor/Contractor to perform work pursuant to the Contract with the department.

Please confirm

*Response required

10.3.9. *Affidavit of Non Collusion and of Non-Interest of Hernando County Employees**
Affidavit of Non Collusion and of Non-Interest of Hernando County Employees

Certification that Vendor/Contractor affirms that the bid/proposal presented to the Owner is made freely, and without any secret agreement to commit a fraudulent, deceitful, unlawful or wrongful act of collusion.

I have read and attest that I am the Vendor/Contractor in the above bid/proposal, that the only person or persons interested in said proposal are named therein; that no officer, employee or agent of the Hernando County Board of County Commissioners (BOCC) or of any other Vendor/Contractor is interested in said bid/proposal; and that affiant makes the above bid/proposal with no past or present collusion with any other person, firm or corporation.

Please confirm that you have read and attest to Affidavit of Non Collusion and of Non-Interest of Hernando County Employees.

Please confirm

*Response required

10.3.10. *Sworn Statement 287.133 (3) (a)**

I have read and attest that I understand that a "public entity crime" as defined in Paragraph 287.133 (1)(g), Florida Statutes (current version), means a violation of any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any proposal or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

I have read and attest that I understand that "convicted" or "conviction" as defined in Paragraph 287.133 (1)(b), Florida Statutes (current version), means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any Federal or State trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

I have read and attest that I understand that an "affiliate" as defined in Paragraph 287.133 (1)(a), Florida Statutes (current version), means:

- A. A predecessor or successor of a person convicted of a public entity crime; or
- B. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active

in the management of an affiliate. The ownership by one (1) person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one (1) person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.

I have read and attest that I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes (current version), means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which proposals or applies to proposal on contracts for the provisions of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

I have read and attest that based on information and belief, the statement which I have confirmed below is true in relation to the entity submitting this sworn statement:

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31, OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT.

Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

The entity submitting this sworn statement, or one (1) or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

The entity submitting this sworn statement, or one (1) or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted Vendor/Contractor list

*Response required

10.3.11. If you chose option 3, to the question above, 3.10 Sworn Statement 287.133(3) a, attach a copy of the final order.

10.4. Bid Bond

*10.4.1. Bid Bond Confirmation **

If the foregoing proposal shall be accepted by Hernando County, Florida, and the undersigned shall fail to execute a satisfactory contract as stated in the advertisement herein attached, then the County may, at its option, determine that the undersigned has abandoned the Contract, and thereupon this proposal shall be null and void, and the certified check or bond accompanying this proposal, shall be forfeited to and become the property of Hernando County, Florida, and the full amount of said check shall be retained by the County, or if the proposal bond be given, the full amount of such bond shall be paid to the County as stipulated for liquidated damages; otherwise, the bond or certified check accompanying this proposal, or the amount of said check, shall be returned to the undersigned as specified herein.

If corporation, give the names and addresses of the president and secretary. If firm or partnership, the names and addresses of the members or partners. The Bidder shall list not only his name, but also the name of any person with whom Bidder has any type of agreement whereby such person's improvements, enrichment, employment of possible benefit, whether subcontractor, materialman, agent, supplier, or employer, is contingent upon the award of the Contract to the Bidder).

Please confirm

*Response required

10.4.2. BID GUARANTEE*

Bidder has enclosed a Certified check, Cashier's Check or Bid Bond in the amount of not less than the five percent (5%) of the Total Base Bid Amount payable to the Hernando County Board of County Commissioners as a guarantee for the purpose set out in the Instructions to Bidders.

Please confirm

*Response required

10.4.3. Bid Bond Form

Please download the below documents, complete, and upload.

- [Bid Bond Form \(2\).pdf](#)

10.5. Proposal/Qualifications

10.5.1. References *

Proposer must provide a minimum of **three (3)** references using the format options shown below. A combination of the format options may be used as long as three complete references are provided.

References must be individuals that can be readily contacted and have first-hand knowledge of the Proposer's performance on the specific project performed by the Proposer. Each reference project must meet the following criteria:

Project at Substantial Completion or completed within the last seven (7) years.

Similar in size, dollar value and scope as this project.

Option 1: Please provide the below information for 3 required References:

Business/Owner Name

Reference Contact Person

Reference Address

Reference Phone No.

Reference Email Address

Project Name

Project Location

Contract Project Manager

Site Superintendent

Contract Amount

Date Project Commenced

Date of Substantial Completion

Date of Final Completion

Description of Work Performed

Option 2: Please download the attached Reference Form and upload completed references.

Note: Experience shall be related to successfully completed projects within the last seven (7) years (i.e., the project must have been Substantially Complete within seven (7) years of the due date of this solicitation. Only projects that are complete or substantially complete as of the solicitation due date will be considered).

By submitting this information, I certify that the qualifications questionnaire information is true and correct to the best of my knowledge.

- [Reference Check for Solicit...](#)

*Response required

10.5.2. Licenses

The Bidder must be a registered to do business in the State of Florida. **All Bidder's and/or subcontractors performing work requiring a specialty license must be licensed in the State of Florida.**

This includes but is not limited to electrical and mechanical trades, as well as any other earthwork Contractor on the Bidder's team. Provide evidence of the required licenses as listed in this Solicitation for Bidder and all subcontractors identified herein.

Classification

Issuing Government License

Issue Date:

License Number:

10.5.3. *Please provide construction experience**

Overview of bidder/subcontractor construction experience, including a list of projects successfully completed and indicating Owner, location, Contract value and completion date.

*Response required

10.5.4. *Experience Similar Size and Scope**

Documentation of bidder/subcontractor two (2) projects, similar in scope and complexity to this project, which have been successfully completed by the Bidder within the past seven (7) years.

*Response required

10.5.5. *ORGANIZATION CHART:**

Bidder must provide an organization chart showing Bidder's team identifying specific responsibilities of Bidder and subcontractors.

*Response required

10.5.6. *Key Subcontractors**

Each Bidder must submit with its response a list of subcontractors who will perform the work in each of the following categories (key subcontractors). List the name of the proposed subcontractor, or "Bidder" if the Bidder will perform the work, after each work category:

Example:

- (1) Earthwork construction
- (2) Earthen dike construction
- (3) Soil bentonite backfill cut-off wall installation
- (4) Wet excavation/dredging work
- (5) Concrete form work
- (6) Equipment installation
- (7) Electrical and instrumentation installation
- (8) Control system integration
- (9) Wetland planting and establishment

If no subcontractors will be employed please state "NONE"

*Response required

10.5.7. *PROJECT MANAGER AND SUPERINTENDENT QUALIFICATIONS:**

Bidder must provide resumes of Project Manager and Superintendent listing qualifications, experience, education and training. The Project Manager and Superintendent must have adequate experience, generally considered as a working Project Manager/Superintendent on a minimum of two (2) projects, similar in size and scope to the Construction of Veterans Memorial Monument (Rebid), within the past seven (7) years.

*Response required

10.6. [Additional Required Forms](#)

10.6.1. [Trench Safety Act Compliance*](#)

Please download the below documents, complete, and upload.

- [Trench Safety Act Complian...](#)

*Response required

10.6.2. [Hernando County Employment Disclosure*](#)

Please download the below documents, complete, and upload.

- [HC Employment Disclosure Ce...](#)

*Response required

10.6.3. [STATE REQUIRED FORMS*](#)

Please download the below documents, complete, and upload.

- [ED 80-0013 Form - Certifica...](#)
- [Convicted or Discriminatory...](#)



**BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY, FLORIDA
SAMPLE CONSTRUCTION CONTRACT**

This Contract, entered into this _____ day of _____, 20____, by and between the Hernando County Board of County Commissioners, hereafter called the COUNTY, and _____, hereinafter called the VENDOR/CONTRACTOR. County and Vendor/Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follow:

**Construction of Veterans Memorial Monument
ITB NO. 24-CG00852/EK
Brooksville, Florida**

ARTICLE 1 – CONTRACT DOCUMENTS

- 1.01** The Vendor/Contractor shall furnish all labor, equipment and materials and perform the work above described for the amount stated above in strict accordance with the Contract Documents, all of which are made a part hereof and designated as follows:

Fully-executed Construction Contract

Solicitation Document (ITB) in its entirety including but not limited to all sections therein, and exhibits

Solicitation

Introduction

Definitions and Solicitation Instructions

General Conditions

Special Conditions

Scope and Specifications

General State of Florida Required Terms

Attachments

C – Hernando Veteran Memorial Park – ARCH

D – Hernando Veteran Memorial Park – ELEC

E – Hernando Veteran Memorial Park – STR

F – Hernando Veteran Memorial Park – Civil – SS

G – Hernando Veteran 100% Spec Revised

Exhibit A--General Requirements and Technical Specifications

Exhibit B--Plans/Drawings

All addenda issued by the County prior to the receipt of bids and all supplementary drawings issued after award of the Contract become part of the Contract Document.

Amending and Supplementing Contract Documents:

The Contract Documents may be amended to provide for additions, deletions, and revisions in the work or to modify the terms and conditions thereof by Change Order.

The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the work may be authorized, by one (1) or more of the following ways:

A field order;

Engineer's approval of a shop drawing or sample; or

Engineer's written interpretation or clarification per the provisions described in the Contract Documents.

In resolving such conflicts, errors and discrepancies, the documents shall be given preference in the following order: Agreement, Specifications, Drawings, Solicitation Instructions. Within the specifications the order of preference shall be as follows: Addenda, General Conditions, Technical Specifications. Figure dimensions on drawings shall govern over scale dimensions, and the detailed drawings shall govern over general drawings. Any work that may reasonably be inferred from the specifications or drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work materials or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. In case of conflict the more stringent requirements shall take precedence and govern.

The Vendor/Contractor shall take no advantage of any error or omission in the plans or of any discrepancy between the plans and specifications, and the Engineer shall make such interpretation as may be deemed necessary for the fulfillment of the intent of the plans and specifications as construed by him and his decision shall be final.

All provisions required by law to be inserted in this Contract, whether actually inserted or not.

Exhibits to this Agreement (as follows):

Vendor/Contractor's Pricing Proposal (Bid).

Documentation submitted by Vendor/Contractor after the Notice of Award:

Insurance Certificate.

Payment and Performance Bond.

The following which may be delivered or issued on or after the effective date of the Agreement and are not attached hereto:

Notice to Proceed.

Change Order(s).

The documents listed in this paragraph are attached to the Agreement (except as expressly noted otherwise).

There are no Contract Documents other than those listed in this paragraph.

The Contract Documents may only be amended, modified, or supplemented as provided in the Contract Documents.

There are no contract documents other than those listed in this section.

1.02 Amending and Supplementing Contract Documents: The Contract Documents may only be amended, modified, or supplemented as stated in the Solicitation Document, section titled "SPECIAL CONDITIONS", paragraph 16, titled "Changes in the Work; Claims". The Contract Documents may be amended to provide for additions, deletions, and revisions in the work or to modify the terms and conditions thereof by change order.

The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the work may be authorized, by one (1) or more of the following ways:

A. A field order;

B. Engineer's approval of a shop drawing or sample; or

C. Engineer's written interpretation or clarification per the provisions described in the Contract Documents.

- 1.03** Resolving Conflicts, Errors and Discrepancies in the Contract Documents: In resolving such conflicts, errors and discrepancies, the documents shall be given preference in the following order: Contract, Solicitation Document, drawings. Within the Solicitation Document the order of preference shall be as follows: addenda, general conditions, technical specifications. Figure dimensions on drawings shall govern over scale dimensions, and the detailed drawings shall govern over general drawings. Any work that may reasonably be inferred from the specifications or drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work materials or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. In case of conflict the more stringent requirements shall take precedence and govern.

The Vendor/Contractor shall take no advantage of any error or omission in the plans or of any discrepancy between the plans and specifications, and the Engineer shall make such interpretation he/she may deem necessary for the fulfillment of the intent of the plans and specifications as construed by him/her; the Engineer's decision shall be final.

ARTICLE 2 - THE ENGINEER

- 2.01** Engineer in the administration of this Contract and any references to the Engineer or the Professional shall be deemed to mean **Coastal Engineer Associates, Tina Malmberg, P.E.**, for the plans and specifications. **Keith Larson, Or Rob Talmage** will act as the County's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the work in accordance with their respective scope of work and the Contract Documents.

ARTICLE 3 – CONTRACT TIMES

- 3.01** Time of the Essence:

For purposes of this Contract, all time limits for completion and readiness for final payment as stated in the Contract Documents are of the essence.

- 3.02** Days to Achieve Substantial Completion and Final Payment:

Vendor/Contractor agrees that the work will be substantially complete within **One Hundred Fifty (150)** calendar days after the commencement date indicated in the Notice to Proceed and ready for final payment within **One Hundred Eighty (180)** calendar days after the date indicated on the Notice to Proceed.

- 3.03** Liquidated Damages:

Vendor/Contractor and County agree for each consecutive calendar day that the work remains incomplete after the date established for substantial completion and/or final completion, the County will retain from the compensation otherwise to be paid to the Vendor/Contractor the sum of **Five Hundred Dollars (\$500.00)** as liquidated damages. This liquidated damages amount is the minimum measure of damages the County will sustain by failure of the Vendor/Contractor to complete all remedial work, correct deficient work, clean up the project and other miscellaneous tasks required to complete all work specified.

ARTICLE 4 – CONTRACT PRICE

- 4.01** County shall pay Vendor/Contractor for completion of the work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to the paragraphs below:

- 4.01.1** For all work other than unit price work, a lump sum of:

(\$ _____)
(figure)

(words)

All specific cash allowances are included in the above price and have been computed in accordance with the Solicitation Document, section titled "SPECIAL CONDITIONS", paragraph 17, titled "Cost of the Work; Allowances; Unit Price Work", subparagraph B, titled "Allowances" item no. 2, titled "Cash Allowances".

4.01.2 For all unit price work, an amount equal to the sum of the established unit price for each separately identified item of unit price work times the estimated quantity of that item as indicated in this paragraph:

As provided in the ITB, section titled "SPECIAL CONDITIONS", paragraph 17, titled "Cost of the Work; Allowances; Unit Price Work", subparagraph C, titled "Unit Price Work", estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by County Designated Representative as provided in the ITB, section titled "SPECIAL CONDITIONS", paragraph 17, titled "Cost of the Work; Allowances; Unit Price Work", subparagraph C, titled "Unit Price Work". Unit prices have been computed as provided in the ITB, section titled "SPECIAL CONDITIONS", paragraph 17, titled "Cost of the Work; Allowances; Unit Price Work", subparagraph C, titled "Unit Price Work".

UNIT PRICE WORK

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Estimated Price</u>
-----------------	--------------------	-------------	---------------------------	-------------------	------------------------------

ESTIMATED TOTAL OF ALL UNIT PRICE WORK	\$ _____ (use words)	\$(_____) (figure)
--	-------------------------	------------------------

ARTICLE 5 – PAYMENT PROCEDURES

5.01 Submittal and Processing of Payments:

Vendor/Contractor shall submit Applications for Payment in accordance with the ITB, section titled "SPECIAL CONDITIONS", paragraph 21, titled "Payments to Contractor and Completion", subparagraph B, titled "Progress Payments", subparagraph 1 titled "Application for Payments", item A. Applications for Payment will be processed by County Designated Representative as provided in the Contract Documents.

5.02 Progress Payments; Retainage:

5.02.1 County shall make progress payments on account of the Contract Price on the basis of Vendor/Contractor's Applications for Payment not later than the time periods established by applicable provisions of the Florida Prompt Payment Act, Part VII, Section 218.735, F.S., during performance of the work as provided in paragraphs below. All such payments will be measured by the Schedule of Values (and in the case of unit price work based on the number of units completed) or, in the event there is no Schedule of Values, as provided in the General Requirements:

5.02.1.1 Progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as County Designated Representative may determine or County may withhold, including but not limited to liquidated damages, in accordance with the Contract Documents:

5.02.1.1.1 Ninety-five percent (95%) of work completed (with the balance being retainage); and

5.02.1.1.2 Ninety-five percent (95%) of cost of materials and equipment not incorporated in the work (with the balance being retainage).

5.03 Final Payment:

5.03.1 Upon receipt of the final Application for Payment accompanied by County Designated Representative's recommendation of payment in accordance with the ITB, section titled "SPECIAL CONDITIONS", paragraph 21, titled "Payments to Contractor and Completion", subparagraph B, titled "Progress Payments", subparagraph 1 titled "Application for Payments", item A, County shall pay Vendor/Contractor the remainder of the Contract Price as recommended by County Designated Representative, less any sum County is entitled to set off against County Designated Representative's recommendation, including but not limited to liquidated damages.

5.03.2 Final Payment, constituting the entire unpaid balance of the Contract Sum, shall be paid by the County to the Vendor/Contractor when the work has been completed, the Contract fully performed, [NPDES – FDEP Notice of Termination \(NOT\) has been delivered to the County Designated Representative](#), and a final Certificate for Payment has been issued by the County Designated Representative.

ARTICLE 6 – INTEREST

All moneys not paid when due shall bear interest at the maximum legal rate.

ARTICLE 7 – VENDOR/CONTRACTOR'S REPRESENTATIONS

7.01 In order to induce County to enter into this Contract Vendor/Contractor makes the following representations:

7.01.1 Vendor/Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bid Documents.

7.01.2 Vendor/Contractor has visited the Site and become familiar with and is satisfied with the general, local, and Site conditions that may affect cost, progress, and performance of the work.

7.01.3 Vendor/Contractor is familiar with and is satisfied with all Federal, State, and local laws and regulations that may affect cost, progress, and performance of the work.

7.01.4 Vendor/Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

7.01.5 Vendor/Contractor is aware of the general nature of work to be performed by County and others at the Site that relates to the work as indicated in the Contract Documents.

- 7.01.6 Vendor/Contractor has correlated the information known to Vendor/Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- 7.01.7 Vendor/Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Vendor/Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Vendor/Contractor.
- 7.01.8 The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the work.

ARTICLE 8 – MISCELLANEOUS

8.01 Terms:

Terms used in this Contract will have the meanings stated in the Contract Documents.

8.02 Assignment of Contract:

No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.03 Severability:

Any provision or part of the Contract Documents held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon County and Vendor/Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

8.04 This Contract may be executed in several counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

ARTICLE 9 – CONTRACT PAYMENT

9.01 The County agrees to pay the Vendor/Contractor for the faithful performance under this Contract for the agreed amount of _____ Dollars (\$_____) and is based on the lump sum prices contained herein and subject to additions or deductions as modified.

***THIS SPACE INTENTIONALLY LEFT BLANK
SIGNATURES ON NEXT PAGE***

OWNER/COUNTY:
HERNANDO COUNTY BOARD OF COUNTY
COMMISSIONERS

VENDOR/CONTRACTOR

By: ELIZABETH NARVERUD

By: _____

Title: CHAIR

Title: _____

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest: Douglas A. Chorvat, Jr.

Attest: _____

Title: Clerk of Circuit Court & Comptroller

Title: _____

Address for giving notices:

Address for giving notices:

15470 Flight Path Dr.

Brooksville, FL 34604

Agent for service of process:

(If Vendor/Contractor is a corporation or a partnership,
attach evidence of authority to sign.)

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that _____, hereinafter referred to as the "Vendor/Contractor," as principal, and _____ hereinafter called "Surety," as surety, are held and firmly bound unto Hernando County, hereinafter referred to as the "County," a political subdivision of the State of Florida as obligee, in the full and just sum of \$ _____ dollars, lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Vendor/Contractor and Surety bind themselves, their representatives, and each of their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Vendor/Contractor has entered into a certain written Contract with the County dated the _____ day of _____, 20____, for the _____, with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purpose of explaining this bond.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS such that if Vendor/Contractor shall fully, promptly and faithfully perform said Contract and all obligations thereunder, including all obligations imposed by the Contract (which includes but is not limited to the solicitation-offer-award (cover page), advertisement of bid, solicitation document (ITB/RFQ/RFP), solicitation instruction, general conditions, special conditions, scope and specifications, Bid Form, required forms and certifications, exhibits, agreement form, form(s) of contract bond(s), plans and specifications and such alterations thereof as may be made as provided for therein) and shall promptly make payments to all claimants for any and all labor and materials used or reasonably required for use or furnished in connection with the performance of said Contract, and shall perform all other covenants and obligations of this bond, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. The undersigned shall indemnify and save harmless the County against and from all costs, expenses and damages, including litigation costs and attorney's fees arising out of, or in connection with the neglect, default or want of care or skill, including patent infringement on the part of said Vendor/Contractor, his agents, servants or employees in the execution or performance of said Contract.
2. The undersigned shall promptly make payment to all persons supplying services, labor, materials or supplies used directly or indirectly by said Vendor/Contractor, or any sub-contractor, in the prosecution of the work provided for in said Contract.
3. The undersigned agrees to promptly pay the County any difference between the sum to which the Vendor/Contractor would be entitled on the completion of the Contract, and the sum which the County may be obligated to pay for the completion of said work by the Vendor/Contractor or otherwise, including any damages, direct or indirect, or consequential, which the County may sustain by reason of the failure of the Vendor/Contractor to properly and promptly perform and abide by all of the provisions of said Contract.
4. Subject to the County's priority, claimants covered by § 713.01, Fla. Stat. (current version) shall have a direct right of action against the principal and surety under this obligation, after written notice of the performance of labor or delivery of materials or supplies, and non-payment therefor. Any claimant who seeks to recover against the principal or surety under this obligation must also satisfy the notice requirements and time limitations of § 255.05, Fla. Stat. (current version).
5. The Vendor/Contractor shall save the County harmless from any and all damages, expenses and costs which may arise by virtue of any defects in said work or materials within

a period of one (1) year from the date of initial acceptance of the completed project, if applicable.

Signed and sealed this _____ day of _____, 20_____.

VENDOR/CONTRACTOR, AS PRINCIPAL:

SURETY:

Principal Firm Name

Surety Name

By:

By:

Signature (Seal)

Signature (Seal)

Typed Name and Title

Typed Name and Title

Vendor/Contractor's mailing address:

Surety's mailing address:

Vendor/Contractor's email address:

Surety's email address:

Surety's telephone: _____

WITNESS:

Signature

Signature

Typed Name and Title

Typed Name and Title

EMERGENCY TELEPHONE NUMBERS

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

The following are the business and home telephone numbers where project key personnel can be reached at all times. In addition, the emergency telephone numbers of other vital agencies are listed:

	<u>BUSINESS NO.:</u>	<u>MOBILE NO.:</u>
VENDOR/CONTRACTOR'S PROJECT MANAGER	() _____	() _____
VENDOR/CONTRACTORS REPRESENTATIVE	() _____	() _____
COUNTY/PROJECT MANAGER	() _____	() _____

OTHER EMERGENCY NUMBERS

SHERIFF'S OFFICE	(352) 754-6850
FLORIDA HIGHWAY PATROL	(352) 754-6767
FLORIDA REGIONAL EMS	(352) 754-8991
BROOKSVILLE FIRE RESCUE	(352) 544-5445
EAST HERNANDO COUNTY FIRE RESCUE	(352) 540-4350
NORTHWEST HERNANDO COUNTY FIRE RESCUE	(352) 592-5618
WITHLACOOCHEE RIVER ELECTRIC	(352) 596-4000 EXT. 3145
DUKE ENERGY	(800) 700-8744
CHARTER COMMUNICATIONS (FKA: BRIGHT HOUSE CABLE)	(800) 892-0803
FLORIDA GAS TRANSMISSION	(352) 527-1898
TECO - PEOPLES GAS	(877) 832-6747
HERNANDO COUNTY UTILITIES	(352) 754-4037
HERNANDO COUNTY SCHOOL TRANSPORTATION	(352) 797-7003
HERNANDO COUNTY TRAFFIC SIGNAL SYSTEM	(352) 754-4064 EXT. 139
DEPARTMENT OF PUBLIC WORKS	(352) 754-4060
ENGINEERING DIVISION	(352) 754-4062
FLORIDA DEPARTMENT OF TRANSPORTATION	(352) 797-5700

**HERNANDO COUNTY UTILITY COORDINATION
FOR CONSTRUCTION SITES**

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

"I hereby certify that the coordination of the locations, connections, and relocations, as needed of all utilities in the project limits, has occurred with the respective utility, County and/or their official representatives. This certification regards the coordination only at this time and does not reflect actual work performed. Utility verification forms are attached from each respective utility verifying coordination and stating known conflicts. This form shall be completed by the Vendor/Contractor(s) and approved by Hernando County prior to initiating construction."

- THERE ARE NO KNOWN UTILITY CONFLICTS AFFECTING THIS PROJECT'S CONSTRUCTION TIME AND/OR COSTS.
- THERE ARE NOTED UTILITY CONFLICTS AFFECTING THIS PROJECT'S CONSTRUCTION TIME AND/OR COSTS.

VENDOR/CONTRACTOR INFORMATION

Signature

Date

Name and Title

Street or P. O. Box

City

State

Zip Code

Telephone: Area Code Number

Emergency Number

Traffic Sub-Contractor Telephone

Emergency Number

Hernando County Approved By:

Date

HERNANDO COUNTY UTILITY VERIFICATION
FOR CONSTRUCTION SITES

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

"I HEREBY CERTIFY THAT _____ HAS EXAMINED
(Utility Name)
THE PLANS AND CONSTRUCTION LIMITS OF THIS PROJECT. WE KNOW OF NO
CONSTRUCTION/UTILITY CONFLICTS WITH OUR FACILITIES AT THIS TIME, UNLESS NOTED
BELOW."

UTILITY COMPANY NAME

Signature

Date

Name and Title

Street or P. O. Box

City

State

Zip Code

Telephone Number: Area Code Number

Known Conflict Information

HERNANDO COUNTY MAINTENANCE OF TRAFFIC PLAN
FOR CONSTRUCTION SITES

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

"I hereby certify that the Maintenance of Traffic (MOT) Plan, as described in the attached construction plans or referenced by Florida Department of Transportation Standard Indexes, has been installed and will be maintained for this construction project. The MOT Plan reflects requirements applicable to protecting motorists and workers around the construction area. The MOT Plan shall be utilized, as applicable, by all Vendor/Contractors on the project. The MOT Plan provides compliance with approved Hernando County and State of Florida MOT Standards. This form shall be completed by the Vendor/Contractor(s) and approved by Hernando County prior to initiating construction."

UTILITY COMPANY NAME

Signature

Date

Name and Title

Street or P.O. Box

City

State

Zip Code

Telephone Number: Area Code Number

Known Conflict Information

STORM WATER POLLUTION PREVENTION PLAN
FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

"I hereby certify that the Storm Water Pollution Prevention Plan has been received by the undersigned for the construction site described in the Construction Plans. The Storm Water Pollution Prevention Plan reflects requirements applicable to protecting surface water resources in sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State or local officials. The Storm Water Pollution Prevention Plan provides compliance with approved issued permits, erosion and sediment control plans and storm water management plans. I certify, under penalty of law, that the Storm Water Pollution Prevention Plan will be installed and maintained, until all construction activities are complete.

Company Name

Signature

Date

Name and Title

Street or P.O. Box

City

State

Zip Code

Telephone:

Area Code

Number

UTILITY CONTACT LIST

PROJECT NAME:

COUNTY PROJECT NO.:

C.E.O. NO.: _____

The following are the contact names and business telephone numbers of utility representatives with infrastructure specifically located in the project limits. Additionally, the telephone numbers of various utilities in Hernando County and other vital agencies are listed:

<u>UTILITY NAME</u>	<u>REPRESENTATIVE</u>	<u>PHONE NUMBER</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

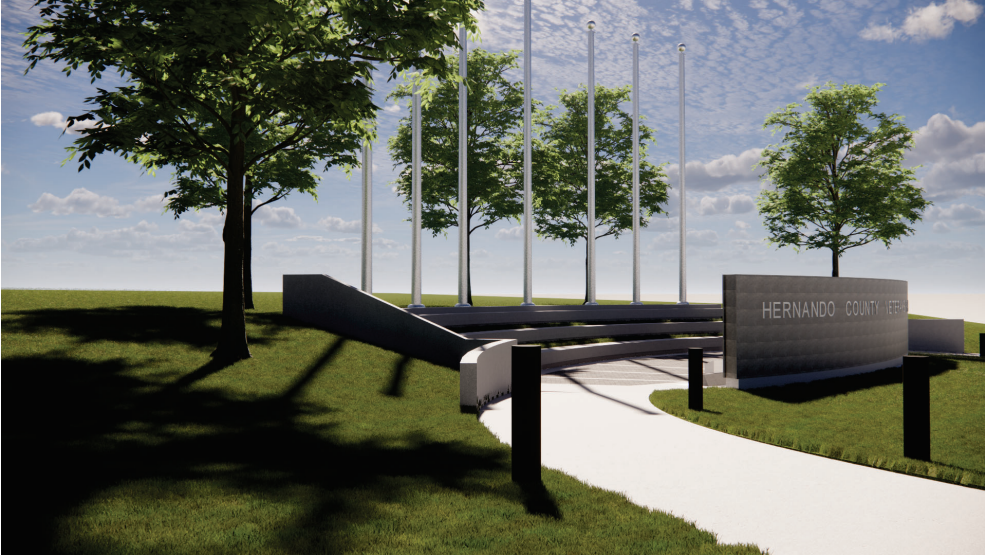
COUNTY UTILITY NUMBERS

WITHLACOOCHEE RIVER ELECTRIC	(352) 596-4000	EXT. 3145
DUKE ENERGY	(800) 700-8744	
CHARTER COMMUNICATIONS (FKA: BRIGHT HOUSE CABLE)	(800) 892-0803	
FLORIDA GAS TRANSMISSION	(352) 527-1898	
TECO - PEOPLES GAS	(877) 832-6747	
HERNANDO COUNTY UTILITIES	(352) 754-4037	

OTHER VITAL NUMBERS

SHERIFF'S OFFICE	(352) 754-6850	
FLORIDA HIGHWAY PATROL	(352) 754-6767	
FLORIDA REGIONAL EMS	(352) 754-8991	
BROOKSVILLE FIRE RESCUE	(352) 544-5445	
EAST HERNANDO COUNTY FIRE RESCUE	(352) 540-4350	
NORTHWEST HERNANDO COUNTY FIRE RESCUE	(352) 592-5618	
HERNANDO COUNTY SCHOOL TRANSPORTATION	(352) 797-7003	
HERNANDO COUNTY TRAFFIC SIGNAL SYSTEM	(352) 754-4064	EXT. 139
DEPARTMENT OF PUBLIC WORKS	(352) 754-4060	
ENGINEERING DIVISION	(352) 754-4062	
FLORIDA DEPARTMENT OF TRANSPORTATION	(352) 797-5700	

VETERANS MEMORIAL PARK



MILESTONE HERE

No.	Description	Date
	PERMIT	12/05/2023
	BID SET	06/21/2024



Wannemacher Jensen
Architects, Inc.

132 Mirror Lake Drive N. Unit 301, St. Petersburg,
Florida 33701-3214
AA0002277

STRUCTURAL ENGINEER
BECKLEY ENGINEERING

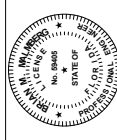
PO BOX 15789 BROOKSVILLE, FL 34604

ELECTRICAL ENGINEER
MPS ENGINEERING

240 PINE AVE N. OLDSMAR, FL 34677

CIVIL ENGINEER
COASTAL ENGINEERING ASSOC., INC

966 CANDLELIGHT BLVD. BROOSVILLE, FL 34601



Coastal
 engineering associates, inc.
 1960 Grandview Boulevard - Ft. Lauderdale, Florida 33401
 (954) 794-6400 • Fax: (954) 794-8389
 EIR-0000442

THIS RELEASE IS VALID FOR THE PROJECT AND THE PARTS OF THE PROJECT IDENTIFIED HEREIN. IT IS THE PROPERTY OF COASTAL ENGINEERING ASSOCIATES, INC. AND MAY BE USED ONLY FOR THE PROJECT IDENTIFIED HEREIN. ANY OTHER USE, REPRODUCTION, OR TRANSMISSION OF THIS INFORMATION WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC. IS PROHIBITED.

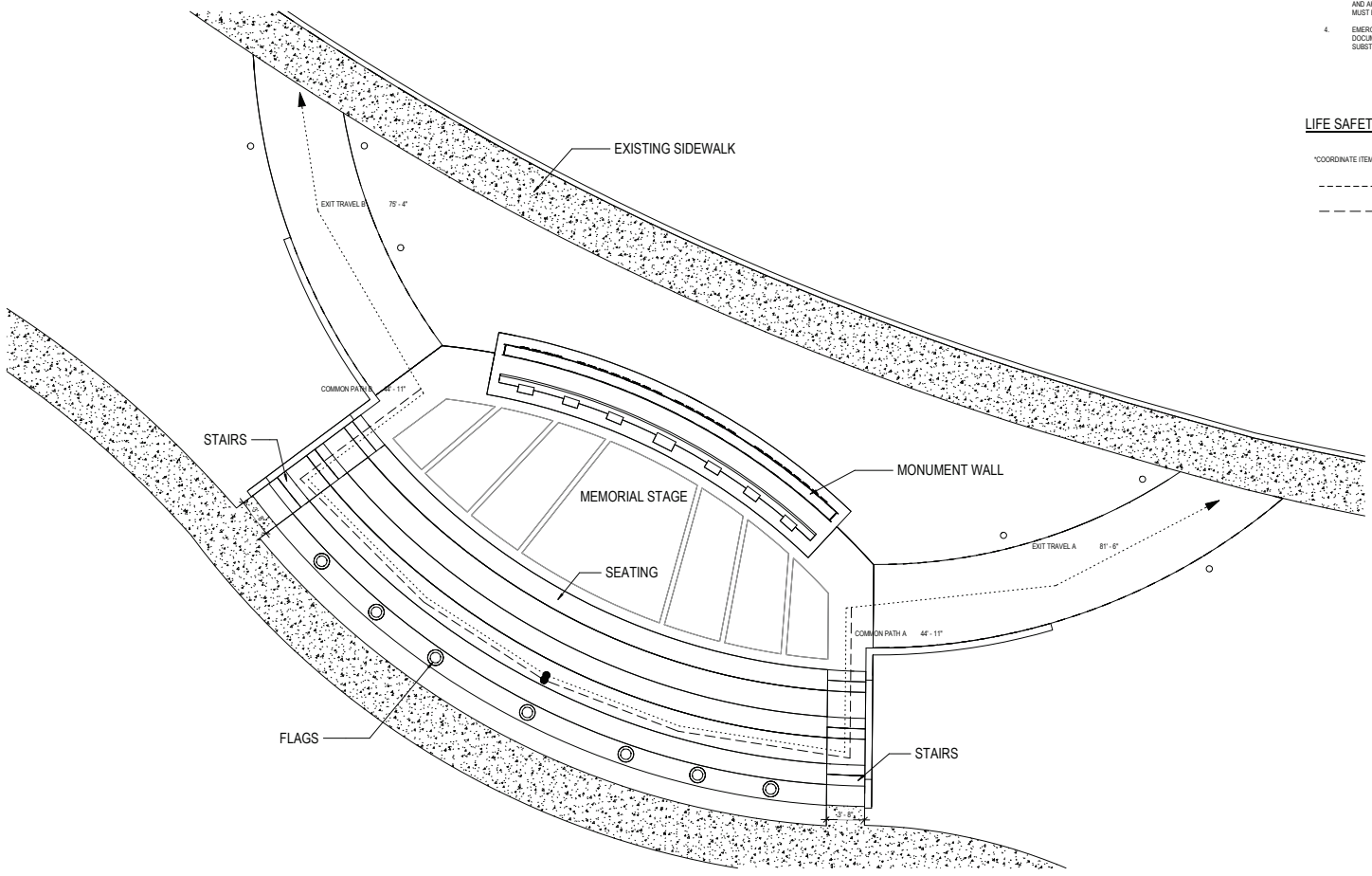
NO.	DATE	DESCRIPTION

LIFE SAFETY GENERAL NOTES

1. REFER CODE ANALYSIS SHEET G-101.
2. FINAL EMERGENCY LIGHTING LOCATIONS ARE SUBJECT TO THE APPROVAL OF THE GOVERNING JURISDICTION. APPLICABLE SIGNAGE SHALL BE PROVIDED BY CONTRACTOR AND COORDINATE WITH OTHER BUILDING SIGNAGE. REFER TO FBC SECTION 1013.4 FOR RAISED CHARACTER AND IRRADIANCE EXIT SIGNS REQUIREMENT.
3. IF GOVERNING JURISDICTION RELOCATES ELEMENTS FROM ARCHITECTURAL SPECIFICATION, INFORM ARCHITECT, OWNER, AND AHI PRIOR TO INSTALLATION. FIELD REVISED INFORMATION MUST BE INCLUDED IN "AS BUILT" DOCUMENTATION.
4. EMERGENCY FIXTURES SHALL BE TIED TO GENERATOR W/ TEST DOCUMENTATION PROVIDED TO ARCHITECT PRIOR TO SUBSTANTIAL COMPLETION.

LIFE SAFETY PLAN LEGEND

- *COORDINATE ITEMS W/ ELECTRICAL AS REQUIRED
- TOTAL EXIT ACCESS TRAVEL DISTANCE (FEET)
- TOTAL COMMON PATH OF TRAVEL (FEET)



1 LIFE SAFETY PLAN
 3/8" = 1'-0"










GENERAL NOTES

1. HATCHED AREA NOT INCLUDED IN SCOPE OF WORK UNLESS OTHERWISE NOTED.
2. REFER TO CIVIL AND ELECTRICAL FOR UTILITIES AND ACCESS POINTS.
3. REFER TO CIVIL FOR MORE SITE INFORMATION.
4. REFER TO SHEET A-101 FOR LIGHT FIXTURES AND FINISHES.
5. EXISTING WC LOCATED ON SITE BY CONCESSIONS BUILDING.

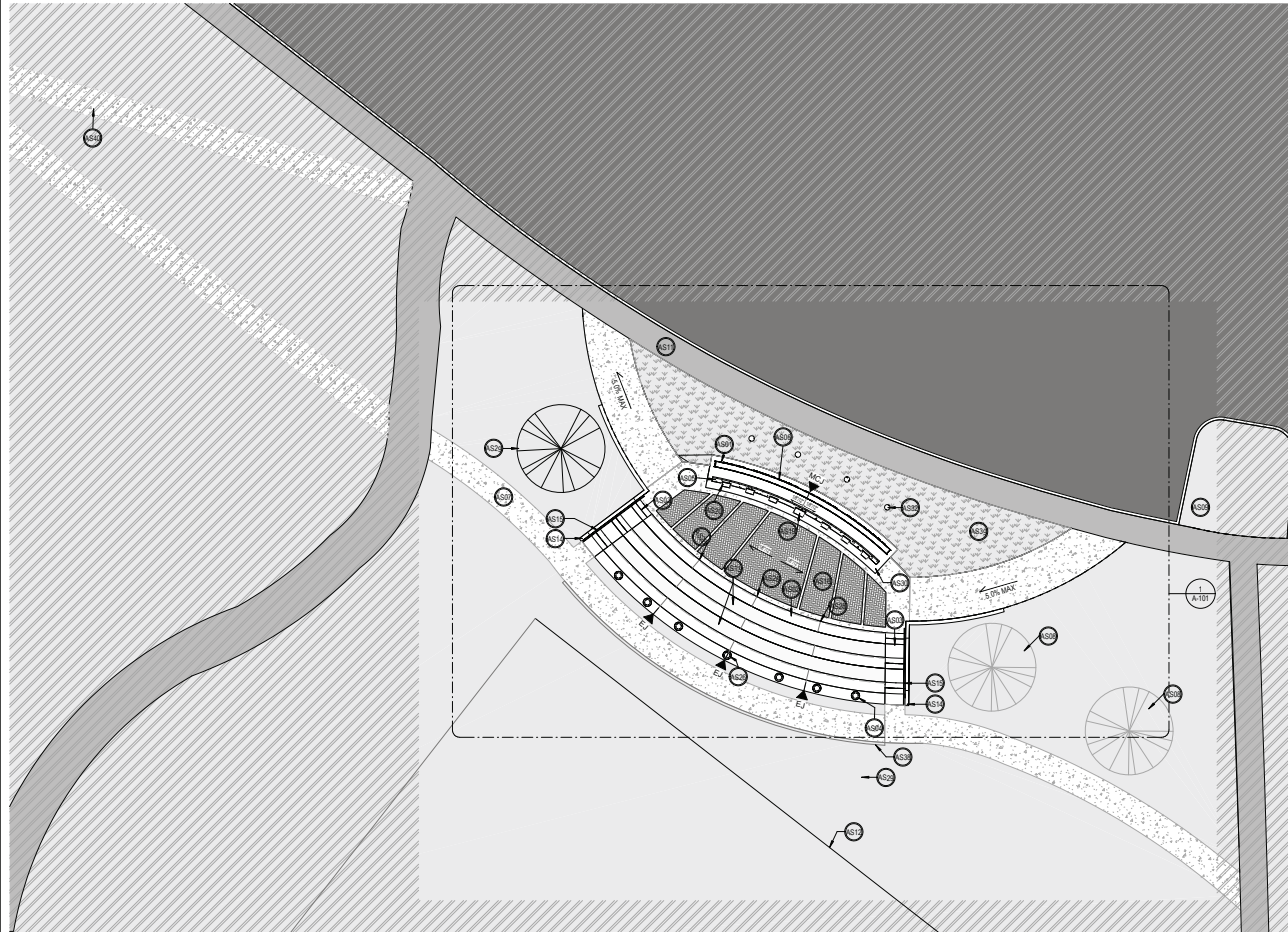
ZONING LEGEND

*ZONING DISTRICT: POP RECREATIONAL
 *FUTURE LAND USE MAP
 FEMA FLOOD ZONE: FLOOD ZONE X (BASED ON SURVEY)
 BASE FLOOD ELEVATION (BFE): NA FOR ZONE X
 GROSS LOT AREA: 21.5 ACRES
 PROJECT AREA: 12,798 SF (0.35 ACRES)
 MAX. F.A.R.: NA
 DENSITY: NA

SITE PLAN LEGEND

-  AREA N.I.C.
-  EXISTING PARKING TO REMAIN
-  EXISTING SIDE WALK TO REMAIN
-  GREENSPACE
-  NEW CONCRETE PATH
-  EXISTING
-  NEW

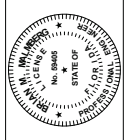
SPECIFIC KEYNOTES - SITE	
Keynote Number	Keynote Text
AS01	6" x 10" x 18" RECTIFIED LIMESTONE TILES OVER 12" CMU. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS02	CAST-IN-PLACE ARCHITECTURAL CONCRETE SEATING WITH UNDER SEAT LIGHTING. REFER TO ENLARGED PLAN FOR FUTURE LOCATION. REFER TO STRUCTURAL AND ELECTRICAL.
AS03	CAST-IN-PLACE ARCHITECTURAL CONCRETE STAIRS WITH ANTI-GRAFFITI COATING. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS04	3/4" TAPERED POWDER COATED ALUMINUM FLAGPOLE WITH EXTERNAL VANDAL PROOF CRANK FOR MILITARY BRANCH FLAGS. INSTALL FLAGS FROM CENTERLINE GRID C. DELEGATED DESIGN. REFER TO DIMENSION PLAN. REFER TO STRUCTURAL. REFER TO ELECTRICAL FOR FUTURE LOCATION.
AS05	ARCHITECTURAL CONCRETE CURB. REFER TO STRUCTURAL.
AS06	POWDER COATED ALUMINUM FINISH. REFER TO SPECIFICATIONS.
AS07	NEW CONCRETE SIDEWALK. REFER TO CIVIL.
AS08	EXISTING TREES TO REMAIN.
AS09	NEW TREE ISLAND. REFER TO CIVIL.
AS10	A PORTION OF EXISTING SIDEWALK TO BE REPLACED. REFER TO CIVIL.
AS11	EXISTING FIELD TO BE REDUCED BY 10 FEET SOUTHWEST.
AS12	EXISTING FIELD TO BE REDUCED BY 10 FEET SOUTHWEST.
AS13	PICTURE GRASS. REFER TO SPEC.
AS14	CAST-IN-PLACE ARCHITECTURAL CONCRETE RETAINING WALL WITH ANTI-GRAFFITI COATING. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS15	1-1/2" NOM DIA POWDER COATED ALUMINUM PIPE HANGAR. WELD TO SUPPORT BAR. GRIND SMOOTH. ALUMINUM FINISH.
AS16	CLAY PAVEMENT FINISH IN HERRINGBONE PATTERN. REFER TO SPECIFICATIONS.
AS17	PROPOSED MONUMENT STONE: 24" x 12" x 24". INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN. CFS.
AS18	BRANCH STONES: 18" x 24" x 18" PROVIDED BY OWNER. INSTALLED BY GC (OFF). INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS.
AS19	6" TAPERED POWDER COATED ALUMINUM FLAGPOLE WITH EXTERNAL VANDAL PROOF CRANK FOR AMERICAN FLAG. INSTALL FLAGS FROM CENTERLINE GRID C. DELEGATED DESIGN. REFER TO DIMENSION PLAN. REFER TO STRUCTURAL. REFER TO ELECTRICAL FOR LIGHT FUTURE LOCATION.
AS20	EQUALLY SPACED EXPANSION JOINTS FOR SEATING. REFER TO STRUCTURAL.
AS21	NEW TREE. REFER TO CIVIL.
AS22	EXPOSED AGGREGATE CONCRETE TO SURROUND MONUMENT WALL. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS23	12" FIBERGLASS REINFORCED CONCRETE FOR STANCHION MOUNT. REFER TO CIVIL FOR DETAILS AND LOCATIONS.
AS24	TRENCH DRAIN. REFER TO CIVIL FOR LOCATION.
AS25	SOIL LANDSCAPING. REFER TO CIVIL.
AS26	FUTURE SIDEWALK CONNECTION TO FUTURE FITNESS COURT. REFER TO CIVIL FOR EXACT LOCATION.



1 ARCHITECTURAL SITE PLAN
 3/32" = 1' = 0"



SITE PLAN
VETERANS MEMORIAL PARK

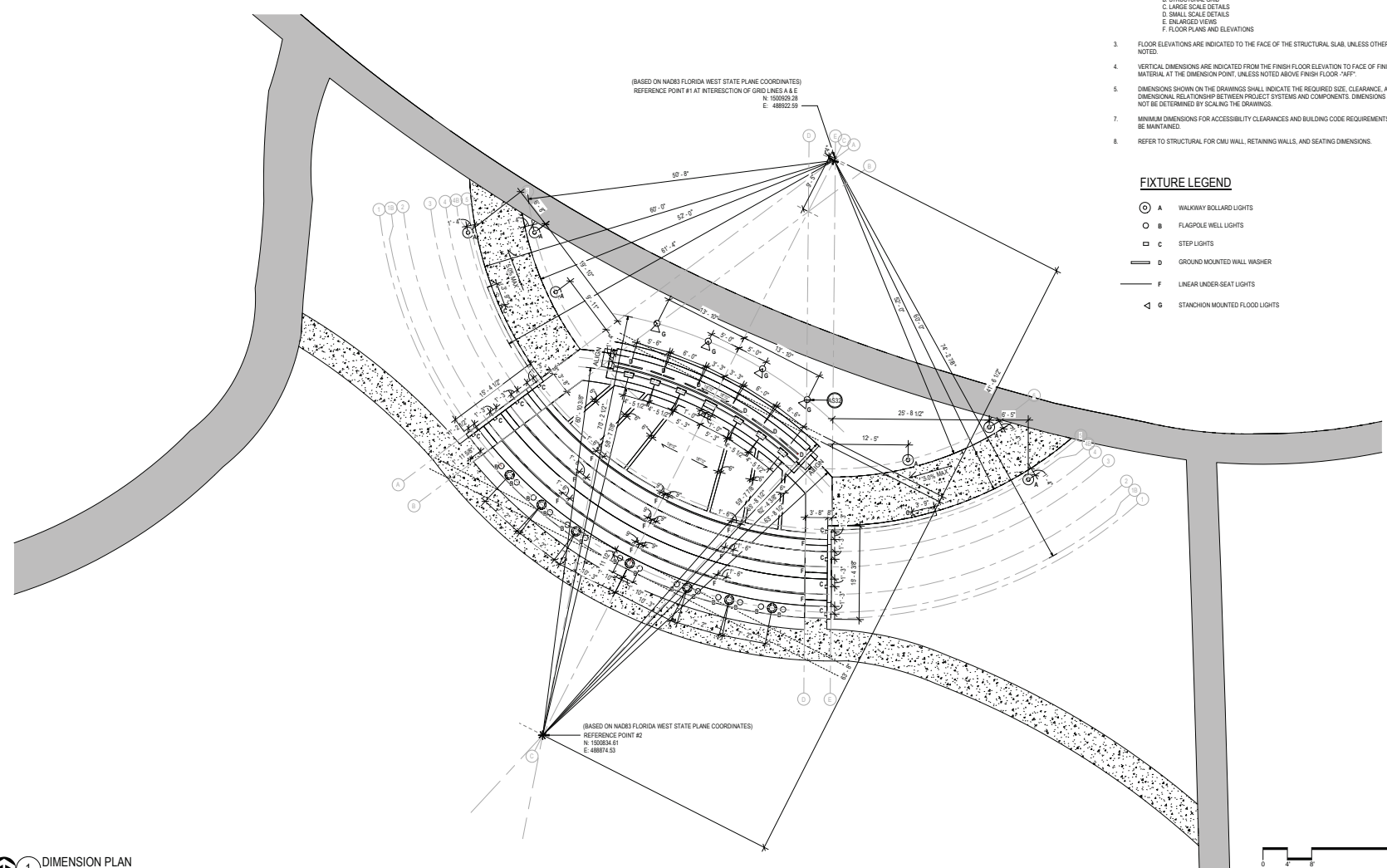


Coastal
 Engineering
 Associates, Inc.
 946 Crandall Boulevard - Tallahassee, Florida 32301
 (904) 794-6245 Fax: (904) 794-4349
 E-mail: info@coastaleng.com

DATE: 08/14/2018
 TIME: 10:00 AM
 DRAWN BY: J. W. WOOD
 CHECKED BY: J. W. WOOD
 PROJECT: VETERANS MEMORIAL PARK
 SHEET: A-001

NO.	DATE	DESCRIPTION
1	08/14/2018	ISSUED FOR PERMIT

SHEET
A-001



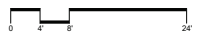
DIMENSION NOTES:

1. DIMENSIONS ARE INDICATED TO THE FACE OF CONCRETE WALL, NOMINAL FACE OF CMU WALL, OR CENTERLINE OF PARTITION TYPE AS SCHEDULED WORK.
2. ALIGNMENT OF PARTITIONS AND FINISHES AS SCHEDULED SHALL BE STRAIGHT, TRUE & PLUMB. THE PRIORITY FOR PROJECT DIMENSIONS SHALL BE IN THE FOLLOWING ORDER:
 - A. MINIMUM DIMENSIONS FOR ACCESSIBILITY CLEARANCE & BUILDING CODE REQUIREMENT
 - B. STRUCTURAL GRID
 - C. LARGE SCALE DETAILS
 - D. SMALL SCALE DETAILS
 - E. ENLARGED VIEWS
 - F. FLOOR PLANS AND ELEVATIONS
3. FLOOR ELEVATIONS ARE INDICATED TO THE FACE OF THE STRUCTURAL SLAB, UNLESS OTHERWISE NOTED.
4. VERTICAL DIMENSIONS ARE INDICATED FROM THE FINISH FLOOR ELEVATION TO FACE OF FINISHED MATERIAL AT THE DIMENSION POINT, UNLESS NOTED ABOVE FINISH FLOOR: "MSF".
5. DIMENSIONS SHOWN ON THE DRAWINGS SHALL INDICATE THE REQUIRED SIZE, CLEARANCE, AND DIMENSIONAL RELATIONSHIP BETWEEN PROJECT SYSTEMS AND COMPONENTS. DIMENSIONS SHALL NOT BE DETERMINED BY SCALING THE DRAWINGS.
7. MINIMUM DIMENSIONS FOR ACCESSIBILITY CLEARANCES AND BUILDING CODE REQUIREMENTS SHALL BE MAINTAINED.
8. REFER TO STRUCTURAL FOR CMU WALL, RETAINING WALLS, AND SEATING DIMENSIONS.

FIXTURE LEGEND

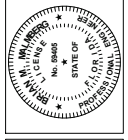
- ⊙ A WALKWAY BOLLARD LIGHTS
- ⊙ B FLAGPOLE WELL LIGHTS
- ⊙ C STEP LIGHTS
- D GROUND MOUNTED WALL WASHERS
- F LINEAR UNDER SEAT LIGHTS
- ◁ G STANCHION MOUNTED FLOOD LIGHTS

1 DIMENSION PLAN
1/8" = 1'-0"



DIMENSION PLAN

VETERANS MEMORIAL PARK



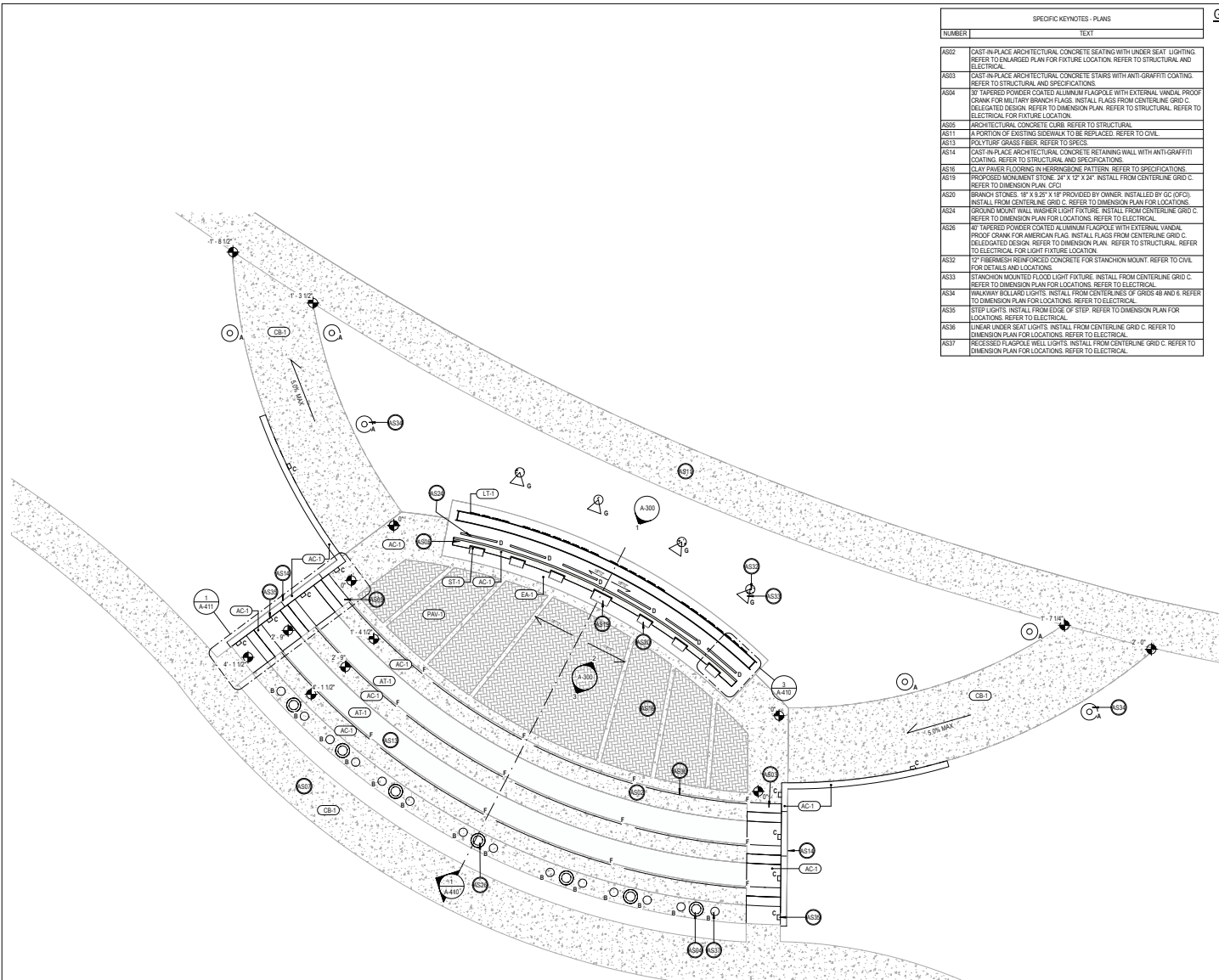
Coastal
 Engineering
 Surveying
 Planning
 Architecture
 Construction Management
 engineering associates, inc.
 1800 Crandon Boulevard - Ft. Lauderdale, Florida 33401
 (954) 794-6400 Fax: (954) 794-4349
 EIR-000042

THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.

NO.	DATE	DESCRIPTION

SHEET

A-002



SPECIFIC KEYNOTES - PLANS	
NUMBER	TEXT
AS22	CAST-IN-PLACE ARCHITECTURAL CONCRETE SEATING WITH UNDER SEAT LIGHTING. REFER TO ENLARGED PLAN FOR FIXTURE LOCATION. REFER TO STRUCTURAL AND ELECTRICAL.
AS23	CAST-IN-PLACE ARCHITECTURAL CONCRETE STAIRS WITH ANTI-GRAFFITI COATING. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS24	4" TYPED POWDER COATED ALUMINUM FLAGPOLE WITH EXTERNAL VANDAL PROOF CRANK FOR MILITARY BRANCH FLAGS. INSTALL FLAGS FROM CENTERLINE GRID C. DELEGATED DESIGN. REFER TO DIMENSION PLAN. REFER TO STRUCTURAL. REFER TO ELECTRICAL FOR FIXTURE LOCATION.
AS25	ARCHITECTURAL CONCRETE CURB. REFER TO STRUCTURAL.
AS27	A PORTION OF EXISTING SIDEWALK TO BE REPLACED. REFER TO CIVIL.
AS13	POLYTOP; GRASS FIBER. REFER TO SPEC.
AS14	CAST-IN-PLACE ARCHITECTURAL CONCRETE RETAINING WALL WITH ANTI-GRAFFITI COATING. REFER TO STRUCTURAL AND SPECIFICATIONS.
AS16	CLAY PAVEMENT FLOORING IN HERRINGBONE PATTERN. REFER TO SPECIFICATIONS.
AS19	PRECAST MONUMENT STONE 24" X 12" X 24". INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN (D2).
AS20	BRANCH STONES 18" X 9.25" X 18" PROVIDED BY OWNER. INSTALLED BY GC (D2). INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS.
AS24	SPINDLE MOUNT WALL WASHER LIGHT FIXTURE. INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.
AS26	4" TYPED POWDER COATED ALUMINUM FLAGPOLE WITH EXTERNAL VANDAL PROOF CRANK FOR AMERICAN FLAG. INSTALL FLAGS FROM CENTERLINE GRID C. DELEGATED DESIGN. REFER TO DIMENSION PLAN. REFER TO STRUCTURAL. REFER TO ELECTRICAL FOR LIGHT FIXTURE LOCATION.
AS32	12" FIBERMESH REINFORCED CONCRETE FOR STANCHION MOUNT. REFER TO CIVIL FOR DETAILS AND LOCATIONS.
AS33	STANCHION MOUNTED FLOOD LIGHT FIXTURE. INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.
AS34	WALKWAY BOLLARD LIGHTS. INSTALL FROM CENTERLINES OF GRID 4B AND 4. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.
AS35	STEP LIGHTS. INSTALL FROM EDGE OF STEP. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.
AS36	LINEAR UNDER SEAT LIGHTS. INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.
AS37	RECESSED FLAGPOLE WELL LIGHTS. INSTALL FROM CENTERLINE GRID C. REFER TO DIMENSION PLAN FOR LOCATIONS. REFER TO ELECTRICAL.

- ### GENERAL NOTES
- SEE SHEET A-410 AND A-411 FOR PLAN DETAIL CALLOUTS.
 - SEE SHEET A-302 FOR DIMENSION PLAN.
 - REFER TO ELECTRICAL FOR FIXTURE INFORMATION. ALL FIXTURES TO BE VANDAL PROOF.
 - SPOT ELEVATIONS REFERENCE LEVEL 1.

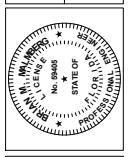
- ### FIXTURE LEGEND
- ⊙ A WALKWAY BOLLARD LIGHTS
 - B FLAGPOLE WELL LIGHTS
 - C STEP LIGHTS
 - ▣ D GROUND MOUNTED WALL WASHER
 - F LINEAR UNDER SEAT LIGHTS
 - △ G STANCHION MOUNTED FLOOD LIGHTS

- ### FINISH LEGEND
- (CB1) DESCRIPTION: CONCRETE BROOM FINISH
 - (AC1) DESCRIPTION: ARCHITECTURAL CONCRETE. REMARKS: REFER TO SPECIFICATIONS
 - (DB1) DESCRIPTION: BASIS OF DESIGN - DECORATIVE GROUND FACE BLOCK. MANUFACTURER: WESTBROOK CONCRETE BLOCK. COLOR: D28. SIZE: 8"X12"X16". REMARKS: GROUT COLOR: WCB-108
 - (EA1) DESCRIPTION: BASIS OF DESIGN - EXPOSED AGGREGATE CONCRETE. STYLE: GRANITE ROCK. COLOR: DARK GRAY. SEE GRADE #8 D8F TO 107. REMARKS: GC TO SUBMIT A 12X12" MOCK UP FOR APPROVAL
 - (AT1) DESCRIPTION: BASIS OF DESIGN - SYNTHETIC TURF. MANUFACTURER: SOUTHWEST GREENS. COLOR: TURF GREEN. REMARKS: PILING HEIGHT 1.25". URETHANE BACKING TYPE.
 - (LT1) DESCRIPTION: BASIS OF DESIGN - LIMESTONE TILE. MANUFACTURER: EARTHWORKS. STYLE: SANBASTED. COLOR: SKYMET. SIZE: 3/4" THICK 30X18". REMARKS: 1" THICK TILE FOR THE WALL OVERHANGS.
 - (PAV) DESCRIPTION: BASIS OF DESIGN - CLAY PAVERS. MANUFACTURER: SINDICOTT. STYLE: INVISI-LUG. COLOR: MANGANESE BLACK. SIZE: 4"X12". REMARKS: HERRINGBONE PATTERN
 - (ST1) DESCRIPTION: GRANITE STONES. REMARKS: PROVIDED BY OWNER INSTALLED BY GC.

1 ENLARGED PLAN
3/16" = 1'-0"



ENLARGED PLAN
VETERANS MEMORIAL PARK



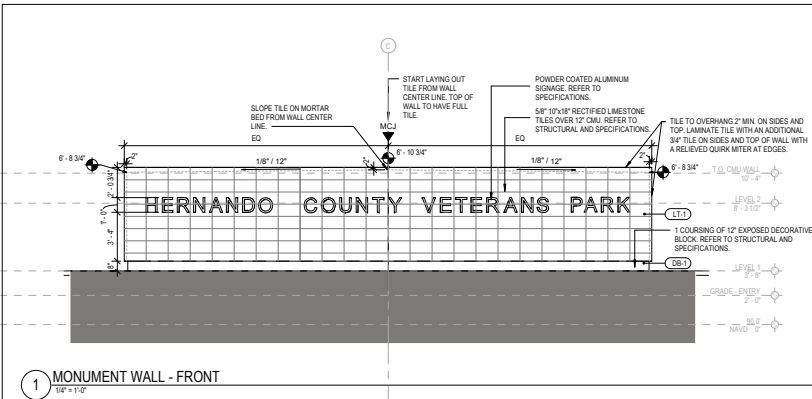
Coastal
Engineering
Architecture
Interior Design
Construction Management
Environmental Associates, Inc.

1960 Granddunes Boulevard
P.O. Box 1000
Orlando, Florida 32801
(407) 799-6200 Fax: (407) 799-8389
EIR-000042

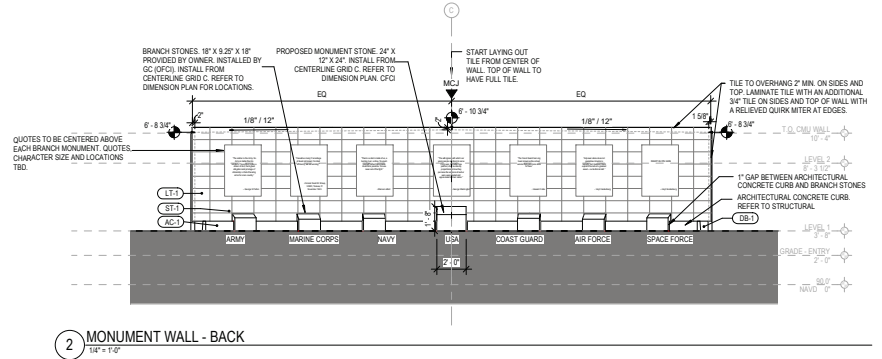
THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING ARCHITECTURE INTERIOR DESIGN CONSTRUCTION MANAGEMENT ENVIRONMENTAL ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ARCHITECTURE INTERIOR DESIGN CONSTRUCTION MANAGEMENT ENVIRONMENTAL ASSOCIATES, INC.

DATE	REVISION	BY	CHKD

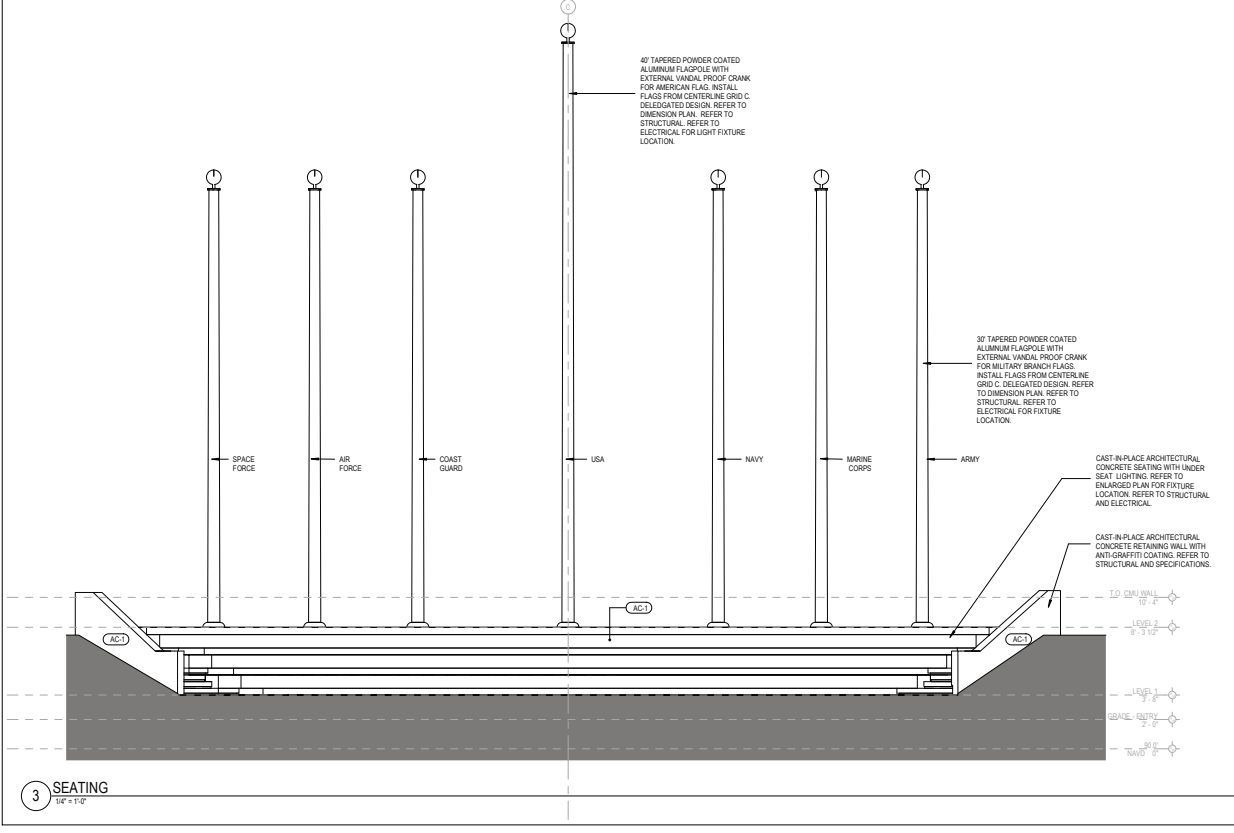
SHEET
A-101



1 MONUMENT WALL - FRONT
1/8" = 1'-0"



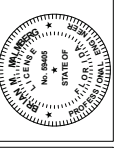
2 MONUMENT WALL - BACK
1/8" = 1'-0"



3 SEATING
1/8" = 1'-0"

- FINISH LEGEND**
- (CB-1) DESCRIPTION: CONCRETE BROOM FINISH
 - (AC-1) DESCRIPTION: ARCHITECTURAL CONCRETE
REMARKS: REFER TO SPECIFICATIONS
 - (DB-1) DESCRIPTION: BASIS OF DESIGN - DECORATIVE GROUND FACE BLOCK
MANUFACTURER: WESTBROOK CONCRETE BLOCK
COLOR: 108
SIZE: 8"x12"x16"
REMARKS: GROUT COLOR: WCB-108
 - (EA-1) DESCRIPTION: BASIS OF DESIGN - EXPOSED AGGREGATE CONCRETE
STYLE: GRANITE ROCK
COLOR: DARK GRAY
SIZE: SQUARE #8 (8" TO 12")
REMARKS: GC TO SUBMIT A 12"x12" MOCK UP FOR APPROVAL
 - (AT-1) DESCRIPTION: BASIS OF DESIGN - SYNTHETIC TURF
MANUFACTURER: SOUTHWEST GREENS
COLOR: TURF GREEN
REMARKS: PILING HEIGHT 1.25" URETHANE BACKING TYPE
 - (LT-1) DESCRIPTION: BASIS OF DESIGN - LIMESTONE TILE
MANUFACTURER: EARTHWORKS
STYLE: SANDBLASTED
COLOR: DRINKIST
SIZE: 3/4" THICK 10"x16"
REMARKS: 1" THICK TILE FOR THE WALL OVERHANGS
 - (PAV-1) DESCRIPTION: BASIS OF DESIGN - CLAY PAVERS
MANUFACTURER: ENDCOTT
STYLE: INVALUG
COLOR: MANGANESE BLACK
SIZE: 4"x12"
REMARKS: HERRINGBONE PATTERN
 - (ST-1) DESCRIPTION: GRANITE STONES
REMARKS: PROVIDED BY OWNER INSTALLED BY GC.

ELEVATIONS
VETERANS MEMORIAL PARK



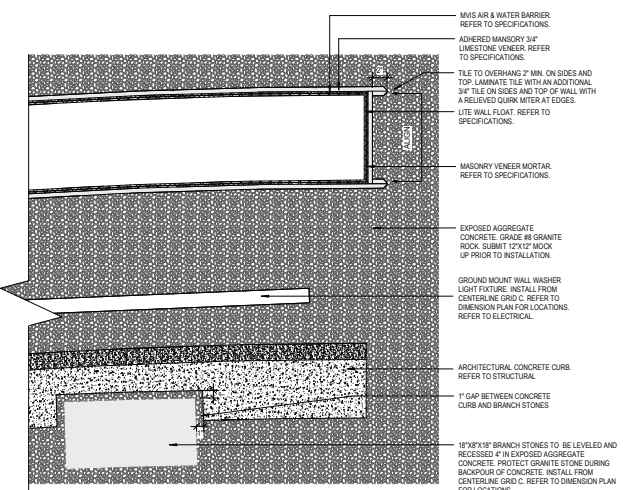
Coastal
Engineering
Surveying
Construction Management
Engineering Associates, Inc.
1960 Granddaddy Boulevard - Jacksonville, Florida 32201
(904) 794-6242 Fax: (904) 794-4349
Eli-000042

THIS RELEASE OF INFORMATION IS LIMITED TO THE PROJECT AND SITE SPECIFIC INFORMATION AND IS NOT TO BE USED FOR ANY OTHER PROJECTS OR SITES WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OF RECORD.

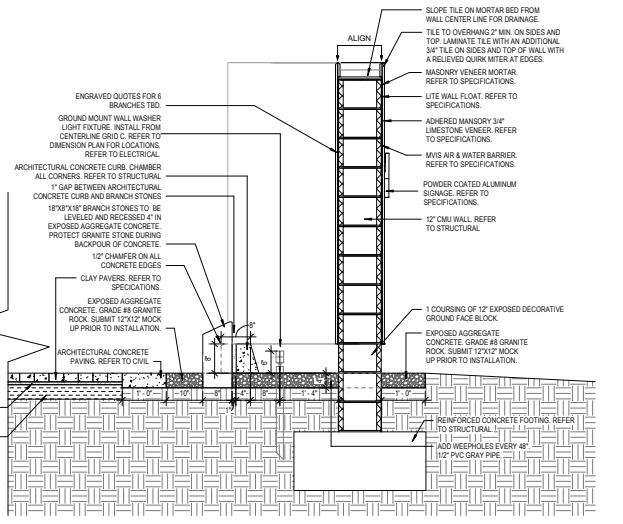
NO.	DATE	REVISIONS

SHEET
A-300

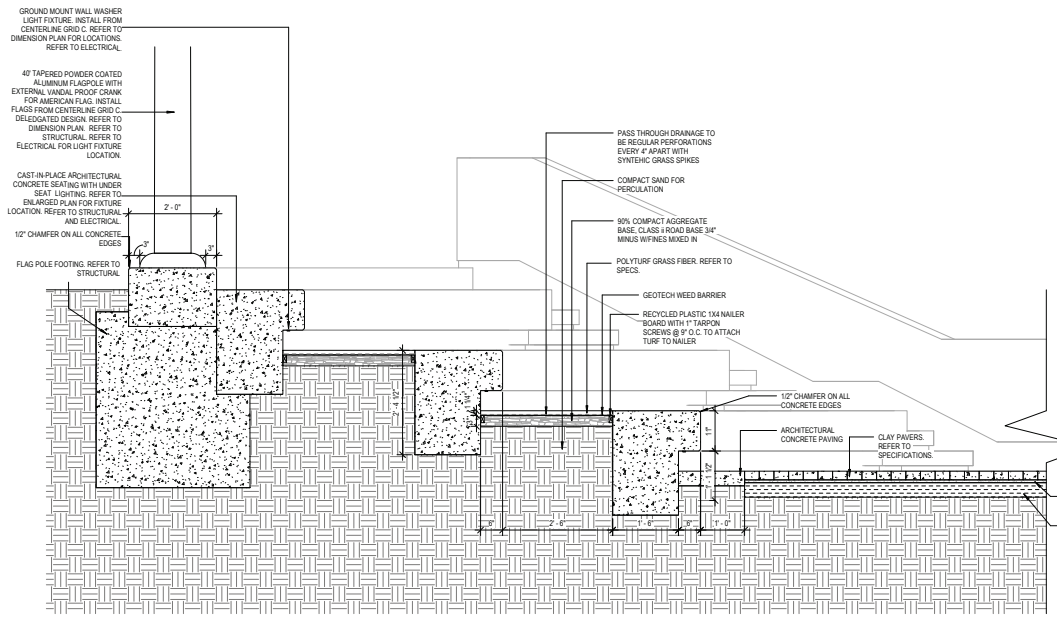




3 MONUMENT WALL & CONCRETE CURB EDGE PLAN DETAIL
1/12" = 1'-0"



2 MONUMENT WALL - WEST SECTION
3/4" = 1'-0"



1 SEATING - WEST SECTION
3/4" = 1'-0"

DETAILS
VETERANS MEMORIAL PARK



Coastal
Engineering
1906 Crandall Boulevard - Ft. Myers, Florida 34001
(888) 794-6400 Fax: (888) 794-4349
Eli-000042

THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING.

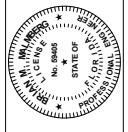
NO.	DATE	DESCRIPTION

SHEET
A-410



DETAILS

VETERANS MEMORIAL PARK

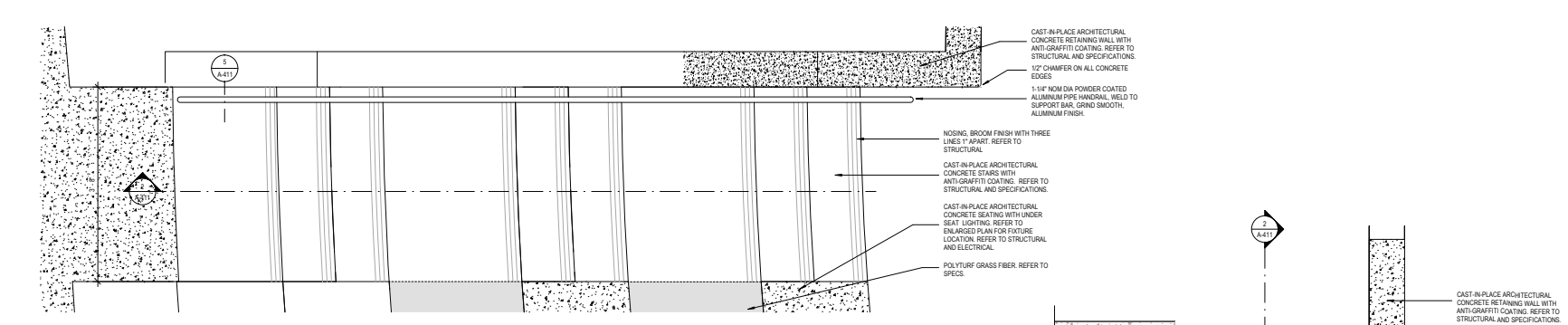


Coastal
Engineering
Architectural
Mechanical
Electrical
Civil
Structural
Environmental
Construction Management

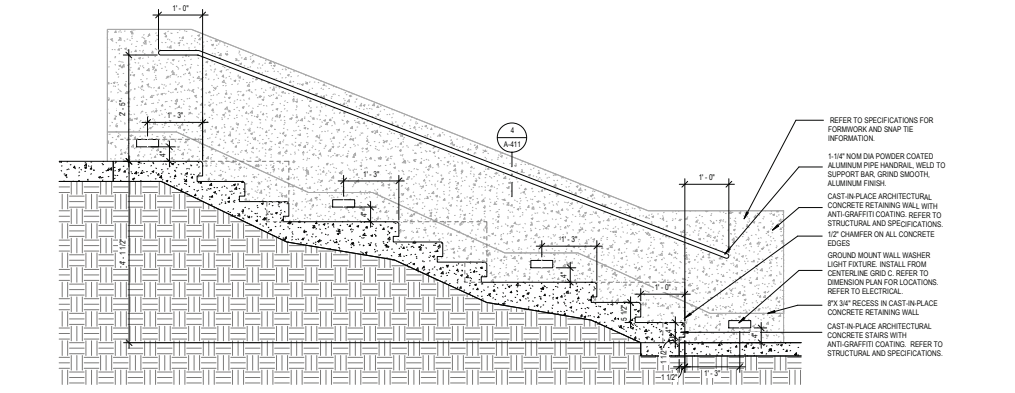
1966 Cranford Boulevard
Houston, Texas 77058-3401
(713) 794-6400
E-mail: info@coastaleng.com

THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING ASSOCIATES, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, EITHER WHOLLY OR IN PART, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.

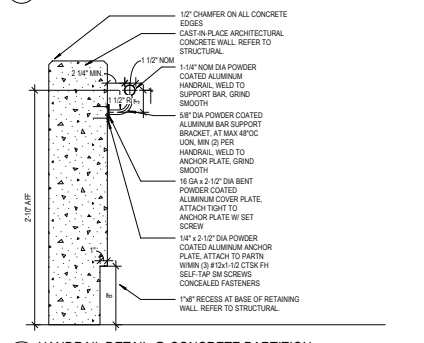
NO.	DATE	REVISION



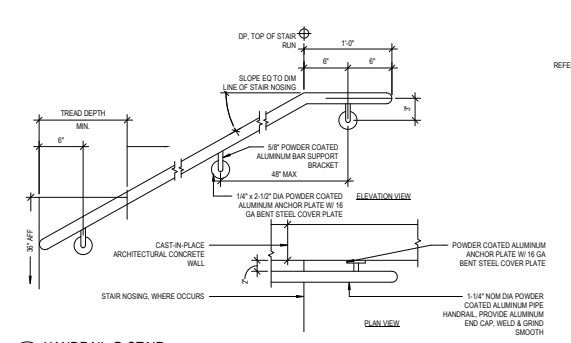
1 STAIRS - ENLARGED PLAN
1" = 1/2"



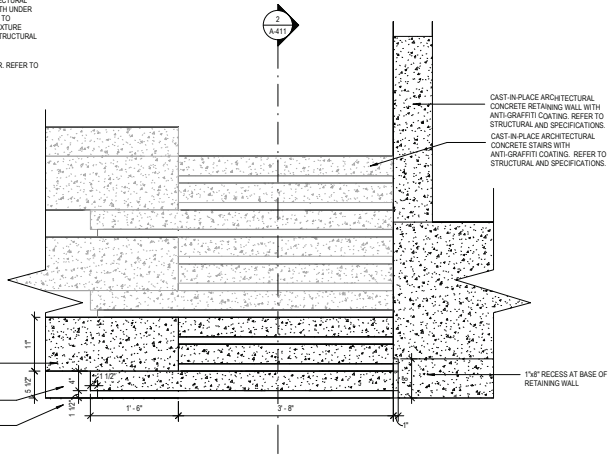
2 STAIRS - SECTION
3/4" = 1/2"



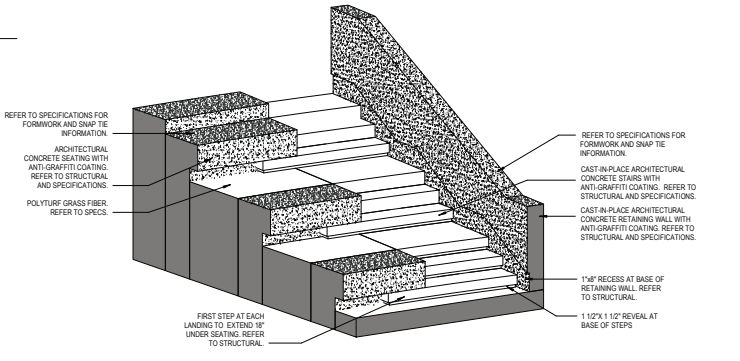
4 HANDRAIL DETAIL @ CONCRETE PARTITION
1 1/2" = 1/2"



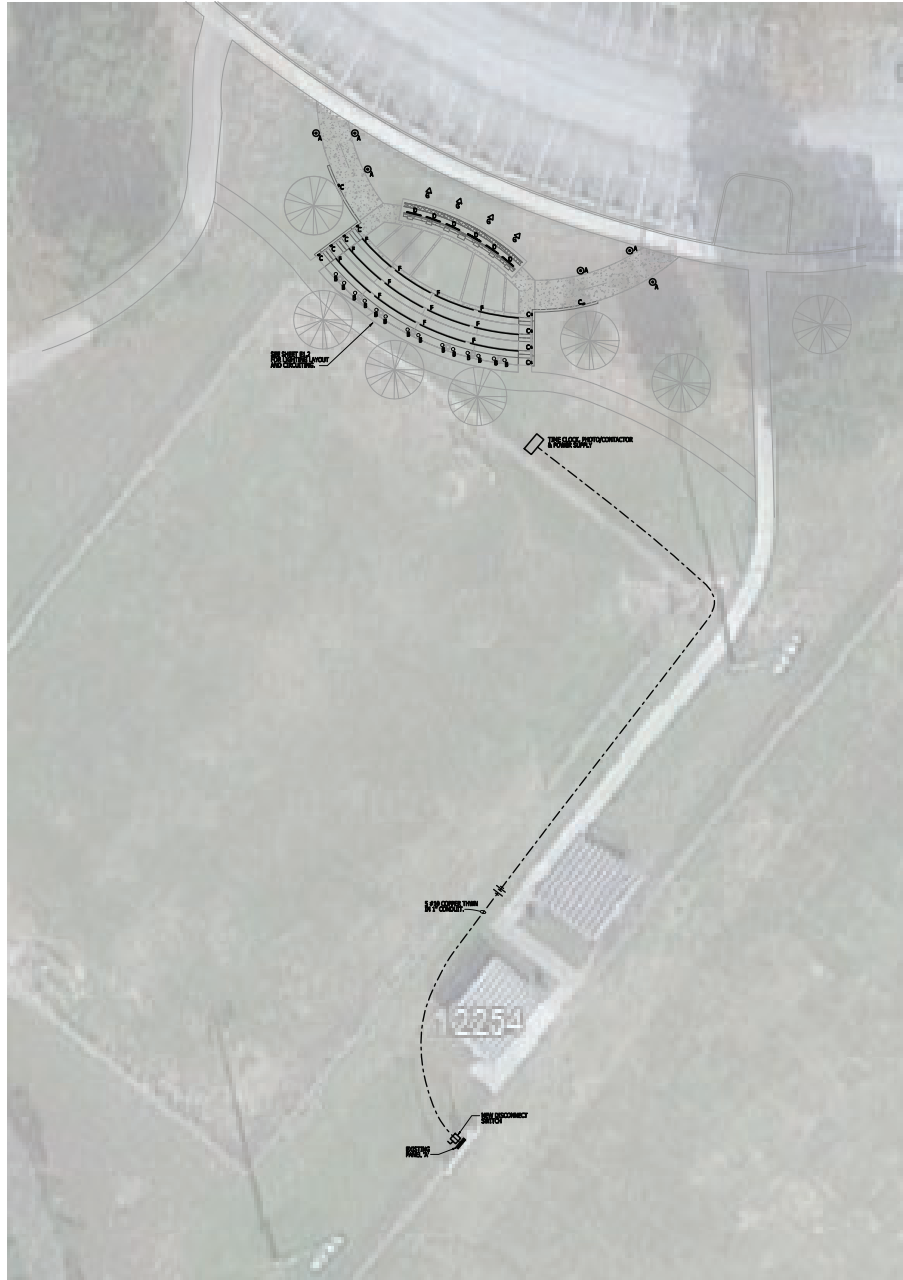
5 HANDRAIL @ STAIR
1 1/2" = 1/2"



3 STAIR AND SEATING ELEVATION
1" = 1/2"



6 STAIR AND SEATING DIAGRAM
1" = 1/2"



SITE GENERAL NOTES

- A. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL DETERMINE THE PRESENCE AND LOCATION OF ANY UNDERGROUND FACILITIES SUCH AS TELEPHONE, ELECTRIC POWER, WATER, GAS, SEWERAGE LINES, ETC., WHETHER PREVIOUSLY EXISTING OR AS INSTALLED BY THE OTHER TRADES, TO AVOID INTERFERENCE WITH ANY SUCH SYSTEMS.
- B. THE ELECTRICAL CONTRACTOR SHALL INSTALL A GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS AND BOND TO ALL EQUIPMENT AND DEVICES. BONDING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C. GROUND CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH TABLE 250-122 OF THE N.E.C.
- C. WHERE UNGROUNDING CONDUCTORS ARE INCREASED IN SIZE, CORRESPONDING EQUIPMENT GROUNDING CONDUCTORS SHALL BE INCREASED IN SIZE PROPORTIONATELY ACCORDING TO CIRCULAR MIL AREA OF THE UNGROUNDING CONDUCTORS.
- D. CONTRACTOR SHALL PROVIDE ALL EXCAVATION AND BACKFILL REQUIRED FOR ALL WORK INCLUDING FILL, COMPACTION, SURFACE, ETC. TO MEET ALL REQUIREMENTS AS APPLICABLE FOR THE AREA.
- E. ALL UNDERGROUND FEEDER CONDUITS TO BE MARKED WITH MARKER TAPE AT 12" ABOVE CONDUITS IN TRENCH.

MANUFACTURER: SQUARE D	MLO OR NGR: NGR	PANEL: A EXIST
TYPE: NO	FEED: TOP	VOLTAGE: 120/240V, 1 PH, 3 WIRE
MOUNTING SURFACE: LOCATION: EXISTING FIELD	CU/AL WIRC: AL AC RATING: SEE RISER	MAIN AMP: 200 AMP FEEDER: 200 AMP
SPACER: 42		

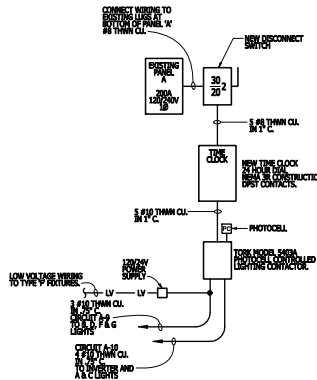
NOTE: USE LUGS AT BOTTOM OF BUS TO CONNECT NEW FEUSED DISCONNECT SWITCH NEAR BY PANEL.

CKT NO.	LOAD	OPT CODE	KVA	WIRE	BRKR	PHASE	WIRE	KVA	CODE	OPT	LOAD	CKT NO.
1	EXIST	E	2.00	12	2000	A	10	2.40	L		EXIST	1
3	EXIST	E	2.00	12	2000	B	10	2.40	L		EXIST	3
5	EXIST	E	2.40	10	200	A	10	2.40	L		EXIST	5
7	EXIST	E	2.40	10	200	B	10	2.40	L		EXIST	7
9	VETERAN MEMORIAL LIGHTS	L	1.88	10	20	A	10	2.25	L		VETERAN MEMORIAL LIGHTS	9

DEMAND	KVA	FACTOR	DEMAND KVA
(L) LIGHTING:	18.19	X 1.25	= 22.74
(R) RECEPTACLE:	0.00	X 1.00	= 0.00
(R) RECEPTACLE:	0.00	X 0.20	= 0.00
(P) HVAC:	0.00	X 1.00	= 0.00
(E) EQUIPMENT:	0.00	X 1.00	= 0.00
(K) KITCHEN EQUIP:	0.00	X 0.85	= 0.00
(M) MOTORS:	0.00	X 1.00	= 0.00
LARGEST MOTOR:	0.00	X 0.25	= 0.00
TOTAL DEMAND KVA:	18.19		

DEMAND KVA:	24.34
TIMES 168	
DIVIDED BY 240	
DEMAND AMPS:	100.89

DATE LAST REVISION: 04/20/2024



PARTIAL RISER DIAGRAM

N.T.S.

Input		
Load Voltage	120V 1Ø	
Conductor Size	8	
Conductor Type	Cu	Al
Number of Bots	1	
Distance (one way)	<input type="text" value="300"/>	Feet
Load (A)	<input type="text" value="8.2"/>	A
Output		
Utility Power Factor		85% PF
Voltage Drop (V)	<input type="text" value="2.8"/>	V
Voltage Drop (%)	<input type="text" value="2.4"/>	%
Voltage at Load	<input type="text" value="117.2"/>	V
Minimum Conductor Size for 3% VD	<input type="text" value="8"/>	
Minimum Conductor Size for 5% VD	<input type="text" value="10"/>	

ELECTRICAL SITE PLAN
VETERANS MEMORIAL PARK



Coastal
ENGINEERING & CONSULTING
1000 North US Highway 1
Tampa, Florida 33601
(813) 287-1234

RELISE OF DOCUMENT
THIS DOCUMENT COMPRISED OF THE DRAWINGS AND ALL INSTRUMENTS OF SERVICE ARE THE PROPERTY OF COASTAL ENGINEERING & CONSULTING. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN AUTHORIZATION OF COASTAL ENGINEERING & CONSULTING, INC. © 2024

10/13/2022
12/05/2023
01/27/2024

REVISION
1 100% Submittal
2 PERMIT
3 BID SET

DATE: 01/27/2024
REV. BY/EV: [REDACTED]
NO. 3
REVISION

WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" x 34"

MPS
ENGINEERING
AN M.P. SPYCHALA COMPANY
SINCE 1984
240 Pine Ave. N
Oldsmar, FL 34677
813.855.2721
www.mpseng.com

SHEET
E1.1
23047

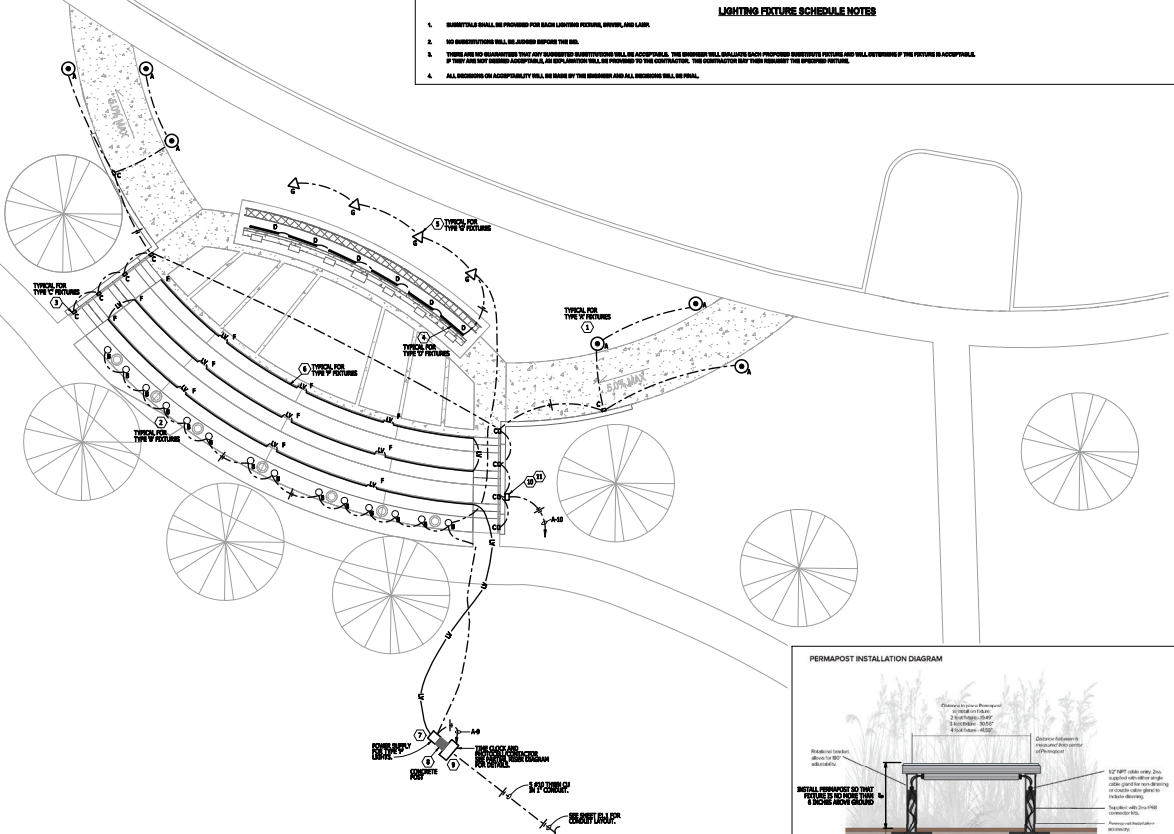
LIGHTING FIXTURE SCHEDULE								
Design	Type	Finish	Lens	Volt	Lamps	Manufacturer	Remarks	
A	WALKWAY BOLLARD LIGHTS	BLACK	GLASS	120	16	1610 LUMENS LED	LITHONIA RAN LED P4 40K 87M MVOLT 87R BCC DR30 BL	MOUNT TO CONCRETE BASE ALONG SIDEWALK
B	FLAJOLE WALL LIGHTS	BLACK	GLASS	120	80	4800 LUMENS LED	HYDRAL METRIC ALLED P4 48K 87M VOLT FL FLG 948 87R BL	RECESS IN CONCRETE
C	STEP LIGHTS	BLACK	GLASS	120	12.5	1000 LUMENS LED	NEGA 20005 + 84 BLK	RECESS IN WALL AT 2" ABOVE FLOOR
D	GROUND MOUNT WALL WASHERS	ALUMINUM	GLASS	120	80	2800 LUMENS LED	TANBETT JEDD 00 10 W48 40 P LV PERMAPOST	MOUNT TO PERMAPOST 80 TOY TOP OF FIXTURE 18" ABOVE GROUND AND 4" TO WASH WALL. CONCEAL WIRING.
F	LEASER UNDER SEAT LIGHTS	WHITE	POLYURETHANE	120/24	20	1200 LUMENS LED PWR 10T	O TRAM LED AN80-8W 78C WET 40 HO BNCAL 81A 81V10 DL	MOUNT UNDER CONTAINER EDGE OF SEAT. PROVIDE ONE 120 VOLT TO 24 VOLT 300 WATT POWER SUPPLY TO POWER ALL UNDER SEAT LIGHTS. OTHER MODEL C08M 3000T-120-8W+122-CK-8-8K. CONCEAL WIRING MOUNT FIXTURE TO FIXTURE WITH A CONCRETE BASE. SEE DETAILS ON PLANS. AIM LIGHTS TO ILLUMINATE FRONT FACE OF MOUNTMENT WALL.
G	GROUND MOUNTED FLOOD LIGHTS	BLACK	GLASS	120	82	7400 LUMENS LED	LITHONIA DS072 LED-P4-40K-7400LM-ANVCLY-80-DR30	

LIGHTING FIXTURE SCHEDULE NOTES

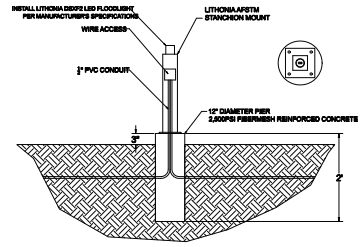
1. SUBSTITUTES SHALL BE PROVIDED FOR EACH LIGHTING FIXTURE, MODEL AND LAMP.
2. NO SUBSTITUTIONS WILL BE ALLOWED ABOVE THE BID.
3. THERE ARE NO WARRANTIES THAT ANY SUBMITTED SUBSTITUTIONS WILL BE ACCEPTABLE. THE SUBMITTER WILL QUALIFY EACH PROPOSED SUBSTITUTION FIXTURE AND WILL OBTAIN IF THE FIXTURE IS ACCEPTABLE BY THE AIA AND NOT ACCEPTABLE, AN EXPLANATION WILL BE PROVIDED TO THE CONTRACTOR. THE CONTRACTOR MAY THEN REQUEST THE ORIGINAL FIXTURE.
4. ALL DIMENSIONS OR ACCEPTABILITY WILL BE MADE BY THE SUBMITTER AND ALL DIMENSIONS WILL BE FINAL.

- LIGHTING GENERAL NOTES**
1. CONTRACTOR SHALL INSTALL A GREEN EQUIPMENT GROUNDING WIRE IN ALL CONDUITS AND SHALL BOND THE GROUND WIRE TO ALL CIRCUITS AND ELECTRICALLY WIRED EQUIPMENT. BONDING SHALL BE INSTALLED IN ACCORDANCE WITH TABLE 250-122 OF THE NEC.
 2. PROVIDE SEPARATE NEUTRAL CONDUCTORS FOR ALL 120V SINGLE POLE CIRCUITS PER NEC ARTICLE 210.4. TYPICAL THROUGHOUT. GREATER HANDLE TIES ARE UNACCEPTABLE.
 3. ANY 20A BRANCH CIRCUITS EXCEEDING A WIRE LENGTH OF 150 FT SHALL USE #10 AWG CONDUCTORS REGARDLESS OF WHAT PANE. SCHEDULES SHOW.
 4. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF SHOP DRAWINGS FOR ALL OF THE LIGHTING FIXTURES AND CONTROLS SHOWN FOR THE SUBMITTAL PACKAGE.

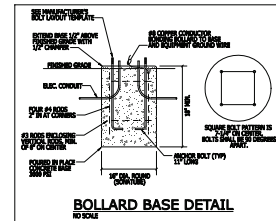
- LIGHTING KEYED NOTES**
1. SEE BASE DETAIL ON THIS SHEET FOR BOLLARD LIGHT MOUNTING.
 2. WALL LIGHT INSTALLED IN CONCRETE. ARRANGE TO ILLUMINATE STAIRS.
 3. STEP LIGHTS TO BE INSTALLED IN WALL TO ILLUMINATE STAIRS.
 4. WIRING TO BE RUN IN UNDER GROUND CONDUIT AND STUB UP INTO PERMAPOST. MAKE WIRING CONNECTIONS CONCEALED WITHIN PERMAPOST. AIM FIXTURES TO ILLUMINATE WALL EVENLY. SEE DETAIL ON THIS SHEET.
 5. PROVIDE 2-3/8" TENON FOR MOUNTING TYPE 'G' FIXTURES. AIM FIXTURES TO ILLUMINATE FRONT OF MOUNTMENT.
 6. TYPE 'F' FIXTURES TO BE INSTALLED TO UNDERSEIDE OF BENCH SEATS. PROVIDE 24 VOLT WIRING TO CONNECT FROM FIXTURE TO FIXTURE. CONCEAL WIRING BETWEEN BENCHES IN UNDERGROUND CONDUIT.
 7. PROVIDE POWER SUPPLY TO CONVERT 120 VOLT CIRCUIT TO 24 VOLT OUTPUT AND RUN LOW VOLTAGE WIRING TO TYPE 'F' FIXTURES.
 8. PROVIDE CONCRETE POST TO MOUNT TIME CLOCK AND POWER SUPPLY. DIRECT BURIAL.
 9. PROVIDE 24 HOUR TIME CLOCK WITH PHOTOCELL CONTROLLED CONTACTOR. TWO POLE NEMA 3R RATED. THE CLOCK TO ENABLE POWER TO LIGHTS THROUGH PHOTOCELL CONTROLLED CONTACTOR. TIME CLOCK TO TURN LIGHTS OFF.
 10. PROVIDE NEMA 3R ENCLOSURE CABINET WITH HINGED DOOR AND LOCKABLE HANDLE LATCH. 20" HIGH x 24" WIDE x 12" DEEP. MOUNT TO BACK SIDE OF RETAINING WALL.
 11. PROVIDE BODINE ELI-S-230 SINUSOIDAL BATTERY INVERTER INSIDE NEMA 3R ENCLOSURE. WIRE TYPE "W" AND TYPE "C" FIXTURES THROUGH THE INVERTER. INVERTER TO PROVIDE 90 MINUTES OF EMERGENCY BACKUP POWER TO FIXTURES UPON LOSS OF NORMAL POWER. RUN UNSWITCHED WIRING TO BATTERY PER MANUFACTURERS WIRING INSTRUCTIONS.



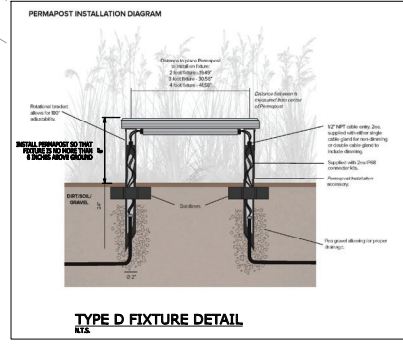
1 SITE LIGHTING PLAN
1/8" = 1'-0"



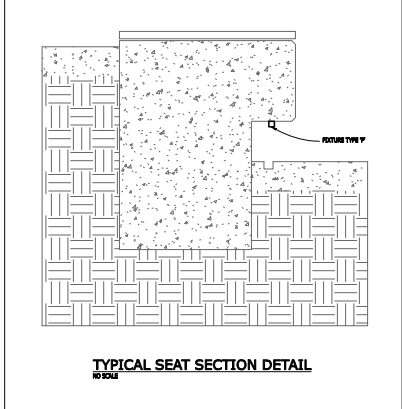
MOUNTING DETAIL FOR LIGHT FIXTURE 'G'
N.T.S.



BOLLARD BASE DETAIL
NO SCALE



TYPE D FIXTURE DETAIL
N.T.S.



TYPICAL SEAT SECTION DETAIL
NO SCALE

SITE LIGHTING PLAN

VETERANS MEMORIAL PARK

Coastal
 Engineering
 898 Clearlight Boulevard - Brooksville, Florida 34601
 (813) 796-8400
 Fax: (813) 796-8401
 E-mail: info@coastaleng.com

Coastal
 Engineering
 898 Clearlight Boulevard - Brooksville, Florida 34601
 (813) 796-8400
 Fax: (813) 796-8401
 E-mail: info@coastaleng.com

REUSE OF DOCUMENT
 THIS DOCUMENT, COMPRISED OF THE
 HEREIN, IS AN INSTRUMENT OF
 SERVICE AND IS THE PROPERTY OF
 PROPERTY OF COASTAL ENGINEERING
 CONSULTANTS, INC. IT IS NOT TO BE
 USED, IN WHOLE OR IN PART, FOR
 ANY OTHER PROJECT WITHOUT THE
 WRITTEN AUTHORIZATION OF COASTAL
 ENGINEERING CONSULTANTS, INC.
 & MADE BY REGISTERED PROFESSIONAL

DATE	REV. BY/REV. NO.	REVISION
10/13/2022	2	100% Submitted
12/05/2022	3	PERMIT
01/27/2024		BID SET

SHEET
E1.2
 WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" x 34"

MPS
 ENGINEERING
 SINCE 1984
 AN M.P. SPYCHALA COMPANY
 240 Pine Ave. N
 Oldsmar, FL 34677
 813.855.2721
 www.mpseng.com

CONSTRUCTION PLANS for VETERANS MEMORIAL PARK

100% SUBMITTAL

HERNANDO COUNTY, FLORIDA

Project Number 22087

PREPARED FOR:

HERNANDO COUNTY BOCC

15470 FLIGHT PATH DRIVE
BROOKSVILLE, FL 34604

PROJECT MANAGER: KEITH LARSON

PREPARED BY:

Coastal Engineering
Planning
Surveying
Environmental
Construction Management
engineering associates, inc.
966 Candlelight Boulevard - Brooksville - Florida 34601
(352) 796-9423 - Fax (352) 799-8359
EB-0000142

SURVEYOR/ENGINEER:
COASTAL ENGINEERING ASSOCIATES, INC
966 CANDLELIGHT BOULEVARD
BROOKSVILLE, FL 34601
(352) 796-9423

ARCHITECT:
WANNEMACHER JENSEN ARCHITECTS, INC
132 MIRROR LAKE DR. N.
ST. PETERSBURG, FL 33701
(727) 822-5566

STRUCTURAL ENGINEER:
BECKLEY ENGINEERING CONSULTANTS
16150 AVIATION LOOP # 15789
BROOKSVILLE, FL 34604
(352) 316-7600
www.beckleyeng.com

ELECTRICAL ENGINEER:
MPS ENGINEERING
240 PINE AVE N.
OLDSMAR, FL 34677
(813) 855-2721
www.mpseng.com

SHEET INDEX

CIVIL

- C-01 COVER SHEET
- C-02 GENERAL NOTES / DETAILS
- C-03 EXISTING CONDITIONS
- C-04 DEMOLITION PLAN
- C-05 AERIAL SITE PLAN
- C-06 SITE PLAN
- C-07 GRADING PLAN

ARCHITECTURAL

- SITE RENDERING
- G-101 SITE PLAN
- B-101 LIFE-SAFETY PLAN
- A-001 SITE PLAN
- A-002 SITE PLAN
- A-101 ENLARGED PLAN
- A-300 ELEVATIONS
- A-410 DETAILS
- A-411 DETAILS

ELECTRICAL

- E0.1 SYMBOLS LIST AND SPECIFICATIONS
- E1.1 ELECTRICAL SITE PLAN
- E1.2 SITE LIGHTING PLAN

STRUCTURAL

- S-101 GENERAL STRUCTURAL NOTES
- S-201 PLANS
- S-301 TYPICAL DETAILS
- S-401 WALL SECTIONS

SITE DATA

OWNER: HERNANDO COUNTY BOCC

ADDRESS: 15470 FLIGHT PATH DRIVE
BROOKSVILLE, FL 34604

CONTACT: KEITH LARSON
(352) 754-4027
KLARSON@CO.HERNANDO.FL.US

ENGINEER: COASTAL ENGINEERING ASSOCIATES, INC
BRIAN MALMBERG REG#59405

PROJECT ADDRESS: 12254 SPRING HILL DRIVE
SPRING HILL, FLORIDA 34609

PARCEL KEY: 416142

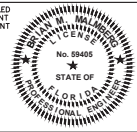
EXIST. ZONING: PARK

TOTAL PROPERTY AREA: ±21.5 AC

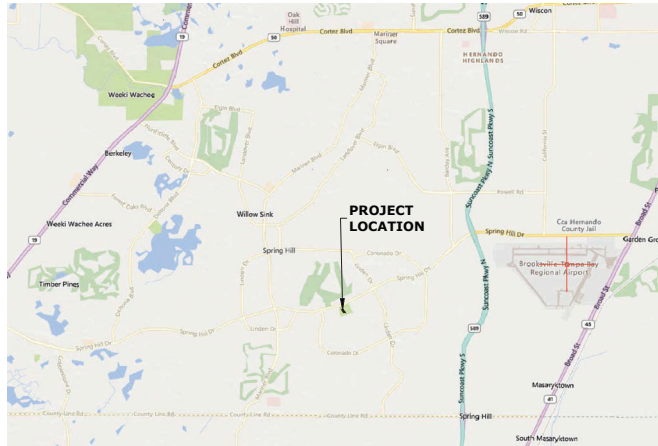
PROJECT AREA: 15,790 S.F. / ±0.36 AC

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY BRIAN MALMBERG, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY BRIAN MALMBERG, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



DESIGN ENGINEER BRIAN M. MALMBERG, P.E., REGISTRATION NO. 59405



LOCATION MAP
NTS.
6/7/21
29/2/118

PLAN REVISIONS

DATE	REVISION NO.	REVISION	AGENCY	PERMIT TYPE	PERMIT NO.	EXP. DATE
8/9/23	1	90% SUBMITTAL				
10/13/23	2	100% SUBMITTAL				
01/16/24	3	BENCHMARKS UPDATED TO NAVD88				
05/13/24	4	REMOVE FITNESS COURT PER COUNTY RELOCATION OF COURT				

AGENCY APPROVALS

GENERAL CONSTRUCTION NOTES

- BENCHMARK DATUM IS NAVD83.
- THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS AND TO THE MAXIMUM EXTENT FEASIBLE. THE CONTRACTOR SHALL REFER TO THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR ADDITIONAL INFORMATION ON HORIZONTAL AND VERTICAL CONTROL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL MARKERS AND PROPERTY CORNERS (MONUMENTS, PIPES, ETC.) FOR THE DURATION OF CONSTRUCTION. MARKERS SHALL BE CONTINUOUSLY MONITORED AND RE-SET IMMEDIATELY BY A FLORIDA LICENSED LAND SURVEYOR IF ANY SHOULD BECOME DISTURBED.
- LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS AND TO THE MAXIMUM EXTENT FEASIBLE. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, ETC. AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL REPAIR ALL PAVED, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, RETAINING WALLS, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COSTS WITH THE SAME MATERIALS REMOVED OR DAMAGED AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL SATISFY HIMSELF AS TO POSSIBLE INCIDENTAL CONFLICTS WITH EXISTING STRUCTURES SUCH AS MAIL BOXES, SIGNS, FENCES, BILLBOARDS, ETC. AND SHALL INCLUDE IN HIS OVERALL COSTS THE REMOVAL AND OR REPLACEMENT AND PROTECTION OF SUCH INCIDENTAL ITEMS.
- THE CONTRACTOR, PRIOR TO BIDDING THIS WORK, SHALL APPRAISE HIMSELF AS TO ALL ABOVE AND BELOW GROUND FEATURES THAT HE MAY ENCOUNTER DURING CONSTRUCTION AND INCLUDE INTO HIS OVERALL BID ALL COSTS FOR SPECIFIC CONSTRUCTION METHODS AND PROCEDURES THAT NEED TO BE TAKEN TO WORK AROUND SUCH APPURTENANCES.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH ANY SITE WORK WHICH A CONTACT HAS BEEN DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.
- CONSTRUCTION SHALL BE CARRIED OUT "IN THE DRY". THE CONTRACTOR SHALL REVIEW SITE CONDITIONS AND DETERMINE METHODS AND EXTENT OF DRAINAGE NECESSARY AND SHALL INCLUDE COSTS OF DRAINAGE IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONTROL OF SURFACE WATER OR FOR THE ADDITIONAL MATERIALS OR REMOVAL REQUIRED AS A RESULT OF INADEQUATE OR INSUFFICIENT DRAINAGE.
- ALL WORK TO BE PERFORMED FOR THE COMPLETION OF THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE BEST PRACTICES OF THE INDUSTRY AND IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND COUNTY CODES, ORDINANCES, STANDARDS AND PERMIT CONDITIONS. FLORIDA BUILDING CODE (LATEST EDITION) IS APPLICABLE.
- ALL CONCRETE SHALL BE 3,000 PSI WITH FIBER MESH UNLESS OTHERWISE STATED ON THE PLANS.

MINIMUM REQUIRED AS-BUILTS

GENERAL

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A RECORD SURVEY(S) PREPARED AND SUBMITTED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER INCLUDING, BUT NOT LIMITED TO, LOCATION AND FINISHED GRADE ELEVATIONS IN PAVED AND NON-PAVED AREAS SUFFICIENT TO DETERMINE DIRECTION OF SITE DRAINAGE AND ELEVATIONS OF RETENTION CENTER AREAS, MITIGATION AREAS AND DITCH CHANNEL CONVICANCES INCLUDING TOPS OF BANKS, TOES OF SLOPES, POLE BOTTOMS AND WATER LEVELS, ELEVATIONS AND DIMENSIONS OF POLE CONTROL STRUCTURES, SPILLWAYS AND UNDERDRAINS, DRAINAGE STRUCTURE GRATING/TRENCH ELEVATIONS, STORM PIPE SIZES, PIPE MATERIALS AND PIPE INLET LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL STRUCTURES. CONSTRUCTION COMPONENTS WHICH VARY FROM THE DESIGN. UTILITY INFORMATION SHALL INCLUDE LOCATION OF WATER LINE CONNECTIONS, VALVES, BENDS, HESSES AND ELEVATIONS OF PIPES INSIDE DEPTH OF COVER VARIES FROM DESIGN, TIES TO SANITARY SEWER LINES, MANHOLE RIM AND INVERT ELEVATIONS, CLEANOUTS AND SERVICE CONNECTIONS.
- ALL DIMENSIONS SHALL BE IN FEET DIMENSIONED OFF CENTERLINE OF ROADS OR OTHER PERMANENT STRUCTURES. IF ONLY ONE DIMENSION CAN BE TAKEN OFF THE CENTERLINE OF ROAD, THE SECOND SHALL BE OFF A PERMANENT MARKER OR REFERENCE POINT.
- FOUR (4) SETS OF 24x36 SIGNED AND SEALED AS-BUILT DRAWINGS, ONE (1) CD WITH AUTOCAD AND Adobe PDF'S OF ALL SHEETS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

GENERAL UTILITY NOTES

- THE CONTRACTOR IS CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES, WHEN SHOWN, ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ACTUAL FIELD LOCATIONS FROM THE RESPECTIVE UTILITY COMPANY AND TO COORDINATE WITH AFFECTED UTILITY COMPANY 48 HOURS BEFORE BEGINNING ANY WORK.
AT A TELEPHONE: 1-800-472-4300
BIRDAHOUSE CABLE TV: 1-800-492-3499
WRE: 1-522-687-5133
HERNANDO COUNTY UTILITIES DEPT: 1-352-754-4037
TECO: 1-813-239-1226
VERIZON: 1-800-483-4000
- ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES. ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

SPECIAL NOTES TO CONTRACTORS

- WHERE TREE REMOVAL IS REQUIRED DUE TO CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF THOSE TREES. THE COST FOR THIS REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS. TREE REMOVAL AND PROTECTION SHALL COMPLY WITH APPLICABLE CITY AND COUNTY CODES.
- UNLESS SPECIFIED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED ITEMS SHOWN WITHIN THE CONSTRUCTION PLANS.
- CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE CLOSEST OPEN SPACE AVAILABLE AND AVAILABLE FOR THE CONTRACTOR'S USE. HOWEVER, THE SITE MAY NOT BE CONTIGUOUS TO THE PROJECT AREA OR OF SUFFICIENT SIZE TO ACCOMMODATE THE ENTIRE PROJECT INVENTORY OF MATERIALS / EQUIPMENT.
- A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS NOT PART OF THE PERMITTING OBTAINED WITH THIS PLAN SET. THEREFORE, THE CONTRACTOR IS ADVISED THAT AN NPDES CONSTRUCTION PERMIT MAY BE REQUIRED FOR THIS PROJECT AND THAT THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND ADHERING TO THIS PERMIT. REFER TO SUBSECTION 62-321.1 F.A.C. FOR ADDITIONAL INFORMATION. THE INFORMATION PROVIDED IN THE SWPPP NOTES AND DETAILS SHEETS ARE FOR COMPLIANCE WITH ENVIRONMENTAL RESTRICTION PERMITTING UNDER CHAPTER 62-333, F.A.C. AND MAY BE USED AS A REFERENCE FOR COMPLIANCE WITH NPDES PERMITTING, BUT ARE NOT NECESSARILY INCLUSIVE OF ALL NPDES REQUIREMENTS.
- HERNANDO COUNTY HAS AN NPDES DISCHARGE REQUIREING COMPLIANCE ON ALL CONSTRUCTION SITES (CH. 28, ARTICLE X, SEC. 28-341 TO 403).
- A PRE-CONSTRUCTION VIDEO & PHOTOS OF THE ENTIRE PROJECT AREA, INCLUDING THE SITE ACCESS SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

ENVIRONMENTAL PROTECTION NOTES

- CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES. WHERE CONSTRUCTION IS NECESSARY ACROSS WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. SILT BARRIERS SHALL BE CONSIDERED LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS.
- CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORMWATER SURFACES WITHIN A WATERSHED AREA ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT AREA.
- STAYED OR FLOATING SILT SCREENS OR SYNTHETIC HAY BALES, AS APPROPRIATE, SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES OR WETLAND AREAS. ONCE CONSTRUCTION IS COMPLETE AND FINISH GRADING / STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE OWNER AND PRIOR TO FINAL ACCEPTANCE.
- ALL FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STRIPPED OF VEGETATION. WATERING OR OTHER PRIOR APPROVED MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING AND OTHER SITE WORK SHALL BE INITIATED AS SOON AS POSSIBLE.
- ALL WATER COLLECTED AND PUMPED DURING TRENCH DRAINAGE ACTIVITIES SHALL BE DISPOSED OF IN UPLAND AREAS INTO DOUBLE STAKED HAY BALES. DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST SURFACE WATER BODY OR WETLAND AREA, TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES.
- TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO UNDISTURBED WETLANDS. ADDITIONALLY, STOCKPILES TO REMAIN FOR LONGER THAN 24 HOURS SHALL BE CONFINED BY SILT BARRIERS WHICH PREVENT RUNOFF SEDIMENTATION FROM ENCROACHING UPON WETLAND AREAS OR SURFACE WATER BODIES. STOCKPILES IN PLACE AND UNTOUCHED FOR 7 DAYS OR MORE TO HAVE VEGETATIVE COVER TO PREVENT WIND EROSION AND SEDIMENT DISPERSAL.
- ALL TRASH AND CONSTRUCTION DEBRIS PRODUCED FROM THIS PROJECT SHALL BE COLLECTED BY THE CONTRACTOR ONLY. THESE MATERIALS SHALL BE STAGED OR CONTAINERIZED AS NECESSARY TO PREVENT ACCIDENTAL RELEASE. DISPOSAL OF SOLID WASTE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL, COUNTY AND STATE REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR MOVING AND MAINTAINING PORTABLE SANITARY WASTE UNITS ON-SITE FOR USE BY HIS EMPLOYEES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN CONTROL OF ANY HAZARDOUS MATERIALS UTILIZED ON-SITE FOR CONSTRUCTION, SUCH AS OIL CONTAINERS, WASTE OIL TUMBLES, REGULARS FOR LEAKAGE. A SPILL PREVENTION PLAN SHALL BE ESTABLISHED WHICH COVERS CLEANUP AND NOTIFICATION OF APPROPRIATE GOVERNMENT AGENCIES.
- CONTRACTOR SHALL NOT REMOVE TREES WITHOUT APPROVAL OF THE LOCAL GOVERNING JURISDICTION. TREE PROTECTION SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION OR ALTER EXISTING TOPOGRAPHY. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOIL, SYNTHETIC HAY BALES, SAND BAGS OR DIRT MOUND, AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES AND GRADES SHOWN IN THE PLANS UNTIL FINAL ACCEPTANCE. ALL SLOPES AND SURFACES 4:1 OR STEEPER SHALL BE SOILED. ALL OTHER UNPAVED SURFACES UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE CONTRACT DOCUMENTS. ALL SOILED SURFACES OVER 4:1 SHALL BE INSTALLED WITH SOIL PEGS.
- SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED. SEE SWPP / CSWMP NOTES AND DETAIL SHEETS FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF TEMPORARY SEDIMENT/EROSION CONTROL DEVICES WHEN NO LONGER NEEDED.

EASTERN INIGO SNAKE

IF YOU SEE A LIVE EASTERN INIGO SNAKE ON THE SITE:

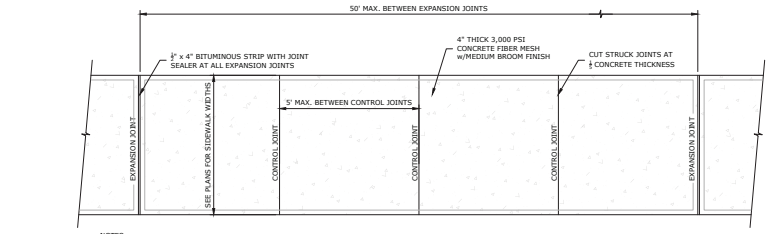
- Cease clearing activities and allow the live eastern inigo snake sufficient time to move away from the site through brush.
 - Personnel must NOT attempt to touch or handle snake due to protected status.
 - Take photographs of the snake, if possible, for identification and documentation purposes.
 - Immediately notify supervisor or the applicant's designated agent, and the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A DEAD EASTERN INIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, and the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and freeze the specimen. The appropriate wildlife agency will retrieve the dead snake. Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern inigo snake is encountered: North Florida Field Office - (904) 731-3336 Panama City Field Office - (850) 769-0502 South Florida Field Office - (772) 982-3909

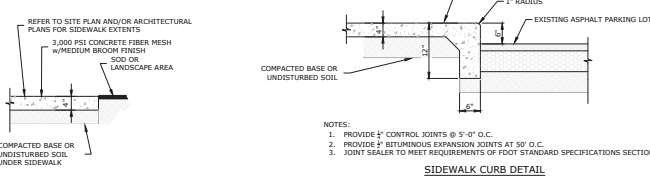
DURING CONSTRUCTION ACTIVITIES

- During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern inigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
- If an eastern inigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in project consultation.
- Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern inigo snakes are seen.



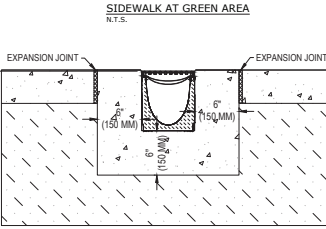
SIDEWALK STANDARD DETAIL

N.T.S.



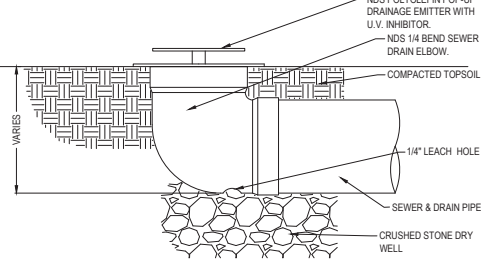
SIDEWALK CURB DETAIL

N.T.S.



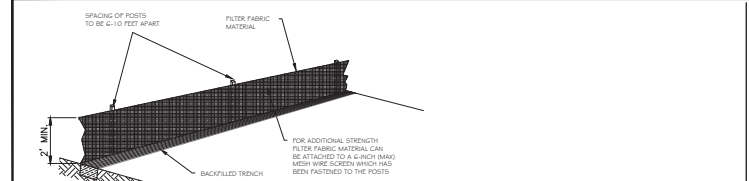
TRENCH DRAIN DETAIL

N.T.S.



POP-UP DRAINAGE EMITTER DETAIL

N.T.S.



NOTES:

- For additional information and details, see F.D.O.T. Index No.102.
- Unless specified, hay barriers may be used in lieu of silt fences.
- Additional posts and rolls may be necessary to secure and support barriers.
- Additional fence lengths may be required by the County Engineer or by regulatory agencies.
- Type-III normally used, where required.
- Type-IV are used where large sediment loads anticipated, see FDOT Index 102

DO NOT DEPLOY IN A MANNER SO THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS ARE TO BE USED AT PERMANENT BODIES OF WATER.

HERNANDO COUNTY DEPARTMENT OF PUBLIC WORKS

TITLE: DRAINAGE / EROSION STANDARD
SILT FENCES

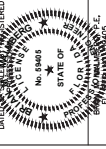
APPROVED BY: DATE: 10-01-08
C. C. MASON, P.E.

NO: 111-10

Always call 811 two full business days before you dig

Sunshine811.com

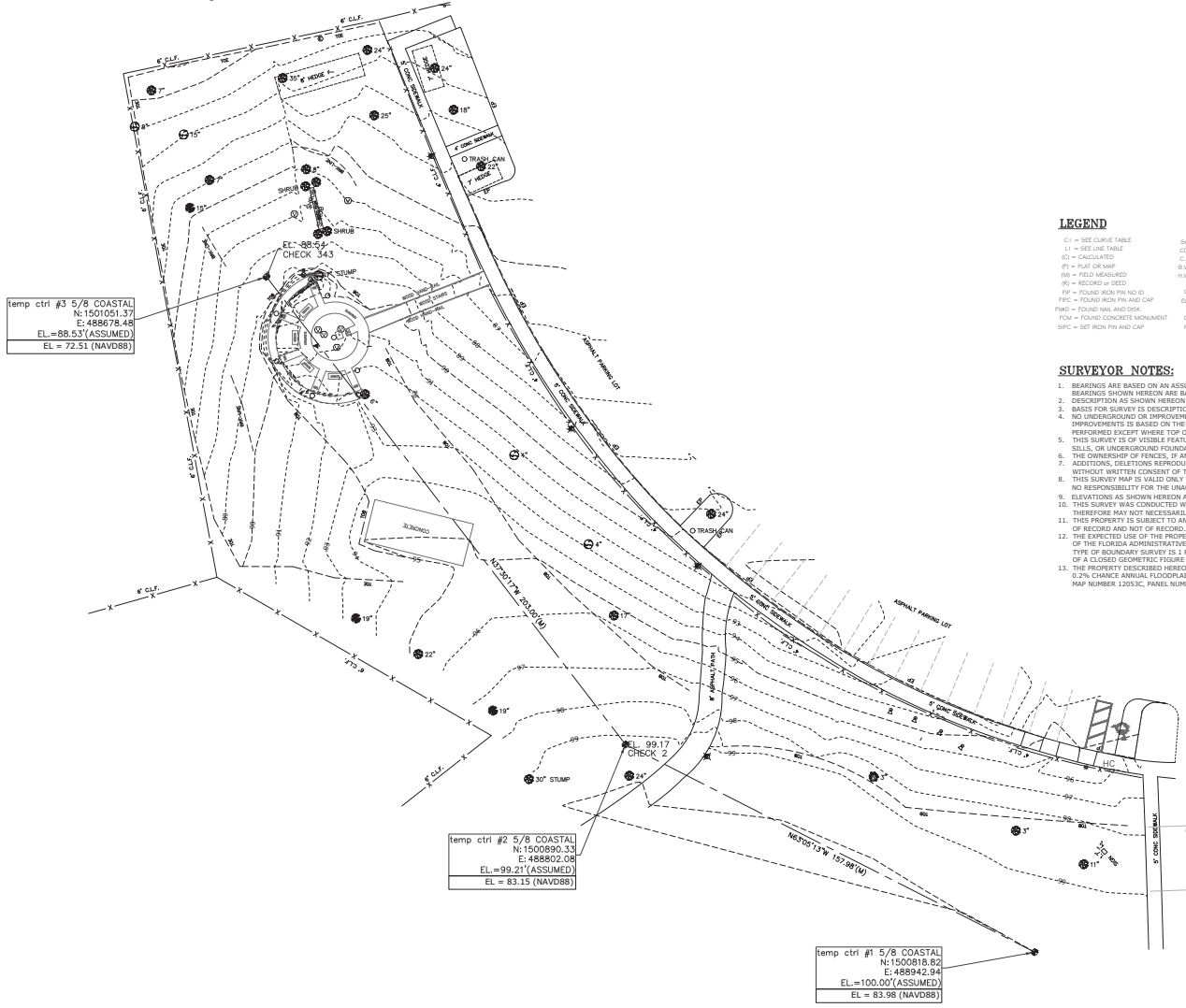
GENERAL NOTES & DETAILS
VETERANS MEMORIAL PARK



Coastal Environmental Consulting & Management
8680 Crandall Blvd., Suite 200 - Brooksville, FL 34601
(352) 796-8399
E-mail: info@cecm.com

DATE	REV. #	DESCRIPTION
10/1/08	1	ISSUE
10/7/08	2	REVISIONS
10/7/08	3	REVISIONS
10/7/08	4	REVISIONS

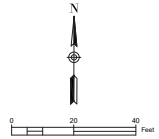
SPRING HILL DRIVE



temp ctrl #3 5/8 COASTAL
N: 1501051.37
E: 488678.48
EL = 86.53 (ASSUMED)
EL = 72.51 (NAVD88)

temp ctrl #2 5/8 COASTAL
N: 1500890.33
E: 488602.08
EL = 99.21 (ASSUMED)
EL = 83.15 (NAVD88)

temp ctrl #1 5/8 COASTAL
N: 1500818.82
E: 488942.94
EL = 100.00 (ASSUMED)
EL = 83.98 (NAVD88)



DESCRIPTION
A PORTION OF VETERANS MEMORIAL PARK IN SPRING HILL, FLORIDA FOR CONSTRUCTION OF A NEW MEMORIAL MONUMENT.

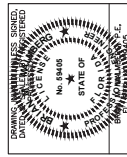
LEGEND

- | | | | | |
|-------------------------------|--------------------------------|---|-----------------------------|--|
| C1 = SEE CURVE TABLE | SCM = SET CONCRETE MONUMENT | RW = RIGHT-OF-WAY | ▽ = SIGN | ■ = UTILITY SERVICE BOX |
| L1 = SEE LINE TABLE | CONC = CONCRETE | SEC = SECTION | ■ = FIRE HYDRANT | ○ = CATY MARKER |
| K2 = CALCULATED | CL.F = CHAIN LINK FENCE | MES = METERS PER SECTION | ○ = UTILITY POLE | ○ = FOUND IRON PIN 4 CAP (AS SHOWN) |
| PL = PLAT OR MAP | B.W.F. = BARBED WIRE FENCE | KCP = REINFORCED CONCRETE PIPE | ○ = LIGHT POLE | ● = SET IRON PIN AND CAP (5/8" LB #7200) |
| RM = FIELD MEASURED | H.W.F. = HOOD WIRE FIELD FENCE | TOB = TOP OF BANK | ○ = UTILITY GATE VALVE | ● = SET IRON PIN AND CAP (5/8" LB #7200) |
| RE = RECORDS OF DEED | SW = SIDESWALK | TOE = TOE OF SURVEY | ○ = TELEPHONE SERVICE RISER | ▲ = FOUND NAIL AND DISK (AS SHOWN) |
| RP = FOUND IRON PIN NO ID | OP = OVERHEAD POWER | POB = POINT OF BEGINNING | ○ = ELECTRIC TRANSFORMER | ▲ = SET NAIL AND DISK (LB #7200) |
| RPC = FOUND IRON PIN AND CAP | ELC = ELECTRIC | POC = POINT OF COMMENCEMENT | ○ = FIBER OPTIC BOX | = FOUND CONCRETE MONUMENT (AS SHOWN) |
| FM = FOUND IRON PIN AND CAP | EP = EDGE OF PAVEMENT | PCF = Permanent Control Point | ○ = WATER METER | ■ = SET CONCRETE MONUMENT (4" X 4" LB #7200) |
| FOM = FOUND CONCRETE MONUMENT | OR = ORIGINAL RECORD | PRM = Permanent Reference Monument (100.0) = EXISTING ELEVATION | ○ = SANITARY MANHOLE | ■ = DESCRIPTIVE POINT |
| SFC = SET IRON PIN AND CAP | P.B. = PLAT BOOK | | | |

SURVEYOR NOTES:

- BEARINGS ARE BASED ON AN ASSUMED BASELINE BETWEEN CONTROL POINTS #1 & #2. ESTABLISHING AN ASSUMED BEARING OF N00°00'00". BEARINGS SHOWN HEREON ARE BASED ON ASSUMED COORDINATES AND ARE NOT GRID BEARINGS.
- DESCRIPTION AS SHOWN HEREON WAS PROVIDED.
- BASES FOR SURVEY IS DESCRIPTION, RECORD PLAT, AND MONUMENTATION FOUND IN PLACE.
- NO UNDERGROUND OR IMPROVEMENTS OR UTILITIES HAVE BEEN LOCATED EXCEPT AS NOTED. THE HORIZONTAL LOCATION OF UNDERGROUND IMPROVEMENTS IS BASED ON THE FLAGGED LOCATION PROVIDED BY THE CONTRACTOR. SOFT DIGGS TO CONFIRM SAID LOCATIONS WERE NOT PERFORMED EXCEPT WHERE TOP OF PIPE ELEVATIONS ARE INDICATED.
- THIS SURVEY IS OF VISIBLE FEATURES ONLY. UNDERGROUND ENCROACHMENTS, IF ANY, WERE NOT LOCATED. OVERHANGS, WINDOW SILLS, OR UNDERGROUND FOUNDATIONS NOT LOCATED.
- THE OWNERSHIP OF FENCES, IF ANY EXIST, ON OR NEAR THE PROPERTY LINES IS NOT KNOWN BY THIS SURVEYOR.
- ADDITIONS, DELETIONS REPRODUCTION OF SURVEY DRAWINGS BY OTHER THAN THE SIGNED PARTY OR PARTIES IS PROHIBITED BY LAW WITHOUT WRITTEN CONSENT OF THE SIGNED PARTY OR PARTIES.
- THIS SURVEY MAP IS VALID ONLY TO THOSE PERSONS OR ENTITIES NAMED HEREON. COASTAL ENGINEERING ASSOCIATES, INC. WILL ASSUME NO RESPONSIBILITY FOR THE UNAUTHORIZED REPRODUCTION AND/OR REDISTRIBUTION OF THIS SURVEY MAP.
- ELEVATIONS AS SHOWN HEREON ARE BASED ON AN ASSUMED VERTICAL DATUM UNLESS OTHERWISE NOTED.
- THIS SURVEY WAS CONDUCTED WITHOUT THE BENEFIT OF A COMPLETE TITLE REPORT OR TITLE ABSTRACT AND THEREFORE MAY NOT NECESSARILY SHOW ALL RIGHT-OF-WAYS, EASEMENTS OR OTHER ENCUMBRANCES OF RECORD.
- THIS PROPERTY IS SUBJECT TO ANY DEDICATION, LIMITATIONS, RESERVATIONS, RESTRICTIONS, AND/OR EASEMENTS OF RECORD AND NOT OF RECORD.
- THE EXPECTED USE OF THE PROPERTY AS DESCRIBED HEREON, AS CLASSIFIED IN THE STANDARDS OF PRACTICE (S-17 OF THE FLORIDA ADMINISTRATIVE CODE), IS "SUBURBAN". THE HORIZONTAL RELATIVE DISTANCE ACCURACY FOR THIS TYPE OF BOUNDARY SURVEY IS 1 FOOT IN 7,500 FEET. THE ACCURACY OBTAINED BY MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE WAS FOUND TO MEET OR EXCEED THIS REQUIREMENT.
- THE PROPERTY DESCRIBED HEREON APPEARS TO BE IN FLOOD ZONE "V" (AREA DETERMINED TO FALL OUTSIDE OF THE 0.2% CHANCE ANNUAL FLOODPLAIN) AS SCALED FROM THE FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 120110, MAP NUMBER 12003C, PANEL NUMBER 0000-0, EFFECTIVE DATE 02/02/2012.

EXISTING CONDITIONS
VETERANS MEMORIAL PARK



Coastal
Engineering
Surveying
Mapping
Environmental
Construction Management

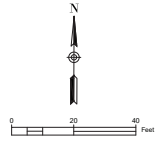
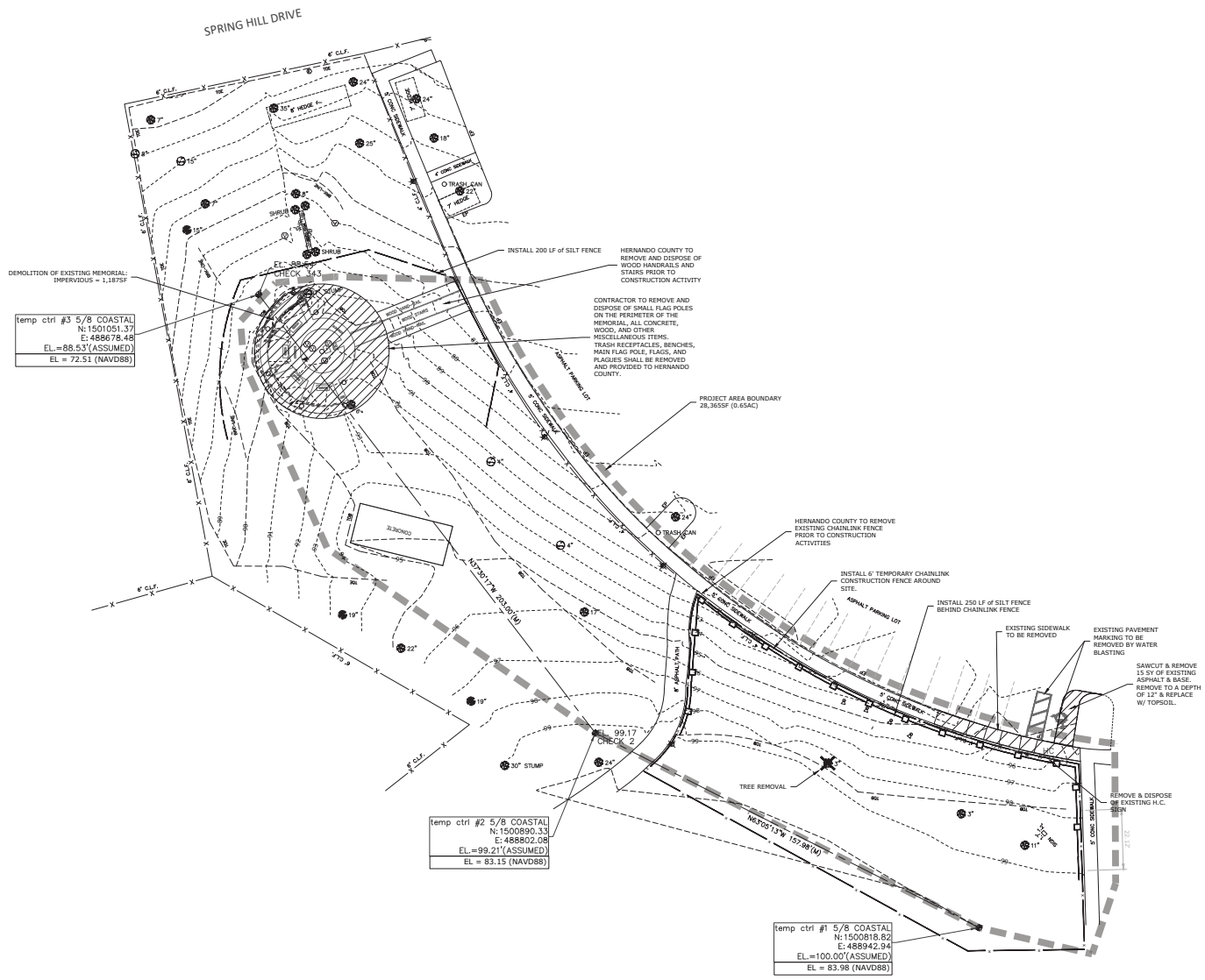
900 Casselhill Boulevard • Brooksville • Florida 34401
(352) 796-4423 • Fax (352) 796-4359
EEO-9900142

REUSE OF DOCUMENT
THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.
DRAWING INVALID UNLESS SIGNED, DATED AND SEALED BY REGISTERED PROFESSIONAL ENGINEER

DATE	REV. BY/REV. NO.	REVISION
02/07/24	1	PER CLIENT
02/07/24	2	FOR SUBMITTAL
02/07/24	3	REVISIONS UPDATED TO MATCH
02/07/24	4	REDOUCED LINES COURT PER COUNTY RECORDS

WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 27" X 34"

SHEET
C-03
22087



NOTES:

1. CONTRACTOR TO REMOVE EXISTING PAVERS & STOCK THEM AT ONSITE LOCATION SPECIFIED BY THE COUNTY PROJECT MANAGER.
2. SPECIAL CARE SHALL BE TAKEN TO NOT DISTURB OR DAMAGE THE PAVERS TO BE LEFT IN PLACE.

temp ctrl #3 5/8 COASTAL
 N: 1501051.37
 E: 488678.48
 EL = 86.53 (ASSUMED)
 EL = 72.51 (NAVD88)

temp ctrl #2 5/8 COASTAL
 N: 1500890.33
 E: 488602.08
 EL = 99.21 (ASSUMED)
 EL = 83.15 (NAVD88)

temp ctrl #1 5/8 COASTAL
 N: 1500818.82
 E: 488942.94
 EL = 100.00 (ASSUMED)
 EL = 83.98 (NAVD88)

DEMOLITION PLAN
VETERANS MEMORIAL PARK



Coastal
 Engineering
 Planning
 Surveying
 Environmental
 Construction Management

808 Cavalierlight Boulevard • Brooksville, Florida 34601
 (352) 796-4423 • Fax (352) 799-8359
 EIC-6500742

REUSE OF DOCUMENT
 THIS DOCUMENT IS THE PROPERTY OF COASTAL ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.

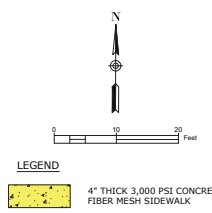
DATE	REV. BY/REV. NO.	REVISION
08/04/24	JAY	1 PER SUBMITTAL
08/04/24	JAY	2 FOR SUBMITTAL
08/04/24	JAY	3 RESUBMITTAL (ADDED TO WAIVER)
08/04/24	JAY	4 REMOVE (FINES COURT PER COUNTY RELOCATION)

PRINTED: 08/06/2024 - 12:25pm PRINTED BY: L4 DATE: 11/20/23 Version: Project/Draw/Client/Sheet/Date/Scale



temp ctrl #2 5/8 COASTAL
 N: 1500890.33
 E: 488802.08
 EL = 99.21 (ASSUMED)
 EL = 83.15 (NAVD88)

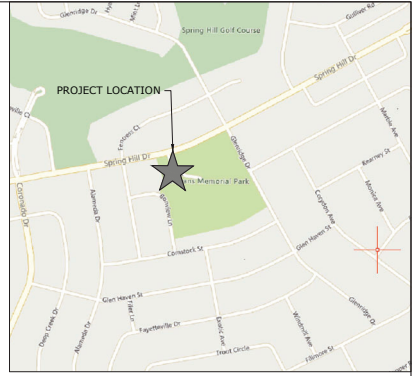
temp ctrl #1 5/8 COASTAL
 N: 1500818.92
 E: 488942.94
 EL = 100.00 (ASSUMED)
 EL = 83.98 (NAVD88)



OVERALL SITE DATA
OWNER/APPLICANT:
 HERMANDO COUNTY BOCC
 15470 FLIGHT PATH DR.
 BROOKSVILLE, FL 34604
PARCEL KEY NO. 416142
TOTAL PROPERTY AREA: 21.5 ACRES
PROJECT AREA: #15,790 S.F. / 0.36 ACRES
SECTION/TOWNSHIP/RANGE: 29/23S/18E

FEMA FIRM COMMUNITY PANELS: THE PROJECT IS LOCATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 12053C9975D EFFECTIVE DATE 2/2/2012. THE PROPERTY IS LARGELY LOCATED WITHIN ZONE X WITH AREAS OF ZONE AE AND ZONE X-SHADED LOCATED ADJACENT TO PROJECT BOULEVARD ENTRANCE ROAD.

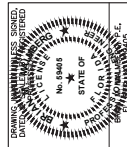
NOTE:
 1.) ALL DISTURBED AREAS TO BE SOODED W/ BAHIA GRASS



SITE LOCATION MAP
 N.T.S.

LEGEND
 4" THICK 3,000 PSI CONCRETE FIBER MESH SIDEWALK

AERIAL SITE PLAN
VETERANS MEMORIAL PARK

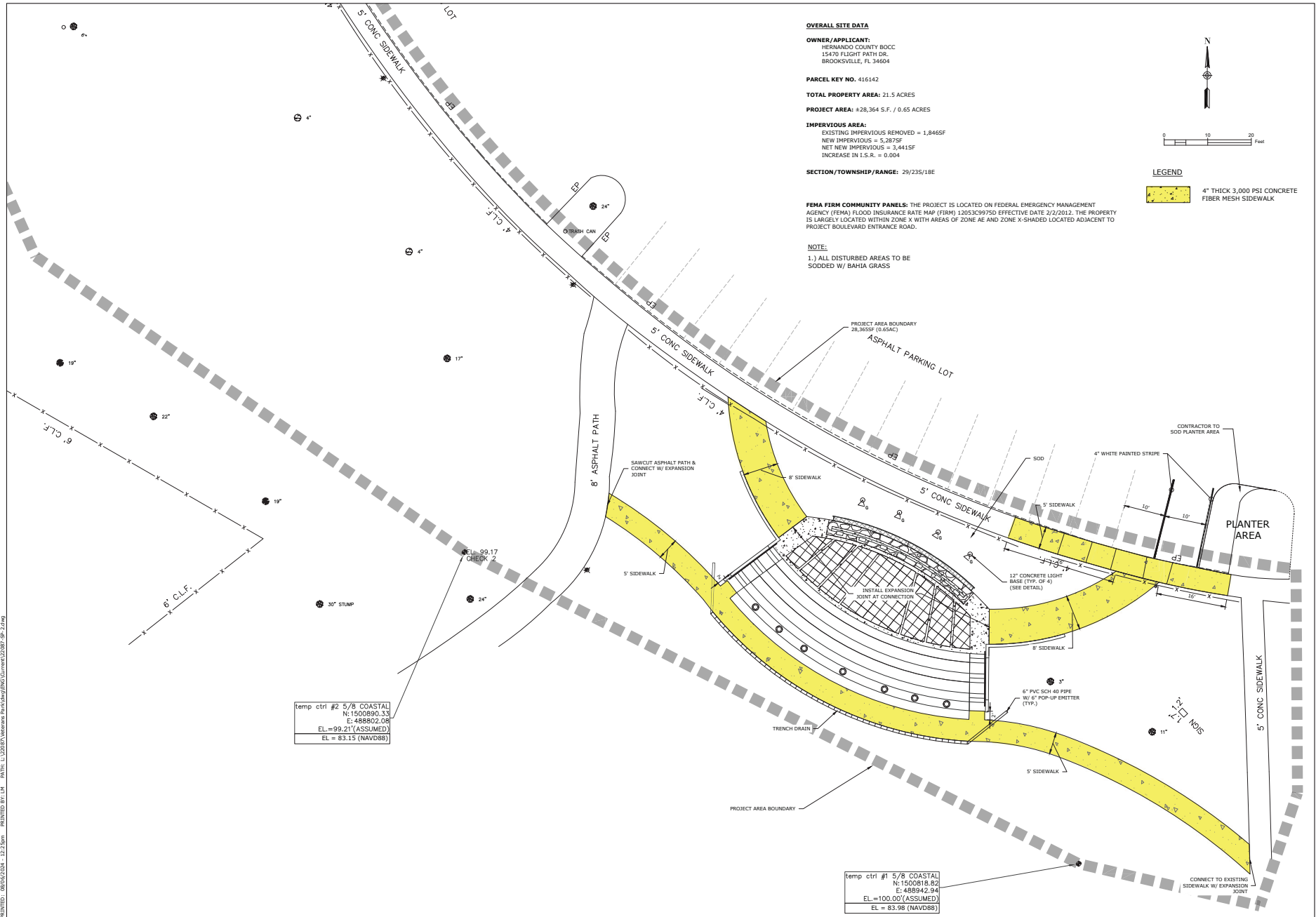


Coastal
 Engineering
 Planning
 Surveying
 Environmental
 Construction Management
 808 Cathedral Boulevard • Brooksville, Florida 34601
 (352) 796-4223 • Fax (352) 796-8359
 EIC-000742

REUSE OF DOCUMENT
 THIS DOCUMENT COMPOSED OF THE INCORPORATED IDEAS AND DESIGN PROFESSIONAL SERVICES IN THIS ASSOCIATION, AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.
 DRAWING SHALL UNLESS SHOWN, DATED & SIGNED BY REGISTERED PROFESSIONAL ENGINEER

DATE	REV. BY/CHK. BY	NO.	REVISION
8/9/23	PKR/SUBMITAL	1	FOR SUBMITAL
10/7/23	PKR	2	REWORKS/REVISED TO MATCH
02/07/24	PKR	3	REWORK (THRESH. COUNT PER COUNTY REGULATION)
02/07/24	SKA	4	REWORK (THRESH. COUNT PER COUNTY REGULATION)

SHEET
C-05
 22087



OVERALL SITE DATA

OWNER/APPLICANT:
 HERNANDO COUNTY BOCC
 15470 FLIGHT PATH DR.
 BROOKSVILLE, FL 34604

PARCEL KEY NO. 416142

TOTAL PROPERTY AREA: 21.5 ACRES

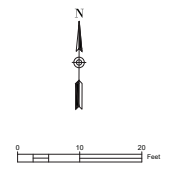
PROJECT AREA: ±28,364 S.F. / 0.65 ACRES

IMPERVIOUS AREA:
 EXISTING IMPERVIOUS REMOVED = 1,846SF
 NEW IMPERVIOUS = 5,287SF
 NET NEW IMPERVIOUS = 3,441SF
 INCREASE IN I.S.R. = 0.004

SECTION/TOWNSHIP/RANGE: 29/23S/18E

FEMA FIRM COMMUNITY PANELS: THE PROJECT IS LOCATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 128530975D EFFECTIVE DATE 3/2/2012. THE PROPERTY IS LARGELY LOCATED WITHIN ZONE X WITH AREAS OF ZONE AE AND ZONE X-SHADED LOCATED ADJACENT TO PROJECT BOULEVARD ENTRANCE ROAD.

NOTE:
 1.) ALL DISTURBED AREAS TO BE
 SODDED W/ BAHIA GRASS



LEGEND

4" THICK 3,000 PSI CONCRETE FIBER MESH SIDEWALK

SITE PLAN

VETERANS MEMORIAL PARK



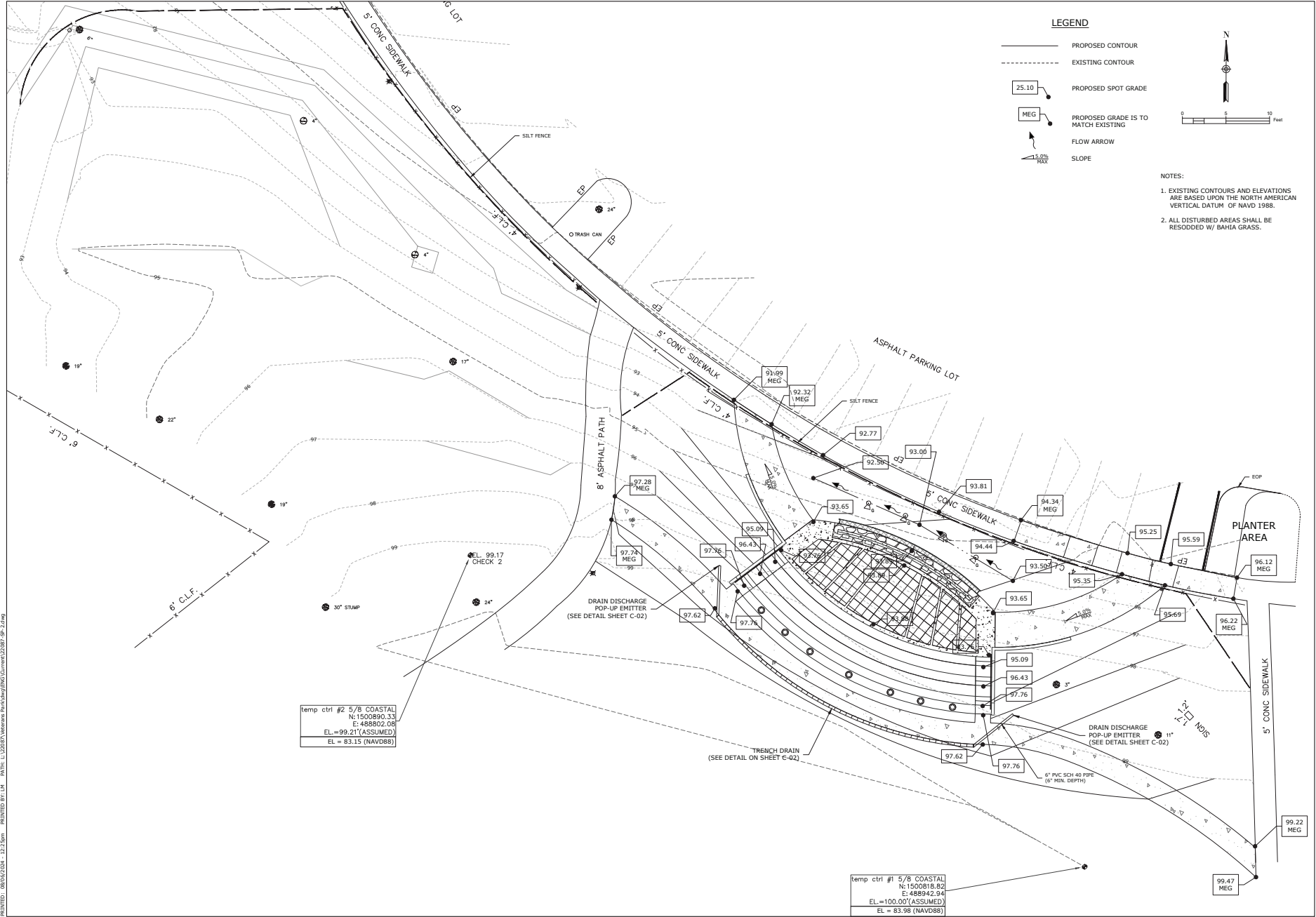
Coastal
 Engineering
 Planning
 Surveying
 Environmental
 Construction Management
 800 Conditional Boulevard • Brooksville, Florida 34601
 (352) 796-4423 • Fax (352) 796-4359
 EID-0001742

REUSE OF DOCUMENT
 THIS DOCUMENT, COMPARED TO THE INFORMATION HEREIN, IS THE PROPERTY OF COASTAL ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.

DATE	REV. SHEET NO.	REVISED BY	REVISION
08/25/14	1	PKR/SUBTTL	PERIODIC
10/07/13	2	COX/SUBTTL	PERIODIC
02/07/14	3	RENOVALES/GRATED TO WALKER	PERIODIC
02/07/14	4	RENOVALES (TRENCH GRATE PER COUNTY REGULATION)	PERIODIC

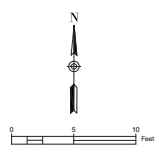
SHEET
C-06
 22087

PRINTED: 08/16/2016 - 12:22:50pm PRINTED BY: LAF PATH: L:\2016\Veterans Park\DWG\Grading\Grading\Grading.dwg



LEGEND

- PROPOSED CONTOUR
- - - EXISTING CONTOUR
- 25.10 PROPOSED SPOT GRADE
- MEG PROPOSED GRADE IS TO MATCH EXISTING
- FLOW ARROW
- 5.0% MAX SLOPE

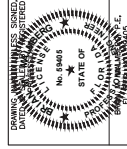


- NOTES:**
- EXISTING CONTOURS AND ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988.
 - ALL DISTURBED AREAS SHALL BE RESODDED W/ BAHIA GRASS.

temp ctrl #2 5/8 COASTAL
 N=1500890.33
 E=488802.08
 EL.=99.21'(ASSUMED)
 EL = 83.15 (NAVD88)

temp ctrl #1 5/8 COASTAL
 N=1500816.82
 E=488945.34
 EL.=100.00'(ASSUMED)
 EL = 83.98 (NAVD88)

GRADING PLAN
VETERANS MEMORIAL PARK



Coastal
 Engineering
 Associates, Inc.
 888 Constitution Boulevard • Brooksville, Florida 34601
 (352) 796-4423 • Fax (352) 796-8359
 EIC-04001742

REUSE OF DOCUMENT
 THIS DOCUMENT, IN WHOLE OR IN PART, IS NOT TO BE REUSED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING ASSOCIATES, INC.

DATE	REV.	BY/CHKD	REVISION
08/16/16	1	PKL/SMB/TLL	PER CON SUBMITTAL
07/23/16	2	PKL/SMB/TLL	CON SUBMITTAL
07/14/16	3	REWORK/MSK	GRADING TO MATCH
07/14/16	4	REWORK/MSK	REMOVE (TRENCH) PER COUNTY REGULATION

SHEET
C-07
 22087

Specifications for:

Veterans Memorial Park

100% Submittal

Prepared For:
Hernando County
15470 Flight Path Drive
Brooksville, FL 34604

November 2023

Prepared By



VETERANS MEMORIAL PARK

TABLE OF CONTENTS

DIVISION 01 - GENERAL CONDITIONS

011000 SUMMARY
013233 PHOTOGRAPHIC DOCUMENTATION
014000 QUALITY REQUIREMENTS
014200 REFERENCES
016000 PRODUCT REQUIREMENTS
017300 EXECUTION

DIVISION 03 – CONCRETE – FOR STRUCTURAL SPECS REFER TO SHEET S-101

033300 ARCHITECTURAL CONCRETE

DIVISION 04 – MASONRY – FOR STRUCTURAL SPECS REFER TO SHEET S-101

042223 DECORATIVE CONCRETE UNIT MASONRY
042600 ADHERED MASONRY VENEER

DIVISION 05 - METALS

055000 METAL FABRICATIONS
055213 PIPE AND TUBE RAILINGS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 ROUGH CARPENTRY

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

079200 JOINT SEALANTS
071900 WATER REPELLENTS

DIVISION 10 - SPECIALTIES

101419 DIMENSIONAL LETTER SIGNAGE
101500 FLAGPOLES

DIVISION 26 – ELECTRICAL- FOR ELECTRICAL SPECS REFER TO REFER TO SHEET E0.1

DIVISION 31 – EARTHWORK - FOR CIVIL SPECS REFER TO SHEET C-02

DIVISION 32 - EXTERIOR IMPROVEMENTS – FOR CIVIL SPECS REFER TO SHEET C-02

321316 DECORATIVE CONCRETE PAVING
321400 UNIT PAVING
321813 ARTIFICIAL TURF SURFACING

DIVISION 33 – UTILITIES - FOR CIVIL SPECS REFER TO SHEET C-02

VETERANS MEMORIAL PARK

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Work by Owner.
 - 4. Purchase contracts.
 - 5. Access to site.
 - 6. Work restrictions.
 - 7. Specification and drawing conventions.

1.3 PROJECT INFORMATION

- A. Project Identification: Veterans Memorial Park.
 - 1. Project Location: 12254 Spring Hill Dr, Spring Hill, FL 34609
 - 2. Project Owner: Hernando County
- B. Civil Engineer:
Coastal Engineering Assoc., Inc
966 Candlelight Blvd.
Brooksville, FL 34601
- C. Architect:
Wannemacher Jensen Architects, Inc.
132 Mirror Lake Drive N., Unit 301
St. Petersburg, FL 33701-3214
- D. Architect's Consultants: The Architect has retained the following design professionals who have prepared designated portions of the Contract Documents:
 - 1. Structural Engineer:
Beckley Engineering
PO Box 15789
Brooksville, FL 34604
 - 2. Electrical Engineer:
MPS Engineering
240 Pine Ave N
Oldsmar, FL 34677

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. The scope of work includes a new 2000 GSF memorial. The structure is composed of one monument wall, three rows of seating, retaining walls, memorial lighting, landscaping and two sets of stairs and ADA access.
- B. Type of Contract:

VETERANS MEMORIAL PARK

1. Project will be constructed under a single prime contract.

1.5 ACCESS TO SITE

- A. General: Project site limits defined on the construction plans. Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7 a.m. to 7 p.m., Monday through Friday and 8:00 a.m. to 3:00 p.m. if a County Inspector/Project Manager is required to be on-site. No weekends or county observed holidays without prior consent.
- C. Testing: Contractor to notify Project Manager a minimum of 24 hours in advance for any function/task that requires testing. Hernando County will have its own certified test lab to perform a variety of the inspections and can provide contracted testing if a local company cannot perform a specific test. Hernando County to inspect all concrete forms for ADA compliance and thickness prior to pour.
- D. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- E. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 1. Maintain list of approved screened personnel with Owner's representative.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

VETERANS MEMORIAL PARK

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

VETERANS MEMORIAL PARK

SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 1. Preconstruction photographs.
 2. Periodic construction photographs.
 3. Final completion construction photographs.

1.3 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit image files within three days of taking photographs.
 1. Digital Camera: Minimum sensor resolution of 8 megapixels.
 2. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
 3. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.
 - b. Name and contact information for photographer.
 - c. Name of Architect.
 - d. Name of Contractor.
 - e. Date photograph was taken.
 - f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - g. Unique sequential identifier keyed to accompanying key plan.

1.4 USAGE RIGHTS

- A. Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

- A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 8 megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.

VETERANS MEMORIAL PARK

1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
1. Date and Time: Include date and time in file name for each image.
 2. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to Architect.
- C. Preconstruction Photographs: Before commencement of excavation, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.
1. Flag construction limits before taking construction photographs.
 2. Take 20 photographs to show existing conditions adjacent to property before starting the Work.
 3. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
 4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- D. Periodic Construction Photographs: Take 20 photographs monthly, coinciding with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Architect-Directed Construction Photographs: From time to time, Architect will instruct photographer about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.
- F. Time-Lapse Sequence Construction Photographs: Take 20 photographs as indicated, to show status of construction and progress since last photographs were taken.
1. Frequency: Take photographs monthly, coinciding with the cutoff date associated with each Application for Payment.
 2. Vantage Points: Following suggestions by Architect and Contractor, photographer to select vantage points. During each of the following construction phases, take not less than two of the required shots from same vantage point each time to create a time-lapse sequence as follows:
 - a. Commencement of the Work, through completion of subgrade construction.
 - b. Above-grade structural framing.
 - c. Exterior building enclosure.
 - d. Interior Work, through date of Substantial Completion.
- G. Final Completion Construction Photographs: Take 20 color photographs after date of Substantial Completion for submission as project record documents. Architect will inform photographer of desired vantage points.
- H. Additional Photographs: Architect may request photographs in addition to periodic photographs specified. Additional photographs will be paid for by Change Order and are not included in the Contract Sum.
1. Three days' notice will be given, where feasible.
 2. In emergency situations, take additional photographs within 24 hours of request.
 3. Circumstances that could require additional photographs include, but are not limited to, the following:
 - a. Special events planned at Project site.
 - b. Immediate follow-up when on-site events result in construction damage or losses.
 - c. Photographs to be taken at fabrication locations away from Project site. These photographs are not subject to unit prices or unit-cost allowances.
 - d. Substantial Completion of a major phase or component of the Work.

VETERANS MEMORIAL PARK

- e. Extra record photographs at time of final acceptance.
- f. Owner's request for special publicity photographs.

END OF SECTION 013233

VETERANS MEMORIAL PARK

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, Commissioning Authority, Construction Manager or authorities having jurisdiction are not limited by provisions of this Section.
 - 4. Specific test and inspection requirements are not specified in this Section.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect or Construction Manager.
- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 1. Laboratory Mockups: Full-size physical assemblies constructed at testing facility to verify performance characteristics.
 - 2. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on Project site, consisting of multiple products, assemblies, and subassemblies.
 - 3. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.

VETERANS MEMORIAL PARK

- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.5 ACTION SUBMITTALS

- A. Shop Drawings: For mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.
 - 1. Indicate manufacturer and model number of individual components.
 - 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:

VETERANS MEMORIAL PARK

1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
 2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.
- D. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
1. Specification Section number and title.
 2. Entity responsible for performing tests and inspections.
 3. Description of test and inspection.
 4. Identification of applicable standards.
 5. Identification of test and inspection methods.
 6. Number of tests and inspections required.
 7. Time schedule or time span for tests and inspections.
 8. Requirements for obtaining samples.
 9. Unique characteristics of each quality-control service.

1.7 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice of Award, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
1. Project quality-control manager may also serve as Project superintendent.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 3. Owner-performed tests and inspections indicated in the Contract Documents, including tests and inspections indicated to be performed by the Commissioning Authority.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.

VETERANS MEMORIAL PARK

- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
1. Date of issue.
 2. Project title and number.
 3. Name, address, and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making tests and inspections.
 6. Description of the Work and test and inspection method.
 7. Identification of product and Specification Section.
 8. Complete test or inspection data.
 9. Test and inspection results and an interpretation of test results.
 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of technical representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement that equipment complies with requirements.
 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions, products, and installation will affect warranty.
 5. Other required items indicated in individual Specification Sections.

VETERANS MEMORIAL PARK

- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.

VETERANS MEMORIAL PARK

- b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f. When testing is complete, remove test specimens, assemblies, mockups; do not reuse products on Project.
2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect and Commissioning Authority, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect or Construction Manager.
 2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at Project.
 4. Demonstrate the proposed range of aesthetic effects and workmanship.
 5. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 7. Demolish and remove mockups when directed unless otherwise indicated.

1.10 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
 3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.

VETERANS MEMORIAL PARK

- a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect, Commissioning Authority, Construction Manager and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Architect, Commissioning Authority, Construction Manager and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.

VETERANS MEMORIAL PARK

6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents as a component of Contractor's quality-control plan. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
1. Distribution: Distribute schedule to Owner, Architect, Commissioning Authority, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.11 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner and as follows:
1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
 2. Notifying Architect, Commissioning Authority, Construction Manager and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect and Commissioning Authority, through Construction Manager with copy to Contractor and to authorities having jurisdiction.
 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to Architect.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's, Commissioning Authority's and Construction Manager's reference during normal working hours.

VETERANS MEMORIAL PARK

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

VETERANS MEMORIAL PARK

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

VETERANS MEMORIAL PARK

1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. AABC - Associated Air Balance Council; www.aabc.com.
 2. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
 3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
 4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
 5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
 6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
 7. ACI - American Concrete Institute; (Formerly: ACI International); www.concrete.org.
 8. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
 9. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
 10. AF&PA - American Forest & Paper Association; www.afandpa.org.
 11. AGA - American Gas Association; www.aga.org.
 12. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
 13. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
 14. AI - Asphalt Institute; www.asphaltinstitute.org.
 15. AIA - American Institute of Architects (The); www.aia.org.
 16. AISC - American Institute of Steel Construction; www.aisc.org.
 17. AISI - American Iron and Steel Institute; www.steel.org.
 18. AITC - American Institute of Timber Construction; www.aitc-glulam.org.
 19. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
 20. ANSI - American National Standards Institute; www.ansi.org.
 21. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
 22. APA - APA - The Engineered Wood Association; www.apawood.org.
 23. APA - Architectural Precast Association; www.archprecast.org.
 24. API - American Petroleum Institute; www.api.org.
 25. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
 26. ARI - American Refrigeration Institute; (See AHRI).
 27. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
 28. ASCE - American Society of Civil Engineers; www.asce.org.
 29. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
 30. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
 31. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
 32. ASSE - American Society of Safety Engineers (The); www.asse.org.
 33. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.

VETERANS MEMORIAL PARK

34. ASTM - ASTM International; (American Society for Testing and Materials International); www.astm.org.
35. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
36. AWEA - American Wind Energy Association; www.awea.org.
37. AWI - Architectural Woodwork Institute; www.awinet.org.
38. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
39. AWPA - American Wood Protection Association; (Formerly: American Wood-Preservers' Association); www.awpa.com.
40. AWS - American Welding Society; www.aws.org.
41. AWWA - American Water Works Association; www.awwa.org.
42. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
43. BIA - Brick Industry Association (The); www.gobrick.com.
44. BICSI - BICSI, Inc.; www.bicsi.org.
45. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.com.
46. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
47. BOCA - BOCA; (Building Officials and Code Administrators International Inc.); (See ICC).
48. BWF - Badminton World Federation; (Formerly: International Badminton Federation); www.bwfbadminton.org.
49. CDA - Copper Development Association; www.copper.org.
50. CEA - Canadian Electricity Association; www.electricity.ca.
51. CEA - Consumer Electronics Association; www.ce.org.
52. CFFA - Chemical Fabrics & Film Association, Inc.; www.chemicalfabricsandfilm.com.
53. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
54. CGA - Compressed Gas Association; www.cganet.com.
55. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
56. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
57. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
58. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
59. CPA - Composite Panel Association; www.pbmdf.com.
60. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
61. CRRC - Cool Roof Rating Council; www.coolroofs.org.
62. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
63. CSA - Canadian Standards Association; www.csa.ca.
64. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
65. CSI - Construction Specifications Institute (The); www.csinet.org.
66. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
67. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
68. CWC - Composite Wood Council; (See CPA).
69. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
70. DHI - Door and Hardware Institute; www.dhi.org.
71. ECA - Electronic Components Association; www.ec-central.org.
72. ECAMA - Electronic Components Assemblies & Materials Association; (See ECA).

VETERANS MEMORIAL PARK

73. EIA - Electronic Industries Alliance; (See TIA).
74. EIMA - EIFS Industry Members Association; www.eima.com.
75. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
76. ESD - ESD Association; (Electrostatic Discharge Association); www.esda.org.
77. ESTA - Entertainment Services and Technology Association; (See PLASA).
78. EVO - Efficiency Valuation Organization; www.evo-world.org.
79. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
80. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
81. FM Approvals - FM Approvals LLC; www.fmglobal.com.
82. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
83. FRSA - Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; www.floridarroof.com.
84. FSA - Fluid Sealing Association; www.fluidsealing.com.
85. FSC - Forest Stewardship Council U.S.; www.fscus.org.
86. GA - Gypsum Association; www.gypsum.org.
87. GANA - Glass Association of North America; www.glasswebsite.com.
88. GS - Green Seal; www.greenseal.org.
89. HI - Hydraulic Institute; www.pumps.org.
90. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
91. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
92. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
93. HPW - H. P. White Laboratory, Inc.; www.hpwhite.com.
94. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
95. IAS - International Approval Services; (See CSA).
96. ICBO - International Conference of Building Officials; (See ICC).
97. ICC - International Code Council; www.iccsafe.org.
98. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
99. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
100. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
101. IEC - International Electrotechnical Commission; www.iec.ch.
102. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
103. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
104. IESNA - Illuminating Engineering Society of North America; (See IES).
105. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
106. IGMA - Insulating Glass Manufacturers Alliance; www.igmaonline.org.
107. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.okstate.edu.
108. ILI - Indiana Limestone Institute of America, Inc.; www.iliai.com.
109. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
110. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
111. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).

VETERANS MEMORIAL PARK

112. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
113. ISO - International Organization for Standardization; www.iso.org.
114. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
115. ITU - International Telecommunication Union; www.itu.int/home.
116. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
117. LMA - Laminating Materials Association; (See CPA).
118. LPI - Lightning Protection Institute; www.lightning.org.
119. MBMA - Metal Building Manufacturers Association; www.mbma.com.
120. MCA - Metal Construction Association; www.metalconstruction.org.
121. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.
122. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
123. MHIA - Material Handling Industry of America; www.mhia.org.
124. MIA - Marble Institute of America; www.marble-institute.com.
125. MMPA - Moulding & Millwork Producers Association; (Formerly: Wood Moulding & Millwork Producers Association); www.wmmpa.com.
126. MPI - Master Painters Institute; www.paintinfo.com.
127. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
128. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
129. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
130. NADCA - National Air Duct Cleaners Association; www.nadca.com.
131. NAIMA - North American Insulation Manufacturers Association; www.naima.org.
132. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
133. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
134. NCMA - National Concrete Masonry Association; www.ncma.org.
135. NEBB - National Environmental Balancing Bureau; www.nebb.org.
136. NECA - National Electrical Contractors Association; www.necanet.org.
137. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
138. NEMA - National Electrical Manufacturers Association; www.nema.org.
139. NETA - InterNational Electrical Testing Association; www.netaworld.org.
140. NFHS - National Federation of State High School Associations; www.nfhs.org.
141. NFPA - NFPA; (National Fire Protection Association); www.nfpa.org.
142. NFPA - NFPA International; (See NFPA).
143. NFRC - National Fenestration Rating Council; www.nfrc.org.
144. NHLA - National Hardwood Lumber Association; www.nhla.com.
145. NLGA - National Lumber Grades Authority; www.nlga.org.
146. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
147. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
148. NRCA - National Roofing Contractors Association; www.nrca.net.
149. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
150. NSF - NSF International; (National Sanitation Foundation International); www.nsf.org.
151. NSPE - National Society of Professional Engineers; www.nspe.org.
152. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.

VETERANS MEMORIAL PARK

153. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
154. NWFA - National Wood Flooring Association; www.nwfa.org.
155. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
156. PDI - Plumbing & Drainage Institute; www.pdionline.org.
157. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); www.plasa.org.
158. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
159. RFCI - Resilient Floor Covering Institute; www.rfci.com.
160. RIS - Redwood Inspection Service; www.redwoodinspection.com.
161. SAE - SAE International; (Society of Automotive Engineers); www.sae.org.
162. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
163. SDI - Steel Deck Institute; www.sdi.org.
164. SDI - Steel Door Institute; www.steeldoor.org.
165. SEFA - Scientific Equipment and Furniture Association; www.sefalabs.com.
166. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
167. SIA - Security Industry Association; www.siaonline.org.
168. SJI - Steel Joist Institute; www.steeljoist.org.
169. SMA - Screen Manufacturers Association; www.smainfo.org.
170. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
171. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
172. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
173. SPIB - Southern Pine Inspection Bureau; www.spib.org.
174. SPRI - Single Ply Roofing Industry; www.spri.org.
175. SRCC - Solar Rating and Certification Corporation; www.solar-rating.org.
176. SSINA - Specialty Steel Industry of North America; www.ssina.com.
177. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
178. STI - Steel Tank Institute; www.steeltank.com.
179. SWI - Steel Window Institute; www.steelwindows.com.
180. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
181. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
182. TCNA - Tile Council of North America, Inc.; (Formerly: Tile Council of America); www.tileusa.com.
183. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
184. TIA - Telecommunications Industry Association; (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
185. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
186. TMS - The Masonry Society; www.masonrysociety.org.
187. TPI - Truss Plate Institute; www.tpinst.org.
188. TPI - Turfgrass Producers International; www.turfgrassod.org.
189. TRI - Tile Roofing Institute; www.tilerroofing.org.
190. UBC - Uniform Building Code; (See ICC).

VETERANS MEMORIAL PARK

191. UL - Underwriters Laboratories Inc.; www.ul.com.
 192. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
 193. USAV - USA Volleyball; www.usavolleyball.org.
 194. USGBC - U.S. Green Building Council; www.usgbc.org.
 195. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
 196. WASTEC - Waste Equipment Technology Association; www.wastec.org.
 197. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
 198. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
 199. WDMA - Window & Door Manufacturers Association; www.wdma.com.
 200. WI - Woodwork Institute; (Formerly: WIC - Woodwork Institute of California); www.wicnet.org.
 201. WMMPA - Wood Moulding & Millwork Producers Association; (See MMPA).
 202. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
 203. WPA - Western Wood Products Association; www.wwpa.org.
- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
1. DIN - Deutsches Institut für Normung e.V.; www.din.de.
 2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
 3. ICC - International Code Council; www.iccsafe.org.
 4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.
- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up-to-date as of the date of the Contract Documents.
1. COE - Army Corps of Engineers; www.usace.army.mil.
 2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
 3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
 4. DOD - Department of Defense; <http://dodssp.daps.dla.mil>.
 5. DOE - Department of Energy; www.energy.gov.
 6. EPA - Environmental Protection Agency; www.epa.gov.
 7. FAA - Federal Aviation Administration; www.faa.gov.
 8. FG - Federal Government Publications; www.gpo.gov.
 9. GSA - General Services Administration; www.gsa.gov.
 10. HUD - Department of Housing and Urban Development; www.hud.gov.
 11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; <http://eetd.lbl.gov>.
 12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
 13. SD - Department of State; www.state.gov.
 14. TRB - Transportation Research Board; National Cooperative Highway Research Program; www.trb.org.
 15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
 16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.

VETERANS MEMORIAL PARK

17. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
 18. USP - U.S. Pharmacopeia; www.usp.org.
 19. USPS - United States Postal Service; www.usps.com.
- E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
 2. DOD - Department of Defense; Military Specifications and Standards; Available from Department of Defense Single Stock Point; <http://dodssp.daps.dla.mil>.
 3. DSCC - Defense Supply Center Columbus; (See FS).
 4. FED-STD - Federal Standard; (See FS).
 5. FS - Federal Specification; Available from Department of Defense Single Stock Point; <http://dodssp.daps.dla.mil>.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.
 6. MILSPEC - Military Specification and Standards; (See DOD).
 7. USAB - United States Access Board; www.access-board.gov.
 8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. CBHF - State of California; Department of Consumer Affairs; Bureau of Electronic Appliance and Repair, Home Furnishings and Thermal Insulation; www.bearhfti.ca.gov.
 2. CCR - California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.calregs.com.
 3. CDHS - California Department of Health Services; (See CDPH).
 4. CDPH - California Department of Public Health; Indoor Air Quality Program; www.cal-iaq.org.
 5. CPUC - California Public Utilities Commission; www.cpuc.ca.gov.
 6. SCAQMD - South Coast Air Quality Management District; www.aqmd.gov.
 7. TFS - Texas Forest Service; Forest Resource Development and Sustainable Forestry; <http://txforestservation.tamu.edu>.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

VETERANS MEMORIAL PARK

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor, through Construction Manager, of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

VETERANS MEMORIAL PARK

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 6. Protect stored products from damage and liquids from freezing.
 - 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.

VETERANS MEMORIAL PARK

3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Architect will make selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
 - b. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.
 4. Manufacturers:
 - a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
 - b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

VETERANS MEMORIAL PARK

5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample", provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 3. Evidence that proposed product provides specified warranty.
 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

VETERANS MEMORIAL PARK

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Coordination of Owner-installed products.
 - 6. Progress cleaning.
 - 7. Starting and adjusting.
 - 8. Protection of installed construction.
- B. Related Requirements:
 - 1. Section 011000 "Summary" for limits on use of Project site.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For land surveyor.
- B. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.
- C. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- D. Certified Surveys: Submit two copies signed by land surveyor.
- E. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

1.5 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.
- B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut

VETERANS MEMORIAL PARK

- and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operational elements include the following:
 - a. Primary operational systems and equipment.
 - b. Fire separation assemblies.
 - c. Air or smoke barriers.
 - d. Fire-suppression systems.
 - e. Mechanical systems piping and ducts.
 - f. Control systems.
 - g. Communication systems.
 - h. Fire-detection and -alarm systems.
 - i. Conveying systems.
 - j. Electrical wiring systems.
 - k. Operating systems of special construction.
 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:
 - a. Water, moisture, or vapor barriers.
 - b. Membranes and flashings.
 - c. Exterior storefront construction.
 - d. Equipment supports.
 - e. Piping, ductwork, vessels, and equipment.
 - f. Noise- and vibration-control elements and systems.
 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

VETERANS MEMORIAL PARK

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 3. Verify compatibility with and suitability of substrates.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
1. Description of the Work.
 2. List of detrimental conditions, including substrates.
 3. List of unacceptable installation tolerances.
 4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect and Construction Manager promptly.
- B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.
1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
 2. Establish limits on use of Project site.

VETERANS MEMORIAL PARK

3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 4. Inform installers of lines and levels to which they must comply.
 5. Check the location, level and plumb, of every major element as the Work progresses.
 6. Notify Architect and Construction Manager when deviations from required lines and levels exceed allowable tolerances.
 7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect and Construction Manager.

3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect before proceeding.
 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- D. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- E. Final Property Survey: Engage a land surveyor to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.

VETERANS MEMORIAL PARK

2. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 1. Make vertical work plumb and make horizontal work level.
 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
 4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 2. Allow for building movement, including thermal expansion and contraction.
 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

VETERANS MEMORIAL PARK

- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
- F. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
- G. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.7 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction personnel.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction personnel.
 - 1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
 - 2. Preinstallation Conferences: Include Owner's construction personnel at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

3.8 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

VETERANS MEMORIAL PARK

- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
- K. Contractor is to coordinate with Hernando County Parks and Recreation for requirements for site cleanliness before commencement of work.

3.9 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.10 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

VETERANS MEMORIAL PARK

SECTION 033300 - ARCHITECTURAL CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes cast-in-place architectural concrete including form facings, reinforcement accessories, concrete materials, concrete mixture design, placement procedures, and finishes.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture.
- C. Formwork shop drawings.
- D. Snap Tie grid layout shop drawings.
- E. Placement schedule.
- F. Samples: For each of the following materials:
 - 1. Form-facing panel.
 - 2. Form ties.
 - 3. Coarse- and fine-aggregate gradations.

1.4 INFORMATIONAL SUBMITTALS

- A. Material certificates.
- B. Material test reports.

1.5 QUALITY ASSURANCE

- A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 301, "Specification for Structural Concrete," Sections 1 through 5 and Section 6, "Architectural Concrete."
 - 2. ACI 303.1, "Specification for Cast-in-Place Architectural Concrete."
- B. Field Sample Panels: After approval of verification sample and before casting architectural concrete, produce field sample panels to demonstrate the approved range of selections made under Sample submittals. Produce a minimum of three sets of full-scale panels, cast vertically, approximately 48 by 48 by 6 inches minimum, to demonstrate the expected range of finish, color, and texture variations. See section 3.6 Addendum.

VETERANS MEMORIAL PARK

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

- A. General: Comply with Section 033000 "Cast-in-Place Concrete" for formwork and other form-facing material requirements.
- B. Form-Facing Panels for As-Cast Finishes: Melamine coated panel material that will provide continuous, true, and smooth architectural concrete surfaces. Furnish in largest practicable sizes to minimize number of joints. See Addendum 3.6-B at the end of the
- C. Rustication Strips: Metal, rigid plastic, or dressed wood with sides beveled and back kerfed; nonstaining; in longest practicable lengths.
- D. Chamfer Strips: Metal, rigid plastic, elastomeric rubber, or dressed wood, 3/4 by 3/4 inch, minimum; nonstaining; in longest practicable lengths.
- E. Form Joint Tape: Compressible foam tape; pressure sensitive; AAMA 800, "Specification 810.1, Expanded Cellular Glazing Tape"; minimum 1/4 inch thick.
- F. Form Ties: Factory-fabricated, glass-fiber-reinforced plastic ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

2.2 STEEL REINFORCEMENT AND ACCESSORIES

- A. General: Comply with Section 033000 "Cast-in-Place Concrete" for steel reinforcement and other requirements for reinforcement accessories.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire fabric in place; manufacture according to CRSI's "Manual of Standard Practice."
 - 1. Where legs of wire bar supports contact forms, use gray, all-plastic bar supports.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 - 1. Portland Cement: ASTM C150/C150M, Type I white.
- B. Normal-Weight Aggregates: ASTM C33, Class 5S coarse aggregate or better, graded. Provide aggregates from single source.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch.
 - 2. Gradation: Uniformly graded.
- C. Normal-Weight Fine Aggregate: ASTM C33, manufactured or natural sand, from same source for entire Project.
- D. Water: Potable, complying with ASTM C94/C94M except free of wash water from mixer washout operations.

2.4 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C260.

VETERANS MEMORIAL PARK

- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
 - 2. Retarding Admixture: ASTM C494/C494M, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type D.

2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- B. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- C. Waterborne, Membrane-Forming Curing Compound: ASTM C309, Type 1, Class B.

2.6 CONCRETE MIXTURES

- A. Prepare design mixtures for each type and strength of cast-in-place architectural concrete proportioned on basis of laboratory trial mixture or field test data, or both, according to ACI 301.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed design mixtures based on laboratory trial mixtures.
- B. Proportion concrete mixtures as follows:
 - 1. Compressive Strength (28 Days): 4000 psi.
 - 2. Maximum Water-Cementitious Materials Ratio: 0.46.
 - 3. Slump Limit: 4 inches, plus or minus 1 inch.
 - 4. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 3/4-inch nominal maximum aggregate size.
- C. Cementitious Materials: For cast-in-place architectural concrete exposed to deicers, limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements.

2.7 CONCRETE MIXING

- A. Ready-Mixed Architectural Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and furnish batch ticket information.
 - 1. Clean equipment used to mix and deliver cast-in-place architectural concrete to prevent contamination from other concrete.
 - 2. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK

- A. General: Comply with Section 033000 "Cast-in-Place Concrete" for formwork, embedded items, and shoring and reshoring.
- B. Limit deflection of form-facing panels to not exceed ACI 303.1 requirements.

VETERANS MEMORIAL PARK

- C. In addition to ACI 303.1 limits on form-facing panel deflection, limit cast-in-place architectural concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch.
- D. Fabricate forms to result in cast-in-place architectural concrete that complies with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- E. Chamfer exterior corners and edges of cast-in-place architectural concrete where indicated on Drawings.
- F. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- G. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

3.2 REINFORCEMENT AND INSERTS

- A. General: Comply with Section 033000 "Cast-in-Place Concrete" for fabricating and installing steel reinforcement. Securely fasten steel reinforcement and wire ties against shifting during concrete placement.
- B. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

3.3 REMOVING AND REUSING FORMS

- A. Formwork for sides of walls, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.
 - 1. Cut off and grind glass-fiber-reinforced plastic form ties flush with surface of concrete.
- B. Leave formwork for slabs and other structural elements that support weight of concrete in place until concrete has achieved 28-day design compressive strength. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for cast-in-place architectural concrete surfaces.

3.4 JOINTS

- A. Construction Joints: Install construction joints true to line with faces perpendicular to surface plane of cast-in-place architectural concrete so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated.
- B. Contraction Joints: Form weakened-plane contraction joints true to line with faces perpendicular to surface plane of cast-in-place architectural concrete so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

VETERANS MEMORIAL PARK

3.5 CONCRETE PLACEMENT

- A. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- B. Deposit concrete continuously between construction joints. Deposit concrete to avoid segregation.
- C. Cold-Weather Placement: Comply with ACI 306.1. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- D. Hot-Weather Placement: Comply with ACI 301.

3.6 FINISHES

- A. Architectural Concrete Finish: Match Architect's design reference sample identified and described as indicated, to satisfaction of Architect. See addendum 3.6-A at the end of the section.
- B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces.
 - 1. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.
- C. Maintain uniformity of special finishes over construction joints unless otherwise indicated.

3.7 CONCRETE CURING

- A. Begin curing cast-in-place architectural concrete immediately after removing forms from concrete. Cure according to ACI 308.1, by one or a combination of the following methods that will not mottle, discolor, or stain concrete:
 - 1. Moisture curing.
 - 2. Moisture-retaining-cover curing.
 - 3. Curing compound.

3.8 FIELD QUALITY CONTROL

- A. General: Comply with field quality-control requirements in Section 033000 "Cast-in-Place Concrete."

3.9 REPAIRS, PROTECTION, AND CLEANING

- A. Repair and cure damaged finished surfaces of cast-in-place architectural concrete when approved by Architect. Match repairs to color, texture, and uniformity of surrounding surfaces and to repairs on approved mockups.
 - 1. Remove and replace cast-in-place architectural concrete that cannot be repaired and cured to Architect's approval.
- B. Protect corners, edges, and surfaces of cast-in-place architectural concrete from damage; use guards and barricades.

VETERANS MEMORIAL PARK

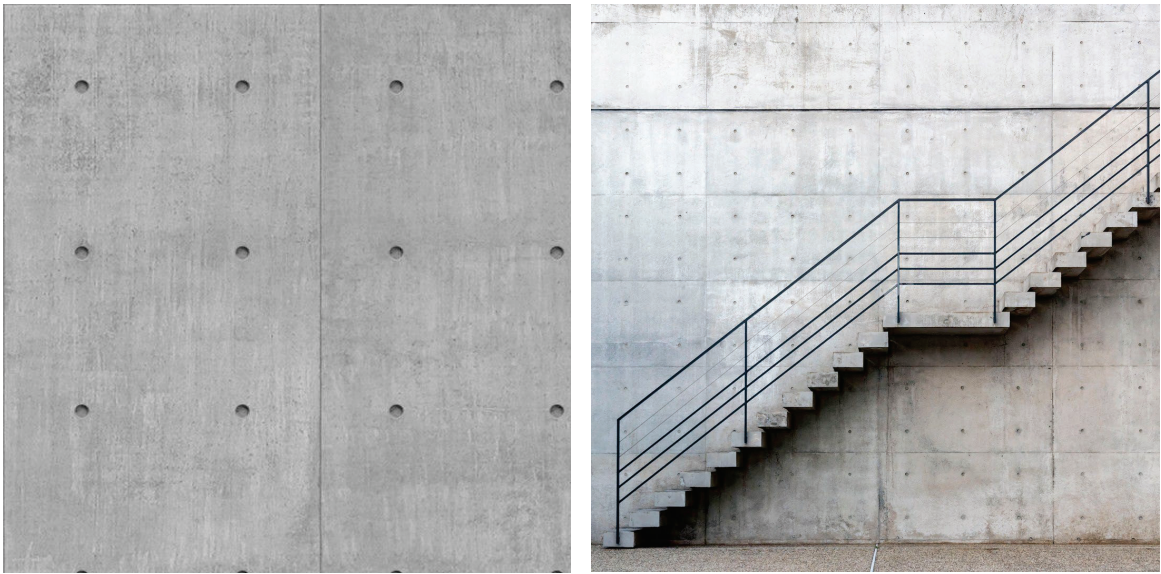
- C. Protect cast-in-place architectural concrete from staining, laitance, and contamination during remainder of construction period.

3.5 ACCESSORIES

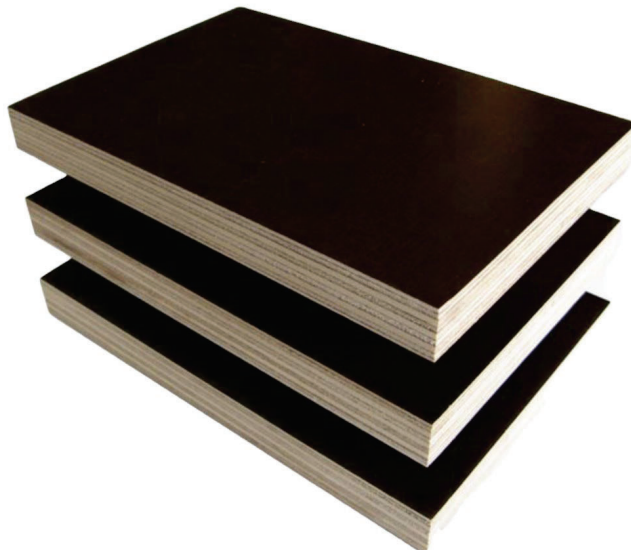
- A. Vandal Sealant: VandIGuard Anti-Graffiti Coating, clear finish

3.6 ADDENDUM

- A. Architectural Concrete Finish Reference Sample: Use Melamine laminated plywood as formwork for continuous, true, and smooth architectural concrete surfaces. If desired smoothness is not achieved, incorporate rub-down finish by dampening the surface, and before it dries, rub a mixture of dry cement and sand with a wad of burlap or a sponge-rubber float to remove surplus mortar and fill the voids. Do not cover snap tie voids.



- B. Architectural Concrete Melamine Plywood Formwork Reference Sample:



VETERANS MEMORIAL PARK

END OF SECTION 033300

VETERANS MEMORIAL PARK

SECTION 042223 - DECORATIVE CONCRETE UNIT MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Decorative concrete masonry units.
 - 2. Pre-faced concrete masonry units.
 - 3. Mortar and grout.
 - 4. Masonry joint reinforcement.
 - 5. Ties and anchors.
 - 6. Miscellaneous masonry accessories.
- B. Related Requirements:
 - 1. Section 071900 "Water Repellents."

1.3 DEFINITIONS

- A. CMU(s): Concrete masonry unit(s).

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For the following:
 - 1. Masonry Units: Show sizes, profiles, coursing, and locations of special shapes.
- C. Samples for Verification: For each type and color of the following:
 - 1. Decorative CMUs.
 - 2. Pre-faced CMUs.

1.5 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For each type and size of the following:
 - 1. Masonry units.
 - a. Include data on material properties.
 - b. For masonry units used in structural masonry, include data and calculations establishing average net-area compressive strength of units.
 - 2. Cementitious materials. Include brand, type, and name of manufacturer.
 - 3. Grout mixes. Include description of type and proportions of ingredients.
 - 4. Joint reinforcement.
 - 5. Anchors, ties, and metal accessories.
- B. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.

VETERANS MEMORIAL PARK

1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91 for air content.
2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.

- C. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

1.6 QUALITY ASSURANCE

- A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from single source from single manufacturer for each product required.
- B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color for exposed masonry, from single manufacturer for each cementitious component and from single source or producer for each aggregate.
- C. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.
- D. Preinstallation Conference: Conduct conference at Project site with Hernando County and Architect.
- E. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
1. Build mockups for each type of exposed unit masonry construction in locations and sizes determined by Architect. Build mockups in full thickness and include accessories. The mock-up should demonstrate the full system and include all components anticipated to be used in the application, including control/expansions joints, weeps, sealants, flashing, etc.
 - a. Include a sealant-filled joint at least 16 inches long in each mockup.
 - b. Include water repellent treatment for decorative CMU's as specified in Section 071919 "Water Repellents for Masonry Surfaces."
 - c. Include through-wall flashing installed for a 24-inch length in corner of exterior wall mockup approximately 16 inches down from top of mockup, with a 12-inch length of flashing left exposed to view (omit masonry above half of flashing).
 2. Protect accepted mockups from the elements with weather-resistant membrane.
 3. Approval of mockups is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; and aesthetic qualities of workmanship.
 - a. Approval of mockups is also for other material and construction qualities specifically approved by Architect in writing.
 - b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
 5. Contractor to remove and dispose of all mockups upon completion of the project.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

VETERANS MEMORIAL PARK

- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.8 PROJECT CONDITIONS

- A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 - 1. Extend cover a minimum of 24 inches down both sides of walls and hold cover securely in place.
 - 2. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to unconstructed wythe and hold cover in place.
- B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.
- C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
 - 1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.
 - 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
 - 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- D. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
 - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.
- E. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

1.9 WARRANTY

- A. Manufacturer's Warranty: Written warranty, signed by manufacturer, against defects in materials and workmanship for the installed CMU system specified in this Section.
 - 1. Warranty Duration: 25 years from the date established for Substantial Completion.

VETERANS MEMORIAL PARK

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Source Limitations: Obtain each type of decorative ground face block, mortar and grout material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.
- B. Basis of Design Product: Westbrook Concrete Block, 12" Ground Face block in color 328 with WCB-108 grout to match.

2.2 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.
- B. Fire-Resistance Ratings: Where indicated, provide units that comply with requirements for fire-resistance ratings indicated as determined by testing according to ASTM E 119, by equivalent masonry thickness, or by other means, as acceptable to authorities having jurisdiction.

2.3 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
 - 1. Provide special shapes for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.
 - 2. Provide square-edged units for outside corners unless otherwise indicated.
- B. Integral Water Repellent: Provide units made with integral water repellent decorative CMU.
 - 1. Integral Water Repellent: Liquid polymeric, integral water-repellent admixture that does not reduce flexural bond strength. Units made with integral water repellent, when tested according to ASTM E514/E514M as a wall assembly made with mortar containing integral water-repellent manufacturer's mortar additive, with test period extended to 24 hours, shall show no visible water or leaks on the back of test specimen.
 - 2. Basis of Design: GCP Applied Technologies; Grace Dry-Block.
- C. Decorative CMUs: ASTM C90 and ASTM C1634.
 - 1. Basis of Design: Westbrook Concrete Block Co., Inc.; Westbrook Ground Face with Pozzotive.
 - 2. Density Classification: Normal weight.
 - 3. Size (Width), Full Size CMU: Manufactured to dimensions 3/8 inch less than nominal dimensions. 16 inch long by 8 inch wide nominal, and 16 inch long by 12 wide nominal CMU required; refer to Drawings for locations.
 - 4. Size, Veneer CMU: Nominal 16 inches long by 8 inches high by 1 inch deep.
 - 5. Pattern and Texture:
 - a. Scored vertically so units laid in running bond appear as square units laid in stacked bond, ground face finish. Match Architect's samples.
 - 6. Colors: Match Architect's samples.
- D. Pre-faced CMUs: Lightweight hollow concrete units complying with ASTM C90, with manufacturer's standard smooth resinous facing complying with ASTM C744.
 - 1. Products: SPECTRA-GLAZE II Factory Glazed Concrete Masonry Units and Wall Systems. Produced by manufacturers licensed by Spectra Industrial Licensing Corp.

VETERANS MEMORIAL PARK

2. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2150 psi
3. Size: Manufactured to dimensions of 7-3/4 inches high by 15-3/4 inches by depth indicated on Drawings, but with pre-faced surfaces having 1/16-inch wide returns of facing to create 1/4-inch wide mortar joints with modular coursing.
4. Colors and Patterns: Match Architect's samples.

2.4 MASONRY LINTELS

- A. Masonry Lintels: Prefabricated or built-in-place masonry lintels made from bond beam CMUs with reinforcing bars placed as indicated and filled with coarse grout. Cure precast lintels before handling and installing. Temporarily support built-in-place lintels until cured.

2.5 MORTAR AND GROUT MATERIALS

- A. Masonry Cement: ASTM C91. Type S masonry cement with finely graded mason's sand (ASTM C144). Complies with ASTM C387 and ASTM C270, Type S.
 1. Basis of Design Product: Westbrook Concrete Block Co., Inc.; Westbrook Type S Mortar Premix.
- B. Water-Repellent Admixture, Decorative CMU: Liquid water-repellent mortar admixture for use with CMUs containing integral water repellent from same manufacturer.
- C. Aggregate for Grout: ASTM C404.
- D. Modified Mortar System for CMU Veneer Installation: Following products manufactured by Laticrete International Inc. for the Masonry Veneer Installation System (MVIS):
 1. Air/Water Barrier: "MVIS Air & Water Barrier." One-component fluid-applied membrane barrier.
 2. Veneer Mortar: "MVIS HiBond Veneer Mortar." Polymer-modified mortar for adhering CMU veneer to installation substrates.
 3. Pointing Mortar: "MVIS Pointing Mortar." Formulated from a blend of high strength portland cement, graded aggregates, and colorfast pigments. Color as selected from manufacturer's full color array.
 4. Expansion and Control Joints: "Latasil" sealant. One-component neutral cure exterior grade silicone sealant.
- E. Prefaced CMU Pointing Mortar: For prefaced CMU in shower/bathroom locations, rake out mortar joints 1/4 inch and point with high-performance epoxy-based grout enhanced with microbial protection; Type S.
 1. Basis of Design Product: Laticrete International, Inc.; Laticrete Spectralock Pro Premium Grout.
- F. Water: Potable.

2.6 REINFORCEMENT

- A. Uncoated Steel Reinforcing Bars: ASTM A615/A615M or ASTM A996/A996M, Grade 60.
- B. Masonry Joint Reinforcement, General: ASTM A951/A951M.
 1. Interior Walls: Hot-dip galvanized, carbon steel.
 2. Exterior Walls: Hot-dip galvanized, carbon steel.
 3. Wire Size for Side Rods: 0.148-inch diameter.
 4. Wire Size for Cross Rods: 0.148-inch diameter.
 5. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.

VETERANS MEMORIAL PARK

6. Provide in lengths of not less than 10 feet (3 m), with prefabricated corner and tee units.

C. Masonry Joint Reinforcement for Single-Wythe Masonry: Truss type with single pair of side rods.

2.7 TIES AND ANCHORS

A. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated.

1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A82/A82M; with ASTM A153/A153M, Class B-2 coating.
2. Stainless-Steel Wire: ASTM A580/A580M, Type 304.
3. Galvanized Steel Sheet: ASTM A653/A653M, Commercial Steel, G60 zinc coating.
4. Steel Sheet, Galvanized after Fabrication: ASTM A1008/A1008M, Commercial Steel, with ASTM A153/A153M, Class B coating.

2.8 MISCELLANEOUS MASONRY ACCESSORIES

A. Compressible Filler: Premolded filler strips complying with ASTM D1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene.

B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.

C. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).

D. Single-Wythe CMU Flashing System: System of CMU cell flashing pans and interlocking CMU web covers made from high-density polyethylene incorporating chemical stabilizers that prevent UV degradation. Cell flashing pans have integral weep spouts that are designed to be built into mortar bed joints and weep collected moisture to the exterior of CMU walls and that extend into the cell to prevent clogging with mortar. Snap-off connector bridge allows fast and easy pan installation in reinforced wall system and at corners. Integral open weave polyester mesh drainage mat; 7 inches by 14 inches.

1. Basis of Design Product: Mortar Net Solutions.; BlockFlash.

E. Proprietary Acidic Masonry Cleaner: Manufacturer' standard strength cleaner designed for removing mortar/grout stains., efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended used by cleaner manufacture and manufacturer of masonry units being cleaned.

1. Basis of Design Product: Prosoco; Custom Masonry Cleaner.

2.9 MORTAR AND GROUT MIXES

A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.

1. Do not use calcium chloride in mortar or grout.
2. Use portland cement-lime mortar.

B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

VETERANS MEMORIAL PARK

- C. Grout for Unit Masonry: Comply with ASTM C476.
 - 1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530.1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.
 - 2. Proportion grout in accordance with ASTM C 476, Table 1 or paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.
 - 3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C143/C143M.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.
- B. Build chases and recesses to accommodate items specified in this and other Sections.
- C. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match the construction immediately adjacent to opening.
- D. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- E. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures.
 - 1. Mix units from several pallets or cubes as they are placed.
- F. Modified Mortar System for CMU Veneer Installation: Comply with manufacturer's written installation instructions.

3.3 TOLERANCES

- A. Dimensions and Locations of Elements:
 - 1. For dimensions in cross section or elevation do not vary by more than plus 1/2 inch or minus 1/4 inch.
 - 2. For location of elements in plan do not vary from that indicated by more than plus or minus 1/2 inch.
 - 3. For location of elements in elevation do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

VETERANS MEMORIAL PARK

- B. Lines and Levels:
1. For bed joints and top surfaces of bearing walls do not vary from level by more than 1/4 inch in 10 feet, or 1/2 inch maximum.
 2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
 3. For vertical lines and surfaces do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
 4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
 5. For lines and surfaces do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
 6. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet, or 1/2 inch maximum.
- C. Joints:
1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
 2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
 3. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch.

3.4 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- C. Stopping and Resuming Work: Stop work by racking back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar before laying fresh masonry.
- D. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- E. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.
- F. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below and rod mortar or grout into core.
- G. Build non-load-bearing interior partitions full height of story to underside of solid floor or roof structure above unless otherwise indicated. For transitions from tops of partitions to underside of structure above, refer to Drawings.

3.5 MORTAR BEDDING AND JOINTING

- A. Lay CMUs as follows:
1. With face shells fully bedded in mortar and with head joints of depth equal to bed joints.
 2. With webs fully bedded in mortar in all courses of piers, columns, and pilasters.

VETERANS MEMORIAL PARK

3. With webs fully bedded in mortar in grouted masonry, including starting course on footings.
 4. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted.
- B. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- C. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.

3.6 MASONRY JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
1. Space reinforcement not more than 16 inches o.c.
 2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
 3. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.

3.7 CONTROL AND EXPANSION JOINTS

- A. General: Install control and expansion joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.
- B. Form control joints in concrete masonry as detailed on Drawings.

3.8 LINTELS

- A. Provide masonry lintels where shown and where openings of more than 12 inches for block-size units are shown without structural steel or other supporting lintels.
- B. Provide minimum bearing of 8 inches at each jamb unless otherwise indicated.

3.9 FLASHING

- A. General: Install embedded flashing in masonry at lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.
- B. Install single-wythe CMU flashing system in bed joints of CMU walls where indicated to comply with manufacturer's written instructions. Install CMU cell pans with upturned edges located below face shells and webs of CMUs above and with weep spouts aligned with face of wall. Install CMU web covers so that they cover upturned edges of CMU cell pans at CMU webs and extend from face shell to face shell.

C. REPAIRING, POINTING, AND CLEANING

VETERANS MEMORIAL PARK

- D. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- E. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- F. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- G. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 - 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 - 3. Protect adjacent nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
 - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
 - 5. Clean concrete masonry with specified proprietary masonry cleaner applied according to manufacturer's written instructions. Includes dilution rate, spray device and delivery psi, and flow rate.

3.10 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.
- B. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 042000

VETERANS MEMORIAL PARK

SECTION 042600 – ADHERED MASONRY VENEER

PART 1 - GENERAL

1.1 SUMMARY

- A. Scope of work - Provide ceramic tile, tile installation materials and accessories as indicated on drawings, as specified herein, and as needed for complete and proper installation.

1.2 SECTION INCLUDES

NOTE TO SPECIFIER: Edit for applicable procedures & materials

- A. Thin Brick veneer
- B. Masonry veneer
- C. Manufactured masonry veneer
- D. Special purpose tile
- E. Installation Products; adhesives, mortars, grouts and sealants
- F. Waterproofing membranes for ceramic tile work
- G. Anti-fracture membranes for ceramic tile work
- H. Thresholds, trim, cementitious backer units and other accessories specified herein.

1.3 PRODUCTS FURNISHED BUT NOT INSTALLED UNDER THIS SECTION

1.4 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

1.5 ENVIRONMENTAL PERFORMANCE REQUIREMENTS

- A. Environmental Performance Criteria: The following criteria are required for products included in this section. Refer to Division 1 for additional requirements:
 - 1. Products manufactured regionally within a 100 mile radius of the Project site;
 - 2. Adhesive products must meet or exceed the VOC limits of South Coast Air Quality Management District Rule (SCAQMD) #1168 and Bay Area Air Quality Management District (BAAQMD) Reg. 8, Rule 51.

1.6 RELATED SECTIONS

- A. Section 03 30 00 Architectural Concrete
- B. Section 07 92 00 Joint Sealants

1.9 REFERENCE STANDARDS

- A. American Iron and Steel Institute (AISI) Specification for the Design of Cold-Formed Steel Structural Members
- B. American National Standards Institute (ANSI) A137.1 American National Standard Specifications For Ceramic Tile
- C. American National Standards Institute (ANSI) A137.2 American National Standard Specifications For Glass Tile
- D. American National Standards Institute (ANSI) A108.01 - A108.17 American National Standard Specifications For The Installation Of Ceramic Tile
- E. American National Standards Institute (ANSI) A118.1 - A118.15 American National Standard Specifications For The Installation Of Ceramic Tile
- F. American Society For Testing And Materials (ASTM) C144 Standard Specification for Aggregate for Masonry Mortar
- G. American Society For Testing And Materials (ASTM) C150 Standard Specification for Portland Cement
- H. American Society For Testing And Materials (ASTM) C482 Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement
- I. American Society for Testing and Materials (ASTM) C503 Standard Specification for Marble Dimension Stone (Exterior)
- J. American Society for Testing and Materials (ASTM) C794 Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants
- K. American Society for Testing and Materials (ASTM) C847 Standard Specification for Metal Lath
- L. American Society for Testing and Materials (ASTM) C920 Standard Specification for Elastomeric Joint Sealants

VETERANS MEMORIAL PARK

- M. American Society for Testing and Materials (ASTM) C955 Standard Specification for Load Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Board and Metal Plaster Bases
- N. American Society for Testing and Materials (ASTM) D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
- O. American Society for Testing and Materials (ASTM) D227 Standard Specification for Coal-Tar Saturated Organic Felt Used in Roofing and Waterproofing
- P. American Society for Testing and Materials (ASTM) D1248 Standard Test Method for Staining of Porous Substances by Joint Sealants
- Q. American Society for Testing and Materials (ASTM) D4397 Standard Specification for Polyethylene Sheeting for Construction, Industrial and Agricultural Applications
- R. American Society for Testing and Materials (ASTM) D4716 Standard Test Method for Determining the (In Plane) Flow Rate Per Unit Width and Hydraulic Transmissivity of a Geo-synthetic Using a Constant Head
- S. American Society for Testing and Materials (ASTM) E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- T. American Society for Testing and Materials (ASTM) E96 Standard Test Methods for Water Vapor Transmission of Materials
- U. Canadian Sheet Steel Building Institute (CSSBI) Lightweight Steel Framing Binder {Publication 52M}
- V. Federal Housing Administration (FHA) Bulletin No. 750 Impact Noise Control in Multifamily Dwellings
- W. Housing and Urban Development (HUD) TS 28 A Guide to Airborne, Impact and Structure-borne Noise-Control in Multifamily Dwellings
- X. International Organization for Standardization (ISO) 13007 Standards for Grouts and Adhesives
- Y. Materials and Methods Standards Association (MMSA) Bulletins 1-16
- Z. Metal Lath/Steel Framing Association (ML/SFA) 540 Lightweight Steel Framing Systems Manual
- AA. Steel Stud Manufacturers Association (SSMA) Product Technical Information and ICBO Evaluation Service, Inc. Report ER-4943P
- BB. Terrazzo, Tile and Marble Association of Canada (TTMAC) Specification Guide 09300 Tile Installation Manual
- CC. Tile Council of North America (TCNA) Handbook for Ceramic, Glass, and Stone Tile Installation

1.10 SYSTEM DESCRIPTION

Additionally, building code waivers may need to be obtained for large format "adhered veneer" exterior façade installations where tile / stone sizes:

1. Exceed 36 inches (914 mm) in any face dimension
2. Exceed 5 square feet (0.46 square meters) in total facial area, or
3. Are less than .25 inches (6 mm) thick

Consult with local building code / building code officials as required.

- A. Thin brick veneer, ceramic tile, or manufactured masonry veneer, installed over concrete walls using latex Portland cement mortar and latex Portland cement grout.

1.11 SUBMITTALS

- A. Submit shop drawings and manufacturers' product data under provisions of Section (01 30 00) (01 34 00)
- B. Submit samples of each type/style/finish/size/color of ceramic tile, thin brick, manufactured masonry veneer, mosaic, and trim unit under provisions of Section (01 30 00) (01 34 00)
- C. Submit manufacturers' installation instructions under provisions of Section (01 30 00) (01 34 00)
- D. Submit manufacturer's certification under provisions of Section (01 45 00) that the materials supplied conform to ANSI A137.1 for ceramic tile or ANSI A137.2 for glass tile.
- E. Submit proof of warranty.
- F. Submit Health Product Declarations (HPD) for each tile installation material.
- G. Submit sample of installation system demonstrating compatibility/functional relationships between adhesives, mortars, grouts and other components under provision of Section (01 30 00) (01 34 00). Submit proof from ceramic tile manufacturer or supplier verifying suitability of tile or stone veneer for specific application and use; including dimensional stability, water absorption, freeze/thaw resistance (if applicable), resistance to thermal cycling, and other characteristics that the may project may require. These characteristics must be reviewed and approved by the project design professional(s).
- H. Submit list from manufacturer of installation system/adhesive/mortar/grout identifying a minimum of three (3) similar projects, each with a minimum of ten (10) years service.

VETERANS MEMORIAL PARK

- I. For alternate materials, at least thirty (30) days before bid date submit independent laboratory test results confirming compliance with specifications listed in Part 2 - Products.

1.12 QUALITY ASSURANCE

1. It is strongly recommended to use installers who have demonstrated their commitment to their craft and taken the time to stay current with the latest materials and methods. Requiring references and a portfolio along with a bid or estimate is a good way to ensure the installer has successfully completed work of similar size, scope, and complexity.
2. Pools, exterior facades, mortar beds, shower pans, steam showers, etc. require different skills. Matching installer ability to the project at hand requires close evaluation of their experience, training, state licensing (where applicable), and certifications/credentials (where applicable). The Ceramic Tile Education Foundation (CTEF) provides a Contractor Questionnaire that can be used to aid in evaluating and comparing contractors (www.tilecareer.com).
3. Various programs administered by associations, non-profit educational organizations, unions, and private companies serve the tile industry by providing education, hands-on training, and evaluation of the skills and competency of installers and contractors. It is important to distinguish between the many programs available:
 - Hands-on training
 - Evaluation/certification of installation skills
 - On-line training
 - On-line knowledge evaluation (without a hands-on component)

As with all programs, the rigor and credibility of the program must also be considered.

The following non-profit programs are well-established and recognized by the Tile Council of North America's (TCNA) Handbook Committee (listed alphabetically):

Ceramic Tile Education Foundation (CTEF) Certified Tile Installer Program: CTEF tests hands-on installation skills and knowledge. Installers must achieve the minimum required score on both tests to earn the "CTEF Certified Installer" designation. Contractors that employ CTEF Certified Installers are listed in the CTEF Contractor Directory, found in this *Handbook* and on the CTEF website. See www.tilecareer.org for more information.

International Masonry Institute (IMI) Contractor College Program: IMI conducts professional and technical courses for union masonry and tile contractors, which lead to certification in installation and project supervision. See www.imiweb.org for more information.

Journeyman Tile Layer Apprenticeship Programs: Installers recognized by the U.S. Department of Labor (DOL) as Journeyman Tile Layers are required to fulfill and document several years of training and on-the-job experience as apprentices to become Journeymen. The majority of these setters earn their Journeyman status through union-affiliated training programs, although some non-union tile contractors administer their own DOL-recognized apprenticeship programs and employ journeyman tile layers. Contractors that employ union Journeyman Tile Setters can be found through the union locals that list their signatory contractors, primarily the Bricklayer and Allied Craftworkers (BAC) and the United Brotherhood of Carpenters (UBC). See www.bacweb.org and www.carpenters.org for more information.

National Tile Contractors Association (NTCA) Five Star Contractor Program: NTCA is a tile contractors association, with membership open to all tile contractors. Their Five Star program is a peer review program to recognize NTCA members who have demonstrated a track record of providing successful installations. Earning the Five Star designation requires recommendations from customers, suppliers, and peers as well as participation in continuing education, training, and safety programs. See www.tile-assn.com for more information.

Tile Contractors' Association of America (TCAA) Trowel of Excellence Program: TCAA is a contractor's association for BAC signatory contractors. Its Trowel of Excellence program is a peer review program to recognize TCAA members who have demonstrated a track record of providing successful installations. Earning the Trowel of Excellence designation requires letters of reference, submittal of a detailed project description and photos, employee participation in educational programming, and proof of financial responsibility. See www.tcaainc.org for more information.

VETERANS MEMORIAL PARK

- A. Tile Manufacturer (single source responsibility): Company specializing in ceramic tile, thin brick, manufactured masonry veneer, mosaic, and trim unit with three (3) years minimum experience. Obtain tile from a single source with resources to provide products of consistent quality in appearance and physical properties.
- B. Installation System Manufacturer (single source responsibility): Company specializing in adhesives, mortars, grouts and other installation materials with ten (10) years minimum experience and ISO 9001 certification. Obtain installation materials from single source manufacturer to insure consistent quality and full compatibility.
- C. Submit laboratory confirmation of adhesives, mortars, grouts and other installation materials:
 - 1. Identify proper usage of specified materials using positive analytical method.
 - 2. Identify compatibility of specified materials using positive analytical method.
 - 3. Identify proper color matching of specified materials using a positive analytical method.
- D. Installer qualifications: company specializing in installation of ceramic tile, thin brick, manufactured masonry veneer, mosaic, and trim unit with five (5) years documented experience with installations of similar scope, materials and design.

1.13 MOCK-UPS

- A. Provide mock-up of each type/style/finish/size/color of ceramic tile, thin brick, manufactured masonry veneer, mosaic, and trim unit along with respective installation adhesives, mortars, grouts and other installation materials, under provisions of Section(s) (01 43 00) (01 43 39).
- B. Contractor to remove and dispose of all mockups upon completion of the project.

1.14 PRE-INSTALLATION CONFERENCE

Pre-installation conference: At least three weeks prior to commencing work attend a meeting at the jobsite to discuss conformance with requirements of specification and job site conditions. Representatives of owner, architect, general contractor, tile subcontractor, Tile Manufacturer, Installation System Manufacturer and any other parties who are involved in the scope of this installation must attend the meeting.

1.15 DELIVERY, STORAGE AND HANDLING

- A. Acceptance at Site: deliver and store packaged materials in original containers with seals unbroken and labels, including grade seal, intact until time of use, in accordance with manufacturer's instructions.
- B. Store tile and stone veneers and installation system materials in a dry location; handle in a manner to prevent chipping, breakage, and contamination.
- C. Protect latex additives, organic adhesives, epoxy adhesives and sealants from freezing or overheating in accordance with manufacturer's instructions; store at room temperature when possible.
- D. Store Portland cement mortars and grouts in a dry location.

1.16 PROJECT/SITE CONDITIONS

- A. Provide ventilation and protection of environment as recommended by manufacturer.
- B. Prevent carbon dioxide damage to ceramic tile, thin brick, manufactured masonry veneer, mosaic, and trim unit as well as adhesives, mortars, grouts and other installation materials, by venting temporary heaters to the exterior.
- C. Maintain ambient temperature not less than 50°F (10°C) or more than 100°F (38°C) during installation and for a minimum of seven (7) days after completion. Setting of Portland cement is retarded by low temperatures. Protect work for extended period of time and from damage by other trades. Installation with latex Portland cement mortars requires substrate, ambient and material temperatures at least 37°F (3°C). There is to be no ice in substrates. Freezing after installation will not damage latex Portland cement mortars. Protect Portland cement based mortars and grouts from direct sunlight, radiant heat, forced ventilation (heat & cold) and drafts until cured to prevent premature evaporation of moisture. Epoxy mortars and grouts require surface temperatures between 60°F (16°C) and 90°F (32°C) at time of installation. It is the General Contractor's responsibility to maintain temperature control.

1.17 SEQUENCING AND SCHEDULING

- A. Coordinate installation of tile work with related work.
- B. Proceed with tile wADHERED MASONRY only after curbs, vents, drains, piping, and other projections through substrate have been installed and when substrate construction and framing of openings have been completed.

1.18 WARRANTY

NOTE TO SPECIFIER: Select one of the following LATICRETE system warranties.

- A. The Contractor warrants the work of this Section to be in accordance with the Contract Documents and free from faults and defects in materials and workmanship for a period as determined by local or project

VETERANS MEMORIAL PARK

requirements. The manufacturer of adhesives, mortars, grouts and other installation materials shall provide a written twenty five (25) year warranty, which covers materials and labor - reference LATICRETE Warranty Data Sheet 025.0 for complete details and requirements.

- B. For exterior facades over steel or wood framing, the manufacturer of adhesives, mortars, grouts and other installation materials shall provide a written fifteen (15) year warranty, which covers materials and labor - reference LATICRETE Warranty Data Sheet 230.15 for complete details and requirements.

1.19 MAINTENANCE

Submit maintenance data under provisions of Section(s) (01 74 13) (01 74 16) (01 74 23). Include cleaning methods, cleaning solutions recommended, stain removal methods, as well as polishes and waxes recommended.

1.20 EXTRA MATERIALS STOCK

Upon completion of the work of this Section, deliver to the Owner 2% minimum additional tile and trim shape of each type, color, pattern and size used in the Work, as well as extra stock of adhesives, mortars, grouts and other installation materials for the Owner's use in replacement and maintenance. Extra stock is to be from same production run or batch as original tile and installation materials.

PART 2 - PRODUCTS

2.1 EXTERIOR ADHERED VENEER MANUFACTURER

Subject to compliance with paragraphs 1.12 and performance requirements, provide products by one of the following manufacturer: *EarthWorks*

Substitution requests by contractor are acceptable upon Architect review and approval for products that are equal or better than specified.

2.2 EXTERIOR ADHERED VENEER MATERIAL – BASIS OF DESIGN

- A. Tile: Cut Stone Limestone Tile
- B. Grade:
- C. Size: 3/4" thickness, 10"x18" tiles
- D. Edge: Rectified, except corner tiles to be quirk miter at edges.
- E. Finish: Sandblasted
- F. Color: Skymist
- G. Location: Monument Wall

2.3 INSTALLATION MATERIALS MANUFACTURER- BASIS OF DESIGN

- A. LATICRETE International, Inc., 1 Laticrete Park North, Bethany, CT 06524-3423 USA Phone 800-243-4788, (203) 393-0010 technicalservices@laticrete.com, www.laticrete.com; www.laticrete.com/green
- B. Substitution requests by contractor are acceptable upon Architect review and approval for products and installation materials that are equal or better than specified.

2.4 INSTALLATION ACCESSORIES – EXTERIOR ADHERED VENEER

LATICRETE MVIS installation assembly.

- A. Bulk Water Management / Crack Suppression Membrane to be thin, cold applied, single component liquid and load bearing. Reinforcing fabric to be non-woven rot-proof specifically intended for waterproofing membrane. Waterproofing Membrane to be non-toxic, non-flammable, and non-hazardous during storage, mixing, application and when cured. It shall also meet the following physical requirements:

- | | |
|--|---------------------------|
| 1. Hydrostatic Test (ASTM D4068): | Pass |
| 2. Elongation @ break (ASTM D751): | 20-30% |
| 3. System Crack Resistance (ANSI A118.12): | Pass (High) |
| 4. 7 day Tensile Strength (ANSI A118.10): | >265 psi (1.8 MPa) |
| 5. 7 day Shear Bond Strength (ANSI A118.10) | >200 psi (1.4 MPa) |
| 6. 28 Day Shear Bond Strength (ANSI A118.4): | >214 psi (1.48 – 2.4 MPa) |
| 7. Service Rating (TCA/ASTM C627): | Extra Heavy |
| 8. Total VOC ContADHERED MASONRY VENEERent: | < 0.05 mg/m ³ |

VETERANS MEMORIAL PARK

(Basis of Design: LATICRETE® MVIS™ WCI)

- B. Epoxy Waterproofing Membrane/Flashing Mortar to be 3 component epoxy, trowel applied specifically designed to be used under masonry veneer, stone or thin brick and requires only 24 hours prior to flood testing:
1. Breaking Strength (ANSI A118.10): 450-530 psi (3.1-3.6 MPa)
 2. Waterproofness (ANSI A118.10): No Water penetration
 3. 7 day Shear Bond Strength (ANSI A118.10): 110-150 psi (0.8-1 MPa)
 4. 28 Day Shear Bond Strength (ANSI A118.10): 90-120 psi (0.6-0.83 MPa)
 5. 12 Week Shear Bond Strength (ANSI A118.10): 110-130 psi (0.8-0.9 MPa)
 6. Total VOC Content: <3.4 g/L

(Basis of Design: LATAPOXY® Waterproof Flashing Mortar)

- C. Flashing sealant material; specifically designed for flashing transitions and compatibility to adhered veneer systems.

(Basis of Design: MVIS Flashing Sealant)

- D. Sealer (Exterior Masonry Veneers): water-based formula specifically designed for topical application on porous stones in exterior applications.

(Basis of Design: LATICRETE STONETECH® Heavy Duty Exterior Sealer)

- E. Galvanized, diamond metal lath: flat expanded type, weighing not less than 3.2 lb. per yd² (1.4 kg/m²). Metal lath shall comply with ASTM C847.
- F. Cleavage membrane: 15 pound asphalt saturated, non-perforated roofing felt complying with ASTM D226, 15 pound coal tar saturated, non-perforated roofing felt complying with ASTM D227 or 4.0 mils (0.1 mm) thick polyethylene plastic film complying with ASTM D4397.
- G. Cementitious backer board units: size and thickness as specified, complying with ANSI A118.9.

2.5 INSTALLATION MATERIALS – EXTERIOR ADHERED VENEER

- A. Latex Portland Cement Mortar for thick beds, and scratch/plaster coats to be weather, frost, shock resistant and meet the following physical requirements:
1. Compressive Strength (ASTM C109): >2000 psi (13.8 MPa)
 2. Total VOC Content: < 0.05 mg/m³

(Basis of Design: LATICRETE MVIS™ Lite Wall Float)

- B. Latex Portland Cement Thin Bed Mortar for thin set to be weather, frost, shock resistant, non-flammable and meet the following physical requirements:
1. Compressive strength (ASTM C270): ≥2900 psi (20 MPa)
 2. Shear bond strength (ANSI A118.4 5.2.4): ≥300 psi (2.1 MPa)
 3. Sag On Wall (EN 1308): 0.0mm
 4. Total VOC Content: < 0.05 mg/m³

(Basis of Design: LATICRETE® MVIS™ Veneer Mortar)

- C. Latex Portland Cement Pointing Mortar to be weather, frost and shock resistant, as well as meet the following physical requirements:
1. Compressive Strength (ASTM C91): ≥3000 psi (20.7 MPa)
 2. Total VOC Content: < 0.05 mg/m³

(Basis of Design: LATICRETE MVIS Pointing Mortar)

- D. Expansion and Control Joint Sealant to be a one component, neutral cure, exterior grade silicone sealant and meet the following requirements:

VETERANS MEMORIAL PARK

- | | |
|---|--|
| 1. Tensile Strength (ASTM C794): | 280 psi (1.9 MPa) |
| 2. Hardness (ASTM D751; Shore A): | 25 (colored sealant) /15 (clear sealant) |
| 3. Weather Resistance (QUV Weather-ometer): | 10000 hours (no change) |

(Basis of Design: LATICRETE LATASIL™)

PART 3 – EXECUTION

3.1 SUBSTRATE EXAMINATION

- A. Verify that surfaces to be covered with ceramic tile, mosaic, masonry veneer, trim unit, and waterproofing are:
1. Sound, rigid and conform to good design/engineering practices;
 2. Systems, including the framing system and panels, over which ceramic tile will be installed shall be in conformance with the International Residential Code (IRC) for residential applications, the Florida Building Code (FBC) for commercial applications, or applicable building codes.
 3. Clean and free of dust, dirt, oil, grease, sealers, curing compounds, laitance, efflorescence, form oil, loose plaster, paint, and scale;
 4. For thin-bed Ceramic tile installations when a cementitious bonding material will be used, including medium bed mortar: maximum allowable variation in the tile substrate – for tiles with edges shorter than 15" (375mm), maximum allowable variation is 1/4" in 10' (6mm in 3m) from the required plane, with no more than 1/16" variation in 12" (1.5mm variation in 300mm) when measured from the high points in the surface. For tiles with at least one edge 15" (375mm) in length, maximum allowable variation is 1/8" in 10' (3mm in 3m) from the required plane, with no more than 1/16" variation in 24" (1.5mm variation in 600mm) when measured from the high points in the surface. For modular substrate units, such as exterior glue plywood panels or adjacent concrete masonry units, adjacent edges cannot exceed 1/32" (0.8mm) difference in height. For thick bed (mortar bed) ceramic tile and stone installations, maximum allowable variation in the installation substrate to be (1/4" in 10' (6mm in 3m).
 5. Not leveled with gypsum or asphalt based compounds
- B. Concrete surfaces shall be:
1. Cured a minimum of 28 days at 70°F (21°C), including an initial seven (7) day period of wet curing; NOTE TO SPECIFIER: LATICRETE® MVIS™ Hi-Bond Veneer Mortar does not require a minimum cure time for concrete substrates or mortar beds;
 2. Wood float finished, or better, if the installation is to be done by the thin bed method;
- C. Advise General Contractor and Architect of any surface or substrate conditions requiring correction before tile work commences. ***Beginning of work constitutes acceptance of substrate or surface conditions.***

3.2 SURFACE PREPARATION – EXTERIOR ADHERED VENEERS – FRAMED CONSTRUCTS

- A. SHEATHING (e.g. EXTERIOR OSB , EXTERIOR GRADE PLYWOOD, & OTHER EXTERIOR RATED SHEATHING) OVER FRAMING
1. All designs, specifications and construction practices shall be in accordance with industry standards. Refer to latest editions of:
American Iron and Steel Institute (AISI) "**Specification for the Design of Cold-Formed Steel Structural Members**" [www.steel.org];
Canadian Sheet Steel Building Institute (CSSBI) "**Lightweight Steel Framing Binder {Publication 52M}**" [www.cssbi.ca];
Steel Stud Manufacturers Association (SSMA) "**Product Technical Information**" and "**ICBO Evaluation Service, Inc. Report ER-4943P**" [www.ssma.com];
Metal Lath/Steel Framing Association "**Steel Framing Systems Manual.**"
 2. Prior to commencing work, installer must submit to Architect/Structural Engineer for approval, shop drawings showing wall/façade construction and attachment details. All attachments must be designed to prevent transfer of building or structural movement to the wall/façade.
 3. Construct all framing with galvanized or other rust resistant steel studs and channels; minimum requirements:
Stud Gauge: 16 gauge (1.5mm);
Stud Steel: conforming to ASTM A570 with a minimum yield point of 50 ksi (345 MPa);
Stud Spacing: not to exceed 16" (400mm) on center;
Stud Width: 6" (150mm);
Horizontal Bridging: Not to exceed 4' (1.2m) on center; 16 gauge CR channel typical ***or as specified by structural engineer.***

VETERANS MEMORIAL PARK

4. Studs shall be seated squarely in the channel tracks with the stud web and flange abutting the track web, plumbed or aligned, and securely attached to the flanges or web of both the upper and lower tracks as specified. Similarly connect horizontal bridging/purlins and anti-racking diagonal bracing **as determined by structural engineer**. Finished frame and components must be properly aligned, square and true.
 5. Provide adequate support of framing elements during erection to prevent racking, twisting or bowing. Lay out the exterior rated sheathing installation so all board edges are supported by metal framing (studs vertically and purlins horizontally). Cut/fit the exterior rated sheathing and add additional framing elements as required to support board edges. Stagger boards in courses to prevent continuous vertical joints and allow $\frac{1}{8}$ - $\frac{3}{16}$ " (3-5mm) between sheets.
 6. Fasten the exterior rated sheathing with $\frac{7}{8}$ " (22mm) minimum length, non-rusting, self-embedding screws for metal studs (BUILDEX® Catalog item 10-24 17/16 Wafer T3Z or equivalent). Fasten the boards every 6" (150mm) at the edges and every 8" (200mm) in the field. Stagger placement of screws at seams. Place screws no less than $\frac{3}{8}$ " (9mm), and no more than 1" (25mm), from board edges.
 7. Follow board manufacturer's installation instructions.
 8. Compliance with design criteria and state and local building codes must be approved and certified by a qualified structural engineer. Use more stringent design criteria when necessary to comply with state and local building code stiffness requirements for thin veneers.
- B. CEMENTITIOUS BACKER UNIT (CBU) OVER STEEL FRAMING
1. All designs, specifications and construction practices shall be in accordance with industry standards. Refer to latest editions of:
American Iron and Steel Institute (AISI) "**Specification for the Design of Cold-Formed Steel Structural Members**" [www.steel.org];
Canadian Sheet Steel Building Institute (CSSBI) "**Lightweight Steel Framing Binder {Publication 52M}**" [www.cssbi.ca];
Steel Stud Manufacturers Association (SSMA) "**Product Technical Information**" and "**ICBO Evaluation Service, Inc. Report ER-4943P**" [www.ssma.com];
Metal Lath/Steel Framing Association "**Steel Framing Systems Manual**."
 2. Prior to commencing work, installer must submit to Architect/Structural Engineer for approval, shop drawings showing wall/façade construction and attachment details. All attachments must be designed to prevent transfer of building or structural movement to the wall/façade.
 3. Construct all framing with galvanized or other rust resistant steel studs and channels; minimum requirements:
Stud Gauge: 16 gauge (1.5mm);
Stud Steel: conforming to ASTM A570 – latest edition with a minimum yield point of 50 ksi;
Stud Spacing: not to exceed 16" (400mm) on center;
Stud Width: 6" (150mm);
Horizontal Bridging: Not to exceed 4' (1.2m) on center; 16 gauge CR channel typical **or as specified by structural engineer**.
 4. Studs shall be seated squarely in the channel tracks with the stud web and flange abutting the track web, plumbed or aligned, and securely attached to the flanges or web of both the upper and lower tracks as specified. Similarly connect horizontal bridging/purlins and anti-racking diagonal bracing **as determined by structural engineer**. Finished frame and components must be properly aligned, square and true.
 5. Provide adequate support of framing elements during erection to prevent racking, twisting or bowing. Lay out the CBU installation so all board edges are supported by metal framing (studs vertically and purlins horizontally). Cut/fit CBU and add additional framing elements as required to support board edges. Stagger boards in courses to prevent continuous vertical joints and allow $\frac{1}{8}$ - $\frac{3}{16}$ " (3-5mm) between sheets.
 6. Fasten the CBU with $\frac{7}{8}$ " (22mm) minimum length, non-rusting, self-embedding screws for metal studs (BUILDEX® Catalog item 10-24 17/16 Wafer T3Z or equivalent). Fasten the boards every 6" (150mm) at the edges and every 8" (200mm) in the field. Stagger placement of screws at seams. Place screws no less than $\frac{3}{8}$ " (9mm), and no more than 1" (25mm), from board edges.
 7. Tape all the board joints with the alkali resistant 2" (50mm) wide reinforcing mesh provided by the CBU manufacturer embedded in the same mortar used to install the ceramic tile, mosaic, pavers, brick or stone.
 8. Compliance with design criteria and state and local building codes must be approved and certified by a qualified structural engineer. Use more stringent design criteria when necessary to comply with state and local building code stiffness requirements for thin veneers.

3.3 INSTALLATION ACCESSORIES – EXTERIOR ADHERED VENEERS

VETERANS MEMORIAL PARK

Pre-Treat Cracks and Joints - Install sheathing panels and treat joints in accord with the respective sheathing panel manufacturer's installation instructions, including installation of board joint treatment. Pack any gaps around pipes, lights or other penetrations with LATAPOXY® Waterproof Flashing Mortar and allow to harden. Treat substrate joints and seams up to 1/8" (3 mm) by applying a liberal coat[^] of LATICRETE MVIS Air & Water Barrier approximately 8" (200 mm) wide over seam using a paint roller (heavy napped), brush or trowel. While LATICRETE MVIS Air & Water Barrier is still wet embed 6" (150 mm) wide LATICRETE Waterproofing/Anti-Fracture Fabric pressing the fabric in firmly so that the LATICRETE MVIS Air & Water Barrier liquid bleeds through the fabric, then immediately apply another liberal coat[^] of LATICRETE MVIS Air & Water Barrier liquid over the fabric using a paint roller, brush or trowel. For substrate joints and seams greater than 1/8" (3 mm); fill seams to a smooth finish with a LATICRETE Polymer Fortified Veneer Mortar. Allow mortar to set 24 hours, then treat seams by applying a liberal coat[^] of LATICRETE MVIS Air & Water Barrier approximately 8" (200 mm) wide over seam. While LATICRETE Air & Water Barrier is still wet embed 6" (150mm) wide LATICRETE Waterproofing/Anti-Fracture Fabric pressing the fabric in firmly so that the LATICRETE MVIS Air & Water Barrier liquid bleeds through the fabric, then immediately apply another liberal coat[^] of LATICRETE MVIS Air & Water Barrier liquid over the fabric. LATICRETE MVIS Air & Water Barrier will dry to a uniform olive green color when it's dry to touch.

Pre-Treat Coves and Floor/Wall Intersections - Fill all substrate coves and floor/wall transitions to a smooth finish and changes in plane using a LATICRETE latex-fortified thin-set. Alternatively, a liberal coat^{*} of LATICRETE MVIS Air & Water Barrier applied with a paint brush or trowel may be used to fill in cove joints and floor/wall transitions <1/8" (3mm) in width. Apply a liberal coat^{*} of LATICRETE MVIS Air & Water Barrier approximately 8" (200mm) wide over substrate cracks, cold joints, and control joints using a paint brush or heavy napped paint roller.

Movement Joint Loop (Slip Joint) Treatment - Apply a liberal coat[^] of LATICRETE MVIS Air & Water Barrier, approximately 8" (200 mm) wide over the areas. Then immediately embed and loop the 6" (152 mm) wide LATICRETE Waterproofing/Anti-Fracture Fabric into the substrate movement joint and allow to bleed through. Then top coat with a second liberal coat of LATICRETE MVIS Air & Water Barrier liquid fully encapsulating the LATICRETE Waterproofing/Anti-Fracture Fabric. Repeat process to ensure that all movement joints receive two (2) layers of LATICRETE Waterproofing/Anti-Fracture Fabric.

Main Application - Allow any pre-treated areas to dry to the touch. Apply a liberal coat[^] of LATICRETE MVIS Air & Water Barrier using a paint roller (heavy napped) or paint brush over substrate including pre-treated areas and allow to dry to the touch approximately 1–2 hours at 70°F (21°C) and 50% RH. Apply a second liberal coat[^] of LATICRETE MVIS Air & Water Barrier over the first coat of LATICRETE MVIS Air & Water Barrier. Let topcoat dry to the touch, approximately 1–2 hours at 70°F (21°C) and 50% RH. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects and re-apply as necessary. LATICRETE MVIS Air & Water Barrier will dry to a uniform olive green color when it's dry to touch. Use additional LATICRETE MVIS Air & Water Barrier to seal pinholes, voids, thin spots or other defects and re-apply as necessary. Bring main application of LATICRETE MVIS Air and Water Barrier up to all penetrations through the membrane.

NOTE: Proper integration involves transitioning between different materials. LATAPOXY Waterproof Flashing Mortar may be required between some connections, protrusions, details, joints and transitions. Where transitioning between different materials terminate the LATICRETE MVIS Air & Water Barrier at the edge of the transition, allow main application to dry, then apply LATAPOXY Waterproof Flashing Mortar with a trowel overlapping both sides of the transition by at least 2" to 4" [50mm to 100mm] (see Illustration 1,2,4 & 7).

*** Dry coat thickness is 20 – 30 mil (0.02 - 0.03" or 0.5 - 0.8mm); consumption per coat is approximately 0.01 gal/ft² (approx. 0.4 L/m²); coverage is approximately 100 ft² /gal (approx. 2.5 m²/L). LATICRETE® Waterproofing/Anti-Fracture Fabric can be used to pre-treat cracks, joints, curves, corners, drains, and penetrations with LATICRETE MVIS™ Air & Water Barrier.**

Spray Application of LATICRETE MVIS Air & Water Barrier - Follow all installation and surface preparation requirements outlined in this document and TDS 410M "Spraying LATICRETE MVIS Air & Water Barrier". The sprayer being used for the application of LATICRETE MVIS Air & Water Barrier should be capable of producing a maximum of 3300 psi (22.8 MPa) with a flow rate of 0.95 to 1.6 GPM (3.6 to 6.0 LPM) using a 0.521 or a 0.631 reversible tip. Keep the unit filled with LATICRETE MVIS Air & Water Barrier

VETERANS MEMORIAL PARK

to ensure continuous application of liquid. The hose length should not exceed 100' (30 m) in length and 3/8" (10 mm) in diameter.

Apply a continuous LATICRETE MVIS Air & Water Barrier film with an overlapping spray[^]. The wet film has a sage green appearance and dries to a darker olive green color. When the first coat has dried to a uniform olive green color, approximately 45 to 90 minutes at 70°F (21°C), visually inspect the coating for any voids or pinholes. Fill any defects with additional material and apply the second coat[^] at right angles to the first. The wet film thickness should be checked periodically using a wet film gauge.

Check application thickness with a wet film gauge periodically as the LATICRETE MVIS Air & Water Barrier is being applied to ensure that the appropriate thickness and coverage is achieved. Bounce back and overspray will consume more product. To achieve the required film thickness, the coating must be free from pinholes and air bubbles. Bring main application of LATICRETE[®] Air and Water Barrier up to all penetrations through the membrane. Do not back roll the spray applied coating. Allow the LATICRETE MVIS Air & Water Barrier to cure in accord with the instructions in this document and TDS 410M prior to the installation of finish materials. It is important to note that areas not scheduled to receive the LATICRETE MVIS Air & Water Barrier should be taped off and protected from any potential overspray.

Protection - Provide protection for newly installed membrane, even if covered with a thin-bed stone, masonry veneer, or thin brick installation against exposure to rain or other water for a minimum of 2 hours at 70°F (21°C) and 50% RH. For temperatures between 45°F and 69°F (7°C to 21°C) allow a minimum 24 hour cure period.

*Use the following LATICRETE System Materials:
LATICRETE MVIS™ Air & Water Barrier*

References:

LATICRETE Detail Drawings: [LATICRETE MVIS 103](#), [LATICRETE MVIS E101](#), [LATICRETE MVIS E102](#), [LATICRETE MVIS E103](#), [LATICRETE MVIS E104](#)

LATICRETE Data Sheets: [661.0](#), [661.5](#)

LATICRETE MSDS: [Air & Water Barrier](#), [Fabric](#)

LATICRETE Technical Data Sheets: [177](#), [217](#), [410M](#)

3.4 INSTALLATION - EXTERIOR ADHERED VEENERS

NOTES TO SPECIFIER:

1. Exterior adhered veneer installation techniques can be performed in several ways depending upon the finish type. Specifier to select one of the following installation methods (3.4 A, B, C, D, or E), based on finish type(s) project specific requirements.
 2. The optimum conditions for installation of direct adhered cladding are temperatures between 60° and 80°F (16° and 27°C), with 50% relative humidity and minimal wind. However, these conditions are atypical, so provisions must be made for variations in climatic conditions.
 3. Protection and corrective action primarily requires temporary enclosures or tarpaulins prior to, during, and immediately after installation to shield from rain. If prolonged exposure occurs, surfaces that appear dry may be saturated internally and require testing to determine suitability of certain overlay substrates, membranes or adhesives. Protection applies to the substrate, the installation of adhesives and joint grouts, post-installation (rain and temperature protection) until suitable cure, and also the storage and handling of the cladding material. For every 18°F (10°C) above 70°F (21°C) cementitious and epoxy materials cure twice as fast. For every 18°F (10°C) below 70°F (21°C) cementitious and epoxy materials take twice as long to cure.
 4. Tent / shade and heat areas that will be subjected to the elements and /or freezing temperatures during installation and cure periods.
 5. In addition to installing waterproofing membrane where required, provide proper architectural detailing (water-stops, flashings, weeps, etc.) to conduct water to the building exterior, especially at critical areas such as window heads/sills, penetrations and parapet walls
 6. Consult LATICRETE [TDS 176M](#) "Hot Weather Veneer Installations", available at www.laticrete.com, for more information.
 7. Consult LATICRETE [TDS 175M](#) "Cold Weather Veneer Installation", available at www.laticrete.com, for more information.
- A. **Pre-float Method (exterior adhered veneers):** Over clean, dimensionally stable and sound concrete and masonry substrates, apply latex-Portland cement thick-bed mortar as scratch/leveling coat in compliance

VETERANS MEMORIAL PARK

with current revision of Masonry Veneer Manufacturer's Association (MVMA) "**Installation Guide for Adhered Concrete Masonry Veneer**" and/or veneer manufacturer's specific written installation instructions. Float surface of scratch/leveling coat plumb, true and allow mortar to set until firm. For installation of thin brick, masonry veneer, and stone, follow appropriate "***Exterior Adhered Veneers Method***" for "***Stacked Veneer***" or "***Pointed / Grouted***" veneer installations.

Use the following LATICRETE® System Materials:
LATICRETE MVIS™ Lite Wall Float

References:

LATICRETE Data Sheets: [3622.0](#)

LATICRETE MSDS: [MVIS Lite Wall Float](#)

GREENGUARD Certificates: [MVIS Lite Wall Float](#)

LATICRETE Technical Data Sheets: [177](#), [114](#), [122](#), [204](#)

- B. ***Lath & Plaster Method (exterior adhered veneers)***: Install cleavage membrane/water resistive barrier complying with current revision of ASTM D226 (No. 15 Type 1), 2 separate layers of cleavage membrane/water resistive barrier complying with ICC-ES AC308 or a combination of both using corrosion resistant fasteners complying with ASTM C1063 Sec. 7.10.2. Install metal lath complying with the local building code requirements and/or 2.5 lb. (1.1 kg) or 3.4 lb. (1.5 kg) diamond mesh lath (ASTMC847-10, ASTMC1780). Apply latex-Portland cement mortar as scratch/leveling coat over wire lath, concrete or masonry in compliance with current revision of Masonry Veneer Manufacturer's Association (MVMA) "**Installation Guide for Adhered Concrete Masonry Veneer**" and/or veneer manufacturer's specific written installation instructions and/or ASTM C1780 Standard Practice for Installation Methods for Adhered Manufactured Stone Masonry Veneer. Float surface of scratch/leveling coat plumb, true and allow mortar to set until firm. For installation of thin brick, masonry veneer, or stone, follow the appropriate "***Exterior Adhered Veneers***" installation method for "***Stacked Veneer***" or "***Pointed / Grouted***" veneer installations.

Use the following LATICRETE System Materials:
LATICRETE MVIS™ Lite Wall Float

References:

LATICRETE Data Sheets: [3622.0](#)

LATICRETE MSDS: [MVIS Lite Wall Float](#)

GREENGUARD Certificates: [MVIS Lite Wall Float](#)

LATICRETE Technical Data Sheets: [177](#), [114](#), [122](#), [204](#)

- C. ***Exterior Adhered Veneers (Tile Council of North America / Marble Institute of America Methodology)***: Install latex Portland cement mortar in compliance with current revisions of ANSI A108.02 (3.11), A108.1B and ANSI A108.5. Use the appropriate trowel notch size to ensure proper bedding of the tile, brick or stone selected. Work the latex Portland cement mortar into good contact with the substrate and comb with notched side of trowel. Spread only as much latex Portland cement mortar as can be covered while the mortar surface is still wet and tacky. When installing large format (>8" x 8"/200mm x 200mm) tile/stone, rib/button/lug back tiles, pavers or sheet mounted ceramics/mosaics, spread latex Portland cement mortar onto the back of (i.e. 'back-butter') each piece/sheet in addition to trowelling latex Portland cement mortar over the substrate. Beat each piece/sheet into the latex Portland cement mortar with a beating block or rubber mallet to insure full bedding and flatness. Allow installation to set until firm. Clean excess latex Portland cement mortar from tile or stone face and joints between pieces.

Use the following LATICRETE System Materials:
LATICRETE® MVIS™ Veneer Mortar

References:

LATICRETE Data Sheet: [060.0](#)

LATICRETE MSDS: [Veneer Mortar](#)

GREENGUARD Certificate: [Veneer Mortar](#)

LATICRETE Technical Data Sheets: [105](#), [126](#), [195](#), [208](#)

- D. ***Exterior Adhered Veneers (Pointed/Grouted – Masonry Veneer Manufacturer's Association Methodology)***: Moisten the back of each veneer unit and the top of the scratch coat so the surfaces appear damp but are free of standing water. Install masonry veneer adhesive mortar in compliance with current

VETERANS MEMORIAL PARK

revisions of Masonry Veneer Manufacturer's Association (MVMA) "**Installation Guide for Adhered Concrete Masonry Veneer**" and/or veneer manufacturer's specific written installation instructions. Use the appropriate installation tools to ensure proper bedding of veneer unit. Work the masonry veneer adhesive mortar into good contact with the back of the veneer unit making sure the entire unit is buttered to a nominal ½" (12mm) thickness. DO NOT COVER JUST THE PERIMETER! Buttered masonry veneer units should be firmly worked onto the scratch coat and slid slightly back and forth or with a slight rotating motion. Allow installation to set until firm. Clean excess latex Portland cement mortar from masonry veneer or stone face and joints between pieces. Installing masonry veneer from the top down will minimize cleanup requirements.

Use the following LATICRETE System Materials:
LATICRETE MVIS Veneer Mortar

References:
LATICRETE Data Sheet: [060.0](#)
LATICRETE MSDS: [Veneer Mortar](#)
GREENGUARD Certificate: [Veneer Mortar](#)
LATICRETE Technical Data Sheets: [105](#), [126](#), [195](#), [208](#)

- E. ***Exterior Adhered Veneers (Stacked Veneer - Masonry Veneer Manufacturer's Association Methodology)***: Moisten the back of each veneer unit and the top of the scratch coat so the surfaces appear damp but are free of standing water. Install masonry veneer adhesive mortar in compliance with current revisions of Masonry Veneer Manufacturer's Association (MVMA) "**Installation Guide for Adhered Concrete Masonry Veneer**" and/or veneer manufacturer's specific written installation instructions. Use the appropriate installation tools to ensure proper bedding of veneer unit. Work the masonry veneer adhesive mortar into good contact with the back of the veneer unit making sure the entire unit is buttered to a nominal ½" (12mm) thickness. DO NOT COVER JUST THE PERIMETER! Buttered masonry veneer units should be firmly worked onto the scratch coat and slid slightly back and forth or with a slight rotating motion. Allow installation to set until firm. Clean excess latex Portland cement mortar from masonry veneer or stone face and joints between pieces. Tight fitted masonry veneer should be applied from the corners toward the middle of the wall, and from the bottom toward the top of the wall.

Use the following LATICRETE System Materials:
LATICRETE MVIS™ Veneer Mortar

References:
LATICRETE Data Sheet: [060.0](#)
LATICRETE MSDS: [Veneer Mortar](#)
GREENGUARD Certificate: [Veneer Mortar](#)
LATICRETE Technical Data Sheets: [105](#), [126](#), [195](#), [208](#)

- F. ***Grouting or Pointing (Exterior Adhered Veneers)***:
NOTE TO SPECIFIER: Specify grout / pointing mortar color for each type/color of thin brick, masonry veneer, and stone:

Pointing Mortar (for joints up to 1 1/4" (12mm): Allow thin brick, masonry, and stone installations to cure a minimum of 24 hours @ 70° F (21°C). Verify grout joints are free of dirt, debris or tile spacers. Sponge or wipe dust/dirt off veneer face and remove any water standing in joints. Surface temperature must be between 40-90° F (4-32°C). Use 2 quarts (1.9 L) of clean potable water for 25 lb. (11.4 kg) of LATICRETE® MVIS™ Premium Pointing Mortar. Place water in a clean mixing container and add mortar slowly. Mix with a slow speed mixer to a smooth stiff consistency. Allow mortar to slake for 5 minutes. Remix mortar. Pointing mortar/grout may be installed using a grout bag, filling the joints to the desired depth, ensuring the mortar is forced into all voids. The curing time will vary significantly with temperature and humidity. Once applied allow to firm to "thumbprint" hardness, trowel, rake and/or dry, soft bristled brush to the desired finish.

Use the following LATICRETE System Materials:
LATICRETE MVIS Pointing Mortar

References:
LATICRETE Data Sheets: [288.0](#)
LATICRETE MSDS: [MVIS Pointing Mortar](#)

VETERANS MEMORIAL PARK

LATICRETE Technical Data Sheets: [201](#), [400](#)

- G. **Waterproofing / Flashing:** To be designed and detailed by project architect / engineer. The function of wall flashing, or through-wall flashing, is to divert moisture which may penetrate the exterior face of the facade or divert moisture which may condense within the wall from water vapor migration to or from the interior spaces. Flashings are commonly used at changes in configuration of the facade, and between different components of the wall. Typical locations requiring flashing are at the intersection of roof and wall assemblies, under roof parapet and wall copings, over window and door openings, under window sills, at shelf or relieving angles, and at bases of hollow or cavity walls. Flashings must always turn up against the area or material which is being protected in order to prevent water penetration. Provision must be made to divert any trapped water back to the outside and away from the face of the building facade. This is commonly done by placing weep holes, tubes or absorbent wicks from 24 – 33 inches (600 – 840 millimeters) at the base of the flashing. Flashings must form a drip edge and extend a minimum of 3/8 inch (10 millimeters) beyond the face of the facade to prevent water from dripping down the face of the facade. Check local building code for proper design, placement and implementation of flashing and weep systems. Copings, which protect the top of a parapet wall from water penetration, must be flashed, at a minimum, at the joints between the coping material (metal, stone, ceramic tile, pre-cast concrete), but preferably continuous along and beneath the entire length of the coping. Flashings which cannot be adhered or imbedded in the wall construction are either attached to reglets, which are prefabricated and pre-cast into the wall assembly, or attached to the wall assembly with mechanical attachments and sealed with sealants. In selecting a flashing, it is very important to verify compatibility of metals used in the window frame and the flashing in order to avoid corrosion from galvanic reactions of dissimilar metals.
- H. **Weeps / Pressure Equalization Vents:** To be designed and detailed by project architect / engineer. Most building codes permit weeps no less than 3/16 inch (5 millimeters) in diameter and spaced no more than 33 inches (840 millimeters) on-center. Wick and tube weep spacing recommended at no more than 16 inches (400 millimeters) on-center. Install weeps and/or vent tubes through movement joints, conforming to the size, type and composition specified and as per weep/vent manufacturer's recommendations, on 2 foot (600 millimeters) centers minimum, and at all locations indicated in shop drawings, plans and details. Ensure that all weeps and/or equalization tubes are properly placed to reach the waterproofing membrane and/or cavity they are designed to drain/vent, and are clear of dirt, debris, sealant or other obstructions.
- I. **Vapor Barrier:** Install vapor barrier, conforming to the type and composition specified and as per vapor barrier manufacturer's recommendations, on the side of wall cavity insulation that will be "warm in winter." Complete vapor barrier within two (2) weeks after enclosure of the building. Placement, composition and detail to be provided by project design professional.
- J. **Expansion and Control Joints:** Provide control or expansion joints as located in contract drawings and in full conformity, especially in width and depth, with architectural details.
1. Substrate joints must carry through, full width, to surface of tile, brick, masonry veneer, or stone.
 2. Install expansion joints in tile, brick, masonry veneer, or stone work over construction/cold joints or control joints in substrates.
 3. Install expansion joints where tile, brick, masonry veneer, or stone abut restraining surfaces (such as perimeter walls, curbs, and columns), changes in plane and corners.
 4. Joint placement depends on application – Follow the Masonry Veneer Manufacturers Association's (MVMA) Installation Guide and Detailing Options for Compliance with ASTM C1780.
 5. Joint width: $\geq \frac{1}{8}$ " (3mm) and ≤ 1 " (25mm).
 6. Joint width: depth ~2:1 but joint depth must be $\geq \frac{1}{8}$ " (3mm) and $\leq \frac{1}{2}$ " (12mm).

Layout (field defined by joints): 1:1 length: width is optimum but must be $\leq 2:1$. Remove all contaminants and foreign material from joint spaces/surfaces, such as dirt, dust, oil, water, frost, setting/grouting materials, sealers and old sealant/backer. Use LATICRETE LATASIL™ 9118 Primer for underwater and permanent wet area applications, or for porous stone (e.g. limestone, sandstone etc...) installations. Install appropriate backing material (e.g. closed cell backer rod) based on expansion joint design and as specified in section 07 92 00. Apply masking tape to the face of tile, brick or stone veneer. Use a caulking gun, or other applicator, to completely fill joints with sealant. Within 5-10 minutes of filling joint, 'tool' sealant surface to a smooth finish. Remove masking tape immediately after tooling joint. Wipe smears or excess sealant off the face of non-glazed tile, brick, stone or other absorptive surfaces immediately.

Use the following LATICRETE System Materials:

VETERANS MEMORIAL PARK

LATICRETE LATASIL™ LATICRETE LATASIL 9118 Primer

References:

LATICRETE Detail Drawings: [WP300](#), [WP301](#), [WP302](#), [WP303](#), [EJ-01](#), [EJ-06](#), [EJ-08](#),
[EJ-09](#), [EJ-10](#), [EJ-12](#), [EJ-13](#), [EJ-14](#)

(Sealant treatments only)

LATICRETE Data Sheets: [6200.1](#), [6526.1](#)

LATICRETE MSDS: [LATICRETE LATASIL](#), [Primer](#)

LATICRETE Technical Data Sheets: [211](#), [252](#)

K. **Sealer (Exterior Adhered Veneers):**

NOTE TO SPECIFIER: Different finish types may require different sealers. Impervious ceramic, and porcelain tiles do not require sealing. However, some matte finish, and textured finish ceramic and porcelain tiles, may require a pre-grouting sealer, or grout release agent. For finishes other than natural stone, consult LATICRETE Technical Services at 888-786-6343 extension 2, or via email, at technicalservices@laticrete.com.

Read entire label before using. Use only as directed. Always test in a small inconspicuous area with a 24-hour cure time to determine ease of application and desired results. Allow new grout installations to cure for 72 hours prior to application. Make sure the surface is clean and free of waxes and coatings. Sealer may be applied to damp surfaces one hour after standing water has been removed. Surface temperature is to be between 50 degrees Fahrenheit and 80 degrees Fahrenheit (10 degrees Celsius and 26.7 degrees Celsius). Ensure that the area is well-ventilated during application and until the surface is dry. Keep children and pets out of the area until the treated surface is dry.

1. Ensure cap is closed and sealed. Shake well before use.
2. Mask off surfaces not intended to be treated.
3. Liberally apply an even coat using a paint pad, paint brush, paint roller, or low-pressure solvent-resistant sprayer. Do not thin the sealer before using.
4. Allow sealer to penetrate the surface for 10–15 minutes; denser materials may require more time for the sealer to penetrate. During this time, distribute any excess sealer over the entire area to ensure even penetration.
5. Thoroughly wipe down the entire surface with a clean, dry cloth to completely remove all excess sealer from the surface. **DO NOT ALLOW SEALER TO COMPLETELY DRY ON THE SURFACE.**
6. A second coat may be needed for porous, absorbent surfaces. If a second coat is required, it should be applied one hour after the initial application as directed in steps 2 through 5.
7. If the sealer was not completely wiped off and residue which appears, wipe entire surface with a towel dampened with sealer. Use a white, nylon pad to loosen residue and follow with a clean, white absorbent towel to remove.
8. Keep newly sealed installations free from contamination for 6 hours at 70 degrees Fahrenheit / 21 degrees Celsius.
9. A full cure is achieved in 24 to 72 hours at 70 degrees Fahrenheit / 21 degrees Celsius. Use of the treated surface may resume in 6–8 hours. If use of the surface must resume sooner, cover the treated surface with red rosin paper to protect it until full cure has been achieved.
10. Rags and equipment that are wet with sealer may be flammable. Clean up promptly after work is completed. Clean equipment with mineral spirits and allow it to dry in a well-ventilated area. Allow rags to dry in a well-ventilated area out of reach. When dry, dispose in accordance with local waste disposal regulations.

Recommended Surfaces: Brick; concrete / masonry; homogeneous granite; veined granite; unpolished, honed and textured limestone; quartzite, bluestone, sandstone, slate, and travertine

Storage and Handling Instructions: Avoid prolonged exposure to vapors. Use in a well-ventilated area. Do not ingest. Avoid contact with eyes and skin. **KEEP OUT OF THE REACH OF CHILDREN.** Do not freeze or store above 100 degrees Fahrenheit / 38 degrees Celsius. Do not mix with other chemicals. Do not release to natural waterways.

Use the following LATICRETE Systems Materials:

LATICRETE® STONETECH® Heavy Duty Exterior Sealer

VETERANS MEMORIAL PARK

References:

LATICRETE Data Sheets: [212.5](#)

LATICRETE SDS: [Heavy Duty Exterior Sealer](#)

- L. **Adjusting:** Correction of defective work for a period of one (1) year following substantial completion, return to job and correct all defective work. Defective work includes, without limitation, tiles broken in normal abuse due to deficiencies in setting bed, loose tiles or grout, and all other defects which may develop as a result of poor workmanship.

3.5 CLEANING

Clean excess mortar/epoxy from veneer surfaces with water before they harden and as work progresses. Do not contaminate open grout/caulk joints while cleaning. Sponge and wash veneers diagonally across joints. Do not use acids for cleaning. Polish with clean dry cloth. Remove surplus materials and leave premises broom clean.

3.6 PROTECTION

- A. Protect finished installation under provisions of section 01 50 00.
- B. Due to the slow rate of portland cement hydration and strength development at low temperatures, protect installations exposed to these conditions from traffic for longer than normal periods. Protection applies to the substrate, the installation of adhesives and joint grouts, post-installation (rain and temperature protection) until suitable cure, and also the storage and handling of the cladding material. Extend period of protection of tile work at lower temperatures, below 60°F (15°C), and at high relative humidity (>70% R.H.) due to retarded set times of mortar/adhesives. For every 18°F (10°C) below 70°F (21°C) installation materials take twice as long to cure. Large format tiles and stones also require longer curing periods in cooler temperature / high humidity environments.
- B. Keep finished work undisturbed until full cure. Suitable protection is to be included in the scope of work.
- C. Each component must reach a proper cure prior to installing the subsequent installation product.
- D. Tent / shade and heat areas that will be subjected to the elements, or freezing temperatures, during installation and cure periods.
- E. Protect newly installed exterior adhered veneer installations from direct exposure to rain for 7 days at 70 degrees Fahrenheit / 21 degrees Celsius. Protection and corrective action primarily requires temporary enclosures or tarpaulins prior to, during, and immediately after installation to shield from rain. If prolonged exposure occurs, surfaces that appear dry may be saturated internally and require testing to determine suitability of certain overlay substrates, membranes, and adhesives. Protection applies to the substrate, the installation of adhesives and joint grouts, post-installation (rain and temperature protection) until suitable cure, and also the storage and handling of the cladding material.
- F. Replace, or restore, work of other trades damaged or soiled by work under this section.

PART 4 – HEALTH AND SAFETY

The use of personal protection such as rubber gloves, suitable dust masks, safety glasses and industrial clothing is highly recommended. Discarded packaging, product wash and waste water should be disposed of as per local, state or federal regulations.

END OF SECTION

©2015 LATICRETE International, Inc., all rights reserved

"As a professional courtesy, LATICRETE offers technical services free of charge. The user maintains all responsibility for verifying the applicability and suitability of the technical service or information provided."

The right to copy, distribute and utilize for commercial purposes is granted exclusively to architects, engineers, and specification writers. Execution Statements are subject to change without notice. For latest revision, check our website @ <https://laticrete.com>

R November 16, 2022

† United States Patent No.: 6,881,768 (and other Patents)

△ United States Invention Patent No.: 6,784,229 B2

VETERANS MEMORIAL PARK

All references are the intellectual property of their respective owners:

TCNA Handbook for Ceramic, Glass, and Stone Tile Installation (2014). Tile Council of North America, Inc. Anderson, SC, 2022.

American National Standard Specifications for Installation of Ceramic Tile. Tile Council of North America, Inc. Anderson, SC, 2021.

Annual Book of ASTM Standards. American Society for Testing and Materials. West Conshohocken, PA, 2001.

American National Standard Specifications for Ceramic Tile (ANSI A137.1). Tile Council of North America, Inc. Anderson, SC 2021.

American National Standard Specifications for Glass Tile (ANSI A137.2). Tile Council of North America, Inc. Anderson, SC, 2021.

ISO 13007 Ceramic Tiles – Grouts and Adhesives, International Organization for Standardization (ISO), Geneva, Switzerland, 2004.

Floor and Trench Drains - ASME A112.6.3. American Society of Mechanical Engineers. New York, NY, 2001 (R 2007).

International Building Code, International Code Council. Country Club Hills, IL, 2012.

International Residential Code for One- and Two-Family Dwellings, International Code Council. Country Club Hills, IL, 2012.

LEED Reference Guide for Green Building Design and Construction. U.S Green Building Council. Washington, D.C., 2009.

LEED Reference Guide for Green Building Design and Construction v4. U.S Green Building Council. Washington, D.C., 2013.

LEED Schools Reference Guide. U.S. Green Building Council. Washington D.C., 2007.

Lightweight Steel Framing Design Manual. Canadian Sheet Steel Building Institute. Cambridge, ON, Canada, 2006.

MVMA Installation Guide and Detailing Options for Compliance with ASTM C1780. 2014

North American Specification for the Design of Cold-Formed Steel Structural Members. American Iron and Steel Institute. Washington D.C., 2007.

ICBO ER-4943P Product Technical Information. Steel Stud Manufacturers Association. Chicago, IL, 2001.

Lightweight Steel Framing Systems Manual. Metal Lath/Steel Framing Association Division. Glen Ellyn, IL.

END OF SECTION 042600

VETERANS MEMORIAL PARK

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Miscellaneous framing and supports.
 - 2. Metal Ladders
 - 3. Metal bollards.
 - 4. Miscellaneous steel trim.
 - 5. Metal downspout covers.
- B. Products furnished, but not installed, under this Section include the following:
 - 1. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.
 - 2. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.

1.3 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of metal fabrications that are anchored to or that receive other work. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.4 ACTION SUBMITTALS

- A. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.
- B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide Shop Drawings for the following:
 - 1. Steel framing and supports for operable partitions.
 - 2. Steel framing and supports for mechanical and electrical equipment.
 - 3. Steel framing and supports for applications where framing and supports are not specified in other Sections.
 - 4. Metal ladders.
 - 5. Metal bollards.
- C. Samples for Verification: For each type and finish of extruded [nosing] [and] [tread].
- D. Delegated-Design Submittal: For ladders decorative metal arch, including analysis data signed and sealed by the qualified professional engineer, licensed in the State of Florida, responsible for their preparation.

VETERANS MEMORIAL PARK

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For professional engineer.
- B. Welding certificates.
- C. Research/Evaluation Reports: For post-installed anchors, from ICC-ES.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 - 2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements" to design metal ladders.
- B. Structural Performance of Aluminum Ladders: Aluminum ladders, including landings, shall withstand the effects of loads and stresses within limits and under conditions specified in ANSI A14.3.
- C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
 - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Steel Tubing: ASTM A 500/A 500M, cold-formed steel tubing.
- D. Steel Pipe: ASTM A 53/A 53M, Standard Weight (Schedule 40) unless otherwise indicated.
- E. Aluminum Plate and Sheet: ASTM B 209, Alloy 6061-T6.
- F. Aluminum Extrusions: ASTM B 221, Alloy 6063-T6.

2.3 FASTENERS

- A. General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
 - 1. Provide stainless-steel fasteners for fastening aluminum.
- B. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A; with hex nuts, ASTM A 563; and, where indicated, flat washers.

VETERANS MEMORIAL PARK

- C. Anchor Bolts: ASTM F 1554, Grade 36, of dimensions indicated; with nuts, ASTM A 563; and, where indicated, flat washers.
 - 1. Hot-dip galvanize or provide mechanically deposited, zinc coating where item being fastened is indicated to be galvanized.
- D. Anchors, General: Anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488/E 488M, conducted by a qualified independent testing agency.
- E. Cast-in-Place Anchors in Concrete: Either threaded type or wedge type unless otherwise indicated; galvanized ferrous castings, either ASTM A 47/A 47M malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as needed, all hot-dip galvanized per ASTM F 2329.
- F. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors.
 - 1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, unless otherwise indicated.
 - 2. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group 1 stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.

2.4 MISCELLANEOUS MATERIALS

- A. Shop Primers: Provide primers that comply with Section 099100 "Painting."
- B. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
 - 1. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.
- C. Shop Primer for Galvanized Steel: Primer formulated for exterior use over zinc-coated metal and compatible with finish paint systems indicated.
- D. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- F. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- G. Concrete: Comply with requirements in Section 033000 "Cast-in-Place Concrete" for normal-weight, air-entrained, concrete with a minimum 28-day compressive strength of 3000 psi.

2.5 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- D. Form exposed work with accurate angles and surfaces and straight edges.
- E. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

VETERANS MEMORIAL PARK

2. Obtain fusion without undercut or overlap.
 3. Remove welding flux immediately.
 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.
- G. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- J. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, 1/8 by 1-1/2 inches, with a minimum 6-inch embedment and 2-inch hook, not less than 8 inches from ends and corners of units and 24 inches o.c., unless otherwise indicated.

2.6 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.
- C. Galvanize miscellaneous framing and supports where indicated.

2.7 METAL LADDERS

- A. General:
1. Comply with ANSI A14.3.
- B. Aluminum Ladders:
1. Basis of Design Product: O'Keefe's, Inc.; Model 502.
 2. Space siderails 18 inches apart unless otherwise indicated.
 3. Siderails: Continuous extruded-aluminum channels or tubes, not less than 2-1/2 inches deep, 3/4 inch wide, and 1/8 inch thick.
 4. Rungs: Extruded-aluminum tubes, not less than 3/4 inch deep and not less than 1/8 inch thick, with ribbed tread surfaces.
 5. Fit rungs in centerline of siderails; fasten by welding or with stainless-steel fasteners or brackets and aluminum rivets.
 6. Support each ladder at top and bottom and not more than 60 inches o.c. with welded or bolted aluminum brackets.

2.8 MISCELLANEOUS STEEL TRIM

- A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.
- B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.

VETERANS MEMORIAL PARK

1. Provide with integrally welded steel strap anchors for embedding in concrete or masonry construction.
- C. Steel trim includes exterior decorative metal arch of profile and dimensions indicated on Drawings. Painted to match Apparatus Bay doors. Provide finish as follows:
 1. Powder-Coat Finish: Following proper surface preparation and treatment, provide thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils; comply with AAMA 2603. Provide coating manufacturer's standard 10 year finish warranty against color fade, chalking, cracking, checking, peeling, or failure of coating to adhere to bare metal.
- D. Galvanize miscellaneous steel trim.

2.9 METAL BOLLARDS

- A. Fabricate metal bollards from galvanized HSS concrete-filled steel pipe with pipe sleeve.
 1. Cap bollards with 1/4-inch-thick steel plate.
- B. Where indicated, fabricate bollards with 3/8-inch-thick steel baseplates for bolting to concrete slab. Drill baseplates at all four corners for 3/4-inch anchor bolts.
- C. Fabricate sleeves for bollard anchorage from steel pipe with 1/4-inch-thick steel plate welded to bottom of sleeve. Make sleeves not less than 8 inches deep and 3/4 inch larger than OD of bollard.
- D. Prime bollards with zinc-rich primer.

2.10 METAL DOWNSPOUT COVERS

- A. Stainless steel round frame with secured perforated hinged strainer. Sized to suit downspout pipe size.
 1. Basis of Design Product: Zurn Industries, LLC; Downspout Cover Z199-DC.

2.11 FINISHES, GENERAL

- A. Finish metal fabrications after assembly.
- B. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into surrounding surface.

2.12 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.
 1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
- B. Preparation for Shop Priming Galvanized Items: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with metallic phosphate process.
- C. Shop prime iron and steel items not indicated to be galvanized unless they are to be embedded in concrete, sprayed-on fireproofing, or masonry, or unless otherwise indicated.
 1. Shop prime with universal shop primer unless zinc-rich primer is indicated.
- D. Preparation for Shop Priming: Prepare surfaces to comply with requirements indicated below:
 1. Exterior Items: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 2. Other Items: SSPC-SP 3, "Power Tool Cleaning."
- E. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.
 1. Stripe paint corners, crevices, bolts, welds, and sharp edges.

VETERANS MEMORIAL PARK

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

3.2 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.

3.3 INSTALLING METAL BOLLARDS

- A. Fill metal-capped bollards solidly with concrete and allow concrete to cure seven days before installing.
- B. Anchor bollards in concrete with pipe sleeves preset and anchored into concrete. Fill annular space around bollard solidly with nonshrink grout; mixed and placed to comply with grout manufacturer's written instructions. Slope grout up approximately 1/8 inch toward bollard.

3.4 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780/A 780M.

END OF SECTION 055000

VETERANS MEMORIAL PARK

SECTION 055213 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Steel railings.

1.3 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.4 ACTION SUBMITTALS

- A. Product Data:
 - 1. Manufacturer's product lines of mechanically connected railings.
 - 2. Fasteners.
 - 3. Post-installed anchors.
 - 4. Handrail brackets.
 - 5. Shop primer.
 - 6. Bituminous paint.
 - 7. Nonshrink, nonmetallic grout.
 - 8. Anchoring cement.
 - 9. Metal finishes.
 - 10. Paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Delegated-Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer, licensed in the State of Florida, responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For delegated-design professional engineer.
- B. Welding certificates.
- C. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.

VETERANS MEMORIAL PARK

- D. Research Reports: For post-installed anchors, from ICC-ES or other qualified testing agency acceptable to authorities having jurisdiction.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel in accordance with the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Protect mechanical finishes on exposed surfaces of railings from damage by applying a strippable, temporary protective covering before shipping.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design railings, including attachment to building construction.
- B. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Handrails and Top Rails of Guards:
 - a. Uniform load of 50 lbf/ ft. applied in any direction.
 - b. Concentrated load of 200 lbf applied in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 2. Infill of Guards:
 - a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft.
 - b. Infill load and other loads need not be assumed to act concurrently.

2.2 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.

2.3 STEEL RAILINGS

- A. Tubing: ASTM A500/A500M (cold formed) or ASTM A513/A513M, Type 5.
- B. Pipe: ASTM A53/A53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
- C. Plates, Shapes, and Bars: ASTM A36/A36M.
- D. Cast Iron Fittings: Either gray iron, ASTM A48/A48M, or malleable iron, ASTM A47/A47M, unless otherwise indicated.

2.4 FASTENERS

- A. Fastener Materials:

VETERANS MEMORIAL PARK

1. Ungalvanized-Steel Railing Components: Plated steel fasteners complying with ASTM F1941, Class Fe/Zn 5 for zinc coating.
- B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction and capable of withstanding design loads.
- C. Fasteners for Interconnecting Railing Components:
 1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless otherwise indicated.
 2. Provide Phillips flat-head machine screws for exposed fasteners unless otherwise indicated.
- D. Post-Installed Anchors: Fastener systems with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC193 or ICC-ES AC308.
 1. Material for Interior Locations: Carbon-steel components zinc-plated to comply with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, unless otherwise indicated.

2.5 MISCELLANEOUS MATERIALS

- A. Handrail Brackets: Cast iron center of handrail 2-1/2 inches from wall.
- B. Welding Rods and Bare Electrodes: Select in accordance with AWS specifications for metal alloy welded.
- C. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
- D. Bituminous Paint: Cold-applied asphalt emulsion, complying with ASTM D1187/D1187M.
- E. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout, complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- F. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.

2.6 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Shop assemble railings to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations.
 1. Clearly mark units for reassembly and coordinated installation.
 2. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately.
 1. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated.
 2. Remove sharp or rough areas on exposed surfaces.

VETERANS MEMORIAL PARK

- D. Form work true to line and level with accurate angles and surfaces.
- E. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- F. Connections: Fabricate railings with welded connections unless otherwise indicated.
- G. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove flux immediately.
 - 4. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Finish #1 welds; ornamental quality with no evidence of a welded joint
- H. Form changes in direction as detailed.
- I. Bend members in jigs to produce uniform curvature for each configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- J. Close exposed ends of hollow railing members with prefabricated cap and end fittings of same metal and finish as railings.
- K. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch or less.
- L. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
- M. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work.
 - 1. Fabricate anchorage devices capable of withstanding loads imposed by railings.
 - 2. Coordinate anchorage devices with supporting structure.
- N. Toe Boards: Where indicated, provide toe boards at railings around openings and at edge of open-sided floors and platforms. Fabricate to dimensions and details indicated.

2.7 STEEL AND IRON FINISHES

- A. For nongalvanized-steel railings, provide nongalvanized ferrous-metal fittings, brackets, fasteners, and sleeves; however, hot-dip galvanize anchors to be embedded in exterior concrete or masonry.
- B. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3.
- C. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1 for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.

VETERANS MEMORIAL PARK

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Perform cutting, drilling, and fitting required for installing railings.
 - 1. Fit exposed connections together to form tight, hairline joints.
 - 2. Install railings level, plumb, square, true to line; without distortion, warp, or rack.
 - 3. Set railings accurately in location, alignment, and elevation; measured from established lines and levels.
 - 4. Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
 - 5. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
 - 6. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
- B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.
- C. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- D. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.2 RAILING CONNECTIONS

- A. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article, whether welding is performed in the shop or in the field.

3.3 ANCHORING POSTS

- A. Form or core-drill holes not less than 5 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions.
- B. Leave anchorage joint exposed with anchoring material flush with adjacent surface.
- C. Anchor posts to metal surfaces with flanges, angle type, or floor type, as required by conditions, connected to posts and to metal supporting members as follows:
 - 1. For steel railings, weld flanges to post and bolt to metal supporting surfaces.

3.4 ATTACHING RAILINGS

- A. Anchor railings as detailed on Drawings.

3.5 REPAIR

- A. Touchup Painting:
 - 1. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

VETERANS MEMORIAL PARK

- a. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

3.6 PROTECTION

- A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.
- B. Restore finishes damaged during installation and construction period, so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION 055213

VETERANS MEMORIAL PARK

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes the following:
 1. Wood blocking.
 2. Wood cants.
 3. Wood nailers.
 4. Wood grounds.
 5. Plywood backing panels

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
 2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Include physical properties of treated materials based on testing by a qualified independent testing agency.

1.4 QUALITY ASSURANCE

- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 1. Provide dressed lumber, S4S, unless otherwise indicated.

VETERANS MEMORIAL PARK

- B. Maximum Moisture Content of Lumber: Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWPA UC2 for interior construction not in contact with the ground, Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping and similar members in connection with roofing, flashing, vapor barriers and waterproofing, and in direct contact with masonry and concrete.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
 - 3. Cants.
 - 4. Grounds.
- B. For items of dimension lumber size, provide Standard, Stud, or No. 3 grade lumber and the following species:
 - 1. Species and Grade: Mixed southern pine; SPIB.
 - 2. Minimum Lumber Size: 2 inches by 6 inches, nominal.
- C. Shims: Plastic shims only are acceptable. Use of wood shims is not permissible.

2.4 PLYWOOD BACKING PANELS

- A. Data and Electrical Equipment Backing Panels: DOC PS 1, Exposure 1, C-D Plugged, fire-retardant treated, in thickness indicated or, if not indicated, not less than 3/4 inch nominal thickness.
- B. :Fitness Room Ceiling Panels: DOC PS 1, Exposure 1, C-D Plugged, fire-retardant treated, 1/2 inch thickness. Color "Black."

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide 300 Series stainless steel.

VETERANS MEMORIAL PARK

- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- B. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- C. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- D. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron for items that are continuously protected from liquid water.
 - 2. Use copper naphthenate for items not continuously protected from liquid water.
- E. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in Florida Building Code.

3.2 WOOD GROUND, BLOCKING, AND NAILER INSTALLATION

- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.
- C. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.

END OF SECTION 061000

VETERANS MEMORIAL PARK

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Silicone joint sealants for metal-to-metal joints.
 - 2. Self-leveling urethane joint sealants.
 - 3. Non-sag urethane joint sealants.
 - 4. Hybrid joint sealants.
 - 5. Latex joint sealants.
- B. All control joints and construction joints to have joint filler color to match concrete.

1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- D. Joint-Sealant Schedule: Include the following information:
 - 1. Joint-sealant application, joint location, and designation.
 - 2. Joint-sealant manufacturer and product name.
 - 3. Joint-sealant formulation.
 - 4. Joint-sealant color.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Product Certificates: For each kind of joint sealant and accessory, from manufacturer.
- C. Sealant, Waterproofing, and Restoration Institute (SWRI) Validation Certificate: For each sealant specified to be validated by SWRI's Sealant Validation Program.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.
- E. Warranties: Sample of special warranties.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

VETERANS MEMORIAL PARK

1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 WARRANTY

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
 - 1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
 - 1. Suitability for Immersion in Liquids. Where sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- C. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- D. Suitability for Contact with Food: Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- E. Acceptable Manufacturers:

VETERANS MEMORIAL PARK

1. BASF Building Systems.
2. The Dow Chemical Company.
3. GE Advanced Materials.
4. Pecora Corporation.
5. Sika Corporation.
6. Tremco Incorporated.

F. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS FOR METAL-TO-METAL JOINTS

- A. Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 50, for Use NT.
- B. Basis of Design Products: The Dow Chemical Company; DOWSIL 795 and DOWSIL 995.
- C. Applications:
 1. Aluminum Storefront to Brakemetal: DOWSIL 795.
 2. Aluminum Storefront to Storefront: DOWSIL 795.
 3. Aluminum Storefront to Glazing: DOWSIL 995.

2.3 SELF-LEVELING URETHANE JOINT SEALANTS

- A. Two-Component, Self-Leveling Urethane Joint Sealant: ASTM C920, Type M, Grade P, Class 25, Use T.
 1. Basis of Design Product: Sika Corporation; Sikaflex 2c SL.
 2. Applications:
 - a. Sidewalk to building exterior.
 - b. Slab-on-grade open joints.
 - c. Expansion joints in sidewalks.
 - d. Site sidewalk to pavement curb.

2.4 NON-SAG URETHANE JOINT SEALANTS

- A. Single-Component, Nonsag Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use NT.
 1. Basis of Design Product: Sika Corporation; Sikaflex 1a.
 2. Applications:
 - a. Masonry to masonry control joints.
 - b. CMU control joints behind stucco.
- B. Single-Component, Nonsag Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use NT.
 1. Basis of Design Product: BASF Building Systems; Masterseal NP1.
 2. Applications:
 - a. Aluminum substrates to miscellaneous substrates.

2.5 HYBRID JOINT SEALANTS

- A. Single-Component, Nonsag Hybrid Joint Sealant: ASTM C920, Type S, Grade NS, Class 50, Use NT. Exterior applications, including "beauty bead" sealants, for applications specified herein.
 1. Basis of Design Product: Sherwin-Williams Company; Loxon H1.
 2. Applications:
 - a. Roof fascia to soffit.
 - b. Louver perimeters (beauty bead).
 - c. Light fixtures, wall devices, door frames and similar openings in exterior building envelope (beauty bead).

VETERANS MEMORIAL PARK

- d. Stucco casing beads and trim.
- e. Aluminum storefront to stucco (beauty bead).

2.6 LATEX JOINT SEALANTS

- A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.
 - 1. Basis of Design Product: Pecora Corporation; AC-20+.

2.7 ACOUSTICAL JOINT SEALANTS

- A. Acoustical Joint Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
 - 1. Basis of Design Product: Pecora Corporation; AC-20 FTR.

2.8 JOINT SEALANT BACKING

- A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), Type O (open-cell material), Type B (bicellular material with a surface skin), or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.9 MISCELLANEOUS MATERIALS

- A. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- B. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and

VETERANS MEMORIAL PARK

approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.
 - b. Masonry.
 - c. Unglazed surfaces of ceramic tile.
 3. Remove laitance and form-release agents from concrete.
 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
 - a. Metal.
 - b. Glass.
 - c. Porcelain enamel.
 - d. Glazed surfaces of ceramic tile.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 1. Do not leave gaps between ends of sealant backings.
 2. Do not stretch, twist, puncture, or tear sealant backings.
 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 1. Place sealants so they directly contact and fully wet joint substrates.
 2. Completely fill recesses in each joint configuration.
 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

VETERANS MEMORIAL PARK

- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
1. Remove excess sealant from surfaces adjacent to joints.
 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
 4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
 5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.
 - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

3.4 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION 079200

VETERANS MEMORIAL PARK

SECTION 071900 - WATER REPELLENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes penetrating water-repellent treatments for the following vertical and horizontal surfaces:
 1. Clay brick masonry.
 2. Cast-in-place concrete

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
 1. Include manufacturer's printed statement of VOC content.
 2. Include manufacturer's recommended number of coats for each type of substrate and spreading rate for each separate coat.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Applicator.
- B. Product Certificates: For each type of water repellent, from manufacturer.
- C. Warranty: Special warranty specified in this Section.

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: An employer of workers trained and approved by manufacturer.
- B. Mockups: Apply water repellent to each type of substrate required.
 1. Locate each test application as directed by Architect.
 2. Size: 10 sq. ft.
 3. Final approval by Architect of water-repellent application will be from test applications.
- C. Preinstallation Conference: Conduct conference at Project site.

1.6 PROJECT CONDITIONS

- A. Limitations: Proceed with application only when the following existing and forecasted weather and substrate conditions permit water repellents to be applied according to manufacturers' written instructions and warranty requirements:
 1. Mortar has cured for not less than 28 days.
 2. Building has been closed in for not less than 30 days before treating wall assemblies.
 3. Ambient temperature is above 40 deg F and below 100 deg F and will remain so for 24 hours.
 4. Substrate is not frozen and substrate-surface temperature is above 40 deg F and below 100 deg F.
 5. Rain is not predicted within 24 hours.

VETERANS MEMORIAL PARK

6. Not less than 24 hours have passed since surfaces were last wet.
7. Windy conditions do not exist that might cause water repellent to be blown onto vegetation or surfaces not intended to be treated.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace materials that fail to maintain water repellency specified in "Performance Requirements" Article within specified warranty period.
 1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PENETRATING WATER REPELLENTS

- A. Silane, Penetrating Water Repellent: Clear, containing 20 percent or more solids of alkyltrialkoxysilanes; with alcohol, mineral spirits, water, or other proprietary solvent carrier; and with 400 g/L or less of VOCs.
- B. Siloxane, Penetrating Water Repellent: Clear, containing 10 percent or more solids of oligomeric alkylalkoxysiloxanes; with alcohol, ethanol, mineral spirits, water, or other proprietary solvent carrier; and with 400 g/L or less of VOCs.
- C. Silane/Siloxane-Blend, Penetrating Water Repellent: Clear, silane and siloxane blend with 400 g/L or less of VOCs.
- D. Siliconate, Penetrating Water Repellent: Clear, methyl siliconate water repellent with 400 g/L or less of VOCs.
- E. Basis-of-Design Product: Subject to compliance with requirements, provide one of the following products:
 1. Sure Klean Weather Seal Siloxane WB
 2. Hydrozo Enviroseal Double 7 For Brick
 3. Huls Chem-Trete BSM20 and Aqua-Trete

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements and conditions affecting performance of the Work.
 1. Verify that surfaces are clean and dry according to water-repellent manufacturer's requirements. Check moisture content in three representative locations by method recommended by manufacturer.
 2. Inspect for previously applied treatments that may inhibit penetration or performance of water repellents.
 3. Verify that there is no efflorescence or other removable residues that would be trapped beneath the application of water repellent.
 4. Verify that required repairs are complete, cured, and dry before applying water repellent.
- B. Test pH level according to water-repellent manufacturer's written instructions to ensure chemical bond to silica-containing or siliceous minerals.

VETERANS MEMORIAL PARK

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Cleaning: Before application of water repellent, clean substrate of substances that could impair penetration or performance of product according to water-repellent manufacturer's written instructions.
- B. Protect adjoining work, including mortar and sealant bond surfaces, from spillage or blow-over of water repellent. Cover adjoining and nearby surfaces of aluminum and glass if there is the possibility of water repellent being deposited on surfaces. Cover live vegetation.
- C. Coordination with Mortar Joints: Do not apply water repellent until pointing mortar for joints adjacent to surfaces receiving water-repellent treatment has been installed and cured.
- D. Coordination with Sealant Joints: Do not apply water repellent until sealants for joints adjacent to surfaces receiving water-repellent treatment have been installed and cured.
 - 1. Water-repellent work may precede sealant application only if sealant adhesion and compatibility have been tested and verified using substrate, water repellent, and sealant materials identical to those required.
- E.

3.3 APPLICATION

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect the substrate before application of water repellent and to instruct Applicator on the product and application method to be used.
- B. All materials, along with surrounding air, must be maintained above 45 Fahrenheit degrees during application.
- C. Test a small area of surface to insure compatibility with existing conditions, and to establish proper coverage rates.
- D. Do not dilute or alter water repellents.
- E. Apply water repellent from the bottom of the wall up. Initially fog the wall down with a fine mist, followed by flooding the wall with a minimum 8 inch rundown using a manual-pump low-pressure sprayer. Roll or brush out excessive drip areas.
- F. Apply a heavy-saturation coating of water repellent, on surfaces indicated for treatment, using 15 psi-pressure spray with a fan-type spray nozzle, roller or brush to the point of saturation. Apply coating in dual passes of uniform, overlapping strokes. Remove excess material; do not allow material to puddle beyond saturation. Comply with manufacturer's written instructions for application procedure unless otherwise indicated.
- G. Apply a second saturation coating, repeating first application. Comply with manufacturer's written instructions for limitations on drying time between coats and after rainstorm wetting of surfaces between coats. Consult manufacturer's technical representative if written instructions are not applicable to Project conditions.

VETERANS MEMORIAL PARK

3.4 FIELD QUALITY CONTROL

- A. Testing of Water-Repellent Material: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when water repellent is being applied:
 - 1. Owner will engage the services of a qualified testing agency to sample water-repellent material being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
 - 2. Testing agency will perform tests for compliance of water-repellent material with product requirements.
 - 3. Owner may direct Contractor to stop applying water repellents if test results show material being used does not comply with product requirements. Contractor shall remove noncomplying material from Project site, pay for testing, and correct deficiency of surfaces treated with rejected materials, as approved by Architect.

- B. Coverage Test: In the presence of Architect, hose down a dry, repellent-treated surface to verify complete and uniform product application. A change in surface color will indicate incomplete application.
 - 1. Notify Architect seven days in advance of the dates and times when surfaces will be tested.
 - 2. Reapply water repellent until coverage test indicates complete coverage.

3.5 CLEANING

- A. Immediately clean water repellent from adjoining surfaces and surfaces soiled or damaged by water-repellent application as work progresses. Correct damage to work of other trades caused by water-repellent application, as approved by Architect.

- B. Comply with manufacturer's written cleaning instructions.

END OF SECTION 071900

VETERANS MEMORIAL PARK

SECTION 101419 - DIMENSIONAL LETTER SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Fabricated channel dimensional characters.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For dimensional letter signs.
1. Include fabrication and installation details and attachments to other work.
 2. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 3. Show message list, typestyles, graphic elements, and layout for each sign at least half size.
 4. Show locations of electrical service connections.
 5. Include diagrams for power, signal, and control wiring.
- C. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.5 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: For exterior fabricated channel dimensional characters, allow for thermal movements from ambient and surface temperature changes.
1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

VETERANS MEMORIAL PARK

2.2 DIMENSIONAL CHARACTERS

- A. Fabricated Channel Characters: Metal face and side returns, formed free from warp and distortion; with uniform faces, sharp corners, and precisely formed lines and profiles; internally braced for stability and for securing fasteners; and as follows.
1. Manufacturers: Provide products by one of the following:
 - a. APCO Graphics, Inc.
 - b. A. R. K. Ramos Signage Systems.
 - c. ASI Sign Systems, Inc.
 - d. Gemini Incorporated.
 - e. Metallic Arts.
 - f. Nelson-Harkins Industries.
 - g. Poblocki Sign Company, LLC.
 2. Illuminated Characters: Backlighted character construction with LED lighting including transformers, insulators, and other accessories for operability, with provision for servicing and concealing connections to building electrical system. Use tight or sealed joint construction to prevent unintentional light leakage. Space lamps apart from each other and away from character surfaces as needed to illuminate evenly.
 - a. Power: As indicated on electrical Drawings.
 3. Character Material: Sheet or plate aluminum.
 4. Character Height: As indicated.
 5. Character Depth: As indicated.
 6. Finishes:
 - a. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard, in color as selected by Architect from manufacturer's full range. Comply with AAMA 2603 except minimum 1.5 mils dry film thickness.
 7. Mounting: As indicated or manufacturer's standard for size and design of character.
 - a. Hold characters at manufacturer's recommended distance or distance as selected by Architect from wall surface.
- B. Finish: Powder-Coat finish, color: Black

2.3 DIMENSIONAL CHARACTER MATERIALS

- A. Aluminum Sheet and Plate: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.

2.4 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signage, noncorrosive and compatible with each material joined, and complying with the following:
1. Use concealed fasteners and anchors unless indicated to be exposed.
 2. For exterior exposure, furnish stainless-steel devices unless otherwise indicated.
 3. Exposed Metal-Fastener Components, General:
 - a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.
 4. Utilize tamper proof fasteners where exposed.
- B. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

VETERANS MEMORIAL PARK

2.5 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
1. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
 2. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
 3. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.
 4. Internally brace signs for stability and for securing fasteners.
 5. Provide rebates, lugs, and brackets necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.
 6. Utilize tamper proof fasteners where exposed.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 2. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
 3. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with concrete or dissimilar metals, with a heavy coat of bituminous paint.
- B. Mounting Methods: As indicated on Drawings and recommended by signage manufacturer for mounting substrates.
- C. Remove temporary protective coverings and strippable films as signs are installed.

END OF SECTION 101419

VETERANS MEMORIAL PARK

SECTION 107500 - FLAGPOLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes ground-mounted flagpoles made from aluminum.
- B. Owner-Furnished Material: Flags.

1.3 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Flagpole assemblies, including anchorages and supports, shall withstand the effects of gravity loads, and the following loads and stresses within limits and under conditions indicated according to the following design criteria:
 - 1. Wind Loads: Project wind speed and exposure according to NAAMM FP 1001, "Guide Specifications for Design of Metal Flagpoles." and SEI/ASCE 7.
 - 2. Base flagpole design on nylon or cotton flags of maximum standard size suitable for use with flagpole or flag size indicated, whichever is more stringent.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, operating characteristics, fittings, accessories, and finishes for flagpoles.
- B. Shop Drawings: For flagpoles. Include plans, elevations, details, and attachments to other work. Show general arrangement, jointing, fittings, accessories, grounding, anchoring, and support.
 - 1. Include section, and details of foundation system for ground-mounted flagpoles.
- C. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.
- D. Delegated-Design Submittal: For flagpole assemblies indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer, licensed in the State of Florida, responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified professional engineer.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For flagpoles to include in operation and maintenance manuals.

VETERANS MEMORIAL PARK

1.7 QUALITY ASSURANCE

- A. Source Limitations: Obtain flagpole as complete unit, including fittings, accessories, bases, and anchorage devices, from single source from single manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. General: Spiral wrap flagpoles with heavy paper and enclose in a hard fiber tube or other protective container.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Provide products by one of the following:
 1. American Flagpole; a Kearney-National Inc. company.
 2. Baartol Company.
 3. Concord Industries, Inc.
 4. Eder Flag Manufacturing Company, Inc.
 5. Ewing Flagpoles.
 6. Pole-Tech Company Inc.

2.2 FLAGPOLES

- A. Flagpole Construction, General: Construct flagpoles in one piece if possible. If more than one piece is necessary, comply with the following:
 1. Fabricate shop and field joints without using fasteners, screw collars, or lead caulking.
 2. Provide flush hairline joints using self-aligning, snug-fitting, internal sleeves.
- B. Exposed Height: American flag- 40 feet, Military Branch flags- 30 feet.
- C. Aluminum Flagpoles: Provide cone-tapered flagpoles fabricated from seamless extruded tubing complying with ASTM B241/B241M, Alloy 6063, with a minimum wall thickness of 3/16 inch.
- D. Metal Foundation Tube: Manufacturer's standard corrugated-steel foundation tube, not less than 0.064-inch nominal wall thickness. Provide with 3/16-inch steel bottom plate and support plate; 3/4-inch diameter, steel ground spike; and steel centering wedges welded together. Galvanize steel after assembly. Provide loose hardwood wedges at top of foundation tube for plumbing pole.
 1. Provide flashing collar of same material and finish as flagpole.

2.3 FITTINGS

- A. Finial Ball: Manufacturer's standard flush-seam ball, sized as indicated or, if not indicated, to match flagpole-butt diameter.
 1. 0.063-inch spun aluminum, finished to match flagpole.
- B. Finial Eagle: Manufacturer's standard, sized as standard with manufacturer for flagpole size indicated.
 1. Cast aluminum, finished to match flagpole.

VETERANS MEMORIAL PARK

- C. Internal Halyard, Winch System: Manually operated winch with control stop device and removable handle, stainless-steel cable halyard, and concealed revolving truck assembly with plastic-coated counterweight and sling. Provide flush access door secured with cylinder lock. Finish truck assembly to match flagpole.
 - 1. Halyard Flag Snaps: Provide two stainless-steel swivel snap hooks per halyard.
 - a. Provide with neoprene or vinyl covers.

2.4 MISCELLANEOUS MATERIALS

- A. Drainage Material: Crushed stone, or crushed or uncrushed gravel; coarse aggregate.
- B. Sand: ASTM C33, fine aggregate.
- C. Elastomeric Joint Sealant: Single-component neutral-curing silicone joint sealant complying with requirements in Section 079200 "Joint Sealants" for Use NT (nontraffic) and for Use M, G, A, and, as applicable to joint substrates indicated, for Use O.
- D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187.

2.5 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.6 ALUMINUM FINISHES

- A. Natural Satin Finish: AA-M32, fine, directional, medium satin polish; buff complying with AA-M20; seal aluminum surfaces with clear, hard-coat wax.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, including foundation; accurate placement, pattern, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare uncoated metal flagpoles that are set in foundation tubes by painting below-grade portions with a heavy coat of bituminous paint.
- B. Foundation Excavation: Excavate to neat clean lines in undisturbed soil. Remove loose soil and foreign matter from excavation and moisten earth before placing concrete. Place and compact drainage material at excavation bottom.
- C. Provide forms where required due to unstable soil conditions and for perimeter of flagpole base at grade. Secure and brace forms to prevent displacement during concreting.

VETERANS MEMORIAL PARK

- D. Place concrete, as specified in Section 033000 "Cast-in-Place Concrete." Compact concrete in place by using vibrators. Moist-cure exposed concrete for not less than seven days or use nonstaining curing compound.
- E. Trowel exposed concrete surfaces to a smooth, dense finish, free of trowel marks, and uniform in texture and appearance. Provide positive slope for water runoff to perimeter of concrete base.

3.3 FLAGPOLE INSTALLATION

- A. General: Install flagpoles where shown and according to Shop Drawings and manufacturer's written instructions.
- B. Ground Set: Place foundation tube, center, and brace to prevent displacement during concreting. Place concrete. Plumb and level foundation tube and allow concrete to cure. Install flagpole, plumb, in foundation tube.
 - 1. Foundation Tube: Place tube seated on bottom plate between steel centering wedges and install hardwood wedges to secure flagpole in place. Place and compact sand in foundation tube and remove hardwood wedges. Seal top of foundation tube with a 2-inch layer of elastomeric joint sealant and cover with flashing collar.

END OF SECTION 107500

VETERANS MEMORIAL PARK

SECTION 321316 - DECORATIVE CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes stamped concrete paving.
- B. Related Requirements:
 - 1. Section 033000 "Cast-in-Place Concrete" for general building applications of concrete.
 - 2. Section 321313 "Concrete Paving" for cast-in-place concrete paving with other finishes, curbs and gutters, stamped detectable warnings, pavement markings, and wheel stops.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Verification: For each type of exposed pattern or texture indicated.
- C. Other Action Submittals:
 - 1. Design Mixtures: For each decorative concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer, [ready-mix concrete manufacturer and testing agency.
- B. Material Certificates: For the following, from manufacturer:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Admixtures.
 - 4. Applied finish materials.
 - 5. Joint fillers.
- C. Material Test Reports: For each of the following:
 - 1. Aggregates.
- D. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer of decorative concrete paving systems.

VETERANS MEMORIAL PARK

- B. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- C. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from same manufacturer's plant, and obtain each aggregate from single source.
- E. Concrete Testing Service: Engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures.
- F. ACI Publications: Comply with ACI 301 unless otherwise indicated.
- G. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Build mockups of full-thickness sections of decorative concrete paving to demonstrate typical joints; surface color, pattern, and texture; curing; and standard of workmanship.
 - 2. Build mockups of decorative concrete paving in the location and of the size indicated or, if not indicated, build mockups where directed by Architect and not less than 96 inches by 96 inches.
 - 3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- H. Preinstallation Conference: Conduct conference at [Project site] <Insert location>.
 - 1. Review methods and procedures related to decorative concrete paving, including but not limited to, the following:
 - a. Concrete mixture design.
 - b. Quality control of concrete materials and decorative concrete paving construction practices.
 - 2. Require representatives of each entity directly concerned with decorative concrete paving to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Decorative concrete paving Installer.
 - e. Manufacturer's representative of decorative concrete paving system.

1.6 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
 - 1. Use flexible or uniformly curved forms for curves of a radius of 100 feet or less.

VETERANS MEMORIAL PARK

- B. Forms for Textured Finish Concrete: Units of face design, size, arrangement, and configuration indicated. Provide solid backing and form supports to ensure stability of textured form liners.
- C. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from as-drawn steel wire into flat sheets.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening welded wire reinforcement in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire or plastic, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 - 1. Portland Cement: ASTM C 150, white portland cement Type I.
- B. Normal-Weight Aggregates: ASTM C 33, Class 4S, uniformly graded. Provide aggregates from a single source.
 - 1. Maximum Aggregate Size: 3/4 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: Potable and complying with ASTM C 94/C 94M.
- D. Air-Entraining Admixture: ASTM C 260.
- E. Liquid Release Agent: Manufacturer's standard, clear, evaporating formulation that facilitates release of stamp mats and texture rollers.
 - 1. Basis of Design Product: Sika Corporation; Scofield Liquid Release BG.

2.4 STAMPING DEVICES

- A. Stamp Mats: Semirigid polyurethane mats with projecting textured and ridged underside capable of imprinting texture and joint patterns on plastic concrete.
 - 1. Basis of Design Product: Sika Corporation; Scofield Lithotex Pavemaker Stamp Tool.

2.5 CURING MATERIALS

- A. Curing Paper: Nonstaining, waterproof paper, consisting of two layers of kraft paper cemented together and reinforced with fiber, and complying with ASTM C 171.
- A. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.
 - 1. Basis of Design Product: Sika Corporation, Inc.; Sika Film. A comparable product by one of the following manufacturers is also acceptable:
 - a. BASF Construction Chemicals, LLC.
 - b. Dayton Superior Corporation.

VETERANS MEMORIAL PARK

- c. Euclid Chemical Company.
- d. L&M Construction Chemicals, Inc.
- e. Meadows, W. R., Inc.

2.6 RELATED MATERIALS

- A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.
- B. Polyethylene Film: ASTM D 4397, 1 mil thick, clear.

2.7 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 - 1. Compressive Strength (28 Days): 3000 psi.
 - 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.45.
 - 3. Slump Limit: 4 inches, plus or minus 1 inch.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 - 1. Air Content: 5-1/2 percent plus or minus 1.5 percent for 1-1/2-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to [0.15] [0.30] percent by weight of cement.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Furnish batch certificates for each batch discharged and used in the Work.
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
 - 2. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
 - 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

VETERANS MEMORIAL PARK

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below decorative concrete paving to identify soft pockets and areas of excess yielding.
 - 1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph).
 - 2. Proof-roll with a pneumatic-tired and loaded, 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch according to requirements in Section 312000 "Earth Moving."
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.
- B. Protect adjacent construction from discoloration and spillage during application of release agents.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
 - 1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.

VETERANS MEMORIAL PARK

- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
 - 1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 - 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 - 6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.
 - a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.
- B. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- C. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- D. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms.

VETERANS MEMORIAL PARK

Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement joint devices.

- G. Screed paving surface with a straightedge and strike off.
- H. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- I. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1.
 - 2. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 3. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 4. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

3.8 STAMPING

- A. Mat Stamping: After floating and while concrete is plastic, apply mat-stamped finish.
 - 1. Liquid Release Agent: Apply liquid release agent to the concrete surface and the stamp mat. Uniformly mist surface of concrete at a rate of 5 gal/1000 sq. ft.
 - 2. After application of release agent, accurately align and place stamp mats in sequence.
 - 3. Uniformly load mats and press into concrete to produce required imprint pattern and depth of imprint on concrete surface. Gently remove stamp mats. Hand stamp edges and surfaces unable to be imprinted by stamp mats.
 - 4. Remove residual release agent according to manufacturer's written instructions, but no fewer than three days after stamping concrete. High-pressure-wash surface and joint patterns, taking care not to damage stamped concrete. Control, collect, and legally dispose of runoff.

3.9 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

VETERANS MEMORIAL PARK

- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Paper: Cure with unwrinkled curing paper in pieces large enough to cover the entire width and edges of slab. Do not lap sheets. Fold curing paper down over paving edges and secure with continuous banks of earth to prevent displacement or billowing due to wind. Immediately repair holes or tears in paper.

3.10 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 - 1. Elevation: 3/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-foot long, unlevelled straightedge not to exceed 1/2 inch.
 - 4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.
 - 5. Joint Spacing: 3 inches.
 - 6. Contraction Joint Depth: Plus 1/4 inch, no minus.
 - 7. Joint Width: Plus 1/8 inch, no minus.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 - 3. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
 - 5. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 - 6. Compressive-Strength Tests: ASTM C 39/C 39M; test one specimen at seven days and two specimens at 28 days.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project

VETERANS MEMORIAL PARK

identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
- G. Decorative concrete paving will be considered defective if it does not pass tests and inspections.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- I. Prepare test and inspection reports.

3.12 REPAIRS AND PROTECTION

- A. Remove and replace decorative concrete paving that is broken or damaged or does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Detailing: Grind concrete "squeeze" left from tool placement. Color ground areas with slurry of color hardener mixed with water and bonding agent. Remove excess release agent with high-velocity blower.
- C. Protect decorative concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain decorative concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

3.13 DECORATIVE CONCRETE PAVING SCHEDULE

- A. Patterned Decorative Concrete Paving:
 - 1. Locations: Install at areas indicated on Drawings.
 - 2. Field Patterning Method: Stamped.
 - a. Texture and Pattern: As indicated on Drawings or as selected from manufacturer's full range.

END OF SECTION 321316

VETERANS MEMORIAL PARK

SECTION 321400 - UNIT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Concrete pavers for pedestrian walkways.

1.3 ACTION SUBMITTALS

- A. Product Data:
 - 1. For materials other than water and aggregates.
 - 2. For pavers.
- B. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C136.
- C. Samples for Verification: For full-size units of each type of unit paver indicated.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

1.5 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 CLAY PAVERS

- A. Clay Pavers, Solid Interlocking Paving Units: Complying with ASTM C936/C936M, made from normal-weight aggregates.
 - 1. Basis of Design Product: Endicott Clay products, Invisi-Lug Clay pavers

VETERANS MEMORIAL PARK

2. Thickness: 2-3/8 inches.
3. Face Size and Shape: 4"X12"
4. Color: Manganese Black

- B. Substitution requests by contractor are acceptable upon Architect review and approval for products that are equal or better than specified.

2.3 CURBS

- A. Precast Concrete Curbs: Made from normal-weight concrete with a compressive strength not less than 5000 psi and water absorption not more than 5 percent, in shapes and sizes indicated. Designed as a concrete header restraint for below finished grade applications and as detailed on Drawings.

2.4 AGGREGATE SETTING-BED MATERIALS

- A. Graded Aggregate for Subbase: Sound, crushed stone or gravel complying with ASTM D448 for Size No. 57.
- B. Graded Aggregate for Base: Sound, crushed stone or gravel complying with ASTM D448 for Size No. 8.
- C. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C33/C33M for fine aggregate.
- D. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 sieve and no more than 10 percent passing No. 200 sieve. Complies with ASTM C144
- E. Herbicide: Commercial chemical for weed control, registered with the EPA. Provide in granular, liquid, or wettable powder form.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
 1. For concrete pavers, a block splitter may be used.
- D. Joint Pattern: As indicated.

VETERANS MEMORIAL PARK

- E. Tolerances:
 - 1. Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.

3.3 AGGREGATE SETTING-BED APPLICATIONS

- A. Compact soil subgrade uniformly to at least 95 percent of ASTM D698 laboratory density.
- B. Place aggregate subbase and base, compact by tamping with plate vibrator, and screed to depth indicated.
- C. Place leveling course and screed to a thickness of 1 to 1-1/2 inches, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
- D. Treat leveling course with herbicide to inhibit growth of grass and weeds.
- E. Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch, being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.
 - 1. When installation is performed with mechanical equipment, use only unit pavers with spacer bars on sides of each unit.
- F. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
 - 1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
 - 2. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
 - 3. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
- G. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.
- H. Do not allow traffic on installed pavers until sand has been vibrated into joints.
- I. Repeat joint-filling process 30 days later.

3.4 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

END OF SECTION 321400

VETERANS MEMORIAL PARK

SECTION 321813 - ARTIFICIAL TURF SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 1. Artificial turf surfacing on compacted subgrade.
 2. Drainage provisions.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include manufacturer's written installation instructions.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: From manufacturer.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended maintenance procedures.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer with documented experience for similar projects.

1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard written warranty for the following durations, commencing on the date of Substantial Completion:
 1. Artificial Turf Materials: 10 years, including 5 years for fade resistance.
 2. Installation: One year.

PART 2 - PRODUCTS

2.1 ARTIFICIAL TURF SURFACING

- A. Basis of Design Manufacturer: Southwest Greens of Florida, LLC.
- B. Artificial Turf: Polyurf Grass Fiber in color "Turf Green."

VETERANS MEMORIAL PARK

1. Tufted Pile Height: 1.25 inches.
 2. Tufted Face Weight: 68 oz./sq. yd.
 3. Primary Backing: 7 oz./sq. yd. Stabilized dual layered woven polypropylene.
 4. Secondary Backing: 22 oz./sq. yd. Urethane composition.
- C. Subgrade: Compacted aggregate base over compacted sand. Refer to Drawings for additional requirements.
1. Weed Barrier: Geotech weed barrier recommended by manufacturer, for installation over compacted aggregate base.
- D. Drainage Provisions: Evenly spaced perforations to enable pass-through drainage
- E. Artificial Turf Securement: Provide grass spikes of type, size, and spacing as recommended by manufacturer.
1. Perimeter Securement: Attach turf recycled plastic nailers as detailed on Drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive artificial turf surfacing for compliance with requirements and other conditions affecting installation and performance of the Work.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions.

END OF SECTION 321813



PROCUREMENT DEPARTMENT

15470 FLIGHT PATH DRIVE ♦ BROOKSVILLE, FLORIDA 34604
P 352.754.4020 ♦ F 352.754.4199 ♦ W www.HernandoCounty.us

ADDENDUM # ONE (1)

TO

THE CONTRACT DOCUMENTS FOR

SOLICITATION NO. 24-CG00852/EK - Construction of Veterans Memorial Monument (Rebid)

IN

HERNANDO COUNTY, FLORIDA

Bidders are required to acknowledge receipt of this Addendum via OpenGov prior to the time of the Bid Opening.

The following changes, additions and/or deletions are hereby made a part of the Contract Documents for the above-referenced Solicitation as fully and completely as if the same were fully set forth therein:

A. QUESTIONS AND ANSWERS

- 1.Q. The ITB shows the non-mandatory pre-bid meeting as 8/28/24 at 10:00 AM but Page 5 of the Construction of Veterans Memorial Monument (Rebid) download shows it to be 8/28/24 at 9:00 AM at the Administration Building. Please confirm which time is correct.**
- 1.A. The Pre-Bid meeting will be held at 10:00 AM. Below shows the update to updated Section, 2.2. NON-MANDATORY Pre-Bid Conference with deletion in RED and update in GREEN.**

NON-MANDATORY Pre-Bid Conference will be held
 Wednesday, August 28, 2024,
 910:00 am
 at the
 Hernando County Administration Building
 15470 Flight Path Dr.
 Brooksville, FL 34604.

- 2.Q. What is the engineers estimate or Budget for the project??**
- 2.A. See Section 4.1.AG, Definition of Terms, Project Budget/Estimate for more information**

**BOARD OF COUNTY COMMISSIONERS
OF HERNANDO COUNTY, FLORIDA**

Erin L. Kluis
Briggs

Digitally signed by Erin L. Kluis Briggs
 Date: 2024.08.26 16:30:00 -04'00'

For: Carla Rossiter-Smith, MSM PMP,
Chief Procurement Office



PROCUREMENT DEPARTMENT

15470 FLIGHT PATH DRIVE ♦ BROOKSVILLE, FLORIDA 34604
P 352.754.4020 ♦ F 352.754.4199 ♦ W www.HernandoCounty.us

ADDENDUM # TWO (2)

TO

THE CONTRACT DOCUMENTS FOR

SOLICITATION NO. 24-CG00852/EK - Construction of Veterans Memorial Monument (Rebid)

IN

HERNANDO COUNTY, FLORIDA

Bidders are required to acknowledge receipt of this Addendum via OpenGov prior to the time of the Bid Opening.

The following changes, additions and/or deletions are hereby made a part of the Contract Documents for the above-referenced Solicitation as fully and completely as if the same were fully set forth therein:

A. QUESTIONS AND ANSWERS

- 3.Q. Please provide different link or the actual pdf file for the Bid Bond form. Clicking on the link on page 123 (10.4.3. Bid Bond Form *) opens a page with an error message for us. May you provide that form with the next addendum as a pdf version please,**
- 3.A.** All forms and links are available for download when utilizing Hernando County Procurement Department's eprocurement portal, OpenGov, to view the solicitation. The link to the project is provided here. [Construction of Veterans Memorial Monument \(Rebid\)](#)

**BOARD OF COUNTY COMMISSIONERS
OF HERNANDO COUNTY, FLORIDA**

Erin L. Kluis Digitally signed by
Erin L. Kluis Briggs
Briggs Date: 2024.09.06
14:43:37 -04'00'

For: Carla Rossiter-Smith, MSM PMP,
Chief Procurement Office