

# CITY OF SANIBEL

## PROJECT MANUAL

### POND APPLE PARK POST HURRICANE IAN POND BANK RESTORATION

ITB-UT-5-0-2025/BS

August 18, 2025



*City of Sanibel*  
*800 Dunlop Road, Sanibel, FL 33957*  
*(239)472-6397*

**BIDS DUE BY:** 2:30 PM, (ET) September 18, 2025

**PRE-BID CONFERENCE:** NONE

**NO QUESTIONS WILL BE ACCEPTED AFTER:** 5:00 PM, (ET) September 8, 2025, all questions must be submitted in writing to [jason.goodrich@mysanibel.com](mailto:jason.goodrich@mysanibel.com) and received by stated time.

**SEALED ENVELOPES MUST BE MARKED WITH THE TITLE OF THE BID, BID NUMBER, NAME AND ADDRESS OF THE BIDDER.**

Courier Packages (FedEx, UPS) shall clearly state on the outer packaging, the Invitation to Bid Title and the Invitation to Bid Number. If the proper information is not on the courier's outer packaging the Bid/RFP may be sent back to the Vendor without being opened and/or given consideration for that project.

POND APPLE PARK POST HURRICANE IAN  
POND BANK RESTORATION

TABLE OF CONTENTS

GENERAL SPECIFICATIONS

Advertisement for Bids	A-1
Information for Bidders	IB-1
Proposal Form	P-1
Specimen Form of Contract	CF-1
Specimen Form of Contract Performance and Payment Bond	CF-3
Specimen Form of Periodic Estimate for Partial Payment	CF-6
Specimen Form of Contractor's Certificate	CF-9
Specimen Form of Contract Change Order	CF-10

GENERAL CONDITIONS

2.1 Contract Documents	GC-1
2.2 Owners-Contractor-Engineer Relations	GC-3
2.3 Materials, Equipment & Workmanship	GC-8
2.4 Insurance, Legal Responsibility & Safety	GC-11
2.5 Progress and Completion of Work	GC-15
2.6 Payments to Contractor	GC-18
2.7 Control of the Work	GC-21

FLORIDA DEP STANDARD TERMS AND CONDITIONS APPLICABLE  
TO GRANT AGREEMENTS

14 Pages

SPECIAL PROVISIONS

SP-1

TECHNICAL SPECIFICATIONS

DIVISION 1 – GENERAL REQUIREMENTS

- 01010 – Summary of Work
- 01130 – Measurement and Payment
- 01150 – Protection of Existing Facilities
- 01200 – Project Meetings
- 01330 – Submittals

DIVISION 2 – SITEWORK

- 101 - Mobilization
- 104 - Prevention, Control, and Abatement of Erosion and Water Pollution
- 120 - Excavation and Embankment
- 145 - Geosynthetic Reinforcement
- 570 - Performance Turf
- 985 - Geosynthetic Materials
- 02375 - Cellular Confinement System (GeoCell)

POND APPLE PARK POST HURRICANE IAN  
POND BANK RESTORATION

TABLE OF CONTENTS (Continued)

ADDITIONAL TECHNICAL INFORMATION

Pond Apple Park Post Hurricane Ian Pond Bank Restoration Plans  
(Included by Reference)

3 Sheets

CITY OF SANIBEL, FLORIDA

ADVERTISEMENT FOR BIDS

Legal Notice is hereby given that sealed proposals will be received at the Office of the Procurement Manager, City of Sanibel, Florida, at City Hall, 800 Dunlop Road, Sanibel, until 2:30 P.M., on Thursday September 18, 2025 and shortly thereafter will be publicly opened and read aloud. Any proposal offered later than the above time will be returned unopened.

The work for which proposals are to be received consists of the following:

**POND APPLE PARK POST HURRICANE IAN POND BANK RESTORATION**

Proposals shall be properly and completely executed on a standard proposal form. Each proposal shall be accompanied by an acceptable certified check or cashier's check made payable to the City of Sanibel, or an acceptable Bidders Bond, in an amount not less than five percent (5%) of the total bid price.

The Contractor to whom the work is awarded will be required to furnish an acceptable Surety Bond in an amount of one hundred percent (100%) of the contract price.

No bidder may withdraw his proposal within a period of ninety (90) days following the date set for receiving proposals. The City of Sanibel reserves the right to hold any and all bids for a period of not more than ninety (90) days and said bids shall be and remain valid and in full force and effect during said period. The City of Sanibel reserves the right to reject any and all proposals and to waive informalities.

Plans and Specifications for the work may be obtained online at:

<https://www.mysanibel.com/297/City-Bids>

---

Brett Schira  
Procurement Manager  
AFFIDAVIT REQUESTED  
PUBLISH ONE TIME  
Fort Myers News-Press  
August 18, 2025

## **INFORMATION FOR BIDDERS**

### **1.01 SCOPE**

A. The contract work provides for the **Pond Apple Park Post Hurricane Ian Pond Bank Restoration** and other related items pertinent and incidental thereto including the furnishing of all labor, materials, supplies, equipment, work and services, ready for satisfactory and continuous operation, in accordance with the drawings and specifications.

B. The work included in this contract is described briefly as follows:

The Work to be done consists of furnishing all labor, equipment, materials and services required to repair the pond banks of Pond 3 at Pond Apple Park. Existing Pond 3 bank grades requiring mitigation are assumed from visible inspection. These conditions and the associated amount of fill to be verified by Contractor. Please be advised that the project is located on Sanibel Island, which is a barrier island with one access road, to and from, that is subject to congestion.

C. The work included in this contract has an anticipated start date in November 2025.

### **1.02 CONTRACT DOCUMENTS AND SPECIFICATIONS**

A. Work to be performed shall be in accordance with drawings and specifications prepared by Kimley Horn and Associates, Inc. and the City of Sanibel.

### **1.03 BIDDER TO EXAMINE SITE**

A. All bidders are to inform themselves of the conditions under which the work is to be performed, the site of the work, the obstacles which may be encountered, and all other relevant matters concerning the work to be performed. The successful bidder will not be allowed any extra compensation by reason of any matter or thing concerning which said bidder might have fully informed themselves because of their failure to have so informed themselves prior to the bidding.

### **1.04 INFORMATION NOT GUARANTEED**

A. All information given relating to borings, material encountered, and groundwater is from the reports of the boring CONTRACTOR. Such information is furnished only for the information and convenience of the bidders. It is understood and agreed that the OWNER does not warrant or guarantee as to the accuracy or completeness of such information. Each bidder must satisfy themselves regarding the character, quantities, and conditions of the various materials and work to be done.

B. It is further understood and agreed that the bidder or the CONTRACTOR will not use any information made available to themselves or obtained by any examination made by

them in any manner as a basis or ground of claim or demand of any nature against the OWNER arising from or by reason of any variance which may exist between the information offered and the actual materials and structures encountered during the construction work.

#### **1.05 QUESTIONS REGARDING CONTRACT DOCUMENTS**

- A. In general, no answer will be given in reply to an oral question if the question involves an interpretation of the intent or meaning of the drawings or contract documents, or the equality or use of products or methods other than those definitely designated or described on the drawings or in the specifications. Any information given to bidders other than by means of the drawings and contract documents or by addenda as described below is given informally and shall not be used as the basis of a claim against the OWNER or the Engineer.
- B. To receive consideration, such questions shall be submitted in writing to the OWNER at least **TEN (10)** days before the advertised date for receipt of bids. If the question involves equality or use of products or methods, it must be accompanied by drawings, specifications, or other data, in sufficient detail to enable the OWNER to determine the equality or suitability of the product or method. In general, the OWNER will neither approve nor disapprove particular products prior to the opening of the bids; such products will be considered when offered by the CONTRACTOR for incorporation into the work.
- C. The OWNER will arrange as addenda, which shall become a part of the Contract, all questions received as above provided, with his decision regarding each. Addenda will be posted at least **FIVE (5)** days prior to the receipt of bids. It shall be the responsibility of the CONTRACTOR, prior to submitting a proposal, to check the DemandStar online marketplace to download any and all addenda associated with the project. CONTRACTOR shall acknowledge issued addenda on Proposal document page (P-2).
- D. Unless such action shall have been taken by the CONTRACTOR and approval obtained, he agrees to use the product or method designated or described in the specifications or as amended by these addenda.

#### **1.06 PROPOSAL FORM**

- A. All bids must be submitted upon the Proposal Form which will be furnished by the OWNER. The Proposal Form shall be completely executed and shall give the price bid for each item of work proposed, both in words and figures, and shall be signed by the bidder.
- B. In the event of a discrepancy between the prices written in words and prices written in figures, the prices written in words shall govern.

- C. The successful bidder shall be prepared to complete the work within NINETY (90) calendar days of the Notice to Proceed.

#### **1.07 LETTER FROM SURETY**

- A. The CONTRACTOR shall submit with their executed bid proposal a letter or statement from their surety company that it will execute and deliver a one hundred percent (100%) Performance and Payment Bond.

#### **1.08 AWARD OF CONTRACT**

- A. Lump Sum Proposals - The award of Contract shall be made to the low, responsive and responsible bidder on the lump sum proposals submitted for the work. The Contract shall be deemed as having been awarded when formal notice shall have been served upon the successful bidder by an officer or agent of the OWNER duly authorized to give such notice.

B. Unit Price Proposals

- (1) The award of the Contract will be made to the lowest responsible bidder on the total bid price given on the Proposal Form, page P-1. The Contract shall be deemed as having been awarded when formal notice shall have been served upon the successful bidder by an officer or agent of the OWNER duly authorized to give such notice.
- (2) The quantities listed in the unit price proposal form are to be considered as approximate and are to be used for the comparison of bids only. The unit prices to be tendered by the bidders are to be tendered expressly for the scheduled quantities, as they may be increased or decreased as hereinafter provided. Payments, except for lump sum items in the unit price Contract, will be made to the CONTRACTOR for the actual quantities of work performed or materials furnished in accordance with the plans and specifications; and it is understood that the scheduled quantities of work to be done and materials to be furnished may each be increased or diminished as hereinbefore provided without in any way invalidating the unit price bid. Where there is a conflict between the unit price and the extension thereof made by the bidder, the unit price shall govern, and the Engineer shall be authorized to make a correct extension of such unit bid price and to use such corrected extension in comparing bids.
- (3) When bids are requested on "Alternate" items, the City reserves the right to select the lowest responsible bidder based upon either the base bid or the base bid with any or all of the alternate bid prices.
- (4) The City reserves the right to accept or reject any or all bids and to waive any formal irregularities in the bids, when deemed to be in the best interest of the City.

### **1.09 BID SECURITY**

- A. Each bid shall be accompanied by a cashier's check made payable to the OWNER or an acceptable bidder's bond in an amount of not less than five percent (5%) of the total bid price. The checks will be returned to all except the three lowest formal bidders within three days after the date of opening the bids. Any checks remaining with the OWNER shall be returned upon execution of a contract.

### **1.10 EXPERIENCE AND ABILITY OF CONTRACTOR**

- A. It is the intent of the OWNER not to award the Contract to any bidder who does not furnish satisfactory evidence they have the ability and experience in this class of work, and that they have sufficient capital and plant to enable them to prosecute the same successfully and to complete it in the time named in the proposal. CONTRACTOR shall have a minimum of **FIVE (5)** years' experience with similar projects.

### **1.11 EXECUTION OF CONTRACT**

- A. The successful bidder to whom the Contract is awarded shall be required to execute **three (3)** copies of the Construction Contract and **three (3)** copies of the Performance and Payment Bond.

### **1.12 FORFEITURE OF BID SECURITY**

- A. In the event that the party to whom the Contract is awarded shall fail or neglect to execute the Contract and furnish satisfactory bonds within TEN (10) days after the OWNER has notified him that the Contract is ready for execution, the OWNER may determine that the bidder abandoned the Contract, and thereupon the proposal and acceptance shall be null and void; and the security accompanying the proposal shall be forfeited to and retained by the OWNER as liquidated damages for such failure and neglect, and to indemnify the OWNER for any loss which may be sustained by failure of the bidder to execute the Contract. After the execution of the Contract and the acceptance of the bonds by the OWNER, the bid securities which have been retained by the OWNER shall be returned to the respective bidders.

### **1.13 UNAVAILABILITY OF MATERIALS**

- A. Bids must be based on use of the materials specified, subject to the provisions of any addenda issued. If the CONTRACTOR is unable to furnish or use any of the materials or equipment specified because of any order by a governmental agency limiting the manufacture or use, or because of the supply situation in the general market for such material or equipment, the CONTRACTOR shall offer substitutes therefor. The substitutes shall be suitable for the purpose, considering the factors of quality, serviceability, appearance, and maintenance. No substitute shall be used until it has been approved by the Engineer.

- B. No consideration will be given to the use of substitutes on account of market conditions unless the CONTRACTOR demonstrates that for the item in question, CONTRACTOR placed their order and submitted shop drawings without delay, that CONTRACTOR has shown due diligence in attempting to locate the item as specified, and that the unavailability is due to market conditions in general throughout the particular industry.
- C. If substitutes are used in the work, the compensation to be paid to the CONTRACTOR shall be subject to review and adjustment. As a general principle, if the Engineer shall determine that the substitute will be less satisfactory, the CONTRACTOR shall allow a credit to the OWNER; only "under unusual circumstances shall there be an increase in" compensation to the CONTRACTOR on account of substitution. The basis upon which the amount of price adjustments will be founded shall be the cost of the appropriate items at the time the bids were opened.

#### **1.14 LOCAL LABOR AND MATERIALS**

- A. Whenever possible, the CONTRACTOR, their sub-contractors, material personnel, or others who employ labor, shall employ such labor locally.

#### **1.15 NONDISCRIMINATION IN EMPLOYMENT**

- A. Contracts for work under this proposal may obligate the CONTRACTOR and sub-contractors not to discriminate in employment practices.
- B. Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the Contract.

#### **1.16 RIGHT-OF-ACCESS**

- A. The CONTRACTOR agrees that a representative of the OWNER or Engineer will have access to the work wherever it is in preparation of progress and that the CONTRACTOR will provide facilities for such access and inspection.

#### **1.17 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION**

- A. The successful bidder shall be responsible for all obligations prescribed as employer obligations under Chapter XVII of Title 29, Code of Federal Regulations, Part 1926, otherwise known as "Safety and Health Regulations for Construction."

#### **1.18 UTILITIES**

- A. All existing utility systems which conflict with the construction of the work herein shall be relocated or temporarily removed and replaced as required. Such relocating or temporary removal and replacement shall be accomplished at the expense of the

CONTRACTOR, and the work shall be done by the Utility unless the Utility approves in writing that the work may be done by the CONTRACTOR.

- B. The CONTRACTOR shall make all necessary applications and arrangements and pay all fees and charges for electrical energy for power and light required for the construction of this Contract during its entire progress. CONTRACTOR shall provide and pay for all temporary wiring, switches, connections and meters.

### **1.19 EASEMENTS**

- A. The OWNER will obtain right-of-way easements over and through certain private lands for the construction and rehabilitation. The width or limits of such rights-of-way will be defined by the OWNER before the work or construction shall begin. If the methods of construction employed by the CONTRACTOR are such as to require the use of land beyond the limits obtained, CONTRACTOR shall make their own agreements with the property owners affected for the use of such additional land and submit a copy of the agreement to the "owner".
- B. In all such easement rights-of-way, the CONTRACTOR shall be required to carefully remove the Owner's fences, or other obstacles to the construction procedure, and replace the same after the work is installed. The backfilling shall be to the grade of the existing ground level or to the grade as established by the Owner in the event the Owner permits the deposit of excess material upon such land.
- C. The cost of all such restoration of property shall be included and no additional payment will be allowed for this work.

### **1.20 OPERATIONS WITHIN RIGHT-OF-WAY**

- A. In public thoroughfares, all operations of the CONTRACTOR, including those of temporary nature, must be confined within the applicable right-of-way limits. If the methods of the construction employed by the CONTRACTOR are such as to require the use of land beyond the public thoroughfares, CONTRACTOR shall make their own agreements with the property owners affected for the use of such additional land and submit a copy of the agreement to the "owner".

### **1.21 PUBLIC RECORDS**

- A. OWNER is a public agency subject to Chapter 119, Florida Statutes, the Public Records Law. As a CONTRACTOR or service provider to OWNER, CONTRACTOR is also subject to the Public Records Law pursuant to Section 119.0701, Florida Statutes, and shall comply with Florida's Public Records Law. Unless specifically exempted by Florida law, in whole or part, the CONTRACTOR shall:
  - (1) Keep and maintain public records required by the OWNER in order to perform the service. This shall include all records relating to CONTRACTOR'S services

provided to the OWNER and includes “all documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics or means of transmission.”

- (2) Upon request from the OWNER’S custodian of public records, provide the OWNER with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (3) 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 contract term and following completion of the contract if the CONTRACTOR does not transfer the records to the OWNER.
- (4) Upon completion of the contract, transfer, at no cost to the OWNER, all public records in possession of the CONTRACTOR, or keep and maintain public records required by the OWNER to perform the service. If the CONTRACTOR transfers all public records to the OWNER upon completion of the contract, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the contract, the CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the OWNER, upon request from the OWNER’S custodian of public records, in a format that is compatible with the information technology systems of the OWNER.

- B. As required by Section 119.0701(2)(a), the following contact information is provided to the CONTRACTOR in the format required by statute:

**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:**

**SANIBEL CITY CLERK  
800 DUNLOP ROAD  
SANIBEL, FLORIDA 33957  
(239) 472-3700  
[scotty.kelly@mysanibel.com](mailto:scotty.kelly@mysanibel.com)**

## **1.22 E-Verify**

- A. In compliance with Section 448.095, Fla. Stat., CONTRACTOR and its sub-contractor must be registered with and use the E-Verify system to verify work authorization status of all employees hired after January 1, 2021.
- (1) CONTRACTOR shall require each of its sub-contractors to provide CONTRACTOR with an affidavit stating that the sub-contractor does not employ, contract with, or sub-contract with an unauthorized alien. CONTRACTOR shall maintain a copy of the sub-contractor's affidavit as part of and pursuant to the records retention requirements of this Agreement.
  - (2) The OWNER, CONTRACTOR, or any sub-contractor 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.
  - (3) The OWNER, upon good faith belief that a sub-contractor knowingly violated the provisions of this section, but CONTRACTOR otherwise complied, shall promptly notify CONTRACTOR, and CONTRACTOR shall immediately terminate the contract with the sub-contractor.
  - (4) 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 OWNER 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 CONTRACTOR is liable for any additional costs incurred by the OWNER as a result of termination of any contract for a violation of this section.
  - (5) Subcontracts. CONTRACTOR or sub-contractor shall insert in any subcontracts the clauses set forth in this section, including this subsection, requiring the sub-contractor to include these clauses in any lower tier subcontracts. CONTRACTOR shall be responsible for compliance by any sub-contractor or lower tier sub-contractor with the clauses set forth in this section.

PROPOSAL

CITY OF SANIBEL, FLORIDA

**POND APPLE PARK POST HURRICANE POND BANK RESTORATION**

**DUE SEPTEMBER 18, 2025 @ 2:30 PM**

TO: CITY OF SANIBEL  
Public Works Department  
800 Dunlop Road  
Sanibel, Florida 33957

Pursuant to the advertisement for bids, the undersigned having read the Specifications and examined the Drawings prepared by Kimley-Horn and Associates, Inc. and the City of Sanibel for the **POND APPLE PARK POST HURRICANE IAN POND BANK RESTORATION** in the City of Sanibel, Florida, and having inspected the site of work and conditions affecting and governing same, hereby proposes to provide all materials, and all equipment, tools, etc., and to perform all labor necessary for the installation as specified and described in said Specifications.

The Total Bid Price for the work based on the summation of the extensions of the unit prices on the attached itemized proposal is:

Item	Quantity	Total Price
Pond Apple Park Post Hurricane Ian Pond Bank Restoration	1	\$
TOTAL BID IN WORDS		
<hr style="border: none; border-top: 1px solid black;"/>		
<hr style="border: none; border-top: 1px solid black;"/>		\$
(In words)		<hr style="border: none; border-top: 1px solid black;"/>
		(In figures)
NAME OF SUBMITTING CONTRACTOR		
<hr style="border: none; border-top: 1px solid black;"/>		

### TIME OF COMPLETION

The undersigned further agrees to complete the furnishings and construction of such work, ready for continuous and satisfactory operation in all respects, within NINETY (90) calendar days of the Notice to Proceed.

### TIME OF VALIDITY

It is hereby agreed that this proposal shall remain in full force and effect and may not be withdrawn for a period of sixty (60) days from the date of receiving proposals by the City of Sanibel.

### BID SECURITY

The undersigned encloses herewith a certified check or cashier's check payable to the City of Sanibel, Florida or a bidder's bond bonding the undersigned and surety to the City of Sanibel, Florida in an amount not less than five percent (5%) of the total bid price as set out above, guaranteeing that the undersigned will enter into contract for the performance of the work if this proposal is accepted.

### CONTINGENCY ALLOWANCE

Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs. Owner's Contingency are funds to be used at the discretion of the Owner to cover any increases in Project costs that result from Owner directed changes or unforeseen site conditions associated with construction. Markups for Construction Fees will be applied by the Contractor at the time contingency is used.

### ADDENDA

Receipt of Addenda Nos. \_\_\_\_\_ is hereby acknowledged.

### REQUIRED BID ITEMS

No.	Name	Page Reference
1	Bid Package in sealed envelope marked with Title of Bid, Bid Number, Name & Address of Bidder	Cover page Invitation to Bid
2	Complete Proposal on form provided	Pages A-1 and P-1 through P-4
3	Include Certified Check or Bid Bond 5% or more of total bid price	Pages A-1 and IB-3
4	Acknowledge issued addenda on page 2 of Proposal Form	Pages IB-2, P-2, GC-1
5	Letter or statement from Bidder's surety company it will execute and deliver a 100% Performance and Payment Bond	Page IB-3
6	Furnish evidence they have ability & experience, have sufficient capital and plant, and minimum 5-years of experience with similar projects	Page IB-4
7	Complete Unit Price Proposal	Pages P1 through P-4

## UNIT PRICE PROPOSAL

ITEM NO.	FDOT PAY ITEM NO.	DESCRIPTION	EST. QUANT.	UNIT	UNIT PRICE	EXTENDED PRICE
1	101	Mobilization and Demobilization	1	LS		
2	120-1	Regular Excavation	400	CY		
3	120-6	Embankment	2,500	CY		
4	145-1	Geosynthetic Reinforced Soil Slopes	16,830	SF		
5	570-1	Performance Turf	2,810	SY		
6	985	Geotextile Fabric	16,830	SF		
7	999-97	Remove, Protect, and Reinstall Rope and Bollard	630	LF		
8	999-98	Temporary Irrigation Bypass Pumping System	1	LS		
9	999-99	Topographic Survey	1	LS		
10	NA	Owner's Contingency	1	LS	\$75,000.00	\$75,000.00
<b>TOTAL:</b>						

Respectfully submitted,

\_\_\_\_\_  
Contractor  
(Individual\_\_\_\_) (Partnership\_\_\_\_) or (Corporation\_\_\_\_)

(SEAL)  
Signed \_\_\_\_\_

Name (print) \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

City/State \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

Email \_\_\_\_\_

DATE:

\_\_\_\_\_

**NOTE:** The legal status of the bidder, whether as an individual, partnership or corporation, must be indicated above, and all pertinent information as required of the Specifications must be furnished.

## **SPECIMEN FORM OF CONTRACT**

THIS CONTRACT, made this \_\_\_\_\_ day of \_\_\_\_\_, 2025, by and between THE CITY OF SANIBEL, FLORIDA, hereinafter called "OWNER", and \_\_\_\_\_ a Florida profit corporation, hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the covenants set forth below and other good and valuable consideration, the sufficiency and receipt of which is acknowledged, OWNER and CONTRACTOR hereby agree as follows:

1. The term "CONTRACT DOCUMENTS" means and includes the following, all of which are incorporated herein and made part of the CONTRACT:
  - A. Project Manual for "Pond Apple Park Post Hurricane Ian Pond Bank Restoration" dated August 18, 2025, including, without limitation, all General Specifications, General Conditions, Special Provisions, Required Contract Provisions, Technical Specifications, and Appendices
  - B. Bidding Documents, including Advertisement, Information to Bidders, and Addenda
  - C. Drawings for "Pond Apple Park Post Hurricane Ian Pond Bank Restoration" dated August 2025
  - D. CONTRACTOR'S Proposal in response to ITB-UT-5-0-2025/BS
  - E. This CONTRACT
  - F. Florida DEP Standard Terms and Conditions Applicable to Grant Agreements
  - G. Performance and Payment Bond
  - H. Notice of Award
  - I. Notice to Proceed
  - J. Change Order(s)
2. The CONTRACTOR will commence and complete the construction which includes:  
  
**"Pond Apple Park Post Hurricane Ian Pond Bank Restoration" as described in the CONTRACT DOCUMENTS (the "WORK")**
3. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the completion of the WORK.
4. The CONTRACTOR will commence the WORK within 6 calendar days after date of the NOTICE TO PROCEED and, unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS, will complete the same within **NINETY (90)** calendar days of the Notice to Proceed.
5. The CONTRACTOR agrees to perform all of the WORK in accordance with the CONTRACT DOCUMENTS for the sum of \$\_\_\_\_\_ said amount being the total "**unit price sum / lump sum price**" as listed on the Contractor's proposal form as submitted for this project.
6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
7. The CONTRACT DOCUMENTS embody the entire agreement of CONTRACTOR and OWNER regarding the Work. No deviation from the CONTRACT DOCUMENTS will be allowed, honored or compensated unless accompanied by a fully executed change order.

8. This CONTRACT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns; however, CONTRACTOR shall not assign or otherwise transfer its rights, duties or obligations under this CONTRACT without prior written consent of OWNER.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in counterparts each of which shall be deemed an original on the date first above written.

(SEAL)

OWNER City of Sanibel

ATTEST \_\_\_\_\_

By \_\_\_\_\_

Name \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

(SEAL)

CONTRACTOR: \_\_\_\_\_

ATTEST \_\_\_\_\_

By \_\_\_\_\_

Name \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Email \_\_\_\_\_

Approved as to form

\_\_\_\_\_  
City Attorney

**SPECIMEN FORM OF CONTRACT**  
**PERFORMANCE AND PAYMENT BOND**

BY THIS BOND, WE

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

A \_\_\_\_\_, as principal, and  
(Corporation, Partnership, or Individual)

\_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

a Corporation, as Surety, are bound to

\_\_\_\_\_  
(Name of Owner)

\_\_\_\_\_  
(Address of Owner)

herein called Owner, in the sum of \_\_\_\_\_  
Dollars, (\$\_\_\_\_\_)

for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the Contract dated \_\_\_\_\_, **"Year"** between Principal and Owner for construction of:

---

---

---

---

the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract and;

2. Promptly makes payments to call claimants, as defined in Section 255.05 (1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the Contract and;
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the Contract and;
4. Performs the guarantee of all work and materials furnished under the Contract for the time specified in the Contract; then this bond is void; otherwise it remains in full force.

Any changes in or under the Contract Documents and compliance or non-compliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this bond.

DATED ON \_\_\_\_\_, **"Year"**.

ATTEST:

\_\_\_\_\_  
Principal

By \_\_\_\_\_

---

---

---

\_\_\_\_\_  
(Principal) Secretary

(SEAL)

\_\_\_\_\_  
(Witness as to Principal)

\_\_\_\_\_  
(Address)  
\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
(Surety) Secretary

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
Attorney-in-Fact

(SEAL)

\_\_\_\_\_  
(Witness as to Surety)

\_\_\_\_\_  
(Address)  
\_\_\_\_\_

\_\_\_\_\_  
(Address)  
\_\_\_\_\_  
\_\_\_\_\_

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

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

**PERIODIC ESTIMATE FOR PARTIAL PAYMENT**

PROJECT: \_\_\_\_\_ OWNER: \_\_\_\_\_

ENGINEER: \_\_\_\_\_ CONTRACTOR: \_\_\_\_\_

PERIODIC ESTIMATE NO. \_\_\_\_\_ FOR PERIOD \_\_\_\_\_ TO \_\_\_\_\_

**ANALYSIS OF ADJUSTED CONTRACT AMOUNT TO DATE**

- A. Original contract amount (Col.6) \_\_\_\_\_
- B. Plus: Change Order Additions (Col.13) \_\_\_\_\_
- C. Less: Change Order Deductions (Col.16) \_\_\_\_\_
- D. Adjust contract amount to date \_\_\_\_\_

**ANALYSIS OF WORK PERFORMED**

- 1. Amount of original contract work performed to date (Col.8) \_\_\_\_\_
- 2. Change Order work performed to date \_\_\_\_\_
- 3. Total amount of work performed to date \_\_\_\_\_
- 4. Add: Materials stored at close of this period  
(Attach detailed schedule \_\_\_\_\_)
- 5. Less: Amount retained \_\_\_\_\_ percent \_\_\_\_\_
- 6. Net amount earned on contract work to date \_\_\_\_\_
- 7. Less: Amount of previous payments \_\_\_\_\_
- 8. Balance due this payment \_\_\_\_\_

**CERTIFICATION OF CONTRACTOR**

According to the best of my knowledge and belief, I certify that all items and amounts shown on the face of this periodic estimate are correct; that all work has been performed and/or material supplied in full accordance with the Terms and Conditions of the Contract, and/or duly authorized deviations, substitutions, alterations, and/or additions; that this estimate is as true and correct statement of the contract account up to and including the last day of the period covered by this Periodic Estimate, and that no part of the "Balance Due This Payment" has been received:

\_\_\_\_\_  
(Contractor)

By \_\_\_\_\_  
(Authorized Representative)

\_\_\_\_\_  
Title \_\_\_\_\_

**RECOMMENDATION OF ENGINEER**

In accordance with the contract and this Periodic Estimate for Partial Payment, the Contractor is entitled to payment in the amount shown above.

DATE: \_\_\_\_\_ By \_\_\_\_\_

**PERIODIC ESTIMATE FOR PARTIAL PAYMENT**

PROJECT:

OWNER:

ENGINEER:

CONTRACTOR:

PERIODIC ESTIMATE NO. \_\_\_\_\_ FOR PERIOD \_\_\_\_\_ TO \_\_\_\_\_

CONTRACT AMOUNT					COMPLETED TO DATE			
ITEM NO.	DESCRIPTION OF ITEM	QUANTITY	UNIT OF MEAS.	COST PER UNIT	TOTAL AMOUNT	QUANTITY	AMOUNT	% COM- LETE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

TOTAL

**PERIODIC ESTIMATE FOR PARTIAL PAYMENT**

PROJECT:

OWNER:

ENGINEER:

CONTRACTOR:

PERIODIC ESTIMATE NO. \_\_\_\_\_ FOR PERIOD \_\_\_\_\_ TO \_\_\_\_\_

**SCHEDULE OF CHANGE ORDERS**

CHANGE ORDER					ADDITIONS	
					AMOUNT COMPLETED TO DATE	DEDUCTIONS
NO. (10)	DATE (11)	DESCRIPTION (12)	AMOUNT (13)	PERCENT COMPLETE (14)	(15)	(16)

---

TOTAL

**CONTRACTOR'S LETTERHEAD**

**CONTRACTOR'S CERTIFICATE**

I, \_\_\_\_\_, the duly qualified, acting and authorized agent of the Contractor, \_\_\_\_\_ on the project, do hereby certify that we have performed all of the work set forth in strict accordance with the plans, specifications, laws and ordinances applicable thereto and do further certify that all materials and equipment listed herein have been paid for in full as allowed on all prior Estimates and, if requested to do so, will show evidence of payment for same in writing before the final payment of this Estimate No. \_\_\_\_\_.

I further certify (if this is a Final Estimate) that the amount received hereunder is considered compensation and final payment in full for all work performed under the Contract, including any amendments thereto, and upon payment of said sum, hereby release the Owner, its employees, agents, and representatives in accordance with said Contract. We further certify that we fully guarantee all work performed hereunder for a period of twelve months from the date of payment for the Final Estimate, (in accordance with the terms of our original Contract and all Amendments thereto), during which time all terms and conditions of the original Contract Documents shall remain in full force and effect, including the insurance requirements, Hold Harmless Agreement and Indemnifying Agreements as contained in said Contract Documents.

CERTIFIED TO FOR PAYMENT ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, "Year".

CONTRACTOR'S SEAL

\_\_\_\_\_  
Contractor

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, "Year".

\_\_\_\_\_  
NOTARY

My commission expires: \_\_\_\_\_:

(NOTARY SEAL)

## CONTRACT CHANGE ORDER

PROJECT: \_\_\_\_\_

OWNER: City of Sanibel

CHANGE ORDER NO. \_\_\_\_\_

TO: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

You are hereby authorized to make the following additions and/or deductions to your contract amount.

	PREVIOUS CONTRACT AMOUNT	NET CHANGE		REVISED		CONTRACT AMOUNT
		INCREASE	DECREASE	(DEDUCT)	(ADD)	
TOTAL:	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____

Description of Change:      Add      Deduct

RECOMMENDED:

APPROVED:

OWNER \_\_\_\_\_

By \_\_\_\_\_ By \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

ACCEPTED:

CONTRACTOR \_\_\_\_\_

BY \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

## **GENERAL CONDITIONS OF THE CONTRACT**

### **SECTION 2.1 - CONTRACT DOCUMENTS**

#### **2.1.01 GENERAL:**

The Contract Documents comprise the following general classifications of documents, including all additions, deletions, modifications, or other documents incorporated therein:

1. Bidding Documents
2. Contract
3. General Conditions of the Contract
4. Special Provisions
5. Specifications

#### **2.1.02 BIDDING DOCUMENTS:**

The Bidding Documents are issued by the OWNER to assist bidders in preparing their proposal include:

1. Advertisement
2. Information for Bidders
3. Proposal: The offer of a Bidder to perform the work described by the Contract Documents made out and submitted on the prescribed Proposal Form, properly signed and guaranteed.
4. Addenda to Contract Documents: Any addenda issued during the time of bidding, or forming a part of the Contract Documents loaned to the Bidder for the preparation of his Proposal, shall be covered in the Proposal, and shall be made a part of the Contract. Receipt of each Addendum shall be acknowledged in the Proposal.

#### **2.1.03 CONTRACT:**

The Contract defines the "Contract Documents" and covers the performance of the work described in the Contract Documents including all supplemental addenda thereto and all general and special provisions pertaining to the work or materials.

#### **2.1.04 GENERAL CONDITIONS OF THE CONTRACT:**

The General Conditions of the Contract outline certain general responsibilities of the OWNER and the CONTRACTOR (who are the parties to the Contract) and those responsibilities delegated by the OWNER to the Engineer who acts as the agent of the OWNER.

1. Definitions: Wherever the words hereinafter defined, or pronouns used in their stead, occur in these specifications and contract documents, they shall have the meanings herein given:
  - A. The word "OWNER" shall mean the municipality, person, firm, or corporation as specified in the Advertisement for Bids, for whom the work is to be done.

- B. The word "CONTRACTOR" shall mean the person, firm, or corporation entering into a contract with the OWNER to construct and complete the work as herein specified, set out and shown.
- C. The word "sub-contractor" shall mean a person, firm, or corporation, other than a CONTRACTOR, supplying labor and materials or labor for work at the site of the project.
- D. The word "Engineer" shall mean the project engineer as designated by the OWNER.

#### **2.1.05 SPECIAL CONDITIONS:**

Special Conditions are special provisions, not included in the General Conditions of the Contract, which apply to this specific project.

#### **2.1.06 DRAWINGS AND SPECIFICATIONS:**

The intent of the Drawings and Specifications is that the CONTRACTOR shall furnish all labor, materials, equipment, and transportation necessary for the proper execution of the work, unless specifically noted otherwise. The CONTRACTOR shall do all the work outlined in the Contract Documents and all incidental work necessary to complete the project in a substantial and acceptable manner, and fully complete the work or improvement, operational and ready for occupancy by the OWNER.

1. Discrepancies: Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings and Specifications shall be immediately reported to the Engineer, who shall promptly correct such inconsistencies or ambiguities in writing. Any work done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies, or ambiguities shall be done at the CONTRACTOR'S risk.
2. Adequacy: Responsibility for adequacy of the design and for sufficiency of the Drawings and Specifications shall be borne by the OWNER. The complete requirements of the work to be performed under the Contract shall be set forth in Drawings and Specifications to be supplied by the OWNER through the Engineer or by the Engineer as representative of the OWNER. The Drawings and Specifications shall be considered inseparable documents; and in considering them, the CONTRACTOR shall rely upon both instruments in order to perform the work in accordance with their combined intent.
3. Additional Instructions: Further instructions may be issued by the Engineer during the progress of the work by means of Drawings, or otherwise to make more clear or specific the Drawings and Specifications or as may be necessary to explain or illustrate changes in the work to be done. Where said correction of errors or omissions, except as provided in the next two paragraphs below, adds to the amount of work to be done by the CONTRACTOR, compensation for said additional work shall be made under the item for Extra Work except where the additional work may be classed under some item of work for which a unit price is included in the proposal.
4. The fact that specific mention of the fixture, or of any part of work, is omitted in the specifications, whether intentionally or otherwise, when the same is clearly shown or indicated on the drawings, or is usually and customarily required to fully complete such work as is specified herein, will not entitle the CONTRACTOR to consideration in the matter

of any claim for extra compensation, but the said fixtures or work or both must be installed or done the same as if called for by both drawings and specifications.

5. All work indicated on the drawings and not mentioned in the specifications or vice versa, and all work and material usual and necessary to make work complete in all its parts, whether or not they are indicated on the drawings or mentioned in the specifications, shall be furnished and executed the same as if they were called for by both the drawings and specifications.
6. Plans and Specifications: The Engineer may furnish the CONTRACTOR up to 5 sets of plans and specifications covering this project at no cost to the CONTRACTOR. For each set of plans and specifications furnished to the CONTRACTOR, or any of his sub-contractor's, in excess of this number, the CONTRACTOR shall be billed at actual cost of printing and delivery.
7. Dimensions: Only figured dimensions on the Drawings will be used by the CONTRACTOR. Where the work of the CONTRACTOR is affected by finish dimensions, these shall be determined by the CONTRACTOR at the site, and he shall assume the responsibility, therefore.

#### **2.1.07 CONTRACT DOCUMENTS FOR THE USE OF THE ENGINEER:**

The CONTRACTOR shall maintain one complete set of the Contract Documents at the job site which shall always be available to the Engineer and upon which the CONTRACTOR shall record all changes and field adjustments. The CONTRACTOR shall keep one copy of plans, shop drawings, and supplemental drawings at the site in good order and annotated to show all changes made during construction. An as-built survey of the project shall be performed and submitted to OWNER prior to final acceptance. The survey shall be conducted in accordance with the standards set forth in Chapter 472 of the Florida Statutes and the Minimum Technical Standards for such survey as specified in Chapter 61G17 of the Florida Administrative Code. The cost of the survey shall be borne by the CONTRACTOR.

### **SECTION 2.2 - OWNER-CONTRACTOR-ENGINEER RELATIONS**

#### **2.2.01 OWNER'S RIGHTS AND RESPONSIBILITIES:**

1. Lands by OWNER: The OWNER will provide the lands shown on the Drawings or described in the Specifications upon which the work under the Contract is to be performed and to be used for right-of-way for access. Any delay in furnishing these lands by the OWNER will be deemed proper for adjustment in the Contract Amount and in the time of completion.
2. Base Lines and Bench Marks: Unless otherwise specified, the OWNER will establish base lines, and bench marks.
3. OWNER'S Right to Correct Deficiencies: Upon failure to perform the work in accordance with the Contract Documents, including any requirements with respect to the Schedule of Completion, and after five days' written notice to the CONTRACTOR, the OWNER may, without prejudice to any other remedy he may have, correct such deficiencies in work intended to become a permanent part of the project. The cost to correct such deficiencies may be deducted from the payment due the CONTRACTOR.

4. Suspension of Work by OWNER: The OWNER shall have the authority to suspend the work, wholly or in part, for such period or periods as he may deem necessary due to unsuitable weather or such other conditions as are considered unfavorable to carry out the provisions of the Contract, or to supply materials meeting the requirements of the Contract Documents.
  - A. Notice: The work or any portion thereof may be suspended at any time by the OWNER provided that he gives the CONTRACTOR five days' notice of suspension which shall set forth the date on which work is to be resumed. The CONTRACTOR shall resume the work upon written notice from the OWNER and within ten days after the date set forth in the notice of suspension. If the OWNER does not give written notice to resume work within ten days of the date fixed in the notice of suspension, the CONTRACTOR may abandon that portion of the work so suspended and shall be entitled to payment in accordance with Paragraph 2.6.09, Payment for Work Suspended by the OWNER.
  - B. In case of any suspensions, the time in which the CONTRACTOR is required to complete the work shall be extended as many working days as the same is suspended; provided, however, that if the work is suspended on account of failure on the part of the CONTRACTOR to comply with specifications, such extensions of time will not be allowed.
5. OWNER'S Right to Terminate Agreement and Complete the Work: The OWNER shall have the right to terminate his agreement with the CONTRACTOR after giving ten days' written notice of termination to the CONTRACTOR in the event of any default by the CONTRACTOR.
  - A. Default by CONTRACTOR: It shall be considered a default by the CONTRACTOR whenever he shall:
    - (i) Declare bankruptcy, become insolvent, or assign his assets for the benefit of his creditors.
    - (ii) Disregard or violate provisions of the Contract Documents or fail to prosecute the work according to the agreed Schedule of Completion, including extensions thereof.
    - (iii) Fail to provide a qualified superintendent, competent workmen or sub-contractor's, or proper materials, or fail to make prompt payment, therefore.
  - B. Completion by the OWNER: In the event of termination of the Agreement by the OWNER because of default by the CONTRACTOR, the OWNER may take possession of the work and of all materials and equipment thereon and may finish the work by whatever method and means he may select.

#### **2.2.02 CONTRACTOR'S RIGHTS AND RESPONSIBILITIES:**

All work shall be done in strict accordance with the Contract Documents. Observations, construction reviews, tests, recommendations or approvals by the Engineer or persons other than the CONTRACTOR, shall in no way relieve the CONTRACTOR of his obligation to complete all work in accordance with the Contract Documents. All work shall be done under the direct supervision of the

CONTRACTOR. The CONTRACTOR shall be responsible for construction means, methods, techniques and procedures, and for providing a safe place for the performance of the work by the CONTRACTOR, Sub-contractor's, suppliers and their employees, and for access use, work or occupancy by all authorized persons. The CONTRACTOR shall be responsible for all obligations prescribed as employer obligations under Chapter XVII of Title 29, Code of Federal Regulations, Part 1926, otherwise known as "Safety and Health Regulations for Construction".

1. Lands by CONTRACTOR: Any land and access thereto not specifically shown to be furnished by the OWNER that may be required for temporary construction facilities or for storage of materials shall be provided by the CONTRACTOR with no liability to the OWNER. The CONTRACTOR shall confine his apparatus and storage to such additional areas as he may provide at his expense.
  - A. Private and Public Property: The CONTRACTOR shall not enter upon private property for any purpose without obtaining permission; and he shall be responsible for the preservation of all public property, trees, monuments, structures, and improvements, along and adjacent to the street and/or right-of-way and shall use every precaution necessary to prevent damage or injury thereto. He shall use suitable precautions to prevent damage to pipes, conduits, and other underground structures, and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed.
2. Surveys: Based upon the information provided by the OWNER, the CONTRACTOR shall develop and make all detailed surveys necessary for construction, including slope stakes, batter boards, stakes for pile locations and other working point lines, and elevations. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes; and, in the case of destruction thereof by the CONTRACTOR or resulting from his negligence, the CONTRACTOR shall be charged with the expense and damage resulting there from and shall be responsible for any mistakes that may be caused by the loss or disturbance of such bench marks, reference points, and stakes.
3. Public Utilities: The elevation and location of all public utilities shown on the Drawings were taken from existing public records. It shall be the duty of the CONTRACTOR to make final and exact determination of the location and extent of all utilities, and he will be liable for any expense resulting from damage to them.
4. Superintendent: A qualified superintendent, who is acceptable to the OWNER, shall be maintained on the work and give efficient supervision to the work until its completion. The superintendent shall have full authority to act in behalf of the CONTRACTOR, and all instruction given to the superintendent shall be considered as given to the CONTRACTOR. It shall be the responsibility of this CONTRACTOR's superintendent to coordinate the work of all the sub-contractor's. The superintendent shall be present on the site at all times required to perform adequate supervision and coordination.
5. Subcontracts: At the time set forth in the Contract Documents or when requested by the OWNER, the CONTRACTOR shall submit in writing for review of the OWNER the names of the sub-contractor's proposed for the work. Sub-contractor's may not be changed, except at the request or with the approval of the OWNER. The CONTRACTOR is responsible to the OWNER for the acts and deficiencies of his sub-contractor's, and of their direct and indirect employees, to the same extent as he is responsible for the acts and deficiencies of his employees. The Contract Documents shall not be construed as creating

any contractual relation between any sub-contractor and the OWNER. The CONTRACTOR shall bind every sub-contractor by the terms of the Contract Documents.

A. For convenience of reference and to facilitate the letting of Contracts and Subcontracts, the Specifications are separated into titled sections. Such separation shall not, however, operate to make the OWNER or the Engineer an arbiter to establish limits to the contracts between CONTRACTOR and sub-contractor.

6. CONTRACTOR'S Right to Suspend Work or Terminate Agreement: CONTRACTOR may suspend work or terminate his Agreement with the OWNER upon ten days' written notice to the OWNER for any of the following reasons:

A. If an order of any court or other public authority caused the work to be stopped or suspended for a period of 90 days through no act or fault of the CONTRACTOR or his employees.

B. If the OWNER should fail to pay the CONTRACTOR any sum within 45 days after its award by arbitrators.

7. Work During an Emergency: The CONTRACTOR shall perform any work and shall furnish and install any materials and equipment necessary during an emergency endangering life or property. In all cases, he shall notify the OWNER of the emergency as soon as practicable, but he shall not wait for instruction before proceeding to properly protect both life and property.

### **2.2.03 RESPONSIBILITY OF THE ENGINEER:**

The Engineer shall decide questions which may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, interpretation of Drawings and Specifications, and all questions as to the acceptable fulfillment of the Agreement on the part of the CONTRACTOR. The duties and responsibilities of the Engineer as set forth herein shall not be extended, except through written consent of the Engineer and the OWNER.

1. Observation of the Work: All materials and each part or detail of the work shall always be subject to observation by the Engineer and the OWNER; and the CONTRACTOR will be held strictly to the intent of the Contract Documents in regard to quality of materials, workmanship, and the diligent execution of the Contract. Observations may be made at the site or at the source of material supply, whether mill, plant, or shop. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the CONTRACTOR as is required to make his observations and construction review.

2. Acceptability of Work: The Engineer's decision as to the acceptability or adequacy of the work shall be final and binding upon the CONTRACTOR. The CONTRACTOR agrees to abide by the Engineer's decision relative to the performance of the work.

3. Engineer's Decisions: All claims of the OWNER or the CONTRACTOR shall be presented to the Engineer for decision which shall be final, except in cases where time and/or financial considerations are involved, which shall be subject to arbitration.

#### **2.2.04 ORAL AGREEMENTS:**

No oral order, objection, claim, or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents; and none of the provisions of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than a definitely agreed waiver or modification thereof in writing; and no evidence shall be introduced in any proceeding of any other waiver or modification.

#### **2.2.05 OBSERVATION OF COMPLETED WORK**

The CONTRACTOR shall remove or uncover such portions of the completed work as may be directed by the OWNER at any time before acceptance of the work. After examination, the CONTRACTOR shall restore the work to the standard required by the Contract Documents. Should the work thus exposed or examined prove acceptable, the uncovering or removing and the restoring of the work shall be paid for as Extra Work; but should the work exposed or examined prove unacceptable, the uncovering, removing, and restoring of the work shall be at the CONTRACTOR'S expense.

#### **2.2.06 WORK BY OWNER OR OTHER CONTRACTOR'S:**

1. Separate Contracts: The OWNER may let other contracts in connection with the work of the CONTRACTOR. The CONTRACTOR shall cooperate with other CONTRACTOR'S regarding storage of materials and execution of their work. It shall be the CONTRACTOR'S responsibility to inspect all work by other CONTRACTOR'S affecting his work and to report to the OWNER any irregularities which will not permit him to complete his work in a satisfactory manner. His failure to notify the OWNER of such irregularities shall indicate the work of other CONTRACTOR'S has been satisfactorily completed to receive his work. The CONTRACTOR shall not be responsible for defects of which he could not have known, which develop in the work of others after the work is completed. It shall be the responsibility of the CONTRACTOR to measure the completed work in place and report to the OWNER immediately any difference between completed work by others and the provisions of the Contract Documents.
2. Written Agreement: Whenever work being done by the OWNER through his own employees or through other CONTRACTOR'S is contiguous to work covered by the Contract Documents, the respective rights of the various interests involved shall be established by written agreement to secure the completion of the various portions of the work in general harmony.

#### **2.2.07 SECTION DELETED**

#### **2.2.08 NIGHT AND SUNDAY WORK:**

No night or Sunday work requiring the presence of an Engineer or Inspector will be permitted, except in case of emergency and then only to such an extent as it is absolutely necessary and with written approval of the Engineer, provided that the clause shall not operate in case of a gang organized for regular and continuous night work, and on work which, in the opinion of the Engineer, can be performed satisfactorily at night or on Sunday.

## **SECTION 2.3 - MATERIALS, EQUIPMENT, AND WORKMANSHIP**

### **2.3.01 MATERIALS AND EQUIPMENT:**

The materials and equipment installed in the work shall meet the requirements of the Contract Documents, and no materials or equipment shall be ordered until reviewed by the Engineer. All materials and equipment not otherwise specifically indicated shall be furnished by the CONTRACTOR. The CONTRACTOR shall guarantee all materials and equipment he provides in accordance with Paragraph 2.3.08.

1. Substitutions: In order to establish standards of quality, the Engineer has, in the detailed Specifications, referred to certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design.
  - A. The CONTRACTOR shall furnish the complete list of proposed desired substitutions prior to signing of the Contract, together with such engineering and catalog data as the Engineer may require.
  - B. The CONTRACTOR shall abide by the Engineer's recommendation when proposed substitute materials or items of equipment are not recommended for installation and shall furnish the specified material or item of equipment in such case. All proposals for substitutions shall be submitted in writing by the General CONTRACTOR and not by individual trades or material suppliers. The Engineer will review proposed substitutions and make his recommendations in writing within a reasonable time.
2. Space Requirements: It shall be the responsibility of the CONTRACTOR to ensure that materials and equipment to be furnished fit the space available. He shall make necessary field measurements to ascertain space requirements, including those for connections and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Contract Documents.
3. Arrangement: Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the CONTRACTOR to install the equipment to operate properly, and in harmony with the intent of the Contract Documents, and to make all changes in the work required by such arrangement.
4. Unacceptable Materials and Equipment: Materials and equipment which do not conform to the requirements of the Contract Documents, are not equal to samples reviewed by the Engineer, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall not be furnished nor installed.
5. Storage: Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground, and/or they shall be placed under cover. Stored materials and equipment shall be located to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the OWNER or lessee.

6. Manufacturer's Directions: Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer.

### **2.3.02 SAMPLES:**

All samples called for in the Specifications or required by the Engineer shall be furnished by the CONTRACTOR and shall be submitted to the Engineer for his review. Samples shall be furnished so as not to delay fabrication, allowing the Engineer reasonable time for the consideration of the samples submitted.

1. Samples for Tests: CONTRACTOR shall furnish such samples of material as may be required for examination and test. All samples of materials for tests shall be taken according to standard methods or as provided in the Contract Documents.
2. CONTRACTOR'S Guaranty: All samples shall be submitted by the CONTRACTOR with a covering letter indicating that such samples are recommended by the CONTRACTOR for the service intended and that the CONTRACTOR'S Guaranty will fully apply.
3. All materials, equipment, and workmanship shall be in accordance with samples guaranteed by the CONTRACTOR and reviewed by the Engineer.

### **2.3.03 SHOP DRAWINGS:**

The CONTRACTOR shall provide shop drawings, setting schedules and such other drawings as may be necessary for the prosecution of the work in the shop and in the field as required by the Drawings, Specifications, or the Engineer's instructions. Deviations from the Drawings and Specifications shall be called to the attention of the Engineer at the time of the first submission of shop drawings and other drawings for consideration. The Engineer's review of any drawings shall not release the CONTRACTOR from responsibility for such deviations. Shop drawings shall be submitted according to a schedule prepared jointly by the CONTRACTOR and the Engineer.

1. CONTRACTOR'S Certification: When submitted for the Engineer's review, shop drawings shall bear the CONTRACTOR'S certification that he has reviewed, checked, and approved the shop drawings; that they are in harmony with the requirements of the Project and with the provisions of the Contract Documents; and that he has verified all field measurements and construction criteria, materials, catalog numbers, and similar data. CONTRACTOR shall also certify that the work represented by the shop drawings is recommended by the CONTRACTOR and the CONTRACTOR'S Guaranty will fully apply.

### **2.3.04 EQUIPMENT DATA:**

The CONTRACTOR shall submit for the Engineer's review complete catalog data for every manufactured item of equipment and all components to be used in the work, including specific performance data, material description, rating, capacity, working pressure, material gage or thickness, brand name, catalog number, and general type. This submission shall be compiled by the CONTRACTOR and reviewed by the Engineer before any of the equipment is ordered.

1. Index: Each data sheet or catalog in the submission shall be indexed according to specification section and paragraph for each reference.

2. Relation to Contract Documents: Catalog data for equipment reviewed by the Engineer shall not supersede the Engineer's Contract Documents. The review of the Engineer shall not relieve the CONTRACTOR from responsibility for deviations from Drawings or Specifications, unless he has in writing called the Engineer's attention to such deviations at the time of submission, nor shall it relieve him from responsibility for error of any sort in the items submitted. The CONTRACTOR shall check the work described by the catalog data with the Engineer's Contract Documents for deviations and errors.
3. CONTRACTOR'S Certification: Equipment data shall be submitted by the CONTRACTOR with a covering letter indicating that he has reviewed, checked and approved the data submitted; that they are in harmony with the requirements of the project and with the provisions of the Contract Documents; and that he has verified all field measurements and construction criteria, materials, catalog numbers, and similar data. CONTRACTOR shall also certify that the work represented by the shop drawings is recommended by the CONTRACTOR and that his Guaranty will fully apply.

### **2.3.05 REJECTED WORK AND MATERIALS:**

Any defective work whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause shall be removed within ten days after written notice is given by the OWNER, and the work shall be re-executed by the CONTRACTOR. The fact that the Engineer may have previously overlooked such defective work shall not constitute an acceptance of any part of it.

1. Should the CONTRACTOR fail to remove rejected work or materials within ten days after written notice to do so, the OWNER may remove them and may store the materials.
2. Correction of faulty work after final payment shall be in accordance with Paragraph 2.5.12.

### **2.3.06 CUTTING AND PATCHING:**

The CONTRACTOR shall do all necessary cutting and patching of the work that may be required to properly receive the work of the various trades or as required by the Drawings and Specifications to complete the structure. He shall restore all such cut or patched work as approved by the Engineer. Cutting of existing structure that may endanger the work, adjacent property, workmen, or the public shall not be done.

### **2.3.07 CHARACTER OF WORKMEN:**

The CONTRACTOR shall always be responsible for the conduct and discipline of his employees and/or any sub-contractor or persons employed by sub-contractor's. All workmen must have sufficient knowledge, skill, and experience to perform properly the work assigned to them. Any foreman or workman employed by the CONTRACTOR or sub-contractor who does not perform his work in a skillful manner or appears to be incompetent or to act in a disorderly or intemperate manner shall, at the written request of the OWNER, be discharged immediately and shall not be employed again in any portion of the work without the approval of the OWNER.

### **2.3.08 GUARANTY:**

The CONTRACTOR shall guarantee all materials and equipment furnished and work performed for a period of one year from the date of written acceptance of the work.

1. Correction of faulty work after final payment shall be as provided in Paragraph 2.5.12.

### **2.3.09 A.S.T.M. DESIGNATION:**

Wherever the letters "A.S.T.M." are used in these specifications, it shall be understood as referring to the American Society for Testing Materials. When reference is made to a certain Designation Number of a specification or test as set out or given by the American Society of Testing Materials, it shall be understood to mean the current, up-to-date standard specification or tentative specification for that particular process, material, or test as currently published by that group.

## **SECTION 2.4 – INSURANCE, LEGAL RESPONSIBILITY, AND SAFETY**

### **2.4.01 INSURANCE:**

CONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance as well as provide protection from claims set forth below which may arise out of or result from CONTRACTOR'S performance of the Work and CONTRACTOR'S other obligations under the Contract Documents, whether such performance is by CONTRACTOR, by any sub-contractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. All insurance policies shall be with insurers qualified to do business in the state of the Project location.

1. Types: The types of insurance the CONTRACTOR is required to obtain and maintain for the full period of the Contract will be: Workmen's Compensation and Employer's Liability, Comprehensive General Liability and Automobile Liability, U.S.L. & H. coverage (if applicable), Jones Act (if applicable) and an Excess Liability Umbrella Insurance as detailed in the following specifications.
2. Evidence: As evidence of specified insurance coverage, the OWNER may, in lieu of actual policies, accept a Certificate of Insurance on Accord Form 25 issued by the insurance carrier showing such policies in force for the specified period. Each policy or certificate will bear an endorsement or statement waiving right of cancellation or reduction in coverage without ten days notice in writing to be delivered by registered mail to the OWNER. Should any policy be canceled before final payment by the OWNER to the CONTRACTOR and the CONTRACTOR fails immediately to procure other insurance as specified, the OWNER reserves the right to procure such insurance and to deduct the cost thereof from any sum due the CONTRACTOR under this Contract.
3. Adequacy of Performance: Any insurance bearing on adequacy of performance shall be maintained after completion of the project for the full guaranty period. Should such insurance be canceled before the end of the guaranty period and the CONTRACTOR fails immediately to procure other insurance as specified, the OWNER reserves the right to procure such insurance and to charge the cost thereof to the CONTRACTOR.
4. Payment of Damages: Nothing contained in these insurance requirements is to be construed as limiting the extent of the CONTRACTOR'S responsibility for payment of damages resulting from his operations under this Contract.

### **2.4.02 COMPREHENSIVE GENERAL LIABILITY INSURANCE:**

1. General liability insurance shall provide full comprehensive form coverage for both bodily injury and property damage. Such coverage shall include premises-operations, underground hazard, products/completed operations hazard, contractual insurance, broad

form property damage, independent CONTRACTOR'S, and personal injury. The limits for bodily injury shall be \$500,000 each occurrence and \$500,000 aggregate. The limits for property damage shall be \$100,000 each occurrence and \$100,000 aggregate.

2. Automobile liability insurance shall provide full comprehensive form coverage for both bodily injury and property damage. Such coverage shall include owned, hired, and non-owned vehicles. The limits for bodily injury shall be \$500,000 each person and \$500,000 each accident. The limits for property damage shall be \$100,000.
3. Excess liability insurance shall provide an umbrella form coverage for both bodily injury and property damage combined with a minimum limit of \$2,000,000.
4. Indemnity: Included in such insurance will be contractual coverage sufficiently broad to insure the OWNER, the Engineer, their consultants and each of their officers, agents, and employees as additional insured under the General Liability Policy. See Paragraph 2.4.05 below for provisions of Indemnity.

#### **2.4.03 WORKMEN'S COMPENSATION INSURANCE:**

CONTRACTOR'S shall provide the statutory Workmen's Compensation and Employer's Liability Insurance requirements of the most current and applicable state Workmen's Compensation Insurance Laws.

#### **2.4.04 DELETED**

#### **2.4.05 INDEMNITY:**

The CONTRACTOR (sub-contractor) hereinafter "Indemnitor", hereby agrees to indemnify, save and hold harmless, and defend at its own expense the Engineer, OWNER, their respective partners, agents, employees, and anyone else acting for or on behalf of any of them, and any other person or entity for whom any of them may be legally responsible (herein collectively called "Indemnities") from all claims, losses, damages, suits, costs and expenses, including attorneys' fees, or actions of any nature whatsoever which arise out of or are connected with, or are alleged to arise out of or be connected with, the Work to be performed herein; including without limiting the generality of the foregoing, all liability for damages, loss, claims, demands, and actions arising or alleged to arise from injury including death, damage to property including the loss of use thereof and consequential damages therefrom, or damages arising out of economic loss, to any person or entity including any Indemnatee or Indemnitor or its employees, servants and agents whether based upon, or claimed to be based upon, statutory (including without limiting the generality of the foregoing, workmen's compensation), contractual, tort or other liability of any Indemnatee whether or not caused, or alleged to be caused, in whole or in part, by the joint, several or sole negligence, breach of contract, breach of warranty, strict liability, or other breach of duty by any Indemnatee, its partners, employees, agents, and anyone else for or on behalf of any of them, or any other person for whom any Indemnatee may be responsible.

In the event more than one Indemnitor is responsible or alleged to be responsible in respect to an accident or occurrence covered by this indemnification, then all of such Indemnitor shall be jointly and severally responsible to the Indemnities for indemnification shall be settled by separate proceedings and without jeopardy to any Indemnatee.

The indemnity provided hereunder shall not include indemnification of the Engineer in respect to claims arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications, or (2) the giving of or the failure to give directions or instructions by

the Engineer, his agents or employees; provided that such giving or failure to give is a primary cause of the injuries and damages.

If any part of these indemnity provisions is adjudged to be contrary to law, the remaining parts of these provisions shall in all other respects be and remain legally effective and binding. Moreover, these indemnity provisions shall not be construed to eliminate or in any way reduce any other indemnification or right which the Engineer and OWNER has by law.

#### **2.4.06 WAIVER OF SUBROGATION:**

The OWNER and the CONTRACTOR waive all rights against (1) each other and other sub-contractor's, agents, and employees of each other, and (2) the Engineer and separate CONTRACTOR'S, if any, and their sub-contractor's, agents, and employees, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Section 2.4 or any other property insurance applicable to the work, except such rights as they may have to the proceeds of such insurance held by the OWNER as trustees. The OWNER or the CONTRACTOR, as appropriate, shall require of the Engineer, separate CONTRACTOR'S and sub-contractor's by appropriate agreements, written where legally required for validity, similar waivers each in favor of all other parties enumerated in this subparagraph 2.4.06.

#### **2.4.07 PATENTS AND ROYALTIES:**

If any design, device, material, or process covered by letters, patent or copyright is used by the CONTRACTOR, he shall provide for such use by legal agreement with the OWNER of the patent or a duly authorized licensee of such OWNER, and shall save harmless the OWNER and the Engineer from any and all loss or expense on account thereof, including its use by the OWNER.

#### **2.4.08 PERMITS:**

All permits and licenses (except as listed hereafter) necessary for the prosecution of the work shall be secured and paid for by the CONTRACTOR. The permits for construction within or across the property, rights-of-way, or easements of highways, railroads, gas lines, electric power transmission lines, water lines, telephone lines, telegraph lines, levees, or other utilities shall be secured and paid for by the OWNER. City of Sanibel Building Dept. permit fees shall be paid for by the OWNER.

#### **2.4.09 LAWS TO BE OBSERVED:**

The CONTRACTOR shall give all notices and comply with all Federal, State, and local laws, ordinances, and regulations in any manner affecting the conduct of the work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the OWNER and the Engineer against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications, or contract for this work in relation to any such law, ordinance, regulations, order or decree, the CONTRACTOR shall forthwith report the same to the Engineer in writing.

1. Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein; and the contract shall be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract shall forthwith be physically amended to make such insertion. This shall include but not be limited to the Occupational Safety and Health Act of 1970.

#### **2.4.10 WRITTEN NOTICE:**

Written notice shall be considered as served when delivered in person or sent by registered mail to the individual, firm, or corporation, or to the last business address of such known to him who serves the notice.

1. Change of Address: It shall be the duty of each party to advise the other parties to the Contract as to any change in his business address until completion of the Contract.

#### **2.4.11 ASSIGNMENT OF CONTRACT:**

Neither the CONTRACTOR nor the OWNER shall sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of his right, title, or interest therein, or his obligations thereunder, without written consent of the other party.

#### **2.4.12 ORAL AGREEMENTS:**

No oral order, objection, claim, or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents; and none of the provisions of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing, and no evidence shall be introduced in any proceeding of any other waiver or modification.

#### **2.4.13 WORK DURING AN EMERGENCY:**

The CONTRACTOR shall perform any work and shall furnish and install any materials and equipment necessary during an emergency endangering life or property. In all cases he shall not wait for instructions before proceeding to properly protect both life and property.

#### **2.4.14 WARNING SIGNS AND BARRICADES:**

The CONTRACTOR shall provide adequate signs, barricades, warning lights, and watchmen and take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be protected at night by suitable signal lights which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be painted such as to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist.

#### **2.4.15 PUBLIC CONVENIENCE:**

The CONTRACTOR shall at all times so conduct his work as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work, and to insure the protection of persons and property. No road or street shall be closed to the public, except with the permission of the proper authorities. Fire hydrants on or adjacent to the work shall always be kept accessible to fire-fighting equipment. Temporary provisions shall be made by the CONTRACTOR to ensure the use of sidewalks and the proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches, which shall not be obstructed.

#### **2.4.16 SAFETY:**

In accordance with general accepted construction practices, the CONTRACTOR shall be solely and completely responsible for conditions of the job site, including safety of all persons and property affected

directly or indirectly by his operations during the performance of the work. This requirement will apply continuously 24 hours per day until acceptance of the work by the OWNER and shall not be limited to normal working hours.

1. The duty of the Engineer to conduct construction review of the CONTRACTOR'S performance is not intended to include review of the adequacy of the CONTRACTOR'S safety measures in, on, or near the construction site.

#### **2.4.17 EXISTING CONSTRUCTION:**

When new construction is adjacent to or crosses highways, railroads, streets, or utilities under the jurisdiction of State, County, City, or other public agency, public utility, or private entity, the OWNER shall secure written permission from the proper authority before executing such new construction. The CONTRACTOR shall satisfy himself that the OWNER has secured written permission before any work is done. The CONTRACTOR shall acquaint himself with and shall execute the work in accordance with any and all requirements of the written permit. The CONTRACTOR shall replace or repair all existing construction damaged in the execution of this Contract. The CONTRACTOR will be required to furnish a release from the proper authority before final acceptance of the work.

#### **2.4.18 SANITARY PROVISIONS:**

The CONTRACTOR shall provide and maintain such sanitary accommodations for the use of his employees and those of his sub-contractor's as may be necessary to comply with the requirements and regulations of the local and state departments of health.

#### **2.4.19 NONDISCRIMINATION IN EMPLOYMENT:**

The CONTRACTOR agrees:

1. That in the hiring of employees for the performance of work under this contract or any subcontract hereunder, no CONTRACTOR, or sub-contractor, shall, by reason of race, religion, color, sex, national origin or ancestry, discriminate against any citizen who is qualified and available to perform the work to which the employment relates;
2. That no CONTRACTOR, sub-contractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry;
3. The CONTRACTOR agrees to comply with any Federal, State, or local law with respect to nondiscrimination in employment.

### **SECTION 2.5 - PROGRESS AND COMPLETION OF WORK**

#### **2.5.01 NOTICE TO PROCEED:**

Following the execution of the Contract by the OWNER and the CONTRACTOR, written Notice to Proceed with work shall be given by the OWNER to the CONTRACTOR. The CONTRACTOR shall begin and shall prosecute the work regularly and uninterruptedly thereafter and not before (except as provided for herein) with such force as to secure the completion of the work within the Contract Time.

### **2.5.02 CONTRACT TIME:**

The CONTRACTOR shall complete, in an acceptable manner, all of the work contracted for in the time stated herein. Computation of Contract Time shall commence on the day specified in the Notice to Proceed and every calendar day following, except as herein provided, shall be counted as Contract Time.

### **2.5.03 SCHEDULE OF COMPLETION:**

The CONTRACTOR shall submit, at such times as may reasonably be requested by the Engineer, schedules showing the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the various parts of the work, and estimated date of completion of each part.

### **2.5.04 CHANGES IN THE WORK:**

The OWNER may, as the need arises, order changes in the work through additions, deletions, or modifications to the extent of 25% of the original Contract Amount, without invalidating the Contract. Compensation and time of completion affected by the change shall be adjusted at the time of ordering such change.

### **2.5.05 EXTRA WORK:**

New and unforeseen items of work found to be necessary and which cannot be covered by any item or combination of items for which there is a Contract price, shall be classed as Extra Work. The CONTRACTOR shall do such Extra Work and furnish such materials as may be required for the proper completion or construction of the whole work contemplated, upon written order from the OWNER as approved by the Engineer. In the absence of such written order, no claim for Extra Work shall be considered. Extra Work shall be performed in accordance with these Contract Documents where applicable and work not covered by such shall be done in accordance with the best construction practice and in a workmanlike manner. Extra Work required in an emergency to protect life and property shall be performed by the CONTRACTOR as required.

### **2.5.06 EXTENSION OF CONTRACT TIME:**

A delay beyond the CONTRACTOR'S control occasioned by an Act of God, by act or omission on the part of the OWNER, or by strikes, lockouts, fire, etc., may entitle the CONTRACTOR to an extension of time in which to complete the work as agreed by the OWNER, provided, however, that the CONTRACTOR shall immediately give written notice to the OWNER of the cause of such delay.

1. Act of God shall mean an earthquake, flood, cyclone, or other cataclysmic phenomenon of nature. Rain, wind, flood, or other natural phenomenon of normal intensity for the locality shall not be construed as an Act of God, and no reparation shall be made to the CONTRACTOR for damages to the work resulting therefrom.

### **2.5.07 USE OF COMPLETED PORTIONS:**

The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding that the time for completing the entire work or such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the completion of uncompleted work or causes refinishing of completed work, the

CONTRACTOR shall be entitled to such extra compensation or extension of time or both, as agreed by the OWNER.

#### **2.5.08 REMOVAL OF CONSTRUCTION EQUIPMENT, TOOLS, AND SUPPLIES:**

At the termination of this Contract, before acceptance of the work by the OWNER, the CONTRACTOR shall remove all of his equipment, tools, and supplies from the property of the OWNER. Should the CONTRACTOR fail to remove such equipment, tools, and supplies, the OWNER shall have the right to remove them at the expense of the CONTRACTOR.

#### **2.5.09 CLEANING UP:**

The CONTRACTOR shall remove from the OWNER'S property, and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials leaving the site smooth, clean, and true to line and grade.

#### **2.5.10 ENGINEER'S CERTIFICATE OF SUBSTANTIAL COMPLETION:**

When the work to be performed under this Contract is substantially completed in accordance with the Contract Documents, the Engineer shall prepare an Engineer's Certificate of Substantial Completion to be acknowledged and accepted by the OWNER and the CONTRACTOR. The Certificate may list items to be completed or corrected, but such Certificate shall not relieve the CONTRACTOR of his obligation to complete all work, whether listed or not, in accordance with the Contract Documents nor will it preclude any right the OWNER may have for recourse in accordance with the Contract Documents.

#### **2.5.11 TERMINATION OF CONTRACTOR'S RESPONSIBILITY:**

The Contract will be considered complete when all work has been finished, the final review made up by the Engineer, and the project accepted in writing by the OWNER. The CONTRACTOR'S responsibility shall then cease, except as set forth in his Performance and Payment Bond, as provided in Paragraph 2.3.08 Guaranty, and as provided in Paragraph 2.5.12 Correction of Faulty Work After Final Payment.

#### **2.5.12 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT:**

The making of the final payment by the OWNER to the CONTRACTOR shall not relieve the CONTRACTOR of responsibility for faulty materials or workmanship. The CONTRACTOR shall promptly replace any such defects discovered within one year from the date of written acceptance of the work.

#### **2.5.13 LIQUIDATED DAMAGES:**

In the event the CONTRACTOR fails to complete satisfactorily the entire work contemplated and provided for under this contract on or before the date of completion determined as described elsewhere herein, the OWNER shall deduct from the monies due to CONTRACTOR the sum of One Hundred Dollars (\$100.00) for each calendar day of delay, which sum is agreed upon not as a penalty but as a fixed and liquidated damage for each day of such delay, to be paid in full and subject to no deduction, it being understood and agreed that the time of completion is of the essence. If the monies due the CONTRACTOR are less than the amount of such liquidated damages, then the CONTRACTOR shall pay the balance to the OWNER.

#### **2.5.14 INCENTIVE CLAUSE:**

The City of Sanibel will pay the CONTRACTOR an "Incentive Bonus" in the sum of One Hundred Dollars (\$100.00) for each calendar day if the work in the Contract is completed in accordance with the Contract Documents, as determined by the Engineer, before the documented project completion date.

The parties anticipate that delays may be caused by or arise from any number of events during the course of the Contract, including, but not limited to, work performed, work deleted, change orders, supplemental agreements, delays, disruptions, differing site conditions, utility conflicts, design changes or defects, time extensions, extra work, right-of-way issues, permitting issues, actions of Suppliers, sub-contractor's or other CONTRACTOR'S, actions by third parties, shop drawing approval process delays, expansion of the physical limits of the project to make it functional, weather, weekends, holidays, suspension of CONTRACTOR'S operations, or other such events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on performance by the CONTRACTOR are specifically contemplated and acknowledged by the parties in entering into this Contract and shall not extend the "Incentive Bonus" Completion Date set forth above.

### **SECTION 2.6 – PAYMENTS TO CONTRACTOR**

#### **2.6.01 DETAILED BREAKDOWN OF CONTRACT AMOUNT:**

Except in cases where unit prices form the basis for payment under the Contract, the CONTRACTOR shall, within ten days of receipt of Notice to Proceed, submit a complete breakdown of the Contract Amount showing the value assigned to each part of the work, including an allowance for profit and overhead. Upon approval of the breakdown of the Contract Amount by the Engineer, it shall be used as the basis for all Requests for Payment.

#### **2.6.02 REQUESTS FOR PAYMENT:**

Progress Payments. OWNER may make progress payments on the project based on the CONTRACTOR'S Applications for Payment as recommended by the Engineer during construction as provided below.

1. Prior to Substantial Completion progress payments will be in an amount equal to 95% of the Work completed, and 95% of materials and equipment not incorporated in the Work but delivered and suitably stored, less in each case the aggregate of payments previously made.

#### **2.6.03 DELETED**

#### **2.6.04 OWNER'S ACTION ON REQUEST FOR PAYMENT:**

Within 30 days after receipt of a Request for Payment from the CONTRACTOR, the OWNER shall:

1. Process the Request for Payment as recommended by the Engineer.
2. Pay such other amount, in accordance with Paragraph 2.6.05, as he shall decide is due the CONTRACTOR, informing the CONTRACTOR and the Engineer in writing of his reasons for paying the amended amount.

3. Withhold payment in accordance with Paragraph 2.6.05, informing the CONTRACTOR and the Engineer of his reasons for withholding payment.

#### **2.6.05 OWNER'S RIGHT TO WITHHOLD PAYMENT OF A REQUEST FOR PAYMENT:**

The OWNER may withhold payment, in whole or in part, of a Request for Payment to the extent necessary to protect himself from loss on account of any of the following:

1. Defective work.
2. Evidence indicating the probable filing of claims by other parties against the CONTRACTOR which may adversely affect the OWNER.
3. Failure of the CONTRACTOR to make payments due to sub-contractor's, material suppliers, or employees.
4. Damage to another CONTRACTOR.

#### **2.6.06 PAYMENT FOR UNCORRECTED WORK:**

Should the OWNER direct the CONTRACTOR not to correct work that has been damaged or that was not performed in accordance with the Contract Documents, an equitable deduction from the Contract Amount shall be made to compensate the OWNER for the Uncorrected work.

#### **2.6.07 PAYMENT FOR REMOVAL OF REJECTED WORK AND MATERIALS:**

The removal of work and materials rejected in accordance with Paragraph 2.3.05 and the re-execution of acceptable work by the CONTRACTOR shall be at the expense of the CONTRACTOR, and he shall pay the cost of replacing the work of other CONTRACTOR'S destroyed or damaged by the removal of the rejected work or materials and the subsequent replacement of acceptable work.

1. Removal by OWNER: Removal of rejected work or materials and storage of materials by the OWNER, in accordance with Paragraph 2.3.05, shall be paid by the CONTRACTOR within 30 days after written notice to pay is given by the OWNER. If the CONTRACTOR does not pay the expenses of such removal and after ten days written notice being given by the OWNER of his intent to sell the materials, the OWNER may sell the materials at auction or at private sale and will pay the CONTRACTOR the net proceeds therefrom after deducting all the costs and expenses that should have been borne by the CONTRACTOR.

#### **2.6.08 PAYMENT FOR EXTRA WORK:**

Written notice of claims for payment for Extra Work shall be given by the CONTRACTOR within ten days after receipt of instructions from the OWNER to proceed with the Extra Work and before any work is commenced, except in an emergency endangering life or property. No claim shall be valid unless so made. In all cases, the CONTRACTOR'S itemized estimate sheets showing all labor and material shall be submitted to the OWNER. The OWNER'S order for Extra Work shall specify any extension of the Contract Time and one of the following methods of payment.

1. Unit prices or combinations of unit prices which formed the basis of the original Contract.
2. A lump sum based on the CONTRACTOR'S estimate and accepted by the OWNER.

3. Actual cost plus 15% for overhead and profit. Actual costs are defined as follows:
  - A. Labor costs, including all allowances for holidays, vacation, sick leave, apprentice programs, hospitalization, or other "fringe benefits" and including time of foreman while engaged directly upon extra work.
  - B. Labor insurance and taxes.
  - C. Materials and supplies used on the work.
  - D. Associated General CONTRACTOR'S of America standard rental rates on each piece of equipment having a value in excess of \$50.00. Equipment and tools of lesser value are considered "small tools" and, as such, are considered to be part of overhead.

#### **2.6.09 PAYMENT FOR WORK SUSPENDED BY THE OWNER:**

If the work or any part thereof shall be suspended by the OWNER and abandoned by the CONTRACTOR as provided in Paragraph 2.2.01 d., Suspension of Work by OWNER, the CONTRACTOR will then be entitled to payment for all work done on the portions so abandoned, plus 15% of the value of the abandoned work to compensate for overhead, plant expense, and anticipated profit.

#### **2.6.10 PAYMENT FOR WORK BY THE OWNER:**

The cost of the work performed by the OWNER, in removing construction equipment, tools, and supplies in accordance with Paragraph 2.5.08, Removal of Construction Equipment, Tools, and Supplies, and in correcting deficiencies in accordance with Paragraph 2.2.01 e., OWNER'S Right to Terminate the Agreement and Complete the Work shall be paid by the CONTRACTOR.

#### **2.6.11 PAYMENT FOR WORK BY THE OWNER FOLLOWING HIS TERMINATION OF THE CONTRACT:**

Upon termination of the Contract by the OWNER in accordance with Paragraph 2.2.01 e., OWNER'S Right to Terminate Agreement and Complete the Work, no further payments shall be due the CONTRACTOR until the work is completed. If the unpaid balance of the Contract Amount shall exceed the cost of completing the work including all overhead costs, the excess shall be paid to the CONTRACTOR. If the cost of completing the work shall exceed the unpaid balance, the CONTRACTOR shall pay the difference to the OWNER. The cost incurred by the OWNER, as herein provided, and the damage incurred through the CONTRACTOR'S default, shall be certified by the OWNER.

1. Unpaid Balance: If the unpaid balance of the Contract Sum exceeds the cost of finishing the work, including compensation for the Engineer's additional services, such shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR shall pay the difference to the OWNER. The cost incurred by the OWNER as herein provided shall be certified by the Engineer.

#### **2.6.12 PAYMENT FOR WORK TERMINATED BY THE CONTRACTOR:**

Upon suspension of the work or termination of the Contract by the CONTRACTOR in accordance with Paragraph 2.2.02f, CONTRACTOR'S Right to Suspend Work or Terminate Agreement, the

CONTRACTOR shall recover payment from the OWNER for the work performed, plus loss on plant and materials, plus established profit and damages.

#### **2.6.13 PAYMENT FOR SAMPLES AND TESTING OF MATERIALS:**

Samples furnished in accordance with Paragraph 2.3.02, Samples, shall be furnished by the CONTRACTOR at his expense and may be used in the work, after acceptance.

1. Testing of samples and materials furnished in accordance with Paragraph 2.3.02, Samples, shall be arranged and paid for by the OWNER.

#### **2.6.14 ACCEPTANCE AND FINAL PAYMENT:**

When the CONTRACTOR shall have completed the work in accordance with the terms of the Contract Documents, he shall certify completion of the work to the OWNER and submit a final Request for Payment, which shall be the Contract Amount plus all approved additions, less all approved deductions and less previous payments made. The CONTRACTOR shall furnish evidence that he has fully paid all debts for labor, materials, and equipment incurred in connection with the work, and, upon acceptance by the OWNER, the OWNER will release the CONTRACTOR, except as to the conditions of the Performance and Payment Bond, any legal rights of the OWNER, required guaranties, and Correction of Faulty Work after Final Payment, and will pay the CONTRACTOR'S final Request for Payment. The CONTRACTOR shall allow sufficient time between the time of completion of the work and approval of the final Request for Payment for the Engineer to assemble and check the necessary data.

1. Release of Liens: The CONTRACTOR shall deliver to the OWNER a complete release of all liens arising out of this Contract before the final Request for Payment is paid. If any lien remains unsatisfied after all payments are made, the CONTRACTOR shall refund to the OWNER such amounts as the OWNER may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fee.
2. Final Payment: The CONTRACTOR shall be paid in full within 61 days after the date of substantial completion. If within 61 days after substantial completion there remains uncompleted minor items, an amount equal to 200% of the value of each item as determined by the Engineer shall be withheld and paid 61 days following completion of all such items. This payment shall constitute final settlement.

### **SECTION 2.7 - CONTROL OF THE WORK**

#### **2.7.01 GENERAL:**

The following general provisions have been taken verbatim from the Florida Department of Transportation Standard Specifications for Road and Bridge Construction with certain modifications to meet specific requirements of the City of Sanibel. The CONTRACTOR is advised to read these provisions very carefully and ensure that he fully understands all of the requirements.

## **2.7.02 PLANS AND WORKING DRAWINGS:**

### **1. Plans and Contract Documents:**

The CONTRACTOR will be furnished an appropriate number of copies of the plans and special provisions as required for the particular project. Copies of the Standard Specifications may be purchased from the Florida Department of Transportation. The CONTRACTOR shall have available on the work, at all times, one copy each of the plans, specifications and special provisions.

### **2. Plans:**

The plans furnished by the Engineer consist of general drawings showing such details as are necessary to give a comprehensive idea of the construction contemplated. Roadway plans will show in general, alignment, profile grades, typical cross sections and general cross sections. Structure plans, in general, will show in detail all dimensions of the work contemplated. When the structure plans do not show the dimensions in detail, they will show general features and such details as are necessary to give a comprehensive idea of the structure.

### **3. Alterations in Plans:**

All authorized alterations affecting the requirements and information given on the approved plans shall be in writing. No changes shall be made on any plan or drawing after its approval by the Engineer, except by direction of the Engineer.

### **4. Working Drawings (for Structures):**

#### **A. General:**

The CONTRACTOR shall furnish, on sheets not larger than 24 inches by 36 inches, such working and detail drawings as may be required for any part of the structure and which are not included in plans furnished by the Engineer.

#### **B. For Steel Structures:**

Working Drawings for steel structures shall consist of shop detail, erection details and other working plans, showing details, dimensions, sizes of material, and other information necessary for the complete fabrication and erection of the metal work.

#### **C. For Concrete Structures:**

Working drawings for concrete structures shall consist of such detailed plans as may reasonably be required for the effective prosecution of the work and which are not included in plans furnished by the Engineer. These may include details of falsework, bracing centering and formwork, masonry layout diagrams, and diagrams for bending reinforcing steel.

#### **D. Submission of Working Drawings:**

The CONTRACTOR shall submit to the Engineer for approval three (3) sets of any required detailed shop or working drawings. These drawings shall be submitted in

sufficient time to allow adequate study and discussion and any necessary correction prior to beginning the work they cover. Prior to the approval of these drawings any work done, or materials ordered for the structures involved shall be at the CONTRACTOR'S risk. One set of these drawings will be returned to the CONTRACTOR, either approved or marked with corrections required. The other sets will be retained by the Engineer.

E. Responsibility of Accuracy of Working Drawings:

It is understood, however, that approval by the Engineer of the CONTRACTOR'S working drawings does not relieve the CONTRACTOR of any responsibility for accuracy of dimensions and details, or for conformity of dimensions and details. The CONTRACTOR shall be responsible for agreement and conformity of his working drawings with the approved plans and specifications.

F. Cost of Working Drawings:

The contract prices shall include the cost of furnishing all working drawings, and the CONTRACTOR will be allowed no extra compensation for such drawings.

**2.7.03 COORDINATION OF PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS:**

These Specifications, the plans, special provisions, and all supplementary documents are integral parts of the contract, and a requirement occurring in one is as binding as though occurring in all.

They are intended to be complementary and to describe and provide for a complete work. In addition to the work and materials specifically called for in the Specifications as being included in any specific pay item, additional incidental work, not specifically mentioned, will be included in such pay item when so shown in the plans, or if indicated, or obvious and apparent, as being necessary for the proper completion of the work under such pay item and not stipulated as being covered under other pay items. In case of discrepancy, computed dimensions shall govern over scaled dimensions, plans shall govern over Standard Specifications, and special provisions shall govern over both Standard Specifications and Plans.

**2.7.04 CONFORMITY OF WORK WITH PLANS:**

All Work performed, and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the plans or indicated in the specifications.

In the event the Engineer finds the materials or the finished product in which the materials are used not within reasonable close conformity with the plans and specifications, but that reasonably acceptable work has been produced, he shall then make a determination if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials as he deems necessary to conform to his determination based on engineering judgment.

In the event the Engineer finds the materials, or the finished product in which the materials are used, or the work performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the CONTRACTOR.

In the event the OWNER accepts the work that is not within these tolerances, appropriate deductions will be made from the actual amount used to cover the cost of the extra material. The amount will be computed based on the job mix formula and the unit price stated in the Contract.

#### **2.7.05 ERRORS OR OMISSIONS IN PLANS OR SPECIFICATIONS:**

The CONTRACTOR shall take no advantage of any apparent error or omission which he might discover in the plans or specifications but shall forthwith notify the Engineer of such discovery, who will then make such corrections and interpretations as he deems necessary for reflecting the actual spirit and intent of the plans and specifications.

#### **2.7.06 AUTHORITY OF THE ENGINEER:**

All work shall be available for inspection by the Engineer and performed to his satisfaction.

It is agreed by the parties hereto that the Engineer shall decide all questions, difficulties and disputes, of whatever nature, which may arise relative to the interpretation of the plans, construction, prosecution and fulfillment of the contract, and as to the character, quality, amount and value of any work done, and materials furnished, under or by reason of the contract.

#### **2.7.07 AUTHORITY AND DUTIES OF ENGINEER'S ASSISTANTS:**

The Engineer may appoint such assistants and representatives as he desires. They shall be authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the manufacture, preparation or fabrication of the materials to be used. Such assistants shall not be authorized to revoke, alter or waive any requirement of the specifications. They shall be authorized to call to the attention of the CONTRACTOR any failure of the work or materials to conform to the specifications and contract and shall have the authority to reject materials or suspend the work until any questions at issue can be referred to and decided by the Engineer. The CONTRACTOR shall be immediately notified in writing of any such suspension of the work and such notice shall state in detail the reasons for the suspension. The presence of the inspector or other assistant shall in no way lessen the responsibility of the CONTRACTOR.

#### **2.7.08 CONSTRUCTION STAKES AND MARKERS:**

1. Stakes Furnished:

The CONTRACTOR shall furnish and set, free of charge, slope stakes, grade stakes and all other stakes necessary for construction of the project. The CONTRACTOR shall furnish all templates and other materials necessary for making and maintaining points and lines given and shall furnish the Engineer such incidental labor as he may require in reestablishing points and lines necessary to the prosecution of the work.

2. Special Requirements for Landscape Work:

For landscape work, the OWNER will furnish all stakes in the size and quantity required and the CONTRACTOR shall set all such stakes with his own forces. The CONTRACTOR shall maintain such stakes in place until the layout is approved and the digging of the holes for the plantings has begun; replacing any which may become destroyed or disturbed during such period.

### **2.7.09 CONTRACTOR'S SUPERVISION:**

1. Prosecution of work:

The CONTRACTOR shall give the work the constant attention necessary to assure the scheduled progress and he shall cooperate fully with the Engineer and with other CONTRACTOR'S at work in the vicinity.

2. CONTRACTOR'S Superintendent:

The CONTRACTOR shall at all times have on the work as his agent, a competent superintendent capable of thoroughly interpreting the plans and specifications and thoroughly experienced in the type of work being performed, who shall receive the instructions from the Engineer or his authorized representatives. The superintendent shall have full authority to execute the orders or directions of the Engineer and to supply promptly any materials, tools, equipment, labor and incidentals which may be required. Such superintendence shall be furnished regardless of the amount of work sublet.

3. Supervision for Emergencies:

The CONTRACTOR shall have a responsible person available at or reasonably near the work site on a 24-hour basis, seven days a week, in order that he may be contacted in emergencies and in cases where immediate action must be taken to maintain traffic or to handle any other problem that might arise. For compliance with this requirement outside of working hours, the furnishing of the telephone number where such person can be reached will suffice.

### **2.7.10 GENERAL INSPECTION REQUIREMENTS:**

1. Cooperation by CONTRACTOR:

No work shall be done, nor materials used, without suitable inspection by the Engineer or his representative, and the CONTRACTOR shall furnish the Engineer with every reasonable facility for ascertaining whether the work performed, and materials used are in accordance with the requirements and intent of the plans and specifications. If the Engineer so requests, the CONTRACTOR shall, at any time before final acceptance of the work, remove or uncover such portions of the finished work as may be directed. After examination, the CONTRACTOR shall restore the uncovered portions of the work to the standard required by the specifications. Should the work so exposed or examined prove unacceptable, the uncovering or removal, and the replacing of the covering or making good of the parts removed, shall be at the CONTRACTOR'S expense. However, should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good of the parts removed, shall be paid for as extra work.

2. Failure of Engineer to Reject Work During Construction:

If, during or prior to construction operations, the Engineer should fail to reject defective work or materials, whether from lack of discovery of such defect or for any other reason, such initial failure to reject shall in no way prevent his later rejection when such defect is discovered, or obligate the Engineer to final acceptance, and the CONTRACTOR shall make no claim for losses suffered due to any necessary removals or repairs of such defects.

3. Failure to Remove and Renew Defective Materials and Work:

Should the CONTRACTOR fail or refuse to remove and renew any defective materials used or work performed, or to make any necessary repairs in an acceptable manner and in accordance with the requirements of the specifications, within the time indicated in writing, the Engineer shall have the authority to cause the unacceptable or defective materials or work to be repaired, removed and renewed, as may be necessary; all at the CONTRACTOR'S expense. Any expense incurred by the City in making these repairs, removals or renewals, which the CONTRACTOR has failed or refused to make, shall be paid for out of any moneys due or which may become due the CONTRACTOR, or may be charged against the contract bond. Continued failure or refusal on the part of the CONTRACTOR to make any or all necessary repairs promptly, fully and in an acceptable manner shall be sufficient cause for the City, at its option, to perform the work with its own organization, or to contract with any other individual, firm or corporation to perform the work. All costs and expenses incurred thereby shall be charged against the defaulting CONTRACTOR and the amount thereof deducted from any moneys due or which may become due to him or shall be charged against the contract bond. Any work performed, subsequent to forfeiture of the Contract, as described in this Article, shall not relieve the CONTRACTOR in any way of his responsibility for the work performed by him.

**2.7.11 FINAL CONSTRUCTION INSPECTION:**

1. Maintenance Until Final Acceptance:

The CONTRACTOR shall maintain all work in first-class condition until it has been completed as a whole and has been accepted by the Engineer under the provisions of 2.7.12.

2. Semifinal Inspections:

The Engineer will make a semifinal inspection within seven (7) days after notice from the CONTRACTOR of presumptive completion of the entire project. If, at the semifinal inspection, all construction provided for and contemplated by the contract is found completed to the Engineer's satisfaction, such inspection shall constitute the final inspection, as prescribed below. If, however, at any semifinal inspection any work is found unsatisfactory, in whole or in part, the Engineer shall give the CONTRACTOR the necessary instructions as to replacement of material and performance or re-performance of work necessary and prerequisite to final completion and acceptance, and the CONTRACTOR forthwith shall comply with and execute such instructions. Upon satisfactory replacement of material and performance or reperformance of such work, another inspection shall be made, which shall constitute the final inspection if the required material is found to have been replaced and the work completed satisfactorily.

3. Final Inspection:

Whenever all materials have been furnished, all work has been performed, and the construction contemplated by the contract has been satisfactorily completed, the Engineer will make the final inspection.

#### **2.7.12 FINAL ACCEPTANCE:**

When, upon completion of the final construction inspection, the work is found to be completed satisfactorily, the Engineer shall give the OWNER a written recommendation for acceptance of the work. The OWNER shall then satisfy himself as to the Engineer's recommendation and within five days of said recommendation notify the CONTRACTOR, in writing, of his acceptance of the work.

#### **2.7.13 CLAIMS BY CONTRACTOR:**

Where the CONTRACTOR deems that extra compensation is due him for work or materials not clearly covered in the contract or not ordered by the Engineer as extra work, as defined herein, the CONTRACTOR shall notify the Engineer in writing of his intentions to make claim for extra compensation, before he begins the work on which he bases the claim. If such notification is not given, and the Engineer is not afforded proper opportunity for keeping strict account of actual cost, as defined for force account, then the CONTRACTOR thereby agrees to waive the claim for such extra compensation. Such notice by the CONTRACTOR, and the fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as establishing the validity of the claim. In such case the claim after consideration by the Engineer, is found to be valid, it shall be allowed and paid for as extra as provided herein.

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STANDARD TERMS AND CONDITIONS  
APPLICABLE TO GRANT AGREEMENTS**

**ATTACHMENT 1**

**1. Entire Agreement.**

This Grant Agreement, including any Attachments and Exhibits referred to herein and/or attached hereto (Agreement), constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter. Any terms and conditions included on Grantee's forms or invoices shall be null and void.

**2. Grant Administration.**

- a. Order of Precedence. If there are conflicting provisions among the documents that make up the Agreement, the order of precedence for interpretation of the Agreement is as follows:

- i. Standard Grant Agreement
- ii. Attachments other than Attachment 1, in numerical order as designated in the Standard Grant Agreement
- iii. Attachment 1, Standard Terms and Conditions
- iv. The Exhibits in the order designated in the Standard Grant Agreement

- b. All approvals, written or verbal, and other written communication among the parties, including all notices, shall be obtained by or sent to the parties' Grant Managers. All written communication shall be by electronic mail, U.S. Mail, a courier delivery service, or delivered in person. Notices shall be considered delivered when reflected by an electronic mail read receipt, a courier service delivery receipt, other mail service delivery receipt, or when receipt is acknowledged by recipient. If the notice is delivered in multiple ways, the notice will be considered delivered at the earliest delivery time.

- c. If a different Grant Manager is designated by either party after execution of this Agreement, notice of the name and contact information of the new Grant Manager will be submitted in writing to the other party and maintained in the respective parties' records. A change of Grant Manager does not require a formal amendment or change order to the Agreement.

- d. This Agreement may be amended, through a formal amendment or a change order, only by a written agreement between both parties. A formal amendment to this Agreement is required for changes which cause any of the following:

- (1) an increase or decrease in the Agreement funding amount;
- (2) a change in Grantee's match requirements;
- (3) a change in the expiration date of the Agreement;
- (4) changes to the cumulative amount of funding transfers between approved budget categories, as defined in Attachment 3, Grant Work Plan, that exceeds or is expected to exceed twenty percent (20%) of the total budget as last approved by Department; and/or
- (5) any changes to the terms and conditions of the Agreement other than the specific instances enumerated below when a change order may be used.

A change order to this Agreement may be used when:

- (1) task timelines within the current authorized Agreement period change;
- (2) the cumulative transfer of funds between approved budget categories, as defined in Attachment 3, Grant Work Plan, are less than twenty percent (20%) of the total budget as last approved by Department;
- (3) changing the current funding source as stated in the Standard Grant Agreement; and/or
- (4) fund transfers between budget categories for the purposes of meeting match requirements.

This Agreement may be amended to provide for additional services if additional funding is made available by the Legislature.

- e. All days in this Agreement are calendar days unless otherwise specified.

**3. Agreement Duration.**

The term of the Agreement shall begin and end on the dates indicated in the Standard Grant Agreement, unless extended or terminated earlier in accordance with the applicable terms and conditions. The Grantee shall be eligible for reimbursement for work performed on or after the date of execution through the expiration date of this Agreement, unless otherwise specified in Attachment 2, Special Terms and Conditions. However, work performed prior to the

execution of this Agreement may be reimbursable or used for match purposes if permitted by the Special Terms and Conditions.

#### **4. Deliverables.**

The Grantee agrees to render the services or other units of deliverables as set forth in Attachment 3, Grant Work Plan. The services or other units of deliverables shall be delivered in accordance with the schedule and at the pricing outlined in the Grant Work Plan. Deliverables may be comprised of activities that must be completed prior to Department making payment on that deliverable. The Grantee agrees to perform in accordance with the terms and conditions set forth in this Agreement and all attachments and exhibits incorporated by the Standard Grant Agreement.

#### **5. Performance Measures.**

The Grantee warrants that: (1) the services will be performed by qualified personnel; (2) the services will be of the kind and quality described in the Grant Work Plan; (3) the services will be performed in a professional and workmanlike manner in accordance with industry standards and practices; (4) the services shall not and do not knowingly infringe upon the intellectual property rights, or any other proprietary rights, of any third party; and (5) its employees, subcontractors, and/or subrecipients shall comply with any security and safety requirements and processes, if provided by Department, for work done at the Project Location(s). The Department reserves the right to investigate or inspect at any time to determine whether the services or qualifications offered by Grantee meet the Agreement requirements. Notwithstanding any provisions herein to the contrary, written acceptance of a particular deliverable does not foreclose Department's remedies in the event deficiencies in the deliverable cannot be readily measured at the time of delivery.

#### **6. Acceptance of Deliverables.**

- a. Acceptance Process. All deliverables must be received and accepted in writing by Department's Grant Manager before payment. The Grantee shall work diligently to correct all deficiencies in the deliverable that remain outstanding, within a reasonable time at Grantee's expense. If Department's Grant Manager does not accept the deliverables within 30 days of receipt, they will be deemed rejected.
- b. Rejection of Deliverables. The Department reserves the right to reject deliverables, as outlined in the Grant Work Plan, as incomplete, inadequate, or unacceptable due, in whole or in part, to Grantee's lack of satisfactory performance under the terms of this Agreement. The Grantee's efforts to correct the rejected deliverables will be at Grantee's sole expense. Failure to fulfill the applicable technical requirements or complete all tasks or activities in accordance with the Grant Work Plan will result in rejection of the deliverable and the associated invoice. Payment for the rejected deliverable will not be issued unless the rejected deliverable is made acceptable to Department in accordance with the Agreement requirements. The Department, at its option, may allow additional time within which Grantee may remedy the objections noted by Department. The Grantee's failure to make adequate or acceptable deliverables after a reasonable opportunity to do so shall constitute an event of default.

#### **7. Financial Consequences for Nonperformance.**

- a. Withholding Payment. In addition to the specific consequences explained in the Grant Work Plan and/or Special Terms and Conditions, the State of Florida (State) reserves the right to withhold payment when the Grantee has failed to perform/comply with provisions of this Agreement. None of the financial consequences for nonperformance in this Agreement as more fully described in the Grant Work Plan shall be considered penalties.
- b. Invoice reduction  
If Grantee does not meet a deadline for any deliverable, the Department will reduce the invoice by 1% for each day the deadline is missed, unless an extension is approved in writing by the Department.
- c. Corrective Action Plan. If Grantee fails to correct all the deficiencies in a rejected deliverable within the specified timeframe, Department may, in its sole discretion, request that a proposed Corrective Action Plan (CAP) be submitted by Grantee to Department. The Department requests that Grantee specify the outstanding deficiencies in the CAP. All CAPs must be able to be implemented and performed in no more than sixty (60) calendar days.
  - i. The Grantee shall submit a CAP within ten (10) days of the date of the written request from Department. The CAP shall be sent to the Department's Grant Manager for review and approval. Within ten (10) days of receipt of a CAP, Department shall notify Grantee in writing whether the CAP proposed has been accepted. If the CAP is not accepted, Grantee shall have ten (10) days from receipt of Department letter rejecting the proposal to submit a revised proposed CAP. Failure to obtain Department approval of a CAP as specified above may result in Department's termination of this Agreement for cause as authorized in this Agreement.

- ii. Upon Department's notice of acceptance of a proposed CAP, Grantee shall have ten (10) days to commence implementation of the accepted plan. Acceptance of the proposed CAP by Department does not relieve Grantee of any of its obligations under the Agreement. In the event the CAP fails to correct or eliminate performance deficiencies by Grantee, Department shall retain the right to require additional or further remedial steps, or to terminate this Agreement for failure to perform. No actions approved by Department or steps taken by Grantee shall preclude Department from subsequently asserting any deficiencies in performance. The Grantee shall continue to implement the CAP until all deficiencies are corrected. Reports on the progress of the CAP will be made to Department as requested by Department's Grant Manager.
- iii. Failure to respond to a Department request for a CAP or failure to correct a deficiency in the performance of the Agreement as specified by Department may result in termination of the Agreement.

## **8. Payment.**

- a. Payment Process. Subject to the terms and conditions established by the Agreement, the pricing per deliverable established by the Grant Work Plan, and the billing procedures established by Department, Department agrees to pay Grantee for services rendered in accordance with section 215.422, Florida Statutes (F.S.).
- b. Taxes. The Department is exempted from payment of State sales, use taxes and Federal excise taxes. The Grantee, however, shall not be exempted from paying any taxes that it is subject to, including State sales and use taxes, or for payment by Grantee to suppliers for taxes on materials used to fulfill its contractual obligations with Department. The Grantee shall not use Department's exemption number in securing such materials. The Grantee shall be responsible and liable for the payment of all its FICA/Social Security and other taxes resulting from this Agreement.
- c. Maximum Amount of Agreement. The maximum amount of compensation under this Agreement, without an amendment, is described in the Standard Grant Agreement. Any additional funds necessary for the completion of this Project are the responsibility of Grantee.
- d. Reimbursement for Costs. The Grantee shall be paid on a cost reimbursement basis for all eligible Project costs upon the completion, submittal, and approval of each deliverable identified in the Grant Work Plan. Reimbursement shall be requested on Exhibit C, Payment Request Summary Form. To be eligible for reimbursement, costs must be in compliance with laws, rules, and regulations applicable to expenditures of State funds, including, but not limited to, the Reference Guide for State Expenditures, which can be accessed at the following web address: <https://www.myfloridacfo.com/docs-sf/accounting-and-auditing-libraries/state-agencies/reference-guide-for-state-expenditures.pdf>.
- e. Rural Communities and Rural Areas of Opportunity. If Grantee is a county or municipality that qualifies as a "rural community" or "rural area of opportunity" (RAO) as defined in subsection 288.0656(2), F.S., such Grantee may request from the Department that all invoice payments under this Agreement be directed to the relevant county or municipality or to the RAO itself. The Department will agree to Grantee's request if:
  - i. Grantee demonstrates that it is a county or municipality that qualifies as a "rural community" or "rural area of opportunity" under subsection 288.0656(2), F.S.;
  - ii. Grantee demonstrates current financial hardship using one (1) or more of the "economic distress" factors defined in subsection 288.0656(2)(c), F.S.;
  - iii. Grantee's performance has been verified by the Department, which has determined that Grantee is eligible for invoice payments and that Grantee's performance has been completed in accordance with this Agreement's terms and conditions; and
  - iv. Applicable federal and state law(s), rule(s) and regulation(s) allow for such payments.

This subsection may not be construed to alter or limit any other applicable provisions of federal or state law, rule, or regulation. A current list of Florida's designated RAOs can be accessed at the following web address: <https://floridajobs.org/community-planning-and-development/rural-community-programs/rural-areas-of-opportunity>.
- f. Invoice Detail. All charges for services rendered or for reimbursement of expenses authorized by Department pursuant to the Grant Work Plan shall be submitted to Department in sufficient detail for a proper pre-audit and post-audit to be performed. The Grantee shall only invoice Department for deliverables that are completed in accordance with the Grant Work Plan.
- g. State Funds Documentation. Pursuant to section 216.1366, F.S., if Grantee meets the definition of a non-profit organization under section 215.97(2)(m), F.S., Grantee must provide the Department with documentation that indicates the amount of state funds:

- i. Allocated to be used during the full term of the contract or agreement for remuneration to any member of the board of directors or an officer.
- ii. Allocated under each payment by the public agency to be used for remuneration of any member of the board of directors or an officer.

The documentation must indicate the amounts and recipients of the remuneration. Such information must be posted on the State's the contract tracking system and maintained pursuant to section 215.985, F.S., and must be posted on the Grantee's website, if Grantee maintains a website.

- h. Interim Payments. Interim payments may be made by Department, at its discretion, if the completion of deliverables to date have first been accepted in writing by Department's Grant Manager.
- i. Final Payment Request. A final payment request should be submitted to Department no later than sixty (60) days following the expiration date of the Agreement to ensure the availability of funds for payment. However, all work performed pursuant to the Grant Work Plan must be performed on or before the expiration date of the Agreement.
- j. Annual Appropriation Contingency. The State's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature. This Agreement is not a commitment of future appropriations. Authorization for continuation and completion of work and any associated payments may be rescinded, with proper notice, at the discretion of Department if the Legislature reduces or eliminates appropriations.
- k. Interest Rates. All interest rates charged under the Agreement shall be calculated on the prevailing rate used by the State Board of Administration. To obtain the applicable interest rate, please refer to: <https://www.myfloridacfo.com/division/aa/local-governments/judgement-interest-rates>.
- l. Refund of Payments to the Department. Any balance of unobligated funds that have been advanced or paid must be refunded to Department. Any funds paid in excess of the amount to which Grantee or subgrantee is entitled under the terms of the Agreement must be refunded to Department. If this Agreement is funded with federal funds and the Department is required to refund the federal government, the Grantee shall refund the Department its share of those funds.

#### **9. Documentation Required for Cost Reimbursement Grant Agreements and Match.**

If Cost Reimbursement or Match is authorized in Attachment 2, Special Terms and Conditions, the following conditions apply. Supporting documentation must be provided to substantiate cost reimbursement or match requirements for the following budget categories:

- a. Salary/Wages. Grantee shall list personnel involved, position classification, direct salary rates, and hours spent on the Project in accordance with Attachment 3, Grant Work Plan in their documentation for reimbursement or match requirements.
- b. Overhead/Indirect/General and Administrative Costs. If Grantee is being reimbursed for or claiming match for multipliers, all multipliers used (i.e., fringe benefits, overhead, indirect, and/or general and administrative rates) shall be supported by audit. If Department determines that multipliers charged by Grantee exceeded the rates supported by audit, Grantee shall be required to reimburse such funds to Department within thirty (30) days of written notification. Interest shall be charged on the excessive rate.
- c. Contractual/Subaward Costs (Subcontractors/Subrecipients). Match or reimbursement requests for payments to subcontractors/subrecipients must be substantiated by copies of invoices with backup documentation identical to that required from Grantee. Subcontracts/subawards which involve payments for direct salaries shall clearly identify the personnel involved, salary rate per hour, and hours spent on the Project. All eligible multipliers used (i.e., fringe benefits, overhead, indirect, and/or general and administrative rates) shall be supported by audit. If Department determines that multipliers charged by any subcontractor/subrecipient exceeded the rates supported by audit, Grantee shall be required to reimburse such funds to Department within thirty (30) days of written notification. Interest shall be charged on the excessive rate. Nonconsumable and/or nonexpendable personal property or equipment costing \$5,000 or more purchased for the Project under a subcontract/subaward is subject to the requirements set forth in chapters 273 and/or 274, F.S., and Chapter 69I-72, Florida Administrative Code (F.A.C.) and/or Chapter 69I-73, F.A.C., as applicable. For grants funded with federal funds, nonconsumable and/or nonexpendable personal property or equipment costing \$10,000 or more purchased for the Project under a subcontract/subaward is subject to the requirements set forth in 2 CFR 200. The Grantee shall be responsible for maintaining appropriate property records for any subcontracts/subawards that include the purchase of equipment as part of the delivery of services. The Grantee shall comply with this requirement and ensure its subcontracts/subaward issued under this Agreement, if any, impose this requirement, in writing, on its subcontractors/subrecipients.

#### **Attachment 1**

- i. For fixed-price (vendor) subcontracts/subawards, the following provisions shall apply: The Grantee may award, on a competitive basis, fixed-price subcontracts/subawards to consultants/contractors in performing the work described in Attachment 3, Grant Work Plan. Invoices submitted to Department for fixed-price subcontracted/subawarded activities shall be supported with a copy of the subcontractor/subrecipient's invoice and a copy of the tabulation form for the competitive procurement process (e.g., Invitation to Bid, Request for Proposals, or other similar competitive procurement document) resulting in the fixed-price subcontract/subaward. The Grantee may request approval from Department to award a fixed-price subcontract/subaward resulting from procurement methods other than those identified above. In this instance, Grantee shall request the advance written approval from Department's Grant Manager of the fixed price negotiated by Grantee. The letter of request shall be supported by a detailed budget and Scope of Services to be performed by the subcontractor/subrecipient. Upon receipt of Department Grant Manager's approval of the fixed-price amount, Grantee may proceed in finalizing the fixed-price subcontract/subaward.
  - ii. If the procurement is subject to the Consultant's Competitive Negotiation Act under section 287.055, F.S., or the Brooks Act, Grantee must provide documentation clearly evidencing it has complied with the statutory or federal requirements.
- d. Travel. All requests for match or reimbursement of travel expenses shall be in accordance with section 112.061, F.S.
- e. Direct Purchase Equipment. For grants funded fully or in part with state funds, equipment is defined as capital outlay costing \$5,000 or more. For grants funded fully with federal funds, equipment is defined as capital outlay costing \$10,000 or more. Match or reimbursement for Grantee's direct purchase of equipment is subject to specific approval of Department and does not include any equipment purchased under the delivery of services to be completed by a subcontractor/subrecipient. Include copies of invoices or receipts to document purchases, and a properly completed Exhibit B, Property Reporting Form.
- f. Rental/Lease of Equipment. Match or reimbursement requests for rental/lease of equipment must include copies of invoices or receipts to document charges.
- g. Miscellaneous/Other Expenses. If miscellaneous or other expenses, such as materials, supplies, non-excluded phone expenses, reproduction, or mailing, are reimbursable or available for match or reimbursement under the terms of this Agreement, the documentation supporting these expenses must be itemized and include copies of receipts or invoices. Additionally, independent of Grantee's contract obligations to its subcontractor/subrecipient, Department shall not reimburse any of the following types of charges: cell phone usage; attorney's fees or court costs; civil or administrative penalties; or handling fees, such as set percent overages associated with purchasing supplies or equipment.
- h. Land Acquisition. Reimbursement for the costs associated with acquiring interest and/or rights to real property (including access rights through ingress/egress easements, leases, license agreements, or other site access agreements; and/or obtaining record title ownership of real property through purchase) must be supported by the following, as applicable: Copies of Property Appraisals, Environmental Site Assessments, Surveys and Legal Descriptions, Boundary Maps, Acreage Certification, Title Search Reports, Title Insurance, Closing Statements/Documents, Deeds, Leases, Easements, License Agreements, or other legal instrument documenting acquired property interest and/or rights. If land acquisition costs are used to meet match requirements, Grantee agrees that those funds shall not be used as match for any other Agreement supported by State or Federal funds.

#### **10. Status Reports.**

The Grantee shall submit status reports quarterly, unless otherwise specified in the Attachments, on Exhibit A, Progress Report Form, to Department's Grant Manager describing the work performed during the reporting period, problems encountered, problem resolutions, scheduled updates, and proposed work for the next reporting period. Quarterly status reports are due no later than twenty (20) days following the completion of the quarterly reporting period. For the purposes of this reporting requirement, the quarterly reporting periods end on March 31, June 30, September 30 and December 31. The Department will review the required reports submitted by Grantee within thirty (30) days.

#### **11. Retainage.**

The following provisions apply if Department withholds retainage under this Agreement:

- a. The Department reserves the right to establish the amount and application of retainage on the work performed under this Agreement up to the maximum percentage described in Attachment 2, Special Terms and Conditions. Retainage may be withheld from each payment to Grantee pending satisfactory completion of work and approval of all deliverables.

### **Attachment 1**

- b. If Grantee fails to perform the requested work or fails to perform the work in a satisfactory manner, Grantee shall forfeit its right to payment of the retainage associated with the work. Failure to perform includes, but is not limited to, failure to submit the required deliverables or failure to provide adequate documentation that the work was actually performed. The Department shall provide written notification to Grantee of the failure to perform that shall result in retainage forfeiture. If the Grantee does not correct the failure to perform within the timeframe stated in Department's notice, the retainage will be forfeited to Department.
- c. No retainage shall be released or paid for incomplete work while this Agreement is suspended.
- d. Except as otherwise provided above, Grantee shall be paid the retainage associated with the work, provided Grantee has completed the work and submits an invoice for retainage held in accordance with the invoicing procedures under this Agreement.

## **12. Insurance.**

- a. Insurance Requirements for Subrecipients and/or Subcontractors. The Grantee shall require its subrecipients and/or subcontractors, if any, to maintain insurance coverage of such types and with such terms and limits as described in this Agreement. The Grantee shall require all its subrecipients and/or subcontractors, if any, to make compliance with the insurance requirements of this Agreement a condition of all contracts that are related to this Agreement. Subrecipients and/or subcontractors must provide proof of insurance upon request.
- b. Deductibles. The Department shall be exempt from, and in no way liable for, any sums of money representing a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Grantee providing such insurance.
- c. Proof of Insurance. Upon execution of this Agreement, Grantee shall provide Department documentation demonstrating the existence and amount for each type of applicable insurance coverage *prior to* performance of any work under this Agreement. Upon receipt of written request from Department, Grantee shall furnish Department with proof of applicable insurance coverage by standard form certificates of insurance, a self-insured authorization, or other certification of self-insurance.
- d. Duty to Maintain Coverage. In the event that any applicable coverage is cancelled by the insurer for any reason, or if Grantee cannot get adequate coverage, Grantee shall immediately notify Department of such cancellation and shall obtain adequate replacement coverage conforming to the requirements herein and provide proof of such replacement coverage within ten (10) days after the cancellation of coverage.
- e. Insurance Trust. If the Grantee's insurance is provided through an insurance trust, the Grantee shall instead add the Department of Environmental Protection, its employees, and officers as an additional covered party everywhere the Agreement requires them to be added as an additional insured.

## **13. Termination.**

- a. Termination for Convenience. When it is in the State's best interest, Department may, at its sole discretion, terminate the Agreement in whole or in part by giving 30 days' written notice to Grantee. The Department shall notify Grantee of the termination for convenience with instructions as to the effective date of termination or the specific stage of work at which the Agreement is to be terminated. The Grantee must submit all invoices for work to be paid under this Agreement within thirty (30) days of the effective date of termination. The Department shall not pay any invoices received after thirty (30) days of the effective date of termination.
- b. Termination for Cause. The Department may terminate this Agreement if any of the events of default described in the Events of Default provisions below occur or in the event that Grantee fails to fulfill any of its other obligations under this Agreement. If, after termination, it is determined that Grantee was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of Department. The rights and remedies of Department in this clause are in addition to any other rights and remedies provided by law or under this Agreement.
- c. Grantee Obligations upon Notice of Termination. After receipt of a notice of termination or partial termination unless as otherwise directed by Department, Grantee shall not furnish any service or deliverable on the date, and to the extent specified, in the notice. However, Grantee shall continue work on any portion of the Agreement not terminated. If the Agreement is terminated before performance is completed, Grantee shall be paid only for that work satisfactorily performed for which costs can be substantiated. The Grantee shall not be entitled to recover any cancellation charges or lost profits.
- d. Continuation of Prepaid Services. If Department has paid for any services prior to the expiration, cancellation, or termination of the Agreement, Grantee shall continue to provide Department with those services for which it has already been paid or, at Department's discretion, Grantee shall provide a refund for services that have been paid for but not rendered.

- e. Transition of Services Upon Termination, Expiration, or Cancellation of the Agreement. If services provided under the Agreement are being transitioned to another provider(s), Grantee shall assist in the smooth transition of Agreement services to the subsequent provider(s). This requirement is at a minimum an affirmative obligation to cooperate with the new provider(s), however additional requirements may be outlined in the Grant Work Plan. The Grantee shall not perform any services after Agreement expiration or termination, except as necessary to complete the transition or continued portion of the Agreement, if any.

#### **14. Notice of Default.**

If Grantee defaults in the performance of any covenant or obligation contained in the Agreement, including, any of the events of default, Department shall provide notice to Grantee and an opportunity to cure that is reasonable under the circumstances. This notice shall state the nature of the failure to perform and provide a time certain for correcting the failure. The notice will also provide that, should the Grantee fail to perform within the time provided, Grantee will be found in default, and Department may terminate the Agreement effective as of the date of receipt of the default notice.

#### **15. Events of Default.**

Provided such failure is not the fault of Department or outside the reasonable control of Grantee, the following non-exclusive list of events, acts, or omissions, shall constitute events of default:

- a. The commitment of any material breach of this Agreement by Grantee, including failure to timely deliver a material deliverable, failure to perform the minimal level of services required for a deliverable, discontinuance of the performance of the work, failure to resume work that has been discontinued within a reasonable time after notice to do so, or abandonment of the Agreement;
- b. The commitment of any material misrepresentation or omission in any materials, or discovery by the Department of such, made by the Grantee in this Agreement or in its application for funding;
- c. Failure to submit any of the reports required by this Agreement or having submitted any report with incorrect, incomplete, or insufficient information;
- d. Failure to honor any term of the Agreement;
- e. Failure to abide by any statutory, regulatory, or licensing requirement, including an entry of an order revoking the certificate of authority granted to the Grantee by a state or other licensing authority;
- f. Failure to pay any and all entities, individuals, and furnishing labor or materials, or failure to make payment to any other entities as required by this Agreement;
- g. Employment of an unauthorized alien in the performance of the work, in violation of Section 274 (A) of the Immigration and Nationality Act;
- h. Failure to maintain the insurance required by this Agreement;
- i. One or more of the following circumstances, uncorrected for more than thirty (30) days unless, within the specified 30-day period, Grantee (including its receiver or trustee in bankruptcy) provides to Department adequate assurances, reasonably acceptable to Department, of its continuing ability and willingness to fulfill its obligations under the Agreement:
  - i. Entry of an order for relief under Title 11 of the United States Code;
  - ii. The making by Grantee of a general assignment for the benefit of creditors;
  - iii. The appointment of a general receiver or trustee in bankruptcy of Grantee's business or property; and/or
  - iv. An action by Grantee under any state insolvency or similar law for the purpose of its bankruptcy, reorganization, or liquidation.

#### **16. Suspension of Work.**

The Department may, in its sole discretion, suspend any or all activities under the Agreement, at any time, when it is in the best interest of the State to do so. The Department shall provide Grantee written notice outlining the particulars of suspension. Examples of reasons for suspension include, but are not limited to, budgetary constraints, declaration of emergency, or other such circumstances. After receiving a suspension notice, Grantee shall comply with the notice. Within 90 days, or any longer period agreed to by the parties, Department shall either: (1) issue a notice authorizing resumption of work, at which time activity shall resume; or (2) terminate the Agreement. If the Agreement is terminated after 30 days of suspension, the notice of suspension shall be deemed to satisfy the thirty (30) days' notice required for a notice of termination for convenience. Suspension of work shall not entitle Grantee to any additional compensation.

#### **17. Force Majeure.**

The Grantee shall not be responsible for delay resulting from its failure to perform if neither the fault nor the negligence of Grantee or its employees or agents contributed to the delay and the delay is due directly to acts of God, wars, acts

of public enemies, strikes, fires, floods, or other similar cause wholly beyond Grantee's control, or for any of the foregoing that affect subcontractors/subrecipients or suppliers if no alternate source of supply is available to Grantee. In case of any delay Grantee believes is excusable, Grantee shall notify Department in writing of the delay or potential delay and describe the cause of the delay either (1) within ten days after the cause that creates or will create the delay first arose, if Grantee could reasonably foresee that a delay could occur as a result; or (2) if delay is not reasonably foreseeable, within five days after the date Grantee first had reason to believe that a delay could result. **THE FOREGOING SHALL CONSTITUTE THE GRANTEE'S SOLE REMEDY OR EXCUSE WITH RESPECT TO DELAY.** Providing notice in strict accordance with this paragraph is a condition precedent to such remedy. No claim for damages, other than for an extension of time, shall be asserted against Department. The Grantee shall not be entitled to an increase in the Agreement price or payment of any kind from Department for direct, indirect, consequential, impact or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency, arising because of delay, disruption, interference, or hindrance from any cause whatsoever. If performance is suspended or delayed, in whole or in part, due to any of the causes described in this paragraph, after the causes have ceased to exist Grantee shall perform at no increased cost, unless Department determines, in its sole discretion, that the delay will significantly impair the value of the Agreement to Department, in which case Department may: (1) accept allocated performance or deliveries from Grantee, provided that Grantee grants preferential treatment to Department with respect to products subjected to allocation; (2) contract with other sources (without recourse to and by Grantee for the related costs and expenses) to replace all or part of the products or services that are the subject of the delay, which purchase may be deducted from the Agreement quantity; or (3) terminate Agreement in whole or in part.

#### **18. Indemnification.**

- a. The Grantee shall be fully liable for the actions of its agents, employees, partners, and subcontractors/subrecipients and shall fully indemnify, defend, and hold harmless Department and its officers, agents, and employees, from suits, actions, damages, and costs of every name and description arising from or relating to:
  - i. personal injury and damage to real or personal tangible property alleged to be caused in whole or in part by Grantee, its agents, employees, partners, and subcontractors/subrecipients; provided, however, that Grantee shall not indemnify for that portion of any loss or damages proximately caused by the negligent act or omission of Department;
  - ii. the Grantee's breach of this Agreement or the negligent acts or omissions of Grantee.
- b. The Grantee's obligations under the preceding paragraph with respect to any legal action are contingent upon Department giving Grantee: (1) written notice of any action or threatened action; (2) the opportunity to take over and settle or defend any such action at Grantee's sole expense; and (3) assistance in defending the action at Grantee's sole expense. The Grantee shall not be liable for any cost, expense, or compromise incurred or made by Department in any legal action without Grantee's prior written consent, which shall not be unreasonably withheld.
- c. Notwithstanding sections a. and b. above, the following is the sole indemnification provision that applies to Grantees that are governmental entities: Each party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of section 768.28, F.S. Further, nothing herein shall be construed as consent by a state agency or subdivision of the State to be sued by third parties in any matter arising out of any contract or this Agreement.
- d. No provision in this Agreement shall require Department to hold harmless or indemnify Grantee, insure or assume liability for Grantee's negligence, waive Department's sovereign immunity under the laws of Florida, or otherwise impose liability on Department for which it would not otherwise be responsible. Any provision, implication or suggestion to the contrary is null and void.

#### **19. Limitation of Liability.**

The Department's liability for any claim arising from this Agreement is limited to compensatory damages in an amount no greater than the sum of the unpaid balance of compensation due for goods or services rendered pursuant to and in compliance with the terms of the Agreement. Such liability is further limited to a cap of \$100,000.

#### **20. Remedies.**

Nothing in this Agreement shall be construed to make Grantee liable for force majeure events. Nothing in this Agreement, including financial consequences for nonperformance, shall limit Department's right to pursue its remedies for other types of damages under the Agreement, at law or in equity. The Department may, in addition to

other remedies available to it, at law or in equity and upon notice to Grantee, retain such monies from amounts due Grantee as may be necessary to satisfy any claim for damages, penalties, costs and the like asserted by or against it.

**21. Waiver.**

The delay or failure by Department to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of Department's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

**22. Statutory Notices Relating to Unauthorized Employment and Subcontracts/Subawards.**

- a. The Department shall consider the employment by any Grantee of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationality Act. If Grantee/subcontractor/subrecipient knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of this Agreement. The Grantee shall be responsible for including this provision in all subcontracts/subawards with private organizations issued as a result of this Agreement.
- b. Pursuant to sections 287.133, 287.134, and 287.137 F.S., the following restrictions apply to persons placed on the convicted vendor list, discriminatory vendor list, or the antitrust violator vendor list:
  - i. Public Entity Crime. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a Grantee, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in section 287.017, F.S., for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.
  - ii. Discriminatory Vendors. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.
  - iii. Antitrust Violator Vendors. A person or an affiliate who has been placed on the antitrust violator vendor list following a conviction or being held civilly liable for an antitrust violation may not submit a bid, proposal, or reply on any contract to provide any good or services to a public entity; may not submit a bid, proposal, or reply on any contract with a public entity for the construction or repair of a public building or public work; may not submit a bid, proposal, or reply on leases of real property to a public entity; may not be awarded or perform work as a Grantee, supplier, subcontractor, or consultant under a contract with a public entity; and may not transact new business with a public entity.
  - iv. Notification. The Grantee shall notify Department if it or any of its suppliers, subcontractors, or consultants have been placed on the convicted vendor list, the discriminatory vendor list, or antitrust violator vendor list during the life of the Agreement. The Florida Department of Management Services is responsible for maintaining the discriminatory vendor list and the antitrust violator vendor list and posts the list on its website. Questions regarding the discriminatory vendor list or antitrust violator vendor list may be directed to the Florida Department of Management Services, Office of Supplier Development, at (850) 487-0915.

**23. Compliance with Federal, State and Local Laws.**

- a. The Grantee and all its agents shall comply with all federal, state and local regulations, including, but not limited to, nondiscrimination, wages, social security, workers' compensation, licenses, and registration requirements. The Grantee shall include this provision in all subcontracts/subawards issued as a result of this Agreement.
- b. The Grantee, its subrecipients, subcontractors and agents must also comply with the following civil rights laws and regulations:
  - i. Title VI of the Civil Rights Act of 1964 as amended (prohibiting discrimination in federally assisted programs on the basis of race, color, or national origin in the delivery of services or benefits);

- ii. Section 13 of the 1972 Amendment to the Federal Water Pollution Control Act (prohibiting discrimination on the basis of sex in the delivery of services or benefits under the Federal Water Pollution Control Act as amended);
  - iii. Section 504 of the Rehabilitation Act of 1973 (prohibiting discrimination in federally assisted programs on the basis of disability, both in employment and in the delivery of services and benefits);
  - iv. Age Discrimination Act of 1975 (prohibiting discrimination in federally assisted programs on the basis of age in the delivery of services or benefits);
  - v. 40 C.F.R. Part 7, (implementing Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of the Rehabilitation Act of 1973);
  - vi. Florida Civil Rights Act of 1992 (Title XLIV Chapter 760, Sections 760.01, 760.11 and 509.092, F.S.), including Part I, chapter 760, F.S. (prohibiting discrimination on the basis of race, color, religion, sex, pregnancy, national origin, age, handicap, or marital status).
- c. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida.
  - d. Any dispute concerning performance of the Agreement shall be processed as described herein. Jurisdiction for any damages arising under the terms of the Agreement will be in the courts of the State, and venue will be in the Second Judicial Circuit, in and for Leon County. Except as otherwise provided by law, the parties agree to be responsible for their own attorney fees incurred in connection with disputes arising under the terms of this Agreement.

**24. Build America, Buy America Act (BABA) - Infrastructure Projects with Federal Funding.**

**This provision does not apply to Agreements that are wholly funded by Coronavirus State and Local Fiscal Recovery Funds under the American Rescue Plan Act. Also, this provision does not apply where there is a valid waiver in place. However, the provision may apply to funds expended before the waiver or after expiration of the waiver.**

If applicable, Recipients or Subrecipients of an award of Federal financial assistance from a program for infrastructure are required to comply with the Build America, Buy America Act (BABA), including the following provisions:

- a. All iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- b. All manufactured products used in the project are produced in the United States--this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- c. All construction materials are manufactured in the United States--this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

**25. Investing in America**

Grantees of an award for construction projects in whole or in part by the Bipartisan Infrastructure Law or the Inflation Reduction Act, including the following provision:

- a. Signage Requirements
  - a. Investing in America Emblem: The recipient will ensure that a sign is placed at construction sites supported in whole or in part by this award displaying the official Investing in America emblem and must identify the project as a “project funded by President Biden’s Bipartisan Infrastructure Law” or “project funded by President Biden’s Inflation Reduction Act” as applicable. The sign must be placed at construction sites in an easily visible location that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period.

The recipient will ensure compliance with the guidelines and design specifications provided by EPA for using the official Investing in America emblem available at:  
<https://www.epa.gov/invest/investing-america-signage>.

b. Procuring Signs: Consistent with section 6002 of RCRA, 42 U.S.C. 6962, and 2 CFR 200.323, recipients are encouraged to use recycled or recovered materials when procuring signs. Signage costs are considered an allowable cost under this assistance agreement provided that the costs associated with signage are reasonable. Additionally, to increase public awareness of projects serving communities where English is not the predominant language, recipients are encouraged to translate the language on signs (excluding the official Investing in America emblem or EPA logo or seal) into the appropriate non-English language(s). The costs of such translation are allowable, provided the costs are reasonable.

## **26. Scrutinized Companies.**

- a. Grantee certifies that it is not on the Scrutinized Companies that Boycott Israel List or engaged in a boycott of Israel. Pursuant to section 287.135, F.S., the Department may immediately terminate this Agreement at its sole option if the Grantee is found to have submitted a false certification; or if the Grantee is placed on the Scrutinized Companies that Boycott Israel List or is engaged in the boycott of Israel during the term of the Agreement.
- b. If this Agreement is for more than one million dollars, the Grantee certifies that it is also not on the Scrutinized Companies with Activities in Sudan, Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged with business operations in Cuba or Syria as identified in section 287.135, F.S. Pursuant to section 287.135, F.S., the Department may immediately terminate this Agreement at its sole option if the Grantee is found to have submitted a false certification; or if the Grantee is placed on the Scrutinized Companies with Activities in Sudan List, or Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged with business operations in Cuba or Syria during the term of the Agreement.
- c. As provided in subsection 287.135(8), F.S., if federal law ceases to authorize these contracting prohibitions, then they shall become inoperative.

## **27. Lobbying and Integrity.**

The Grantee agrees that no funds received by it under this Agreement will be expended for the purpose of lobbying the Legislature or a State agency pursuant to section 216.347, F.S., except that pursuant to the requirements of section 287.058(6), F.S., during the term of any executed agreement between Grantee and the State, Grantee may lobby the executive or legislative branch concerning the scope of services, performance, term, or compensation regarding that agreement. The Grantee shall comply with sections 11.062 and 216.347, F.S.

## **28. Record Keeping.**

The Grantee shall maintain books, records and documents directly pertinent to performance under this Agreement in accordance with United States generally accepted accounting principles (US GAAP) consistently applied. The Department, the State, or their authorized representatives shall have access to such records for audit purposes during the term of this Agreement and for five (5) years following the completion date or termination of the Agreement. In the event that any work is subcontracted or subawarded, Grantee shall similarly require each subcontractor/subrecipient to maintain and allow access to such records for audit purposes. Upon request of Department's Inspector General, or other authorized State official, Grantee shall provide any type of information the Inspector General deems relevant to Grantee's integrity or responsibility. Such information may include, but shall not be limited to, Grantee's business or financial records, documents, or files of any type or form that refer to or relate to Agreement. The Grantee shall retain such records for the longer of: (1) three years after the expiration of the Agreement; or (2) the period required by the General Records Schedules maintained by the Florida Department of State (available at: <http://dos.myflorida.com/library-archives/records-management/general-records-schedules/>).

## **29. Audits.**

- a. Inspector General. The Grantee understands its duty, pursuant to section 20.055(5), F.S., to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing. The Grantee will comply with this duty and ensure that its subrecipients and/or subcontractors issued under this Agreement, if any, impose this requirement, in writing, on its subrecipients and/or subcontractors, respectively.
- b. Physical Access and Inspection. Department personnel shall be given access to and may observe and inspect work being performed under this Agreement, with reasonable notice and during normal business hours, including by any of the following methods:

- i. Grantee shall provide access to any location or facility on which Grantee is performing work, or storing or staging equipment, materials or documents;
  - ii. Grantee shall permit inspection of any facility, equipment, practices, or operations required in performance of any work pursuant to this Agreement; and,
  - iii. Grantee shall allow and facilitate sampling and monitoring of any substances, soils, materials or parameters at any location reasonable or necessary to assure compliance with any work or legal requirements pursuant to this Agreement.
- c. **Special Audit Requirements.** The Grantee shall comply with the applicable provisions contained in Attachment 5, Special Audit Requirements. Each amendment that authorizes a funding increase or decrease shall include an updated copy of Exhibit 1, to Attachment 5. If Department fails to provide an updated copy of Exhibit 1 to include in each amendment that authorizes a funding increase or decrease, Grantee shall request one from the Department's Grants Manager. The Grantee shall consider the type of financial assistance (federal and/or state) identified in Attachment 5, Exhibit 1 and determine whether the terms of Federal and/or Florida Single Audit Act Requirements may further apply to lower tier transactions that may be a result of this Agreement. For federal financial assistance, Grantee shall utilize the guidance provided under 2 CFR §200.331 for determining whether the relationship represents that of a subrecipient or vendor. For State financial assistance, Grantee shall utilize the form entitled "Checklist for Nonstate Organizations Recipient/Subrecipient vs Vendor Determination" (form number DFS-A2-NS) that can be found under the "Links/Forms" section appearing at the following website: <https://apps.fldfs.com/fsaa>.
- d. **Proof of Transactions.** In addition to documentation provided to support cost reimbursement as described herein, Department may periodically request additional proof of a transaction to evaluate the appropriateness of costs to the Agreement pursuant to State guidelines (including cost allocation guidelines) and federal, if applicable. Allowable costs and uniform administrative requirements for federal programs can be found under 2 CFR 200. The Department may also request a cost allocation plan in support of its multipliers (overhead, indirect, general administrative costs, and fringe benefits). The Grantee must provide the additional proof within thirty (30) days of such request.
- e. **No Commingling of Funds.** The accounting systems for all Grantees must ensure that these funds are not commingled with funds from other agencies. Funds from each agency must be accounted for separately. Grantees are prohibited from commingling funds on either a program-by-program or a project-by-project basis. Funds specifically budgeted and/or received for one project may not be used to support another project. Where a Grantee's, or subrecipient's, accounting system cannot comply with this requirement, Grantee, or subrecipient, shall establish a system to provide adequate fund accountability for each project it has been awarded.
  - i. If Department finds that these funds have been commingled, Department shall have the right to demand a refund, either in whole or in part, of the funds provided to Grantee under this Agreement for non-compliance with the material terms of this Agreement. The Grantee, upon such written notification from Department shall refund, and shall forthwith pay to Department, the amount of money demanded by Department. Interest on any refund shall be calculated based on the prevailing rate used by the State Board of Administration. Interest shall be calculated from the date(s) the original payment(s) are received from Department by Grantee to the date repayment is made by Grantee to Department.
  - ii. In the event that the Grantee recovers costs, incurred under this Agreement and reimbursed by Department, from another source(s), Grantee shall reimburse Department for all recovered funds originally provided under this Agreement and interest shall be charged for those recovered costs as calculated on from the date(s) the payment(s) are recovered by Grantee to the date repayment is made to Department.
  - iii. Notwithstanding the requirements of this section, the above restrictions on commingling funds do not apply to agreements where payments are made purely on a cost reimbursement basis.

### **30. Conflict of Interest.**

The Grantee covenants that it presently has no interest and shall not acquire any interest which would conflict in any manner or degree with the performance of services required.

### **31. Independent Contractor.**

The Grantee is an independent contractor and is not an employee or agent of Department.

### **32. Subcontracting/Subawards.**

- a. Unless otherwise specified in the Special Terms and Conditions, all services contracted for are to be performed solely by Grantee.

- b. The Department may, for cause, require the replacement of any Grantee employee, subcontractor/subrecipient, or agent. For cause, includes, but is not limited to, technical or training qualifications, quality of work, change in security status, or non-compliance with an applicable Department policy or other requirement.
- c. The Department may, for cause, deny access to Department's secure information or any facility by any Grantee employee, subcontractor/subrecipient, or agent.
- d. The Department's actions under paragraphs b. or c. shall not relieve Grantee of its obligation to perform all work in compliance with the Agreement. The Grantee shall be responsible for the payment of all monies due under any subcontract/subaward. The Department shall not be liable to any subcontractor/subrecipient for any expenses or liabilities incurred under any subcontract/subaward, and Grantee shall be solely liable to the subcontractor for all expenses and liabilities incurred under any subcontract/subaward.
- e. The Department will not deny Grantee's employees, subcontractors/subrecipients, or agents access to meetings within the Department's facilities, unless the basis of Department's denial is safety or security considerations.
- f. A list of minority-owned firms that could be offered subcontracting opportunities may be obtained by contacting the Office of Supplier Development at (850) 487-0915.
- g. The Grantee shall not be liable for any excess costs for a failure to perform, if the failure to perform is caused by the default of a subcontractor/subrecipient at any tier, and if the cause of the default is completely beyond the control of both Grantee and the subcontractor(s)/subrecipient(s), and without the fault or negligence of either, unless the subcontracted/subawarded products or services were obtainable from other sources in sufficient time for Grantee to meet the required delivery schedule.

### **33. Guarantee of Parent Company.**

If Grantee is a subsidiary of another corporation or other business entity, Grantee asserts that its parent company will guarantee all of the obligations of Grantee for purposes of fulfilling the obligations of Agreement. In the event Grantee is sold during the period the Agreement is in effect, Grantee agrees that it will be a requirement of sale that the new parent company guarantee all of the obligations of Grantee.

### **34. Survival.**

The respective obligations of the parties, which by their nature would continue beyond the termination or expiration of this Agreement, including without limitation, the obligations regarding confidentiality, proprietary interests, and public records, shall survive termination, cancellation, or expiration of this Agreement.

### **35. Third Parties.**

The Department shall not be deemed to assume any liability for the acts, failures to act or negligence of Grantee, its agents, servants, and employees, nor shall Grantee disclaim its own negligence to Department or any third party. This Agreement does not and is not intended to confer any rights or remedies upon any person other than the parties. If Department consents to a subcontract/subaward, Grantee will specifically disclose that this Agreement does not create any third-party rights. Further, no third parties shall rely upon any of the rights and obligations created under this Agreement.

### **36. Severability.**

If a court of competent jurisdiction deems any term or condition herein void or unenforceable, the other provisions are severable to that void provision, and shall remain in full force and effect.

### **37. Grantee's Employees, Subcontractors/Subrecipients and Agents.**

All Grantee employees, subcontractors/subrecipients, or agents performing work under the Agreement shall be properly trained technicians who meet or exceed any specified training qualifications. Upon request, Grantee shall furnish a copy of technical certification or other proof of qualification. All employees, subcontractors/subrecipients, or agents performing work under Agreement must comply with all security and administrative requirements of Department and shall comply with all controlling laws and regulations relevant to the services they are providing under the Agreement.

### **38. Assignment.**

The Grantee shall not sell, assign, or transfer any of its rights, duties, or obligations under the Agreement, or under any purchase order issued pursuant to the Agreement, without the prior written consent of Department. In the event of any assignment, Grantee remains secondarily liable for performance of the Agreement, unless Department expressly waives such secondary liability. The Department may assign the Agreement with prior written notice to Grantee of its intent to do so.

### **39. Compensation Report.**

If this Agreement is a sole-source, public-private agreement or if the Grantee, through this agreement with the State, annually receive 50% or more of their budget from the State or from a combination of State and Federal funds, the Grantee shall provide an annual report, including the most recent IRS Form 990, detailing the total compensation for

the entities' executive leadership teams. Total compensation shall include salary, bonuses, cashed-in leave, cash equivalents, severance pay, retirement benefits, deferred compensation, real-property gifts, and any other payout. The Grantee must also inform the Department of any changes in total executive compensation between the annual reports. All compensation reports must indicate what percent of compensation comes directly from the State or Federal allocations to the Grantee.

**40. Disclosure of Gifts from Foreign Sources.**

If the value of the grant under this Agreement is \$100,000 or more, Grantee shall disclose to Department any current or prior interest of, any contract with, or any grant or gift received from a foreign country of concern, as defined in section 286.101, F.S., if such interest, contract, or grant or gift has a value of \$50,000 or more and such interest existed at any time or such contract or grant or gift was received or in force at any time during the previous 5 years. Such disclosure shall include the name and mailing address of the disclosing entity, the amount of the contract or grant or gift or the value of the interest disclosed, the applicable foreign country of concern and, if applicable, the date of termination of the contract or interest, the date of receipt of the grant or gift, and the name of the agent or controlled entity that is the source or interest holder. If the disclosure requirement is applicable as described above, then within 1 year before applying for any grant, Grantee must also provide a copy of such disclosure to the Department of Financial Services.

**41. Food Commodities.**

To the extent authorized by federal law, the Department, its grantees, contractors and subcontractors/subrecipients shall give preference to food commodities grown or produced in this state when purchasing food commodities, including farm products as defined in section 823.14, F.S., of any class, variety, or use thereof in their natural state or as processed by a farm operation or processor for the purpose of marketing such product.

**42. Anti-human Trafficking.**

If the Grantee is a nongovernmental entity, the Grantee must provide the Department with an affidavit signed by an officer or a representative of the Grantee under penalty of perjury attesting that the Grantee does not use coercion for labor or services as defined in section 787.06, F.S.

**43. Iron and Steel for Public Works Projects.**

If this Agreement funds a "public works project" as defined in section 255.0993, F.S., or the purchase of materials to be used in a public works project, any iron or steel permanently incorporated in the Project must be "produced in the United States," as defined in section 255.0993, F.S. This requirement does not apply if the Department determines that any of the following circumstances apply to the Project:

- (1) iron or steel products produced in the United States are not produced in sufficient quantities, reasonably available, or of satisfactory quality;
- (2) the use of iron or steel products produced in the United States will increase the total cost of the project by more than twenty percent (20%); or
- (3) complying with this requirement is inconsistent with the public interest.

Further, this requirement does not prevent the Contractor's minimal use of foreign steel and iron materials if:

- (1) such materials are incidental or ancillary to the primary product and are not separately identified in the project specifications; and
- (2) the "cost" of such materials, as defined in section 255.0993, F.S., does not exceed one-tenth of one percent (1%) of the total Project Cost under this Agreement or \$2,500, whichever is greater.

Electrical components, equipment, systems, and appurtenances, including supports, covers, shielding, and other appurtenances related to an electrical system that are necessary for operation or concealment (excepting transmission and distribution poles) are not considered to be iron or steel products and are, therefore, exempt from the requirements of this paragraph.

This provision shall be applied in a manner consistent with and may not be construed to impair the state's obligations under any international agreement.

**44. Complete and Accurate information.**

Grantee represents and warrants that all statements and information provided to DEP are current, complete, and accurate. This includes all statements and information in this Grant, as well as its Attachments and Exhibits.

**45. Execution in Counterparts and Authority to Sign.**

This Agreement, any amendments, and/or change orders related to the Agreement, may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument. In accordance with the Electronic Signature Act of 1996, electronic signatures, including facsimile transmissions, may be used and shall have the same force and effect as a written signature. Each person signing this Agreement warrants that he or she is duly authorized to do so and to bind the respective party to the Agreement.

**Attachment 1**

## SPECIAL PROVISIONS

1. The Contractor shall be responsible for all survey construction layout.
3. The Contractor shall dispose of all debris such as trees, brush, stumps, grasses, soil, millings, concrete and other deleterious material at location off the Island of Sanibel. No extra compensation will be allowed for hauling and providing the off-island disposal areas.
4. The Contractor is advised that he may not enter upon private property adjacent to the project without written consent of the affected property owner. A copy of the permission document shall be given to the Engineer.
5. The Contractor is hereby advised that he may not engage in any work on private property in the City of Sanibel during the contract performance period without written permission from the City of Sanibel. Failure to comply with this provision may result in suspension of all work activities until the matter is resolved.

An example of such work would be the paving of a private driveway. If the Contractor paves the driveway and the property owners does not possess the proper City permits, the entire project might be stopped until the necessary permits are obtained. The delay could be months and the Contractor could be assessed for liquidated damages.

6. No allowance for time extension of the project will be made for weather conditions common to Southwest Florida during the contract time period. The Contractor is reminded that time is of the essence and the work should proceed as quickly and efficiently as possible.
7. The Contractor shall remove and relocate as necessary all mailboxes, street signs, fences posts, structures such as headwalls, pipes, etc., and any other item necessary for progress and completion of the work. Payment shall be incidental to other items of work.
8. The Contractor will ensure that the roadway and bridges over which he hauls materials will be kept clear and clean. If spoil material, asphalt, and water fall from the truck onto the roadway, the Contractor will keep the road clear at all times, either by power broom or by whatever means is necessary. If excessive material continues to be deposited, the Engineer will require hauling to be discontinued until the situation is resolved.
9. The Contractor is responsible for any temporary striping to assure traffic safety (Vehicular, Pedestrian and Bicycle traffic).
10. All subcontractors must be approved in writing by the City prior to working on the project.
11. All soil, asphalt, and concrete tests will be made by a laboratory approved of by the Engineer. Cost of testing will be paid for by the Owner under the mobilization pay item except all subsequent tests deemed necessary because the original test indicated that the work did not conform to specifications. These tests shall be paid for by the Contractor. The location of these tests shall be determined by the Owner.
12. An As-Built survey is not required for the resurfacing portion of the project. They are required for the drainage improvements.

13. The Contractor shall prevent erosion of soil on the site and adjacent property resulting from his construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection. Install silt barriers or screens for capturing sediments/solids from erosion and construction activities.
14. The Contractor must be in possession of or obtain from the City of Sanibel an Occupational Registration and if applicable a Vegetation Competency Card prior to the start of the contract work to be done.
15. Contractor is responsible for preventing any workers on this project, including all subcontractors, from feeding alligators anywhere on Sanibel Island. Contractor is required to instruct all workers and subcontractors not to eat lunch on the edge of any waterbody on Sanibel Island and not to feed, tease or interact in any way with any alligators, which is illegal under state law. Signage provided by the City regarding alligator feeding shall be posted on all job sites in a clearly visible location. Project sites adjacent to open water of any kind shall have a minimum of two additional alligator signs posted in clearly visible locations near the water's edge. All job sites shall be maintained free of any open containers of food or any food-related garbage. All workers on this project are to be informed that the City takes this issue very seriously and will prosecute any violators to the full extent of this law. State penalties for violating this law include a fine of up to \$500 per incidence and up to 60 days in jail. Failure to inform workers of the prohibition against feeding alligators as required above or evidence of alligators being fed by workers on this project, either at the project site or elsewhere on Sanibel Island, will result in immediate revocation of this contract.

### SPECIAL PROVISIONS

#### FLORIDA DEP STANDARD TERMS AND CONDITIONS APPLICABLE TO GRANT AGREEMENTS

##### Sections Applicable to this Contract:

Paragraph 22. Statutory Notices Relating to Unauthorized Employment and Subcontracts/Subawards

Paragraph 23. Compliance with Federal, State and Local Laws



# **DIVISION 1**

# **GENERAL** **REQUIREMENTS**

## SECTION 01010

### SUMMARY OF WORK

#### PART 1 – GENERAL

##### 1.01 LOCATION

- A. The work described by these specifications is located on property, easements, or right-of-way, owned or leased by the City of Sanibel, Florida.

##### 1.02 DESCRIPTION

- A. The Work to be done consists of furnishing all labor, equipment, materials and services required to repair the pond banks of Pond 3 at Pond Apple Park. Existing Pond 3 bank grades requiring mitigation are assumed from visible inspection. These conditions and the associated amount of fill to be verified by Contractor. Please be advised that the project is located on Sanibel Island, which is a barrier island with one access road, to and from, that is subject to congestion.
- B. Contractor's Duties:
  - 1. Cooperate with the Owner or Owner's Representatives.
  - 2. Adequately phase and coordinate the project and all associated work efforts to avoid delays or project issues.
  - 3. Except as specifically noted, provide and pay for:
    - a. Labor, materials, and equipment.
    - b. Tools, construction equipment, and machinery.
    - c. Water and utilities required for construction.
    - d. Other facilities and services necessary for the proper execution and completion of the Work.
  - 4. Secure and pay for, as necessary for the proper execution and completion of the Work, and as applicable at time of receipt of bids:
    - a. Permits.
    - b. Government fees.
    - c. Licenses.
  - 5. Give required notices.

6. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities that bear on performance of Work.
7. Promptly submit written notice to Engineer of observed variance of Contract Documents from legal requirements.
8. Enforce strict discipline and good order among employees. Do not employ on Work persons not skilled in their assigned task.
9. The Contractor shall furnish personnel and equipment that will be efficient, appropriate, and large enough to secure a satisfactory quality of work and a rate of progress that will ensure the completion of the work within the time stipulated in the Proposal. This project is a critical/priority project, and the work should be completed in a timely fashion accordingly. If, at any time, such personnel appear to the Engineer to be inefficient, inappropriate or insufficient for securing the quality of work aforesaid, he may order the Contractor to increase the efficiency, change the character or increase the personnel and equipment, and the Contractor shall conform to such order. Failure of the Engineer to give such order shall in no way relieve the Contractor of his obligations to secure the quality of the work and rate of progress.
10. The Contractor shall be responsible for restoring all disturbed private property, resulting from his construction activities, or the activities of his sub-consultants, at no additional cost to the Owner.
11. The Contractor shall confine his activities to the site(s) designated by the Owner for the Work or for materials storage.
12. The Contractor must be required to obtain all the necessary permits and pay all fees required to use the various municipal water works supply systems i.e. hydrant meter. All costs for water usage will be included in the various contract items. Water services to residents or other users of the municipal water works system will not be shut off.
  - a. Failure to comply with the rules for usage of the water works systems will result in denial of any use of the water works system facility.
13. Contractor must be aware that the Contract requires work in confined spaces and must follow all federal, state and local requirements for safety in confined spaces.

END OF SECTION

## SECTION 01130

### MEASUREMENT AND PAYMENT

#### PART 1 - GENERAL

##### 1.01 THE REQUIREMENT

- A. Payment for the various items in the Schedule of Payment as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, taxes, materials, commissions, transportation and handling, bonds, permit fees, insurance, overhead and profit, and incidentals appurtenant to the items of Work being described, as necessary to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). Such compensation shall also include payment for any loss or damages arising directly or indirectly from the Work.
- B. The Contractor's attention is called to the fact that the quotations for the various items of Work are intended to establish a total price for completing the Work in its entirety. Should the Contractor feel that the cost for any item of Work has not been established by the Schedule of Payment items or this Section, it shall include the cost for that Work in some other applicable bid item, so that its proposal for the project does reflect its total price for completing the Work in its entirety.

##### 1.02 PAYMENT ITEMS

- A. The Contractor shall submit a Schedule of Payment Values for review with the return of the executed Agreement to the Owner. The schedule shall contain the installed value of the component parts of Work broken down into labor and material categories for the purpose of making progress payments during the construction period.
- B. The schedule shall be given in sufficient detail for proper identification of Work accomplished. The Schedule of Payment Values shall coincide with the activities of Work detailed in the construction progress schedule and the construction network analysis to accurately relate construction progress to the requested payment. Each item shall include its proportional share of all costs including the Contractor's overhead, contingencies, and profit. The sum of all scheduled items shall equal the total value of the Contract.

#### PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.01 MEASUREMENT AND PAYMENT

- A. Make payment based on Work completed for each item in the Bid, such Work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and all other appurtenances to complete the construction and installation of the Work to the configuration and extent as shown on the drawings and described in the specifications. The Work items shall be completed in accordance with the FDOT requirements and as listed in the unit price proposal and detailed on the Drawings. Payment for each item includes compensation for cleanup and restorations. Cost of cleanup and surface restorations will be considered as the percentage retained in accordance with the Contract Documents, and final payment will not be made until cleanup, restorations and as-builts are completed.

END OF SECTION

## SECTION 01150

### PROTECTION OF EXISTING FACILITIES

#### PART 1 – GENERAL

##### 1.01 SECTION INCLUDES

Requirements for protection of existing facilities and completed construction.

##### 1.02 GENERAL

- A. The Contractor shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements of the Contract Documents.
- B. The Contractor shall verify the exact locations and depths of all utilities shown and the Contractor shall make exploratory hand excavations of all utilities that may interfere with the Work. All such exploratory hand excavations shall be performed as soon as practicable after award of Contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's Work. When such exploratory excavations show the utility location as shown to be in error, the Contractor shall so notify the Engineer.
- C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.

##### 1.03 RIGHTS-OF-WAY

- A. The Contractor shall not do any Work that would affect any oil, gas, sewer or water pipeline, any telephone, telegraph or electric transmission line, any fence or any other structure nor shall the Contractor enter upon the rights-of-way involved until notified by the Engineer that the Owner has secured authority therefor from the proper party. After authority has been obtained, the Contractor shall give said party due notice of its intention to begin Work.
- B. When two or more contracts are being executed at one time on the same or adjacent land in such manner that Work on one contract may interfere with that of another, the Owner shall determine the sequence and order of the Work.
  - C. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the Owner to the Contractor so desiring, to the extent, amount, in the manner, and at the times permitted.
- D. No such decision as to the method or time of conducting the Work or the use of territory shall be made the basis of any claim for delay or damage.
- E. The Owner's Right of Access is reserved to the Owner and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement

for the purpose of making changes in their property.

#### 1.05 PROTECTION OF SURVEY STREET OR ROADWAY MARKERS

The Contractor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced for easy and accurate restoration. It shall be the Contractor's responsibility to notify the Owner of the time and location that Work will be done. Such notification shall be sufficiently in advance of construction so that there will be no delay due to waiting for survey points to be satisfactorily referenced for restoration.

#### 1.06 EXISTING UTILITIES AND IMPROVEMENTS

- A. Maintaining in Service: All oil and gasoline pipelines, power, and telephone or other communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the Work shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the Engineer are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, wire or cable.
- B. The Contractor shall protect all underground utilities and other improvements which may be impaired during construction operations. It shall be the Contractor's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.
- C. Where the proper completion of the Work requires the temporary or permanent removal, or relocation of an existing utility or other improvement which is shown, the Contractor shall contact the utility owner and proceed as specified in the Contract Documents.
- D. Unrecorded Underground Utilities or Improvements
  - 1. Plans show features of topography and underground utilities, but do not purport to show in complete detail all such lines or obstructions.
  - 2. Existing utilities shown on Drawings are based upon available records. Data regarding existing utilities is presented for Contractor's convenience only and shall not be used as a basis for claims of extra compensation.
  - 3. Examine available records and make exploratory excavations whenever necessary to determine locations of existing pipes, valves, or other underground improvements.
  - 4. Take prudent precautions not to damage unrecorded underground utilities and improvements.
  - 5. If unrecorded underground utilities or other improvements are encountered, immediately notify the Engineer and inform the Engineer of the conditions encountered.

Include written report of conditions encountered with Progress Schedule covering period in which unrecorded underground utilities or improvements were encountered. Provide unscheduled impact on CPM schedule for each occurrence. If unrecorded underground utilities or improvements conflict with Work, changes shall be made under the terms of the Agreement. Changes to the Work shall be as approved by the Owner.

6. The Contractor shall contact the affected utility owner and proceed as specified in the Contract Documents.

#### 1.07 TREES WITHIN STREET RIGHTS-OF-WAY AND PROJECT LIMITS

- A. The Contractor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs, and shall not trim or remove any trees unless such trees have been identified under selective clearing and grubbing for trimming or removal.
- B. All other existing trees and shrubs which are damaged during construction shall be repaired or replaced by the Contractor as specified in the Contract Documents.

#### 1.08 NOTIFICATION BY THE CONTRACTOR

Prior to any excavation in the vicinity of any existing underground facilities including all water, sewer, storm drain, gas, petroleum products or other pipelines; all buried electric power, communications or television cables; all traffic signal and street lighting facilities; and all roadway and state highway rights-of-way, the Contractor shall notify the respective authorities representing the owners or agencies responsible for such facilities not less than 3 days nor more than 7 days prior to excavation so that a representative of said owners or agencies can locate their facilities or be present during such work if they so desire.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

END OF SECTION

## SECTION 01200

### PROJECT MEETINGS

#### PART 1 - GENERAL

##### 1.01 PRECONSTRUCTION MEETING

- A. A preconstruction meeting will be held after Award of Contract, but prior to starting work at the site. The City Representative shall prepare and distribute the meeting agenda and shall preside at the meeting. The City Representative shall record and distribute minutes of the proceedings and decisions.
- B. Attendance:
  - 1. Owner
  - 2. Engineer of Record
  - 3. Construction Engineer/Inspector
  - 5. Contractor
  - 6. Major subcontractors
- C. Minimum Agenda:
  - 1. Tentative construction and submittal schedules
  - 2. Critical work sequencing
  - 3. Designation of responsible personnel
  - 4. Processing of Field Decisions and Change Orders
  - 5. Adequacy of distribution of Contract Documents
  - 6. Submittal of Shop Drawings and samples
  - 7. Procedures for maintaining record documents
  - 8. Use of site and Owner's requirements
  - 9. Major equipment deliveries and priorities

10. Safety and first aid procedures
11. Security procedures
12. Housekeeping procedures
13. Processing of Partial Payment Requests
14. General regard for community relations

#### 1.02 PROGRESS MEETING

- A. Progress meetings will be held biweekly or as needed at a site to be determined during the performance of the field work of this Contract. Additional meetings may be called as progress of work dictates.
- B. The City Representative will prepare and distribute agenda, preside at meetings and record minutes of proceedings and decisions. The City Representative will distribute copies of minutes to participants.
- C. Attendance:
  1. Owner
  2. Engineer
  3. Construction Engineer/Inspector
  4. Contractor
  5. Subcontractors, only with Engineer's approval or request, as pertinent to the agenda
- D. Minimum Agenda:
  1. Review and approve minutes of previous meetings.
  2. Review progress of Work since last meeting.
  3. Review proposed 2 and 4 week construction schedule.
  4. Note and identify problems which impede planned progress.
  5. Develop corrective measures and procedures to regain planned schedule.

6. Revise construction schedule as indicated and plan progress during next work period.
7. Maintaining of quality and work standards.
8. Complete other current business.
9. Schedule next progress meeting.

PART 2 – PRODUCTS (not used) PART 3 –

EXECUTION (not used)

END OF SECTION

## SECTION 01330

### SUBMITTALS

#### PART 1 - GENERAL

##### 1.01 SECTION INCLUDES

Requirements and procedures for submittals.

##### 1.02 SCHEDULE

- A. Transmit submittals in accordance with approved Progress Schedule, and in such sequence to avoid delay in the Work or work of other contracts.
- B. Do not fabricate products or begin work that requires submittals until return of submittal with Engineer acceptance.
- C. Identify the appropriate specification sections and parts on each submittal.

##### 1.03 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- B. Contractor's submittal review shall include coordination as described in other Sections.
- C. Sign each sheet of shop drawings and product data, and each sample; label to certify compliance with requirements of Contract Documents. Notify Engineer of any deviations from requirements of Contract Documents in writing at time of submittal.
- D. Identify the relevant specification sections and parts on each submittal.

##### 1.04 SUBMITTAL REQUIREMENTS

- A. Apply Contractor's stamp, signed certifying to review and approval, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- B. Number each submittal sequentially beginning with 001. Each submittal shall describe only one product or equipment. Re-submittals shall use the same number

identifier with a letter suffix, e.g., 001A. Submittals shall identify the relevant Specifications Section(s).

- C. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
  - 1. Finishes that involve Engineer selection of colors, textures, or patterns.
  - 2. Associated items that require correlation for efficient function or for installation.
- D. Submit under transmittal letter. Identify Project by title and number.
- E. If any submittal requires more than three reviews (normally an original and two re-submittals), the Engineer may charge the Contractor for additional review time based on his actual incurred time and expenses. These charges shall be summarized for the Contractor and deducted from the Contractor's next pay request.
- F. The Contractor may expect most submittals to be reviewed within 21 calendar days following receipt of the submittal. Certain submittals such as Owner color selection or instrumentation may require a longer review time.
- G. The submission of submittals will be by email subject to the requirements noted below. Before the first electronic submittal, the Contractor must meet with the Engineer to review the format and protocols for such submittals.

Any digital file submittal or re-submittal must be complete in every respect. Any digital file submittal must include only one piece of material or equipment.

- H. Provide submittals on the following items and as required by the Contract Documents:
  - 1. Proposed schedule of work.
  - 2. Geosynthetic Reinforced Soil Slopes.
  - 3. Performance Turf.
  - 4. Geotextile Fabric.
  - 5. Temporary Irrigation Bypass Pumping System Plan.
  - 6. Pond 3 Dewatering Plan.

#### 1.05 SCHEDULE OF SUBMITTALS

- A. Submit copies of Preliminary Schedule of Submittals prior to the Preconstruction Conference.

- B. Within 10 days after Preconstruction Conference, submit the revised copies of Schedule of Submittals.

#### 1.06 PROGRESS SCHEDULES

Submit progress schedules in accordance with Contract documents.

#### 1.07 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number. Transmittal letter shall reference item as listed on Submittal Schedule.
- B. Identify each element of drawings by reference to sheet number and specification section of Contract Documents.
- C. Identify field dimensions; show relation to adjacent or critical features or Work or products.

#### 1.08 PRODUCT DATA

- A. Submit only pages that are pertinent. Mark or highlight each copy of standard printed data to identify pertinent products. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

#### 1.09 TEST REPORTS

Submit test reports as specified in Section 01430 – Materials Testing

#### 1.10 REQUESTS

If there are any questions about interpretations of plans, specifications or Contract Documents, the Contractor may submit a written request for information or a request for clarification to the Engineer.

#### 1.11 RESUBMITTAL

- A. Make resubmittals under procedures specified for initial submittals; identify changes made since previous submittal.
- B. Identify resubmittal as a resubmittal and reference previous submittal.
- C. Identify changes made since previous submittal.

## 1.12 DISTRIBUTION

- A. Distribute reproductions of shop drawings, copies of product data, samples, substitutions, and other submittals which bear Engineer's review stamp, to job site file, Record Documents file, subcontractors, suppliers, and other entities requiring information.
- B. Instruct recipients to promptly report any inability to comply with provisions.

PART 2 - PRODUCTS (not used) PART 3 -

EXECUTION (not used)

END OF SECTION



# **DIVISION 2**

# **SITEWORK**

## **SECTION 101 MOBILIZATION**

### **101-1 Description.**

Perform preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities.

Include the costs of bonds and any required insurance and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials.

### **101-2 Basis of Payment.**

**101-2.1 When a Separate Item is Included in the Proposal:** When the proposal includes a separate item of payment for this work, the work and incidental costs specified as being covered under this Section will be paid for at the Contract lump sum price for the item of Mobilization.

Payment will be made under:

Item No. 101- 1- Mobilization -lump sum.

**101-2.2 Partial Payments:** When the proposal includes a separate pay item for Mobilization and the Notice to Proceed has been issued, partial payments will be made in accordance with the following:

For contracts of 120 contract days duration or less, partial payment will be made at 50% of the bid price per month for the first two months. For contracts in excess of 120 contract days duration, partial payment will be made at 25% of the bid price per month for the first four months. In no event shall more than 50% of the bid price be paid prior to commencing construction on the project site.

Total partial payments for Mobilization will be limited to 10% of the original Contract amount. Any remaining amount will be paid at Final Acceptance.

Retainage, as specified in 9-5, will be applied to all partial payments.

Partial payments made on this item will in no way act to preclude or limit any of the provisions for partial payments otherwise provided for by the Contract.

**101-2.3 When No Separate Item is Included in the Proposal:** When the proposal does not include a separate item for Mobilization, all work and incidental costs specified as being covered under this Section will be included for payment under the several scheduled items of the overall Contract, and no separate payment will be made therefore.

## SECTION 104 PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION

### 104-1 Description.

Provide erosion control measures where work is accomplished in conjunction with the project, to prevent erosion, pollution of water, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project.

### 104-2 General.

Coordinate the installation of temporary erosion control devices with the construction of the permanent erosion control devices to ensure economical, effective, and continuous control of erosion and water pollution throughout the life of the Contract.

### 104-3 Control of Contractor's Operations Which May Result in Water Pollution.

Prevent contaminants, pollutants or hazardous substances, as defined in Section 376.301, Florida Statutes, from migrating from the construction site or from materials and equipment into any surface waters, wetlands, groundwater or property beyond the project limits. Conduct and schedule operations to avoid and minimize pollution or siltation from the project to surface waters, wetlands, groundwater, or property beyond the project limits.

Do not drive in, operate, or place construction equipment or materials in surface waters, wetlands, groundwater, or property beyond the project limits without permitted authority for permanent or temporary impacts. Water crossings or other wetlands impacts must be authorized by permit. Obstructing or impeding the water flow or movement of the water or wildlife must be authorized by permit.

Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms, treat the water by one or more of the following methods prior to discharge from the project: pumping into grassed swales or appropriate upland vegetated areas or constructed sediment basins, or confined by an appropriate enclosure such as turbidity barriers when other methods are not practical. Do not discharge, water that does not meet State water quality standards or does not meet the criteria specified in any applicable permit.

Remove sediment accumulated during construction from all existing or newly constructed stormwater facilities prior to final acceptance. Ensure that all stormwater conveyances and stormwater facilities meet final grade requirements at final acceptance. Remove silt or regrade as necessary to comply with the lines and grades shown in the Plans.

Do not enter onto lands or waters outside the limits of construction as staked, except as authorized by the Engineer. Do not allow water that does not meet state water quality standards or does not meet the permitted criteria to exit the project limits.

Obtain the Engineer's approval for the location and method of operation in borrow pits, material pits, and disposal areas furnished for waste material from the project (other than commercially operated sources) such that erosion during and after completion of the work will not result in detrimental siltation or water pollution.

### 104-4 Materials for Temporary Erosion Control.

Meet the following requirements:

Temporary Sod.....Section 570

Geotextile Materials\* .....Section 985

\*Use products listed on the Department's APL.

For materials that are part of the permanent work, meet the testing requirements of the applicable permanent materials.

For materials not part of the permanent work, no testing is required; acceptance will be based on visual inspection.

Use new or used materials for the construction of temporary silt fence, staked turbidity barriers, and floating turbidity barrier not to be incorporated into the completed project.

#### **104-5 Preconstruction Requirements.**

Prior to the Preconstruction Conference, submit a site-specific Stormwater Pollution Prevention Plan (SWPPP) and the associated Erosion and Sediment Control Plan meeting the requirements and special conditions of all permits authorizing project construction. If no permits are required or the approved permits do not contain special conditions or specifically address erosion and water pollution, the Contractor's site-specific Erosion and Sediment Control Plan will be governed by 7-1.1, 7-2.2, 7-8.1, 7-8.2, and Section 104.

When a NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities permit (CGP) is required, the Contractor's SWPPP and the associated Erosion and Sediment Control Plan shall be prepared to accompany the Department's Stormwater Runoff Control Concept. The SWPPP and Erosion and Sediment Control Plan must meet all of the requirement of the NPDES CGP, specifically Part 4. Do not begin any soil disturbing activities before receiving the Engineer's written acknowledgement of the SWPPP and Erosion and Sediment Control Plan and the required signed certification statements.

Failure to sign and submit any required documents or certification statements will be considered a default of the Contract. Any soil disturbing activities performed without the required signed documents or certification statements is considered a violation of the NPDES CGP.

Prepare a site-specific SWPPP and the associated Erosion and Sediment Control Plan in accordance with the planned sequence of operations and present it in a format acceptable to the Department. The SWPPP and Erosion and Sediment Control Plan shall include, but not be limited to, the following items or activities:

1. For each phase of construction operations or activities, supply the following information:

- a. A Site Plan with locations of all erosion control devices best management practices
- b. Types of all erosion control devices
- c. Estimated time erosion control devices will be in operation
- d. Monitoring schedules for maintenance of erosion control devices
- e. Methods of maintaining erosion control devices
- f. Dewatering plan
- g. Locations of all stored fuel or other petroleum products, pollutants, chemicals, concrete washouts, sanitary waste, or other hazardous waste
- h. Spill prevention and response measures and disposal and removal methods
- i. Submit any changes to the Erosion and Sediment Control Plan within seven calendar days

2. The name and telephone number of the person responsible for monitoring and maintaining the erosion control devices.

Do not begin construction activities until the SWPPP and the associated Erosion and Sediment Control Plan receives written acknowledgement from the Engineer.

## **104-6 Construction Requirements.**

**104-6.1 Limitation of Exposure of Erodible Earth:** Do not allow the surface area of erodible earth that clearing and grubbing operations, excavation and filling operations, or other earth disturbing activities to exceed 750,000 square feet without specific prior written approval by the Engineer. This limitation applies separately to clearing and grubbing operations and excavation and filling operations.

The Engineer may further limit the surface areas of unprotected erodible earth exposed by the construction operation and may direct the Contractor to provide additional erosion or pollution control measures to prevent contamination of any surface waters, wetlands, or groundwater or to prevent detrimental effects on property outside the project limits or damage to the project.

**104-6.2 Incorporation of Erosion and Sediment Control Devices:** Incorporate permanent erosion and sediment control devices into the project at the earliest practical time. Complete the installation of temporary erosion and sediment control devices prior to the commencement of any earth disturbing activities. Use temporary erosion and sediment control devices found in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (E&SC Manual) to control erosion and sediment generated by construction operations, to correct unforeseen conditions during construction, and to control erosion and sediment prior to the incorporation of permanent erosion and sediment control devices. An electronic version of the E&SC Manual can be found at the following URL:

<https://www.fdot.gov/programmanagement/Implemented/URLinSpecs/FLEROSIONSedimentManual.shtm>.

**104-6.3 Scheduling of Successive Operations:** Schedule operations such that the area of unprotected erodible earth exposed at any one time is not larger than the minimum area necessary for efficient construction operations, and the duration of exposure of uncompleted construction to the elements is as short as practicable.

Schedule and perform clearing and grubbing such that grading operations can be incorporated immediately thereafter. Schedule and perform grading operations so that permanent erosion control devices can follow immediately thereafter if conditions on the project permit.

### **104-6.4 Details for Temporary Erosion and Sediment Control Devices:**

**104-6.4.1 General:** Use temporary erosion, sediment and water pollution control devices found in the E&SC Manual. These devices consist of, but are not limited to, temporary sod, rolled erosion control products, sediment containment systems, runoff control structures, sediment barriers, inlet protection systems, silt fences, turbidity barriers, and chemical treatment. For design details for some of these devices, refer to the E&SC Manual. Perform installation, inspection, maintenance, and removal of all temporary erosion and sediment control devices in accordance with applicable permits, manufacturer's directions, and the Contract Documents.

**104-6.4.2 Temporary Sod:** The Engineer may designate certain areas of sod constructed in accordance with Section 570, as a temporary erosion control device. Do not use seed as a temporary erosion control device. The Engineer may waive the turf establishment requirements of Section 570 for areas of temporary sod that will not be a part of the permanent construction.

**104-6.4.3 Runoff Control Structures:** Construct runoff control structures in accordance with the details shown in the Contract Documents.

**104-6.4.4 Sediment Containment Systems:** Construct sediment containment systems in accordance with the details shown in the Contract Documents. Clean out sediment containment systems as necessary in accordance with the Contract Documents.

**104-6.4.5 Sediment Barriers:** Provide and install sediment barriers according to details shown in the Contract Documents or as directed by the Engineer to protect against downstream accumulation of sediment. Sediment Barriers include, but are not limited to synthetic bales, silt fence, fiber logs and geosynthetic barriers. Reusable barriers that have had sediment deposits removed may be reinstalled on the project as approved by the Engineer.

**104-6.4.6 Silt Fence:**

**104-6.4.6.1 General:** Furnish, install, maintain, and remove silt fences, in accordance with the applicable permits, the manufacturer's directions, and the Contract Documents.

**104-6.4.6.2 Materials and Installation:** Use a geotextile material made from woven or nonwoven fabric, meeting the physical requirements of Section 985 according to those applications for erosion control.

Choose the type and size of posts and wire mesh reinforcement (if required). Do not use products which have a separate layer of plastic mesh or netting. Provide a durable and effective silt fence that controls sediment in accordance with the Contract Documents.

Erect silt fence at upland locations and at temporary locations shown in the Contract Documents or where continuous construction activities change the natural contour and drainage runoff. Do not attach silt fence to existing trees unless approved by the Engineer.

**104-6.4.6.3 Inspection and Maintenance:** Inspect all silt fences in accordance with any applicable permit. If the project does not have a permit, inspect within 24 hours after each rain event and at least daily during prolonged rainfall. Immediately correct any deficiencies. In addition, make a daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, repair or replace silt fences in accordance with the Contract Documents or as directed by the Engineer.

Remove sediment deposits when the deposit reaches approximately 1/2 the height of the silt fence or as directed by the Engineer. Shape any remaining sediment deposits to conform with the finished grade and prepare the area for turf in accordance with Section 570.

**104-6.4.7 Floating Turbidity Barriers and Staked Turbidity Barriers:** Furnish, install, maintain, and remove floating turbidity barriers in accordance with the applicable permits, the manufacturer's directions, and the Contract Documents. The Contractor may need to deploy turbidity barriers around isolated areas of concern (such as, seagrass beds, coral communities) both within as well as outside the project limits. The Engineer will identify such areas. Place the barriers prior to the commencement of any work that could impact the area of concern. Ensure that the type of barrier used and the deployment and maintenance of the barrier will minimize dispersion of turbid waters from the project. The Engineer may approve alternate methods or materials.

Install and maintain turbidity barriers to avoid or minimize the degradation of the water quality of the surrounding waters and minimize damage to areas where the floating barriers are installed.

**104-6.4.8 Inlet Protection System:** Furnish and install inlet protection systems as shown in the Contract Documents.

**104-6.4.9 Rolled Erosion Control Products (RECPs):**

**104-6.4.9.1 General:** Install RECPs in locations where temporary protection from erosion is needed. Two common applications are described below.

1. Use RECPs composed of natural or synthetic fiber mats, plastic sheeting, or netting as protection against erosion, when directed by the Engineer, during temporary pauses in construction caused by inclement weather or other circumstances. Remove the material when construction resumes.

2. Use RECPs as erosion control blankets, at locations shown in the Plans, to facilitate plant growth while permanent grassing is being established. For the purpose described, use non-toxic, biodegradable, natural or synthetic woven fiber mats. Leave the material in place, as installed, to biodegrade.

**104-6.4.10 Chemical Treatment:** Provide chemical treatment in accordance with the Contract Documents. Chemical treatment may be used to clarify turbid or sediment laden water that does not meet state water quality standards or to supplement other erosion and sediment control devices to aid in their performance. The contractor must provide the required toxicity testing information in accordance with the Contract Documents to the Engineer for review and acceptance prior to using any chemical treatment on the project site.

**104-6.5 Removal of Temporary Erosion Control Devices:** In general, remove or where applicable, incorporate into the soil any temporary erosion control devices upon incorporation of the permanent erosion control devices into the project. The Engineer may direct temporary devices to be left in place.

**104-7 Maintenance of Erosion and Sediment Control Devices.**

**104-7.1 General:** Provide routine maintenance of permanent and temporary erosion and sediment control devices, at no expense to the Department, until the project is complete and accepted. If reconstruction or replacement of erosion and sediment control devices is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion and sediment control devices, improper installation, lack of maintenance, excessive wear, design-life exceedance or failure by the Contractor to install permanent erosion control devices as scheduled, the Contractor shall repair or replace such erosion control devices at no expense to the Department. If reconstruction of permanent or temporary erosion and sediment control devices is necessary due to factors beyond the control of the Contractor, the Department will pay for replacement under the appropriate Contract pay item or items.

Inspect all erosion and sediment control devices at least once every seven calendar days and within 24 hours of the end of a storm event that is 0.50 inches or greater. Maintain all erosion and sediment control devices as required by the Contractor's SWPPP and associated Erosion and Sediment Control Plan, and if applicable, as specified in the NPDES CGP.

**104-8 Protection During Suspension of Contract Time.**

Initiate stabilization measures within seven calendar days upon suspension of construction activities. If it is necessary to suspend the construction operations for any

appreciable length of time, shape the disturbed areas to facilitate stormwater runoff and construct earthen berms along the top edges of embankments to intercept stormwater runoff. Provide temporary slope drains in areas that are highly erodible to avoid pollution of surface waters, wetlands, groundwater, or property beyond the project limits. Locate slope drains at intervals of approximately 500 feet and stabilize by paving or covering with waterproof materials. Should such preventive measures fail, immediately take action as necessary to effectively prevent erosion and siltation. During suspension of operations, the Engineer may direct the Contractor to perform additional erosion and sediment control work as necessary.

#### **104-9 Method of Measurement.**

When separate items for temporary erosion control devices are included in the Contract, the quantities to be paid for will be:

1. the area, in square yards, of rolled erosion control products;
2. the length, in feet, of runoff control structures, measured along the surface of the work constructed;
3. the number of sediment containment systems constructed and accepted;
4. the number of sediment containment system cleanouts accomplished and accepted;
5. the length, in feet, of sediment barriers;
6. the length, in feet, of floating turbidity barrier;
7. the length, in feet, of staked turbidity barrier;
8. the number of inlet protection systems, for existing inlets;
9. the area, in square yards, of chemical treatment;
10. the number of floc logs or drums of product for chemical treatment;

Upon acceptance by the Engineer, the quantity of floating turbidity barriers, sediment barriers, staked turbidity barriers, and inlet protection devices will be paid for regardless of whether materials are new, used, or relocated from a previous installation on the project. Protection of newly constructed inlets and drainage systems is incidental to their installation. No separate payment will be made for temporary erosion control devices used to protect newly constructed drainage systems.

#### **104-10 Basis of Payment.**

Prices and payments will be full compensation for all work specified in this Section, including phased installation and routine maintenance of temporary erosion control devices throughout the life of the Contract.

Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Temporary sod used as a temporary erosion control device in accordance with 104-6.4.2 will be paid for under Section 570.

Separate payment will not be made for the cost of constructing temporary earth berms along the edges of the roadways to prevent erosion during grading and subsequent operations. The Contractor shall include these costs in the Contract prices for grading items.

In case of repeated failure on the part of the Contractor to control erosion, pollution, or siltation, the Engineer reserves the right to employ outside assistance or to use the Department's own forces to provide the necessary corrective measures. Any such costs incurred, including

engineering costs, will be charged to the Contractor and appropriate deductions made from the monthly progress estimate.

Payment will be made under:

- |                   |  |
|-------------------|--|
| Item No. 104- 1-  | Artificial Coverings/ Rolled Erosion Control Products - per square yard. |
| Item No. 104- 6-  | Slope Drains (Temporary)/ Runoff Control Structures - per foot.          |
| Item No. 104- 7-  | Sediment Basins/ Containment Systems - each.                             |
| Item No. 104- 9-  | Sediment Basin/ Containment system Cleanouts - each.                     |
| Item No. 104- 10- | Sediment Barriers - per foot   |
| Item No. 104- 11- | Floating Turbidity Barrier - per foot.                                   |
| Item No. 104- 12- | Staked Turbidity Barrier - per foot.                                     |
| Item No. 104- 18- | Inlet Protection System - each.  |
| Item No. 104- 19- | Chemical Treatment - per square yard.                                    |
| Item No. 104- 20- | Chemical Treatment (floc logs, drums of product) - each.                 |

## EARTHWORK AND RELATED OPERATIONS

### SECTION 120 EXCAVATION AND EMBANKMENT

#### 120-1 Description.

**120-1.1 General:** Excavate and construct embankments as required for the roadway, ditches, channel changes and borrow material. Use suitable excavated material or authorized borrow material to prepare subgrades and foundations. Construct embankments in accordance with Standard Plans, Index 120-001. Compact and dress excavated areas and embankments.

Meet the requirements of Section 110 for excavation of material for clearing and grubbing and Section 125 for excavation and backfilling of structures and pipe. Material displaced by the storm sewer or drainage structure system is not included in the earthwork quantities shown in the Contract Documents.

The existing surface may be a combination of the following:

1. The original unpaved ground line;
2. The bottom of the existing pavement;
3. The bottom of existing features removed by clearing and grubbing;
4. The bottom of the existing base, if the base is to be removed.

The finished graded surface includes the completed grades of side slopes, unpaved shoulders, and the bottom of the base for flexible or rigid pavement.

**120-1.2 Unidentified Areas of Contamination:** When encountering or exposing any abnormal condition indicating the presence of potentially contaminated materials, cease operations immediately in the vicinity and notify the Engineer. The presence of storage tanks or drums; observations of discolorations or sheens on earth or other conditions that appear abnormal may indicate the presence of contaminated materials and must be treated with extreme caution.

Once determined safe, take measures if needed, to minimize the spread of contamination into uncontaminated areas. Immediately provide for the health and safety of all workers at the job site and make provisions necessary for the health and safety of the public that may be exposed.

The Engineer will notify the District Contamination Impact Coordinator (DCIC) who will coordinate selecting and tasking the Department's Contamination Assessment/Remediation Contractor (CAR). Provide access to any potentially contaminated area. Preliminary investigation by the CAR Contractor will determine the course of action necessary for site security and the steps necessary under applicable laws, rules, and regulations for additional assessment and/or remediation work to resolve the contamination issue.

The CAR Contractor will develop a response work plan in cooperation with the Contractor, DCIC and Engineer. The response work plan will include the CAR Contractor's operations schedule with projected completion dates for the final resolution of the contamination issue.

Provide continuous access to these areas for the CAR Contractor and representatives of regulatory or enforcement agencies having jurisdiction. The CAR Contractor will maintain jurisdiction over the work activities inside the designated contaminated areas and associated equipment and materials staging areas.

Both Contractors will use the response work plan schedule as a basis for planning the completion of both work efforts. The Engineer may grant the Contract Time extensions according to the provisions of 8-7.3.2.

Cooperate with the CAR Contractor to expedite integration of the CAR Contractor's operations into the construction project. The response work plan will inform the Contractor of the construction activities that can be accommodated without exposure to contamination. If handling of contaminated soil, surface water or ground water is involved, all routine construction activities requiring the handling of contaminated soil, surface water or groundwater will be by the CAR Contractor. Adjustments to quantities or to Contract unit prices will be made according to work additions or reductions on the part of the Contractor in accordance with 4-3.

The Engineer will direct the Contractor when normal operations may resume in the affected area.

## **120-2 Classifications of Excavation.**

**120-2.1 General:** The Department may classify excavation specified under this Section for payment as any of the following: regular excavation, subsoil excavation, lateral ditch excavation, and channel excavation.

If the proposal does not show subsoil excavation or lateral ditch excavation as separate items of payment, include such excavation under the item of regular excavation.

If the proposal shows lateral ditch excavation as a separate item of payment but does not show channel excavation as a separate item of payment, include such excavation under the item of lateral ditch excavation. Otherwise, include channel excavation under the item of regular excavation.

**120-2.2 Regular Excavation:** Regular excavation includes roadway excavation and borrow excavation, as defined below for each.

**120-2.2.1 Roadway Excavation:** Roadway excavation consists of the excavation and the utilization or disposal of all materials necessary for the construction of the roadway, ditches, channel changes, etc., except for removal of existing pavement as defined in Section 110.

**120-2.2.2 Borrow Excavation:** Borrow excavation consists of the excavation and utilization of material from authorized borrow pits, including only material that is suitable for the construction of roadway embankments or of other embankments covered by the Contract.

A Cost Savings Initiative Proposal (CSIP) submittal based on using borrow material from within the project limits will not be considered.

**120-2.3 Subsoil Excavation:** Subsoil excavation consists of the excavation and disposal of muck, clay, rock, or any other material that is unsuitable in its original position and that is excavated below the existing surface. For ponds and ditches that identify the placement of a blanket material, the existing surface is template as the bottom of the blanket material. Subsoil excavation also consists of the excavation of all suitable material within the above limits as necessary to excavate the unsuitable material. Consider the limits of subsoil excavation indicated in the Plans as being particularly variable, in accordance with the field conditions actually encountered.

The quantity of material required to replace the excavated material and to raise the elevation of the roadway to the bottom of the template will be paid for under embankment or borrow excavation (Truck Measure).

**120-2.4 Lateral Ditch Excavation:** Lateral ditch excavation consists of all excavation of inlet and outlet ditches to structures and roadway, changes in channels of streams, and ditches parallel to the roadway right-of-way. Dress lateral ditches to the grade and finished graded surface shown in the Plans.

**120-2.5 Channel Excavation:** Channel excavation consists of the excavation and satisfactory disposal of all materials from within the limits of the channel as shown in the Plans.

### **120-3 Preliminary Soils Investigations.**

When the Plans contain the results of a soil survey, do not assume such data is a guarantee of the depth, extent, or character of material present.

### **120-4 Removal of Unsuitable Materials and Existing Roads.**

**120-4.1 Subsoil Excavation:** Where muck, rock, clay, or other material within the limits of the roadway is unsuitable in its original position, excavate such material to the depths shown in the Plans as the removal limits or as indicated by the Engineer, and backfill with suitable material. Where the removal of plastic soils is required, meet a construction tolerance, of plus or minus 0.2 foot in depth and plus or minus 6 inches (each side) in width.

**120-4.2 Construction over Existing Old Road:** Where a new roadway is to be constructed over an old one, completely remove the existing flexible and Portland cement concrete pavement for the entire limits of the width and depth in accordance with Section 110. Compact disturbed material in accordance with Section 120 or 160, whichever material applies. If indicated in the Plans, remove the existing base in accordance with Section 110.

### **120-5 Disposal of Surplus and Unsuitable Material.**

**120-5.1 Ownership of Excavated Materials:** Dispose of surplus and excavated materials as shown in the Plans or, if the Plans do not indicate the method of disposal, take ownership of the materials and dispose them outside the right-of-way.

**120-5.2 Disposal of Muck on Side Slopes:** As an exception to the provisions of 120-5.1, when approved by the Engineer, in rural undeveloped areas, the Contractor may place muck (A-8 material) on the slopes, or store it alongside the roadway, provided there is a clear distance of at least 6 feet between the roadway grading limits and the muck, and the Contractor dresses the muck to present a neat appearance. In addition, the Contractor may also dispose of this material by placing it on the slopes in developed areas where, in the opinion of the Engineer, this will result in an aesthetically pleasing appearance and will have no detrimental effect on the adjacent developments. Where the Engineer permits the disposal of muck or other unsuitable material inside the right-of-way limits, do not place such material in a manner which will impede the inflow or outfall of any channel or side ditches. The Engineer will determine the limits adjacent to channels within which such materials may be disposed.

**120-5.3 Disposal of Paving Materials:** Unless otherwise noted, take ownership of paving materials, such as paving brick, asphalt block, concrete slab, sidewalk, curb and gutter, etc., excavated in the removal of existing pavements, and dispose of them outside the right-of-way. If the materials are to remain the property of the Department, place them in neat piles as directed. Existing base materials that are removed may be incorporated in the stabilized portion of the subgrade in accordance with Section 160. If the construction sequence allows, incorporate all existing base material into the project as allowed by the Contract Documents.

**120-5.4 Disposal Areas:** Where the Contract Documents require disposal of excavated materials outside the right-of-way, and the disposal area is not indicated in the Contract Documents, furnish the disposal area without additional compensation.

Provide areas for disposal of removed paving materials out of sight of the project and at least 300 feet from the nearest roadway right-of-way line of any State maintained road. If the materials are buried, disregard the 300-foot limitation.

## **120-6 Borrow.**

**120-6.1 Materials for Borrow:** Do not open borrow pits until the Engineer has approved their location.

Prior to the purchase or use of any borrow pit materials, provide the Engineer with a written certification of borrow pit compliance meeting the requirements of Section 337.0262, Florida Statutes.

Do not import, stage, or provide borrow materials that contain pollutants defined in Chapter 376 of the Florida Statutes (oil of any kind and in any form, gasoline, pesticides, ammonia, chlorine, and derivatives thereof, excluding liquefied petroleum gas) in concentrations above any local, State, or Federal standards.

Prior to placing any borrow material that is the product of soil incineration, provide the Engineer with a copy of the Certificate of Materials Recycling and Post Burn Analysis showing that the material is below all allowable pollutant concentrations.

**120-6.2 Furnishing of Borrow Areas:** To obtain the Engineer's approval to use an off-site construction activity area that involves excavation such as a borrow pit or local aggregate pit, request in writing, a review for cultural resources involvement. Send the request to the Division of Historical Resources (DHR), Department of State, State Historic Preservation Officer, Tallahassee, FL. As a minimum, include in the request the Project Identification Number, the County, a description of the property with Township, Range, Section, etc., the dimensions of the area to be affected, and a location map. Do not start any work at the off-site construction activity area prior to receiving clearance from the DHR that no additional research is warranted.

For certain locations, the DHR will require a Cultural Resources Assessment (CRA) Survey before approval can be granted. When this is required, secure professional archaeological services to complete an historical and archaeological survey report. Submit the report to the DHR and to the Department. The Engineer will determine final approval or rejection of off-site construction activity areas based on input from the DHR.

Before receiving approval or before use of borrow areas, obtain written clearance from the Engineer concerning compliance with the Federal Endangered Species Act and other Wildlife Regulations as specified in 7-1.4 and Section 4(f) of the USDOT Act as specified in 7-1.8.

The Department will adjust Contract Time in accordance with 8-7 for any suspension of operations required to comply with this Article. The Department will not accept any monetary claims due to delays or loss of off-site construction activity areas.

Except where the Plans specifically call for the use of a particular borrow or dredging area, the Contractor may substitute borrow or dredging areas of their own choosing provided the Engineer determines the materials from such areas meet the Department's standards and other requirements for stability for use in the particular sections of the work in which it is to be placed, and the Contractor absorbs any increase in hauling or other costs. Stake the corners of the proposed borrow area and provide the necessary equipment along with an operator in order for the Engineer to investigate the borrow area. The Engineer will determine test locations,

collect samples, and perform tests to investigate the proposed borrow area based on soil strata and required soil properties. The Engineer will approve use of materials from the proposed area based on test results and project requirements. Final acceptance of materials will be based on Point of Use Test as described in 6-1.2.4.

Before using any borrow material from any substitute areas, obtain the Engineer's approval, in writing, for the use of the particular areas, and, where applicable, ensure that the Engineer has surveyed the surface. Upon such written approval by the Engineer, consider the substitute areas as designated borrow areas.

When furnishing the dredging or borrow areas, supply the Department with evidence that the necessary permits, rights, or waivers for the use of such areas have been secured.

Do not excavate any part of a Contractor furnished borrow area which is less than 300 feet from the right-of-way of the project or any State Road until the Engineer has approved a plan for landscaping and restoring the disturbed area. Perform this landscaping and land restoration at no expense to the Department, prior to final acceptance of the project. Do not provide a borrow area closer than 25 feet to the right-of-way of any state road. In Department furnished borrow pits, do not excavate material within 5 feet of adjacent property lines.

Upon completion of excavation, neatly shape, dress, grass, vegetate, landscape, and drain all exposed areas including haul roads, as necessary so as not to present an objectionable appearance.

Meet the requirements of Section 104 when furnishing borrow areas, regardless of location.

**120-6.3 Borrow Material for Shoulder Build-up:** When indicated in the Plans, furnish borrow material with a specific minimum bearing value, for building up of existing shoulders. Blend materials as necessary to achieve this specified minimum bearing value prior to placing the materials on the shoulders. Take samples of this borrow material at the pit or blended stockpile. Include all costs of providing a material with the required bearing value in the Contract unit price for borrow material.

**120-6.4 Haul Routes for Borrow Pits:** Provide and maintain, at no expense to the Department, all necessary roads for hauling the borrow material. Where borrow area haul roads or trails are used by others, do not cause such roads or trails to deteriorate in condition.

Arrange for the use of all non-public haul routes crossing the property of any railroad. Incur any expense for the use of such haul routes. Establish haul routes which will direct construction vehicles away from developed areas when feasible and keep noise from hauling operations to a minimum. Advise the Engineer in writing of all proposed haul routes.

**120-6.5 Authorization for Use of Borrow:** When the item of borrow excavation is included in the Contract, use borrow only when sufficient quantities of suitable material are not available from roadway and drainage excavation, to properly construct the embankment, subgrade, and shoulders, and to complete the backfilling of structures. Do not use borrow material until so ordered by the Engineer, and then only use material from approved borrow pits.

## **120-7 Materials for Embankment.**

**120-7.1 Use of Materials Excavated from the Roadway and Appurtenances:** Assume responsibility for determining the suitability of excavated material for use on the project in accordance with the applicable Contract Documents. Consider the sequence of work and maintenance of traffic phasing in the determination of the availability of this material.

**120-7.2 General Requirements for Embankment Materials:** Construct embankments of acceptable material meeting the embankment utilization requirements of Standard Plans 120-001, including reclaimed asphalt pavement (RAP), recycled concrete aggregate (RCA) and Portland cement concrete rubble, but containing no muck, stumps, roots, brush, vegetable matter, rubbish, reinforcement bar or other material that does not compact into a suitable and enduring roadbed. Do not use RAP or RCA in the top 3 feet of slopes and shoulders that are to be grassed or have other types of vegetation established. Do not use RAP or RCA in stormwater management facility fill slopes or permitted wetland impact areas.

Remove all waste material designated as undesirable. Use material in embankment construction in accordance with Plans or as the Engineer directs.

Complete the embankment using maximum particle sizes (in any dimension) as follows:

1. In top 12 inches: 3-1/2 inches (in any dimension).
2. 12 to 24 inches: 6 inches (in any dimension).
3. In the depth below 24 inches: not to exceed 12 inches (in any dimension) or the compacted thickness of the layer being placed, whichever is less.

Spread all material so that the larger particles are separated from each other to minimize voids between them during compaction. Compact around these rocks in accordance with 120-9.2.

When and where approved by the Engineer, the Contractor may place larger rocks (not to exceed 18 inches in any dimension) outside the 1:2 slope and at least 4 feet or more below the bottom of the base. Compact around these rocks to a firmness equal to that of the supporting soil. Construct grassed embankment areas in accordance with 120-9.2.4. When constructing embankments adjacent to bridge end bents or abutments, do not place rock larger than 3-1/2 inches in diameter within 3 feet of the location of any end-bent piling.

**120-7.3 Materials Used at Pipes, Culverts, etc.:** Construct embankments over and around pipes, culverts, and bridge foundations with selected materials.

## **120-8 Embankment Construction.**

**120-8.1 General:** Construct embankments in sections of not less than 300 feet in length or for the full length of the embankment. A LOT is defined as a single lift of finished embankment. Do not construct another LOT over an untested LOT without the Engineer's approval in writing.

Construct mainline traffic bearing applications such as pavement lanes, turn lanes, ramps, parking lots, concrete box culverts, emergency shoulder use, and retaining wall systems in LOTs not to exceed 500 feet.

Construct non-mainline LOTs, not to exceed 2,000 feet, for non-traffic bearing applications such as shoulder-only areas, shared use paths, and sidewalks areas.

When mainline and non-mainline areas are constructed in one operation, a LOT shall not exceed 500 feet. Isolated compaction operations will be considered as separate LOTs. For multiple phase construction, a LOT shall not extend beyond the limits of the phase.

### **120-8.2 Dry Fill Method:**

**120-8.2.1 General:** Construct embankments to meet the compaction requirements in 120-9 and in accordance with the acceptance program requirements in 120-10.

As far as practicable, distribute traffic over the work during the construction of embankments to cover the maximum area of the surface of each layer.

Construct embankment using the dry fill method whenever normal dewatering equipment and methods can accomplish the needed dewatering.

**120-8.2.2 Maximum Compacted Lift Thickness Requirements:** Construct the embankment in successive layers with lifts up to a maximum listed in Table 120-1 below based on the embankment material classification group.

Table 120-1			
Group	AASHTO Soil Class	Maximum Lift Thickness	Thick Lift Control Test Section Requirements
1	A-3	12 inches	Not Needed
	A-2-4 (No. 200 Sieve $\leq$ 15%)		
2	A-1	6 inches without Control Test Section	Maximum of 12 inches per 120-8.2.3
	A-2-4 (No. 200 Sieve $>$ 15%)		
	A-2-5, A-2-6, A-2-7, A-4, A-5, A-6		
	A-7 (Liquid Limit $<$ 50)		

**120-8.2.3 Thick Lift Requirements:** For embankment materials classified as Group 2 in Table 120-1 above, the option to perform thick lift construction in successive layers of not more than 12 inches compacted thickness may be used after meeting the following requirements:

1. Notify the Engineer and obtain approval in writing prior to beginning construction of a test section. Demonstrate the possession and control of compacting equipment sufficient to achieve density required by 120-10.2.2 for the full depth of a thicker lift.
2. Construct a test section of the length of one full LOT of not less than 500 feet.
3. Perform five Quality Control (QC) tests at random locations within the test section.
  - a. All five QC tests and a Department Verification test must meet the density required by 120-10.2.2.
  - b. Identify the test section with the compaction effort and soil classification in the Department's Earthwork Records System (ERS).
4. Obtain Engineer's approval in writing for the compaction effort after completing a successful test section.

In case of a change in compaction effort or soil classification, failing QC test or when the QC tests cannot be verified, construct a new test section. The Contractor may elect to place material in 6 inches compacted thickness at any time. Construct all layers approximately parallel to the centerline profile of the road.

The Engineer reserves the right to terminate the Contractor's use of thick lift construction. Whenever the Engineer determines that the Contractor is not achieving satisfactory results, revert to the 6-inch compacted lifts.

**120-8.2.4 Dewatering Equipment and Methods:** Provide normal dewatering equipment including, but not limited to, surface pumps, sump pumps and trenching/digging machinery. Provide normal dewatering methods including, but not limited to, constructing shallow surface drainage trenches/ditches, using sand blankets, sumps and siphons.

When normal dewatering does not adequately remove the water, the Engineer may require the embankment material to be placed in the water or on low swampy ground in accordance with 120-8.2.5.

**120-8.2.5 Placing in Unstable Areas:** When depositing fill material in water, or on low swampy ground that will not support the weight of hauling equipment, construct the embankment by dumping successive loads in a uniformly distributed layer of a thickness not greater than necessary to support the hauling equipment while placing subsequent layers. Once sufficient material has been placed so that the hauling equipment can be supported, construct the remaining portion of the embankment in layers in accordance with the applicable provisions of 120-9.2.2.

**120-8.2.6 Placing on Steep Slopes:** When constructing an embankment on a hillside sloping more than 20 degrees from the horizontal, before starting the fill, deeply plow or cut steps into the surface of the existing slope on which the embankment is to be placed.

**120-8.2.7 Placing Outside the Standard Control Line:** The standard control line is defined as the plane described by a one (vertical) to two (horizontal) slope downward from the roadway shoulder point or the gutter line, in accordance with Standard Plans, Index 120-001 and 120-002.

For sidewalks, the standard control line is a vertical line one foot from the left and right edge of the sidewalk. When the sidewalk is immediately adjacent to another roadway element such as curb-and-gutter, the control line is the distance between the two elements when the distance is less than a foot. The vertical control lines for sidewalks are referenced as the area to be compacted in 522-4.

For retaining wall system, the standard control line is a vertical line along the inside edges of the left and right side of the retaining wall face. For gravity walls and cast-in-place (CIP) retaining walls, the standard control line is a vertical line originating at the inside edge of the top of the gravity or CIP retaining wall.

When various elements are present in a single operation, a hierarchy for standard control line is as follows:

1. Retaining wall system,
2. CIP retaining wall systems,
3. Gravity walls,
4. Curb-and-gutter,
5. Shoulder break point,
6. and concrete driveway and sidewalk.

Where material that is unsuitable for normal embankment construction is to be used in the embankment outside the standard control line, place such material in layers of not more than 18 inches in thickness, measured loose. The Contractor may also place material which is suitable for normal embankment, outside the standard control line in 18-inch layers. Maintain a constant thickness for suitable material placed within and outside the standard control line, unless placing in a separate operation.

### **120-8.3 Hydraulic Method:**

**120-8.3.1 Method of Placing:** When the hydraulic method is used, as far as practicable, place all dredged material in its final position in the embankment by such method. Place and compact any dredged material that is reworked or moved and placed in its final position by any other method, as specified in 120-9.2. Baffles or any other form of construction may be used if the slopes of the embankments are not steeper than indicated in the Plans.

Remove all timber used for temporary bulkheads or baffles from the embankment, and fill and thoroughly compact all voids. When placing fill on submerged land, construct dikes prior to beginning of dredging, and maintain the dikes throughout the dredging operation.

**120-8.3.2 Excess Material:** Do not use any excess material placed outside the prescribed slopes or below the normal high-water table to raise the fill areas. Remove only the portion of this material required for dressing the slopes.

**120-8.3.3 Protection of Openings in Embankment:** Maintain openings in the embankments at the bridge sites. Remove any material which invades these openings or existing channels without additional compensation to provide the same existing channel depth as before the construction of the embankment. Do not excavate or dredge any material within 200 feet of the toe of the proposed embankment.

#### **120-8.4 Reclaimed Asphalt Pavement (RAP) Method:**

**120-8.4.1 General:** Use only RAP material stored at facilities with an approved Florida Department of Environmental Protection Stormwater permit or transferred directly from a milling project to the Department project. Certify the source if RAP material is from an identifiable Department project. Do not use RAP material in the following areas: construction areas that are below the seasonal high groundwater table elevation; MSE Wall backfill; underneath MSE Walls or the top 6 inches of embankment.

Prior to placement, submit documentation to the Engineer for their approval, outlining the proposed location of the RAP material.

**120-8.4.2 Soil and RAP Mixture:** Place the RAP material at the location and spread uniformly, using approved methods to obtain a maximum layer thickness of 4 inches. Mix this 4-inch maximum layer of RAP with a loose soil layer 8 to 10 inches thick. After mixing, meet all embankment utilization requirements specified in 120-7 for the location used. The total RAP and other embankment material shall not exceed 12 inches per lift after mixing and compaction if the Contractor can demonstrate that the density of the mixture can be achieved. Perform mixing using rotary tillers or other equipment meeting the approval of the Engineer. The Engineer will determine the order in which to spread the two materials. Mix both materials to the full depth. Ensure that the finished layer will have the thickness and shape required by the typical section. Demonstrate the feasibility of this construction method by successfully completing a 500-foot long test section.

**120-8.4.3 Alternate Soil and RAP Layer Construction:** Construct soil in 6-inch to 12-inch compacted lifts and RAP in alternate layers with 6-inch maximum compacted lifts. Use soil with a minimum LBR value of 40 to prevent failure during compaction of the overlying RAP layer. Demonstrate the feasibility of this construction method by successfully completing a 500-foot long test section.

**120-8.5 Construction Tolerances:** Shape the surface of the earthwork to conform to the lines and grades as shown in the Plans. In final shaping of the surface of earthwork, maintain a tolerance of 0.3 foot above or below the finished graded surface with the following exceptions:

1. Shape the surface of shoulders to within 0.1 foot of the finished graded surface shown in the Plans.
2. Shape the earthwork to match adjacent pavement, curb, sidewalk, structures, etc.
3. Shape the bottom of conveyance ditches so that the ditch impounds no water.

4. When the work does not include construction of base or pavement, shape the entire roadbed (shoulder point to shoulder point) to within 0.1 foot above or below the Plan finished graded surface.

5. When the work includes permitted linear stormwater management facilities, shape the swales and ditch blocks to within 0.1 foot of the finished graded surface shown in the Plans.

Ensure that the shoulder lines do not vary horizontally more than 0.3 foot from the true lines shown in the Plans.

**120-8.6 Operations Adjacent to Pavement:** Carefully dress areas adjacent to pavement areas to avoid damage to such pavement. Complete grassing of shoulder areas prior to placing the final wearing course. Do not manipulate any embankment material on a pavement surface.

When shoulder dressing is underway adjacent to a pavement lane being used to maintain traffic, exercise extreme care to avoid interference with the safe movement of traffic.

## **120-9 Compaction Requirements.**

**120-9.1 Moisture Content:** Compact the materials at a moisture content such that the specified density can be attained. If necessary to attain the specified density, add water to the material, or lower the moisture content by manipulating the material or allowing it to dry, as is appropriate.

### **120-9.2 Compaction of Embankments:**

**120-9.2.1 General:** Uniformly compact each layer, using equipment that will achieve the required density, and as compaction operations progress, shape and manipulate each layer as necessary to ensure uniform density throughout the embankment.

**120-9.2.2 Compaction Over Unstable Foundations:** Where the embankment material is deposited in water or on low swampy ground, and in a layer thicker than 12 inches (as provided in 120-8.2.5), compact the top 6 inches (compacted thickness) of such layer to the density as specified in 120-10.2.2.

**120-9.2.3 Compaction Where Plastic Material Has Been Removed:** Where unsuitable material is removed and the remaining surface is of the A-4, A-5, A-6, or A-7 Soil Groups (see AASHTO M 145), as determined by the Engineer, compact the surface of the excavated area by rolling with a sheepsfoot roller exerting a compression of at least 250 psi on the tamper feet, for the full width of the roadbed (subgrade and shoulders). Perform rolling before beginning any backfill and continue until the roller feet do not penetrate the surface more than 1 inch. Do not perform such rolling where the remaining surface is below the normal water table and covered with water. Vary the procedure and equipment required for this operation at the discretion of the Engineer.

**120-9.2.4 Compaction of Grassed Areas:** Do not compact the upper layers of shoulders or outer layers of any embankments where turf will be established. Leave this layer in a loose condition to not to exceed 6 inches for subsequent performance turf operations. Do not place RAP or RAP blended material within the top 12 inches of areas to be grassed. Meet the requirements of 570 for turf establishment.

**120-9.3 Compaction for Pipes, Culverts, etc.:** Compact the backfill of trenches to the densities specified for embankment or subgrade, as applicable, and in accordance with the requirements of 125-9.2.

Thoroughly compact embankments over and around pipes, culverts, and bridges in a manner which will not place undue stress on the structures, and in accordance with the requirements of 125-9.2.

**120-9.4 Compaction of Embankment when Substituting Stabilized Subgrade:** If the Plans do not provide for stabilized subgrade or if granular subbase meeting the requirements of 290-2 and 290-3 is used in lieu of stabilized subgrade, meet the following requirements:

1. For cut areas or undisturbed soils, proof roll the embankment in such manner that a firm and unyielding foundation is established. Remove and replace any soft or loose foundation subsoils that are incapable of sustaining the required proof rolling and meet the density backfill requirements of 120-10.2.2.

2. For fill areas, compact embankment to the density specified in 120-10.2.2.

Where trenches for widening strips are not of sufficient width to permit the use of standard compaction equipment, perform compaction using vibratory rollers, trench rollers, or other type compaction equipment approved by the Engineer.

Maintain the required density until the base or pavement is placed on the subgrade.

## **120-10 Acceptance Program.**

### **120-10.1 General Requirements:**

**120-10.1.1 Equipment Comparison:** Before initial production, perform a three-way density gauge comparison with Verification and Independent Assurance (IA) gauges to validate QC and Verification gauges. When comparing the wet density between two density gauges, three sets of calculations must be performed (IA to QC, IA to Verification, and QC to Verification) within the same test hole and same test depth. Ensure that the difference between any two wet densities does not exceed the tolerances listed in Table 120-2. Repair, calibrate, or replace any gauge that does not compare favorably with the IA gauge.

Table 120-2			
Condition	Comparison Type	Manufacturer	Tolerance
Condition 1: When both gauges in the comparison are Nuclear Density Gauges (NDG)	NDG to NDG	Same Manufacturer	2 lb/ft <sup>3</sup>
	NDG to NDG	Different Manufacturer	3 lb/ft <sup>3</sup>
Condition 2: When one of the gauges in the comparison is a Low-Activity Nuclear Density Gauge (L-NDG)	L-NDG to L-NDG	Same Manufacturer	2 lb/ft <sup>3</sup>
	L-NDG to L-NDG	Different Manufacturer	3 lb/ft <sup>3</sup>
	NDG to L-NDG	Same/Different Manufacturer	

Ensure the equipment intended to determine the moisture content of soils by Speedy moisture tester in accordance with FM 5-507 has been calibrated and visually inspected by the Engineer.

To validate additional nuclear density gauges, perform a two-way comparison analysis between the QC nuclear gauge and the Verification nuclear gauge any time a nuclear gauge is first brought to the project or returns from annual calibration/repair. At least one of the nuclear gauges in the two-way comparison analysis must have been previously validated in a comparison. Repair or replace any QC gauge that does not compare favorably with a validated Verification gauge at any time during the remainder of the project. Calibrate all gauges annually.

**120-10.1.2 Density over 105%:** When a QC computed dry density results in a value greater than 105% of the applicable Proctor maximum dry density, the Engineer will perform an Independent Verification (IV) density test within 5 feet. If the IV density results in a value greater than 105%, the Engineer will investigate the compaction methods, examine the applicable Standard Proctor Maximum Density and material description. The Engineer may collect and test an IV Standard Proctor Maximum Density sample for acceptance in accordance with the criteria of 120-10.2.2.

**120-10.2 Quality Control Tests:**

**120-10.2.1 Standard Proctor Maximum Density Determination:** Determine the QC standard Proctor maximum density and optimum moisture content by sampling and testing the material in accordance with FM 1-T099.

**120-10.2.2 Density Testing Requirements:** Determine the in-place wet density by Nuclear Density testing in accordance with FM 1-T310. Determine the in-place moisture content for each density test in accordance with FM 1-T310, FM 5-507 (Speedy Moisture), or ASTM D-4643 (Microwave Oven), whichever is applicable. Calculate the dry density using the measured in-place wet density and moisture content.

Obtain a minimum QC density of 100% of the standard Proctor maximum density as determined by FM 1-T099, with the following exceptions: embankment constructed by the hydraulic method as specified in 120-8.3; material placed outside the standard control line as specified in 120-8.2.7 except when a structure is supported on existing embankment; and other areas specifically excluded herein. For structures supported on existing embankments and other areas specifically excluded herein, refer to the appropriate specifications for density requirement.

**120-10.2.3 Soil Classification:** Perform soil classification tests on the sample collected in 120-10.2.1, in accordance with AASHTO T88, T 89, T 90, and FM 1-T267. Classify soils in accordance with AASHTO M145 in order to determine compliance with embankment utilization requirements as specified in Standard Plans, Index 120-001.

**120-10.2.4 Frequency:** Conduct QC sampling and testing at a minimum frequency listed in Table 120-3 below. The Engineer will perform Verification sampling and tests at a minimum frequency listed in Table 120-3 below.

Table 120-3			
Test Name	Quality Control	Verification	Verification of Shoulder-Only Areas, Shared Use Paths, and Sidewalks
Standard Proctor Maximum Density	One per soil type	One per soil type	One per soil type
Density	One per LOT	One per four LOTS and for wet conditions, the first lift not affected by water	One per two LOTS
Soil Classification and Organic Content	One per Standard Proctor Maximum Density	One per Standard Proctor Maximum Density	One per Standard Proctor Maximum Density

**120-10.2.5 Test Selection and Reporting:** Determine test locations including stations and offsets, using the random number generator approved by the Engineer. Record data directly in the ERS section of the Department's database meeting the requirements of 105. Do not use notepads or worksheets to record data for later transfer to the ERS. Notify the Engineer upon successful completion of QC testing on each LOT prior to placing another lift on top.

**120-10.3 Department Verification:** The Engineer will conduct Verification tests in order to accept all materials and work associated with 120-10.2. The Engineer will verify the QC results if they meet the Verification Comparison Criteria, otherwise the Engineer will implement Resolution procedures.

The Engineer will select test locations, including Station, Offset, and Lift, using a random number generator, based on the LOTs under consideration. Each Verification test evaluates all work represented by the QC testing completed in those LOTs.

In addition to the Verification testing, the Engineer may perform additional Independent Verification (IV) testing. The Engineer will evaluate and act upon the IV test results in the same manner as Verification test results.

When the project requires less than four QC tests per material type, the Engineer reserves the right to accept the materials and work through visual inspection.

**120-10.4 Reduced Testing Frequency:** Obtain the Engineer's written approval for the option to reduce density testing frequency to one test every two LOTs if Resolution testing was not required for 12 consecutive verified LOTs, or if Resolution testing was required, but the QC test data was upheld and all substantiating tests are recorded in the ERS. Do not apply reduced testing frequency in construction of shoulder-only areas, shared use paths, sidewalks, and first and last lift.

Generate random numbers based on the two LOTs under consideration. When QC test frequency is reduced to one every two LOTs, obtain the Engineer's approval to place more than one LOT over an untested LOT. Assure similar compaction efforts for the untested LOTs. If the Verification test fails, and QC test data is not upheld by Resolution testing, the QC testing will revert to the original frequency of one QC test per LOT.

**120-10.5 Payment for Resolution Tests:** If the Resolution laboratory results compare favorably with the QC results, the Department will pay for Resolution testing. No additional compensation, either monetary or time, will be made for the impacts of any such testing.

If the Resolution laboratory results do not compare favorably with the QC results, the costs of the Resolution testing will be deducted from monthly estimates. No additional time will be granted for the impacts of any such testing.

#### **120-10.6 Verification Comparison Criteria and Resolution Procedures:**

**120-10.6.1 Standard Proctor Maximum Density Determination:** The Engineer will verify the QC test results if the results compare within 4.5 lb/ft<sup>3</sup> of the Verification test result. Otherwise, the Engineer will take one additional sample of material from the soil type in question. The State Materials Office (SMO) or an AASHTO accredited laboratory designated by the SMO will perform Resolution testing. The material will be sampled and tested in accordance with FM 1-T099.

The Engineer will compare the Resolution test results with the QC test results. If all Resolution test results are within 4.5 lb/ft<sup>3</sup> of the corresponding QC test results, the Engineer will use the QC test results for material acceptance purposes for each LOT with that soil type. If the Resolution test result is not within 4.5 lb/ft<sup>3</sup> of the Contractor's QC test, the Verification test result will be used for material acceptance purposes.

**120-10.6.2 Density Testing:** When a Verification or IV density test fails the acceptance criteria, perform an equipment comparison analysis using the same test hole and same test depth in accordance with 120-10.1.1. If the equipment compares favorably, then retest the site within a 5-foot radius of the failing Verification's test. Otherwise, repair, calibrate, or replace density gauge in accordance with 120-10.1.1.

If the QC retest meets the acceptance criteria of 120-10.2.2, the Engineer will accept those LOTs in question. Otherwise, rework and retest the LOT. The Engineer will perform new verification testing. Record the equipment comparison data and the QC test results in the ERS section of the Department's database.

**120-10.6.3 Soil Classification:** The Engineer will verify the QC test results if the Verification and the QC test results both match the soil utilization symbol listed in Standard Plans, Index 120-001. Otherwise, the Engineer will test the sample retained for Resolution testing. The SMO or an AASHTO accredited laboratory designated by the SMO will perform the Resolution testing. The material will be sampled and tested in accordance with AASHTO T 88, T 89, and T 90, and classified in accordance with AASHTO M 145.

The Engineer will compare the Resolution test results with the QC test results. If the Resolution test matches the QC soil utilization symbol, the Engineer will use the QC soil utilization symbol for material acceptance purposes. If the Resolution test result does not match the Contractor's QC soil utilization symbol, the Verification test results will be used for material acceptance purposes.

**120-10.6.4 Organic Content:** The Engineer will verify the QC test results if the Verification test results satisfy the organic content test criteria in Standard Plans, Index 120-001. Otherwise, the Engineer will test the sample retained for Resolution testing. The SMO or an AASHTO accredited laboratory designated by the SMO will perform Resolution testing. The material will be sampled and tested in accordance with FM 1-T 267. If the Resolution test results satisfy the required criteria, material of that soil type will be verified and accepted. If the Resolution test results do not meet the required criteria, reject the material and reconstruct with acceptable material.

**120-10.7 Disposition of Defective Materials:** Assume responsibility for removing and replacing all defective material, as defined in Section 6.

Alternately, submit an Engineering Analysis Scope in accordance with 6-4 to determine the disposition of the material.

## **120-11 Maintenance and Protection of Work.**

While construction is in progress, always maintain adequate drainage for the roadbed. Maintain a shoulder at least 3 feet wide adjacent to all pavement or base construction to provide support for the edges.

Maintain all earthwork construction throughout the life of the Contract and take all reasonable precautions to prevent loss of material from the roadway due to the action of wind or water. Repair, at no expense to the Department except as otherwise provided herein, any slides, washouts, settlement, subsidence, or other mishap which may occur prior to final acceptance of the work. Perform maintenance and protection of earthwork construction in accordance with Section 104.

Maintain all channels excavated as a part of the Contract work against natural shoaling or other encroachments to the lines and grades, shown in the Plans, until final acceptance of the project.

## **120-12 Method of Measurement.**

**120-12.1 General:** When payment for excavation is on a volumetric basis, the quantity to be paid for will be the volume, in cubic yards. The material will be measured in its original position by field survey or by photogrammetric means as designated by the Engineer, unless otherwise specified under the provisions for individual items.

Where subsoil excavation extends outside the lines shown in the Plans or authorized by the Engineer including allowable tolerances, and the space is backfilled with material obtained in additional authorized roadway or borrow excavation, the net fill, plus shrinkage allowance, will be excluded from the quantity of roadway excavation or borrow excavation to be paid for, as applicable.

The quantity of all material washed, blown, or placed beyond the limits of the finished graded surface will be determined by the Engineer and will be excluded from the quantity of roadway excavation or borrow excavation to be paid for, as applicable.

Subsoil excavation that extends outside the lines shown in the Plans or authorized by the Engineer including allowable tolerances will be excluded from the quantity to be paid for as subsoil excavation.

**120-12.2 Roadway Excavation:** The measurement will include only the net volume of material excavated between the original ground line or finished graded surface of an existing roadbed, as applicable, and the finished surface of new pavement, except that the measurement will also include all unavoidable slides which may occur in connection with excavation classified as roadway excavation.

The pay quantity will be the plan quantity provided that the excavation was accomplished in substantial compliance with the plan dimensions and subject to the provisions of 9-3.2 and 9-3.4. On designated 3-R Projects, regular excavation will be paid for at the Contract lump sum price provided that the excavation was accomplished in substantial compliance with the plan dimension.

**120-12.3 Borrow Excavation:** Measurement will be made on a loose volume basis, measured in trucks or other hauling equipment at the point of dumping on the road. If measurement is made in vehicles, level the material to facilitate accurate measurement.

Unsuitable material excavated from borrow pits where truck measurement is provided for and from any borrow pits furnished by the Contractor, will not be included in the quantity of excavation to be paid for.

**120-12.4 Lateral Ditch Excavation:** The measurement will include only material excavated within the lines and grades indicated in the Plans or as directed by the Engineer. The measurement will include the full length shown in the Plans or directed by the Engineer and acceptably completed. Excavation included for payment under Section 125 will not be included in this measurement.

The pay quantity will be the plan quantity provided that the excavation was accomplished in substantial compliance with the plan dimensions and subject to the provisions of 9-3.2 and 9-3.4.

**120-12.5 Channel Excavation:** The measurement will include only material excavated within the lines and grades indicated in the Plans or in accordance with authorized Plan changes. The measurement will include the full length shown in the Plans including any authorized changes thereto.

If shoaling occurs subsequent to excavation of a channel and the Engineer authorized the shoaled material to remain in place, the volume of any such material remaining

within the limits of channel excavation shown in the Plans will be excluded from the measured quantity of channel excavation.

**120-12.6 Subsoil Excavation:** The measurement will include only material excavated within the lines and grades indicated in the Plans (including the tolerance permitted therefore) or as directed by the Engineer.

When no item for subsoil excavation is shown in the Contract but subsoil excavation is subsequently determined to be necessary, such unanticipated subsoil excavation will be paid for as provided in Article 4-4.

**120-12.7 Embankment:** The pay quantity will be at the plan quantity. Where payment for embankment is not to be included in the payment for the excavation and is to be paid for on a cubic yard basis for the item of embankment, the measurement will include material placed within the limits of the existing surface, to the finished graded surface as shown in the Plans, Standard Plans Index 120-001, or directed by the Engineer. Where embankment is constructed over an existing road, the embankment measurement will include only the material actually placed up to the finished graded surface. If there are authorized changes in plan dimensions or if errors in plan quantities are detected, plan quantity will be adjusted as provided in 9-3.2.

Any overrun or underrun of plan quantity for subsoil excavation which results in a corresponding increase or decrease in embankment will be considered as an authorized plan change for adjustment purposes as defined in 9-3.2.2.

No payment will be made for embankment material used to replace unsuitable material excavated beyond the lines and grades shown in the Plans or ordered by the Engineer.

In no case will payment be made for material allowed to run out of the embankment on a flatter slope than indicated on the Plans. The Contractor shall make their own estimate on the volume of material actually required to obtain the pay section.

## **120-13 Basis of Payment.**

**120-13.1 General:** Prices and payments for the various work items included in this Section will be full compensation for all work described herein, including excavating, dredging, pumping, hauling, placing, and compacting; dressing the surface of the earthwork; maintaining and protecting the complete earthwork.

The Department will not allow extra compensation for any reworking of materials. The Department will compensate for the cost of grassing or other permanent erosion control measures directed by the Engineer as provided in the Contract.

### **120-13.2 Excavation:**

**120-13.2.1 Items of Payment:** When no classification of material is indicated in the Plans, and bids are taken only on regular excavation, the total quantity of all excavation specified under this Section will be paid for at the Contract unit price for regular excavation.

When separate classifications of excavation are shown in the proposal, the quantities of each of the various classes of materials so shown will be paid for at the Contract unit prices per cubic yard for regular excavation, lateral ditch excavation, subsoil excavation, and channel excavation, as applicable, and any of such classifications not so shown will be included under the item of regular excavation (except that if there is a classification for lateral ditch excavation shown and there is no classification for channel excavation, any channel excavation will be included under the item of lateral ditch excavation). As an exception on designated projects, regular excavation will be paid for at the Contract lump sum price.

**120-13.2.2 Basic Work Included in Payments:** Prices and payments will be full compensation for all work described under this Section, except for any excavation, or

embankment which is specified to be included for payment under other items. Such prices and payments will include hauling; any reworking that may be necessary to accomplish final disposal as shown in the Plans; the dressing of shoulders, ditches and slopes; removal of trash, vegetation, etc., from the previously graded roadway where no item for clearing and grubbing is shown in the Plans; and compacting as required.

**120-13.2.3 Additional Depth of Subsoil Excavation:** Where subsoil excavation is made to a depth of 0 to 5 feet below the depth shown in the Plans, such excavation will be paid for at the unit price bid.

Where subsoil excavation is made to a depth greater than 5 feet, and up to 15 feet, deeper than the depth shown in the Plans, such excavation will be paid for at the unit price bid plus 25% of such unit price. Additional extra depth, more than 15 feet below such plan depth, will be considered as a change in the character of the work and will be paid for as unforeseeable work.

Where no subsoil excavation is shown in a particular location on the original Plans, payment for extra depth of subsoil will begin 5 feet below the lowest elevation on the finished graded surface.

**120-13.2.4 Borrow Excavation:** When the item of borrow excavation is included in the Contract, price and payment will also include the cost of furnishing the borrow areas and any necessary clearing and grubbing thereof, the removal of unsuitable material that it is necessary to excavate in order to obtain suitable borrow material, and also the costs incurred in complying with the provisions of 120-6.3.

**120-13.2.5 Materials Excluded from Payment for the Excavation:** No payment for excavation will be made for any excavation covered for payment under the item of embankment.

No payment will be made for the excavation of any materials which is used for purposes other than those shown in the Plans or designated by the Engineer. No payment will be made for materials excavated outside the lines and grades given by the Engineer, unless specifically authorized by the Engineer. As an exception, in operations of roadway excavation, all slides and falls of insecure masses of material beyond the regular slopes that are not due to lack of precaution on the part of the Contractor, will be paid for at the Contract unit price for the material involved. The removal of slides and falls of material classified as lateral ditch excavation or as subsoil excavation will not be paid for separately but will be included in the Contract unit price for the pay quantity of these materials, measured as provided in 120-13.

### **120-13.3 Embankment:**

**120-13.3.1 General:** Price and payment will be full compensation for all work specified in this Section, including all material for constructing the embankment, all excavating, dredging, pumping, placing and compacting of material for constructing the embankment complete, dressing of the surface of the roadway, maintenance and protection of the completed earthwork, and the removal of rubbish, vegetation, etc., from the roadway where no clearing and grubbing of the area is specified in the Plans. Also, such price and payment, in each case, will specifically include all costs of any roadway, lateral ditch, or channel excavation, unless such excavation is specifically shown to be paid for separately, regardless of whether the materials are utilized in the embankment.

**120-13.3.2 Excluded Material:** No payment will be made for the removal of muck or overburden from the dredging or borrow areas. No payment will be made for

embankment material used to replace muck or other unsuitable material excavated beyond the lines and grades shown in the Plans or ordered by the Engineer.

**120-13.3.3 Clearing and Grubbing:** No payment will be made for any clearing and grubbing of the borrow or dredging areas. Where no clearing and grubbing of such areas is specified in the Plans, the cost of any necessary clearing and grubbing will be included in the Contract unit or lump sum price for Embankment.

**120-13.3.4 Cost of Permits, Rights, and Waivers:** Where the Contractor provides borrow or dredging areas of their own choosing, the cost of securing the necessary permits, rights or waivers will be included in the Contract price for embankment.

**120-13.4 Payment Items:** Payment will be made under:

- |                   |   |
|-------------------|---|
| Item No. 120- 1-  | Regular Excavation - per cubic yard.          |
| Item No. 120- 2-  | Borrow Excavation - per cubic yard.           |
| Item No. 120- 3-  | Lateral Ditch Excavation - per cubic yard.    |
| Item No. 120- 4-  | Subsoil Excavation - per cubic yard.          |
| Item No. 120- 5-  | Channel Excavation - per cubic yard.          |
| Item No. 120- 6-  | Embankment - per cubic yard.                  |
| Item No. 120- 71- | Regular Excavation (3-R Projects) - lump sum. |

## SECTION 145 GEOSYNTHETIC REINFORCEMENT

### 145-1 Description.

This Section specifies the construction requirements for geosynthetic used in geosynthetic reinforced soil slopes, geosynthetic reinforced foundations over soft soils, and geosynthetic reinforced embankment. Furnish and place geosynthetic and any associated facing material or drainage blankets.

### 145-2 Responsibility.

Construct the geosynthetic reinforced feature, including materials, method, and installation based on information provided in the Contract Documents and the geosynthetic supplier's recommendations. Submit shop drawings in accordance with Section 5 showing the details and distribution of the selected geosynthetic that meet the design shown in the Plans. Alternate designs optimizing the selected geosynthetic materials must be in accordance with Chapter 263 of the FDOT Design Manual.

### 145-3 Materials.

Meet the following requirements:

Geosynthetic Material\* .....Section 985

\*Use products listed on the Department's APL.

**145-3.1 Geosynthetic Materials:** Ensure the geosynthetic materials received at the job site are in unopened shipping packages and the packages are clearly labeled with the manufacturer's name, product name, style number, roll dimension and LOT number, otherwise, the Engineer will reject the material. Store geosynthetic materials in accordance with the manufacturer's instructions ensuring to protect the geosynthetic material from physical damage, debris, and temperatures greater than 140° F. Prevent mud, fluid concrete, asphalt, or other deleterious materials from coming in contact with the geosynthetic materials that could impact the performance of the geosynthetic material. Replace geosynthetic materials with defects, tears, punctures, flaws, deterioration, or other damage at no additional cost to the Department.

#### 145-3.2 Geosynthetic Reinforced Soil Slopes:

**145-3.2.1 Backfill Materials:** Use only free draining backfill material in the reinforced fill volume as shown in the Plans meeting the following gradation limits as determined in accordance with AASHTO T 27 and FM 1-T011:

Table 145-1	
Sieve Size	Percent Passing
3-1/2 inches	100
3/4 inch	70 to 100
No. 4	30 to 100
No. 40	15 to 100
No. 100	5 to 65
No. 200	0 to 15

Do not use backfill material containing more than an average of 2.0% by weight of organic material, as determined by FM 1-T267 and by averaging the test results for three

randomly selected, representative samples from each stratum or stockpile of a particular material. Consider the stratum or stockpile unsuitable for construction of the reinforced fill volume if an individual test value exceeds 3.0%.

Use backfill material with a maximum plasticity index of 6 as determined by AASHTO T 90, and a maximum liquid limit of 15 as determined by AASHTO T 89. Use backfill material with a pH between 5.0 and 10.0 as determined by FM 5-550. For polyester geosynthetic reinforcement, use backfill material with a pH between 5.0 and 9.0. Do not use soil cement or lime stabilized backfill unless approved by the Engineer.

**145-3.2.2 Slope Face Treatment:** For reinforced soil slopes, provide slope face material, if applicable, as shown in the Plans and listed on the APL.

**145-3.3 Geosynthetic Reinforced Foundations Over Soft Soils:** Use backfill material meeting the requirements of Section 120, all Contract Documents, and any other applicable specification requirements. Meet the pH criteria specified in 145-3.2.1 as determined by FM 5-550.

**145-3.4 Geosynthetic Reinforced Embankment:** Use backfill material meeting the requirements of Section 120 for Embankment, Section 160 for Stabilization, Section 200 for Rock Base, and Section 204 for Graded Aggregate Base, all Contract Documents, and any other applicable specification requirements. Meet the pH criteria specified in 145-3.2.1 as determined by FM 5-550.

#### **145-4 Construction Requirements.**

**145-4.1 General:** At least fourteen days prior to installation of geosynthetic materials, submit the product sample and certification in accordance with 145-5. Install in accordance with Manufacturer's Instructions.

##### **145-4.2 Geosynthetic Reinforced Soil Slopes:**

**145-4.2.1 Foundation Preparation:** Excavate to the limits shown in the Contract Documents. Remove all existing vegetation and all unsuitable foundation materials. Prepare the foundation in accordance with Section 110 and 120, except as noted herein.

Proof-roll the graded area with a vibratory roller weighing a minimum of 8 tons or a sheepsfoot roller, where appropriate, exerting a compression of at least 250 psi on the tamper foot for at least five passes in the presence of the Engineer or as directed by the Engineer. Remove and replace any soft or loose foundation subsoils that are incapable of sustaining the required proof rolling. Excavate to suitable foundation materials, satisfactory to the Engineer, regardless of the elevation shown in the Plans. Remove all loose and disintegrated rock or thin strata.

Ensure the proof-rolled ground surfaces are uniform, smooth, and free of abrupt changes in slope, debris, and irregularities that might damage the reinforcement. Promptly repair and restore to their original condition any areas outside the limits of disturbance shown in the Plans which are damaged as part of this work at no expense to the Department. Make every possible effort to avoid such damage.

**145-4.2.2 Geosynthetic Placement:** Place the geosynthetic at the proper elevation, location and orientation as shown in the Plans. In general, place the geosynthetic used for slope stabilization such that its primary direction of tensile strength is perpendicular to the plan face of the slope. Pull the geosynthetic material tight and secure it as necessary to lay flat against the soil prior to fill placement.

Place adjacent rolls of geosynthetic to maintain 100% horizontal coverage at the face of the slope. When placing geosynthetic for curved embankments, do not allow less

than 50% horizontal coverage or an unreinforced horizontal spacing greater than 3 feet at the end of the reinforcement farthest from the face of the slope. Do not allow vertical spacing of the geosynthetic layers to exceed the spacing shown in the shop drawings.

Do not make any splices or seams in the primary direction of tensile strength in the geosynthetic without approval of the Engineer. When splices in the primary direction are approved, make splices full width of the geosynthetic strip by using a similar material with similar strength. Use a splice mechanism that allows a minimum of 95% load transfer from piece to piece of geosynthetic. Make only one splice per length of geosynthetic. Do not place splices within 6 feet of the slope face, within 6 feet below top of slope, or horizontally adjacent to another splice.

Place only that amount of geosynthetic material, including facing and drainage material, which will be covered in a single days' production.

Do not operate equipment directly on the geosynthetic. Operate equipment such that no turning movements occur on the areas where geosynthetic is in place with less than 12 inches of fill cover. Fill and compact ruts of more than 3 inches in depth as they develop. Replace or repair any rejected geosynthetic at no additional cost to the Department.

**145-4.2.3 Backfill Placement:** Perform work in accordance with an approved QC Plan meeting the requirements of 105-3. A LOT is defined as a single lift of finished embankment not to exceed 500 feet in length. Maintain uniform moisture content of the backfill material prior to and during compaction throughout each layer of material. Use backfill material having a placement moisture content within 2% on the dry side of optimum. Do not place wet backfill with moisture content greater than optimum in the fill. Spread backfill material over the geosynthetic in the direction of geosynthetic overlaps. Do not stockpile backfill materials on the installed geosynthetic. Avoid construction procedures or equipment which, in the opinion of the Engineer, will cause excessive mudwaving.

Uniformly compact each layer, using equipment that will achieve the required density. Compact the backfill using either smooth wheel or rubber tire rollers. Do not use sheepsfoot, grid rollers, or other types of equipment employing a foot. At the end of each day's operation, slope the backfill surface to permit runoff of rainwater away from the slope face, or provide some other positive drainage. Do not exceed the maximum allowable lift thickness in Section 120.

**145-4.2.4 Repairs:** Repair geosynthetic damaged during or after installation only after the supplier establishes that the interior and exterior stability is not affected and after obtaining the Engineer's approval. Make such repairs as follows:

Remove all backfill material from the damaged area of the reinforcement geosynthetic plus an additional 4 feet in all directions beyond the limits of damage. Place a patch consisting of the same material as the reinforcement geosynthetic over the damaged area in accordance with the supplier's recommendation. Overlap the undamaged reinforcement geosynthetic with the patch a minimum of 3 feet in all directions. Then replace and compact backfill material in accordance with 145-4.2.3.

**145-4.2.5 Slope Face Treatment:** Place the slope face treatment at the elevation and location shown in the Plans and are listed on the APL, if applicable.

**145-4.3 Geosynthetic Reinforced Foundations Over Soft Soils:** This subsection specifies requirements for geosynthetic used to improve embankment stability by strengthening and increasing the embankment stiffness.

**145-4.3.1 Preparation:** For some applications involving reinforcement of soft in situ soils, the Engineer may require that some vegetation be left in place. If directed in the Plans or by the Engineer, cut trees to within 6 inches of the existing surface, and leave the stumps in place. Remove fallen trunks, limbs, etc. greater than 3 inches in diameter.

**145-4.3.2 Backfill Placement:** Use materials meeting the requirements of 145-3.3. Perform work in accordance with an approved QC Plan meeting the requirements of 105-3 and Section 120 for Embankment, all Contract Documents, and any other applicable specification requirements.

**145-4.3.3 Geosynthetic Placement:** Meet the requirements of 145-4.2.2 except as noted herein. Position and orient the geosynthetic over prepared surfaces with the machine direction perpendicular to the embankment alignment. Place a geotextile filter of a type recommended by the designer of the geosynthetic system under the reinforcement geosynthetic.

Cut and overlap geosynthetic as necessary to accommodate curves. Overlaps shall be a minimum of 3 feet, unless specified otherwise in the Contract Documents for a particular application. Make any overlaps in geosynthetic in the same direction that embankment will be spread. Ensure geosynthetic sections do not separate at overlaps during construction. Pull the geosynthetic material tight by hand to a tension that removes all slack and wrinkles or as recommended by the supplier. To reduce overlaps, the geosynthetic material may be sewn together in accordance with the supplier's recommendations. Sew the seams with thread meeting the chemical requirements and minimum seam strength requirements for the application.

**145-4.3.4 Repairs:** Meet the requirements of 145-4.2.4.

**145-4.4 Geosynthetic Reinforced Embankment:** This subsection specifies requirements for geosynthetic used to provide structural support of traffic loads over the life of the pavement. This reinforcement application involves a relatively shallow flexible pavement substructure (embankment/subgrade/base profile) that is constructed over unsuitable soils that are at or near the ground surface.

**145-4.4.1 Preparation:** Remove all existing vegetation and all unsuitable foundation materials as shown in the Plans. Prepare the foundation in accordance with Section 110 and 120 or to the limits shown in the Contract Documents.

**145-4.4.2 Backfill Placement:** Use materials meeting the requirements of 145-3.4. Perform work in accordance with an approved QC Plan meeting the requirements of 105-3, Section 120 for Embankment, Section 160 for Stabilization, Section 200 for Rock Base, and Section 204 for Graded Aggregate Base, all Contract Documents, and any other applicable specification requirements. Spread backfill material over the reinforcement geosynthetic in the direction of the geosynthetic overlaps. Place the first lift of backfill materials over the reinforcement geosynthetic to a minimum thickness of 4 inches. Place backfill material in a manner to avoid any damage or disturbance to the geosynthetic reinforcement material

**145-4.4.3 Geosynthetic Placement:** Meet the requirements of 145-4.3.3.

**145-4.4.3 Repairs:** Meet the requirements of 145-4.2.4.

## **145-5 Certification.**

For geosynthetic materials, submit to the Engineer a certification from the manufacturer confirming that the material is appropriate for the intended use. The manufacturer's certification shall be attested to within the past one year by a person having legal authority to bind the manufacturing company, and must include the project number, APL product number, LOT number, and product name.

In addition, provide two 8-inch by 10-inch samples of geosynthetic materials for product identification to the Engineer. The acceptance of the geosynthetic material is subject to the approval of the State Materials Office (SMO).

For backfill materials, submit to the Engineer a signed and sealed certification by a Professional Engineer registered in the State of Florida, that the pH meets the requirements of 145-3.

## **145-6 Acceptance Program.**

### **145-6.1 General Requirements:**

**145-6.1.1 Equipment Comparison:** Meet the requirements of 120-10.1.1.

**145-6.1.2 Density over 105%:** Meet the requirements of 120-10.1.2 except as modified herein.

### **145-6.2 Quality Control Tests:**

#### **145-6.2.1 Geosynthetic Reinforced Soil Slopes:**

**145-6.2.1.1 Maximum Density Determination:** Collect enough material to split and create three separate samples. Determine test locations, including stations and offsets, using the Random Number generator approved by the Department. Retain the Verification and Resolution samples for the Department until the Engineer accepts the LOTs represented by the samples. Determine modified Proctor maximum density and optimum moisture content by sampling and testing the material in accordance FM 1-T 180.

When compacting A-3 or A-2-4 materials to meet the optional acceptance criteria in 145-6.2.1.4, determine the maximum density in accordance with FM 1-T099.

**145-6.2.1.2 Soil Classification and Organic Content Testing:** Perform soil classification tests on the sample collected in 145-6.2.1.1, in accordance with AASHTO T 27 and FM 1-T011, AASHTO T89, AASHTO T90, and FM 1-T267. Classify the soil in accordance with AASHTO M145 to determine compliance with soil utilization requirements as specified in Standard Plans, Index 120-001. Meet the testing parameters set forth in 145-3.2.1.

**145-6.2.1.3 pH Testing:** Perform pH testing in accordance with FM 5-550 and meet the pH test criteria set forth in 145-3.2.1.

**145-6.2.1.4 Density Testing Requirements:** Meet the requirements of 120-10.2.2 except as modified herein. For select backfill, obtain a density in each LOT of at least 95% of the maximum density as determined by FM 1-T180.

Alternatively, for A-3 and A-2-4 backfill materials, obtain a minimum density of 100% of the standard Proctor maximum dry density as determined by FM 1-T099.

The combined width from both reinforced fill volume and retained fill material may be considered the same LOT if both volumes comprise the same material and both are compacted with the same procedure, lift thickness, equipment, and compacting effort.

**145-6.2.1.5 Frequency:** Conduct sampling and testing at a minimum frequency listed in the table below. The Engineer will perform verification sampling and tests at a minimum frequency listed in the table below.

Table 145-2		
Test Name	Quality Control (QC)	Verification
Maximum Density	One per soil type	One per soil type
Density	One per LOT	One per four LOTs
Soil Classification, Gradation, LL & PI	One per soil type	One per soil type
Organic Content	One per soil type	One per soil type
pH	One per soil type	One per soil type

**145-6.2.1.6 Test Selection and Reporting:** Determine test locations including stations and offsets, using the random number generator approved by the Engineer. Do not use notepads or worksheets to record data for later transfer into the Earthwork Records System (ERS) section of the Department's database. Notify the Engineer upon successful completion of QC testing on each LOT.

**145-6.2.2 Geosynthetic Reinforced Foundation Over Soft Soils:** Meet the acceptance criteria for backfill and compaction requirements for embankment material in accordance with Section 120, all Contract Documents, and any other applicable specification requirements. In addition to the requirements of the applicable earthwork material, test for pH in accordance with FM 5-550 and meet the pH test criteria set forth in 145-3.2.1.

**145-6.2.3 Geosynthetic Reinforced Embankment:** Meet the acceptance criteria for backfill and compaction requirements for embankment material in accordance with Section 120, Stabilization requirements in accordance with 160, Rock Base requirements in accordance with Section 200, Graded Aggregate Base requirements in accordance with Section 204, all Contract Documents, and any other applicable specification requirements. In addition to the requirements of the applicable earthwork material, test for pH in accordance with FM 5-550 and meet the pH test criteria set forth in 145-3.2.1.

**145-6.3 Department Verification:** Meet the requirements of 120-10.3 except that the Engineer will conduct Verification tests to accept all materials and work associated with 145-6.2.

**145-6.4 Payment for Resolution Tests:** Meet the requirements of 120-10.5.

## **145-7 Verification Comparison Criteria and Resolution Procedures.**

### **145-7.1 Geosynthetic Reinforced Soil Slopes:**

**145-7.1.1 Maximum Density Determination:** The Engineer will verify the QC test results in accordance with the procedures specified in 120-10.6.1 except replace FM 1-T099 with FM 1-T180. If the Contractor selects the optional acceptance criteria, the Engineer will verify the QC test results of FM 1-T099 in accordance with 120-10.6.1.

**145-7.1.2 Density Testing:** Meet the requirements of 120-10.6.2.

**145-7.1.3 Soil Classification, Organic Content, and pH Testing:** The Engineer will verify the QC test results if the verification test results meet the limits set forth in 145-3.2.1 for gradation (AASHTO T27 and FM 1-T011), liquid limit (AASHTO T89), plasticity index (AASHTO T90), organic content (FM 1-T267), and pH (FM 5-550) testing. Otherwise, the Engineer will test the sample retained in 145-6.2.1.1. The State Materials Office (SMO) or an AASHTO accredited laboratory designated by the SMO will perform resolution testing.

If the resolution test result satisfies the required gradation limits, liquid limit, plasticity index, organic content, and pH, then the LOTs will be verified. If the resolution test

results do not verify QC test results, then reconstruct the LOTs with acceptable material. The Engineer will perform new verification testing post reconstructing the LOTs.

**145-7.2 Geosynthetic Reinforced Foundations Over Soft Soils:** Meet the verification comparison criteria and resolution procedure for embankment material in accordance with Section 120. In addition, the Engineer will verify the QC tests results if the verification test results meet the limits set forth in 145-3.2.1 for pH in accordance with FM 5-550. Otherwise, the Engineer will follow the resolution procedures specified in 145-7.1.3.

**145-7.3 Geosynthetic Reinforced Embankment:** Meet the verification comparison criteria and resolution procedure for embankment material in accordance with Section 120, Stabilization requirements in accordance with 160, Rock Base requirements in accordance with Section 200, and Graded Aggregate Base with Section 204. In addition, the Engineer will verify the QC tests results if the verification test results meet the limits set forth in 145-3.2.1 for pH in accordance with FM 5-550. Otherwise, the Engineer will follow the resolution procedures specified in 145-7.1.3.

## **145-8 Method of Measurement.**

**145-8.1 Geosynthetic Reinforced Soil Slopes:** The quantity to be paid for will be the plan quantity area, in square feet, of the projected vertical height of the slope face, measured from the top of slope to the finished graded surface at the toe of slope and from the beginning to end limits as shown in the Plans, regardless of the length or number of layers of geosynthetic within the reinforced volume and including any reinforcement required below the toe of slope elevation.

**145-8.2 Geosynthetic Reinforced Foundations Over Soft Soils:** The quantity to be paid for will be the plan quantity area, in square yards, of the embankment to be reinforced as shown in the Plans, regardless of the length or number of layers of geosynthetic within the reinforced soil volume, and including any reinforcement required below the original ground elevation.

**145-8.3 Geosynthetic Reinforced Embankment:** Meet the requirements of 145-8.2.

## **145-9 Basis of Payment.**

**145-9.1 Geosynthetic Reinforced Soil Slopes:** Price and payment will be full compensation for all work, materials, and services specified in this Section, including geosynthetic materials, drainage materials, installation, testing, and required submittals. The cost and placement of all backfill material will be included in the pay quantity for embankment or borrow excavation, as applicable.

**145-9.2 Geosynthetic Reinforced Foundations Over Soft Soils:** Price and payment will be full compensation for all work, materials, and services specified in this Section, including geosynthetic materials, geotextile filter materials, facing materials, drainage materials, installation, testing, and required submittals. The cost and placement of all backfill will be included in the pay quantity for embankment or borrow excavation, as applicable.

**145-9.3 Geosynthetic Reinforced Embankment:** Meet the requirements of 145-9.2

**145-9.4 Payment Items:** Payment will be made under:

- |                  |  |
|------------------|--|
| Item No. 145- 1- | Geosynthetic Reinforced Soil Slopes - per square foot.                 |
| Item No. 145- 2- | Geosynthetic Reinforced Foundations over Soft Soils - per square yard. |
| Item No. 145- 3- | Geosynthetic Reinforced Embankment - per square yard.                  |

## SECTION 570 PERFORMANCE TURF

### 570-1 Description.

Establish a growing, healthy turf over all areas designated in the Plans. Use sod in areas designated in the Plans to be sodded. Use seed, hydroseed, bonded fiber matrix, or sod in all other areas. Maintain performance turf areas until final acceptance of all Contract work in accordance with Section 5-11 and the establishment requirements of 570-4 have been met.

### 570-2 Materials.

Meet the following requirements:

Turf Materials .....	Section 981
Fertilizer .....	Section 982
Water .....	Section 983

### 570-3 Construction Methods.

**570-3.1 General:** Remove all construction debris in performance turf areas. Install performance turf at the earliest practical time for erosion control and establishment.

Shape the areas to be planted to the plan typical sections and lines and grade shown in the Plans.

Except in areas where the Contract Documents requires specific types of turf to match adjoining private property, any species of turf designated in Section 981 may be used. All of the permanent performance turf material shall be in place prior to final acceptance.

The Department will only pay for replanting as necessary due to factors determined by the Engineer to be beyond control of the Contractor.

Install all performance turf on shoulder areas prior to the placement of the friction course on adjacent pavement.

**570-3.2 Seeding:** At the Contractor's option, wildflower seed may be included in the performance turf seeding operation or performed separately from the performance turf seeding. Seed must produce visible seedlings within 45 days of planting.

Use of compost meeting the requirements of Section 987 as mulch is acceptable unless otherwise specified.

**570-3.3 Sod:** Place the sod on the prepared surface, with edges in close contact. Do not use sod which has been cut for more than 48 hours.

Place the sod to the edge of all landscape areas as shown in the Plans and the Standard Plans.

Place rolled sod parallel with the roadway and cut any exposed netting even with the sod edge.

Monitor placed sod for growth of exotic or invasive pest plants and noxious weeds. If exotic or invasive pest plants and/or noxious weeds manifest themselves within 30 days of placement of the sod during the months April through October, within 60 days of placement of the sod during the months of November through March treat affected areas by means acceptable to the Department at no expense to the Department. If pest plants and/or noxious weeds manifest themselves after the time frames described above from date of placement of sod, the Engineer, at their sole option, will determine if treatment is required and

whether or not the Contractor will be compensated for such treatment. If compensation is provided, payment will be made as Unforeseeable Work as described in 4-4.

Remove and replace any sod as directed by the Engineer.

**570-3.4 Hydroseeding:** Use equipment specifically designed for mixing the mulch, seed, fertilizer, tackifier and dye, and applying the slurry uniformly over the areas to be hydroseeded.

Use mulch that does not contain reprocessed wood or paper fibers. Ensure that 50% of the fibers will be retained on a twenty-five mesh screen.

Mix fertilizer as required into the hydroseeding slurry.

Ensure that the dye does not contain growth or germination inhibiting chemicals.

When polyacrylamide is used as part of hydroseeding mix, only anionic polymer formulation with free acrylamide monomer residual content of less than 0.05% is allowed. Cationic polyacrylamide shall not be used in any concentration. Do not spray polyacrylamide containing mixtures onto pavement. These may include tackifiers, flocculants or moisture-holding compounds.

**570-3.5 Bonded Fiber Matrix (BFM):** Meet the minimum physical and performance criteria of this Specification for use of BFM in hydroseeding operations or temporary non-vegetative erosion and sediment control methods.

Provide evidence of product performance testing, manufacturer's certification of training and material samples to the Engineer at least 7 calendar days prior to installation.

Provide documentation to the Engineer of manufacturer's testing at an independent laboratory, demonstrating superior performance of BFM as measured by reduced water runoff, reduced soil loss and faster seed germination in comparison to erosion control blankets.

Use only BFMs that contain all components pre-packaged by the manufacturer to assure material performance. Deliver materials in UV and weather resistant factory labeled packaging. Store and handle products in strict compliance with the manufacturer's directions.

When polyacrylamide is used as part of hydroseeding mix, only anionic polymer formulation with free acrylamide monomer residual content of less than 0.05% is allowed. Cationic polyacrylamide shall not be used in any concentration. Do not spray polyacrylamide containing mixtures onto pavement. These may include tackifiers, flocculants or moisture-holding compounds.

Meet the following requirements after application of the formed matrix:

Ensure that the tackifier does not dissolve or disperse upon re-wetting.

Ensure that the matrix has no gaps between the product and the soil and that it provides 100% coverage of all disturbed soil areas after application.

Ensure that the matrix has no germination or growth inhibiting properties and does not form a water-repelling crust.

Ensure that the matrix is comprised of materials which are 100% biodegradable and 100% beneficial to plant growth.

Mix and apply the BFM in strict compliance with the manufacturer's recommendations.

Apply the BFM to geotechnically stable slopes at the manufacturer's recommended rates.

Degradation of BFM will occur naturally as a result of chemical and biological hydrolysis, UV exposure and temperature fluctuations. Re-application, as determined by the

Engineer, will be required if BFM-treated soils are disturbed or water quality or turbidity tests show the need for an additional application.

**570-3.6 Watering:** Water all performance turf areas as necessary to produce a healthy and vigorous stand of turf. Ensure that the water used for turf irrigation meets the requirements of Section 983.

**570-3.7 Fertilizing:** Fertilize as necessary to promote turf growth and establishment based on soil testing. Refer to Section 982 for fertilizer rates.

For bid purposes, base estimated quantities on an initial application of 265 lb/acre and one subsequent application of 135 lb/acre of 16-0-8.

**570-3.8 Shoulder Treatment:** Provide soil for shoulder treatment in accordance with Standard Plans, Index 570-010. Soil needed for these purposes will be included in the corresponding Pay Item.

#### **570-4 Turf Establishment.**

Perform all work necessary, including watering and fertilizing, to sustain an established turf, free of noxious weeds, at no additional expense to the Department. Provide the filling, leveling, and repairing of any washed or eroded areas, as necessary.

Established turf is defined as follows:

1. An established root system (leaf blades break before seedlings or sod can be pulled from the soil by hand).
2. No bare spots larger than one square foot.
3. No continuous sod seams running perpendicular to the face of the slope.
4. No bare areas comprising more than 1% of any given 1,000 square foot area.
5. No deformation of the performance turf areas caused by mowing or other Contractor equipment.
6. No exposed sod netting.
7. No competing vegetation, exotic or invasive pest plants or noxious weeds.

Monitor turf areas and remove all competing vegetation, exotic or invasive pest plants, and noxious weeds (as listed by the Florida Invasive Species Council (FISC), Category I “List of Invasive Species”, Current Edition, <https://www.floridainvasives.org>). Remove such vegetation regularly by manual, mechanical, or chemical control means, as necessary. When selecting herbicides, pay particular attention to ensure use of chemicals that will not harm desired turf or wildflower species. Use herbicides in accordance with 7-1.7.

If at the time that all other work on the project is completed, but all turf areas have not met the requirements for established turf set forth in 570-4, continuously maintain all turf areas until the requirements for established turf set forth in 570-4 have been met.

During establishment and until the performance turf is established in accordance with this Section, continue the inspection, maintenance, and documentation of erosion and sedimentation control items in accordance with Section 104. Remove and dispose of all erosion and sedimentation control items after the performance turf has been established.

Notify the Engineer, with a minimum of seven calendar days advance notice, to conduct inspections of the performance turf at approximate 90-day intervals during the establishment period to determine establishment. Results of such inspections will be made available to the Contractor within seven calendar days of the date of inspection. Determination of an established turf will be based on the entire project and not in sections.

Upon the determination by the Engineer that the requirements of 570-4 have been met and an established turf has been achieved and all erosion and sedimentation control items have

been removed, the Engineer will release the Contractor from any further responsibility provided for in this Specification.

The Contractor's establishment obligations of this specification will not apply to deficiencies due to the following factors, if found by the Engineer to be beyond the control of the Contractor, their subcontractors, vendors or suppliers:

1. Determination that the deficiency was due to the failure of other features of the Contract.

2. Determination that the deficiency was the responsibility of a third party performing work not included in the Contract or its actions.

The Department will only pay for replanting as necessary due to factors determined by the Department to be beyond the control of the Contractor.

#### **570-5 Responsible Party.**

For the purposes of this Specification, the Contractor shall be the responsible party throughout construction and establishment periods.

Upon final acceptance of the Contract in accordance with 5-11, the Contractor's responsibility for maintenance of all the work or facilities within the project limits of the Contract will terminate in accordance with 5-11; with the sole exception that the facilities damaged due to lack of established turf and the obligations set forth in this Specification for performance turf shall continue thereafter to be responsibility of the Contractor as otherwise provided in this Section.

#### **570-6 Statewide Disputes Review Board.**

The Statewide Disputes Review Board in effect for this Contract will resolve any and all disputes that may arise involving administration and enforcement of this Specification related to the remedial work performed during the warranty period. The Responsible Party and the Department acknowledge that use of the Statewide Disputes Review Board is required, and the determinations of the Statewide Disputes Review Board for disputes arising out of this Specification will be binding on both the Responsible Party and the Department, with no right of appeal by either party. Meet the requirements of 8-3.

#### **570-7 Failure to Perform.**

Should the Contractor fail to timely submit any dispute to the Statewide Disputes Review Board, refuse to submit any dispute to the Statewide Disputes Review Board, fail to provide an established turf in accordance with 570-4 within six months of final acceptance of the Contract in accordance with 5-11, or fail to compensate the Department for any remedial work performed by the Department in establishing a turf and other remedial work associated with lack of an established turf, including but not limited to, repair of shoulder or other areas due to erosion and removal of sediments deposited in roadside ditches and streams, as determined by the Statewide Disputes Review Board to be the Contractor's responsibility, the Department shall suspend, revoke or deny the Contractor's certificate of qualification under the terms of Section 337.16(d)(2), Florida Statutes, until the Contractor provides an established turf or makes full and complete payment for the remedial work performed by the Department. In no case shall the period of suspension, revocation, or denial of the Contractor's certificate of qualification be less than six months. Should the Contractor choose to challenge the Department's notification of intent for suspension, revocation or denial of qualification and the Department's action is upheld,

the Contractor shall have its qualification suspended for a minimum of six months or until the remedial action is satisfactorily performed, whichever is longer.

**570-8 Method of Measurement.**

The quantities to be paid for will be plan quantity in square yards based on the area shown in the Plans, completed and accepted.

**570-9 Basis of Payment.**

Prices and payments will be full compensation for all work and materials specified in this Section.

Payment will be made under:

Item No. 570- 1-      Performance Turf - per square yard.

## SECTION 985 GEOSYNTHETIC MATERIALS

### 985-1 Description.

Geosynthetic materials are used for nonstructural and structural applications and shall be either geotextiles (woven or non-woven) or geogrids (woven or extruded) that are used for drainage, erosion control, reinforcement, separation or stabilization.

### 985-2 General Requirements.

**985-2.1 Product Acceptance:** All geosynthetic materials shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of products for inclusion on the APL shall submit an application in accordance with Section 6 and include the following documentation. A separate application must be submitted for each geotextile type to be evaluated, showing that the product meets the applicable requirements.

Documentation	Requirements
Installation Instructions	Include surface preparations, installation, overlap or sewing instructions, and repair procedures.
AASHTO Product Evaluation & Audit Solutions: Audit Report, for Structural Geosynthetic Materials Only	Manufacturer's facility included on list of compliant producers
AASHTO Product Evaluation & Audit Solutions: Test Results	Product meets requirements of this Section
Product Label Photo	Displays the Product Name
Product Photo	Displays the significant features of the product as required in this section. Displays location of Manufacturer name and model number.
Technical Data Sheet	Uniquely identifies the product and includes product specifications, reporting requirements, and storage instructions

Products will be listed on the APL according to the geosynthetic application type.

**985-2.2 Material Application:** In addition to the general requirements, meet the following physical requirements:

Drainage .....	985-3
Erosion Control .....	985-4
Structural .....	985-5

**985-2.3 Materials:** The geosynthetic material shall be a woven, non-woven or extruded material consisting of long-chain polymeric filaments or yarns such as polypropylene, polyethylene, polyester, polyamides or polyvinylidene chloride formed into a stable network such that the filaments or yarns retain their relative position to each other. The base plastic shall contain stabilizers and/or inhibitors to make the filaments resistant to deterioration due to ultra-violet light, heat exposure and potential chemically damaging environment. The edges of the material shall be selvaged or otherwise finished to prevent the outer yarn from pulling away from the material and shall be free of any treatment which may significantly alter its physical properties.

**985-2.4 Physical Requirements:** Each geosynthetic material shall be tested by an independent third party in accordance with the methods shown. All testing and reported values, except Apparent Opening Size (AOS), are to be minimum average roll values in the weakest principal direction, unless indicated otherwise in this Section. Values for AOS are maximum average roll values.

**985-2.5 Packaging and Labeling:** Geosynthetics shall be packaged in a protective covering sufficient to protect the material from temperatures greater than 140 F, sunlight, dirt, and other debris during shipment and storage. The manufacturer's name, product name, style number, roll dimensions and LOT numbers must be clearly labeled on all packaging.

**985-2.6 Overlaps and Seams:** Overlaps shall be in accordance with the manufacturer's recommendations, unless specified otherwise in the Contract Documents for a particular application. To reduce overlaps, the geosynthetic material may be sewn together in accordance with the manufacturer's recommendations. Sew the seams with thread meeting the chemical requirements and minimum seam strength requirements for the application.

### 985-3 Drainage.

**985-3.1 Application:** Select geotextile materials based on the following applications:

Table 985-1 Drainage Applications		
Geotextile Type	Description	Standard Plans Index
D-1	Revetment (Special)	
	Rock, Rubble without bedding stone	
	Ditch Pavement (Rubble Riprap) without bedding stone	524-001
D-2	Revetment (Standard)	
	Articulating Block	
	Gabions	524-001
	Rock, Rubble, and Broken Concrete with bedding stone	
	Ditch Pavement (Rubble Riprap) with bedding stone	524-001
	Joint Cover for Mechanically Stabilized Retaining Wall with Coarse Aggregate Backfill	
	Joint Cover for Mechanically Stabilized Retaining Wall Supporting Spread Footing Foundations	
D-3	Underdrain: Types II, III, and V	440-001
	French Drain	443-001
	Sheet Piling Filter	
	Filter Fabric Jacket (Culvert)	430-001
	Box Culvert Joints	400-289 and 400-291
	Concrete Pavement Subdrainage	446-001
	Joint Cover for Mechanically Stabilized Retaining Wall with Sand or Limerock Backfill	
D-4	Slope Pavement	
	Ditch Pavement (Sand-Cement Riprap or Concrete)	524-001

Table 985-1 Drainage Applications		
Geotextile Type	Description	Standard Plans Index
	Coarse Aggregate Wrap	
D-5	Separation Geotextile	
	Cast-In-Place Retaining Wall	

**985-3.2 Physical Requirements:** Materials for drainage applications must be tested in accordance with and meet the following physical requirements:

Table 985-2 Geotextile Selection	
In-situ Soil Type or Drainage Application	Class for Type D1, D2, D3 Materials
< 15% passing a No. 200 Sieve*	a
15% to 50% passing a No. 200 Sieve*	b
> 50% passing a No. 200 Sieve*	c
> 50% passing a No. 200 Sieve* with Plastic Index >7	d
MSE Joint Cover for Sand or Limerock Backfill	e
MSE Joint Cover for Coarse Aggregate Backfill	f

\*as per AASHTO T88.

Table 985-3 Drainage Geotextiles Test Methods and Requirements for Types D-1, D-2 and D-3			
Property/Test Method	D-1	D-2	D-3
Limitation	Woven Monofilament Geotextiles only	Woven Geotextiles only. No Slit Film Geotextiles	No Slit Film Geotextiles
Minimum Permittivity (Sec - 1) per ASTM D4491	D-1a = 0.7 D-1b = 0.2 D-1c = 0.1 D-1d = 0.1 D-1e = 0.25 D-1f = 1.5	D-2a = 0.7 D-2b = 0.2 D-2c = 0.1 D-2d = 0.1 D-2e = 0.25 D-2f = 1.5	D-3a = 0.5 D-3b = 0.2 D-3c = 0.1 D-3d = 0.1 D-3e = 0.7
Maximum AOS (mm, US Sieve No.) per ASTM D4751	D-1a = 0.425 (40) D-1b = 0.250 (60) D-1c = 0.212 (70) D-1d = 0.300 (50) D-1e = 0.212 (70) D-1f = 0.600 (30)	D-2a = 0.425 (40) D-2b = 0.250 (60) D-2c = 0.212 (70) D-2d = 0.300 (50) D-2e = 0.212 (70) D-2f = 0.600 (30)	D-3a = 0.425 (40) D-3b = 0.250 (60) D-3c = 0.212 (70) D-3d = 0.300 (50) D-3e = 0.212 (70)
Minimum Grab Tensile Strength (lbs) per ASTM D4632	315	Woven Monofilament = 248 Other Woven Geotextiles = 315	Elongation <50% = 248 Elongation ≥50% = 158
Mass per Unit Area (oz/sy) per ASTM D5261	Provide Test Result	Provide Test Result	Provide Test Result
Minimum Puncture Strength (lbs) per ASTM D6241	618	Woven Monofilament = 495 Other Woven Geotextiles = 618	Elongation <50% = 495 Elongation ≥50% = 309
Minimum Trapezoidal Tear (lbs) per ASTM D4533	113	Woven Monofilament = 57 Other Woven Geotextiles: = 113	Woven Monofilament = 57 Other Geotextiles: Elongation <50% = 90 Elongation ≥50% = 57
Minimum UV Resistance per ASTM D4355 (% Retained Strength)	50% @500 hours	50% @500 hours	50% @500 hours

Table 985-4 Test Methods and Requirements for Drainage Geotextiles Types D-4 and D-5		
Property/Test Method	D-4	D-5
Minimum Permittivity (Sec <sup>-1</sup> ) per ASTM D4491	0.5	0.5
Maximum AOS (mm, US Sieve No.) per ASTM D4751	0.425 (40)	0.212 (70)
Minimum Grab Tensile Strength (lbs) per ASTM D4632	180	90
Mass per Unit Area (oz/sy) per ASTM D5261	Provide Test Result	Provide Test Result
Minimum Puncture Strength (lbs) per ASTM D6241	223	223
Minimum Trapezoidal Tear (lbs) per ASTM D4533	70	40
Minimum UV Resistance per ASTM D4355 (% Retained Strength)	50% @500 hours	50%@500 hours

### 985-4 Erosion Control.

**985-4.1 Application:** Materials may contain natural fibers added to acceptable plastic erosion mats for the sole purpose of facilitating turf growth. However, materials used for erosion control applications must be tested without any natural fiber components in accordance with and meet the physical requirements Table 985-6.

Table 985-5 Erosion Control Applications	
Type	Description
E-1	Staked Silt Fence
E-2	Wind Screen
E-3	Plastic Erosion Mat (Turf Reinforcement Mat) (Type 1)
E-4	Plastic Erosion Mat (Turf Reinforcement Mat) (Type 2)
E-5	Plastic Erosion Mat (Turf Reinforcement Mat) (Type 3)

**985-4.2 Physical Requirements:** Each geosynthetic material shall meet the following requirements:

Table 985-6 Test Methods and Requirements for Erosion Control Materials					
Property/Test Method	E-1	E-2	E-3	E-4	E-5
Permittivity (Sec <sup>-1</sup> ) per ASTM D4491	0.05	0.05	NA	NA	NA
Grab Tensile Strength (lbs) per ASTM D4632	90	90	NA	NA	NA
Minimum UV Resistance per ASTM D4355 (% Retained Strength)	80% @500 hours	80% @150 hours	80% @500 hours		
Tensile Strength **(lbs/ft) per ASTM D6818 or D5035	NA	NA	135x70	275x135	550x275

Table 985-6 Test Methods and Requirements for Erosion Control Materials					
Property/Test Method	E-1	E-2	E-3	E-4	E-5
Filtration Efficiency (%) per ASTM D5141	75% and min. flow rate of 0.3 gal/sf/min	NA	NA	NA	NA
Design Shear***	NA	NA	≥2.1 psf	≥3.6 psf	≥5.0 psf
**Tensile Strength is expressed in units of measure of lbs/ft, in machine direction and cross direction as MD x CD. ***Design Shear limits for Erosion mats must be determined by 30 minutes sustained flow in an unvegetated state as determined by tests performed by Utah State University, Texas Transportation Institute or an independent testing laboratory approved by the State Drainage Engineer.					

**985-4.3 Rolled Erosion Control Blanket (RECB):** Erosion control blankets must be capable of sustaining a maximum design velocity of 6.5 ft/sec as determined from tests performed by Utah State University, Texas Transportation Institute, or an independent testing laboratory approved by the Department. Submit a certified test report showing that the erosion control blankets meet these requirements. Provide two samples for product identification, upon request.

## 985-5 Structural.

**985-5.1 Applications:** Materials for reinforcement, separation and stabilization applications must be tested in accordance with and meet the physical requirements below. The ultimate tensile strength of all R-1 materials must be at least 4800 pounds per foot in both the machine and cross machine directions.

Table 985-7 Reinforcement, Separation and Stabilization Applications	
Type	Description
R-1	Geosynthetic Reinforced Soil (GRS-IBS)
R-2	Reinforcement of Foundations over Soft Soils
R-3	Reinforced Soil Slopes
R-4	Reinforced Embankment
R-5	Construction Expedient

**985-5.2 Physical Requirements:** Each geosynthetic material shall be tested in accordance with the following requirements:

Table 985-8 Test Methods and Reporting Requirements for Structural Geosynthetics			
Property/Test Method	Structural Application Type	Test Methods for Woven Geotextiles	Test Methods for Woven or Extruded Geogrids
Permittivity (sec-1)	R - 1, 2, 3, 4, 5	ASTM D4491	NA
UV Stability (Min Retained Strength @500 hr)	R - 3	ASTM D4355	ASTM D4355
Puncture Strength (lbs)	R - 5	ASTM D6241	NA
Grab Strength (lbs)	R - 5	ASTM D4632	NA

Table 985-8 Test Methods and Reporting Requirements for Structural Geosynthetics			
Property/Test Method	Structural Application Type	Test Methods for Woven Geotextiles	Test Methods for Woven or Extruded Geogrids
Opening Size	R - 1, 2, 3, 4, 5	AOS (US Sieve No.) ASTM D4751	Aperture Size (in x in)
Tensile Strength (lbs/ft)		ASTM D4595	ASTM D6637
Machine Direction Ultimate, (Tult)			
2% Strain	R - 1, 3		
5% Strain	R - 2, 3, 4, 5		
10% Strain	R - 1, 2, 3, 4, 5		
Cross Direction Ultimate			
2% Strain	R - 1, 3,		
5% Strain	R - 2, 3, 4, 5		
10% Strain	R - 1, 2, 3, 4, 5		
Strain @ Ultimate Tensile Strength	R - 1, 2, 3, 4, 5		
Tear Strength (lbs)		ASTM D4533	NA
Machine Direction	R - 5		
Cross Direction	R - 5		
Soil-Geosynthetic Friction	R - 1, 2, 3	ASTM D5321	ASTM D5321/6706
Pullout Resistance	R - 3	ASTM D6706	ASTM D6706
Creep Resistance-Tcreep (lbs/ft)	R - 2, 3	ASTM D5262	ASTM D5262
Creep Reduction Factor (Tult/Tcreep)	R - 2, 3	NA	NA
Installation Damage (RFID)		AASHTO R69	AASHTO R69
Sand	R - 2, 3, 4		
Limestone	R - 2, 3, 4		
Durability (RFD)		AASHTO R69	AASHTO R69
Chemical	R - 2, 3, 4		
Biological	R - 2, 3, 4		
Joint Strength (RFj)			
Mechanical	R - 2, 3	GRI: GT7	GRI: GG4(a) & GG4(b)
Sewn	R - 2, 3	ASTM D4884	NA

SECTION 02375  
CELLULAR CONFINEMENT SYSTEM (GeoCell)

PART 1. GENERAL

1.1 Section Includes

- A. Cellular confinement system for slope protection, earth retention, channel protection and load support

1.2 Related Sections

- A. Section 01330 - Submittals
- B. Section 104 - Prevention, Control, and Abatement of Erosion and Water Pollution
- C. Section 120 - Excavation and Embankment
- D. Section 145 - Geosynthetic Reinforcement
- E. Section 985 - Geosynthetic Materials

1.3 References

- A. ASTM D 1505 - Standard test method for density of plastics by the density gradient technique.
- B. ASTM D 1603 - Standard test method for carbon black in olefin plastics.
- C. ASTM D 5394 - Standard test method for environmental stress-cracking of ethylene plastics.
- D. ASTM D 5199 - ASTM D 5199 -Standard test method for measuring the nominal thickness of geo-synthetics.
- E. US Army Core of Engineers (USACE) Technical Report GL-86-19, Appendix A.

1.4 Submittals

- A. Comply with Section 01330 - Submittal procedures.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Shop drawings: Submit manufacturer's shop drawings, indicating dimensions, cell depth, and system components.
- D. Samples: Submit manufacturer's sample of GeoCell.
- E. Certificate of compliance: submit manufacturer's certificate of compliance indicating GeoCell comply with specified requirements.
- F. Quality Assurance Certification: Submit manufacturer's ISO 9001:2000 quality assurance certification.
- G. Warranty: Submit manufacturer's standard warranty.

1.5 Quality Assurance

- H. Manufacturer's field representative qualifications: Experienced in cellular confinement system installation.
- I. Installer's Qualifications: Experienced in cellular confinement system installation
- J. Pre-installment meeting: Convene pre-installment meeting [2 weeks] before start of

installation of GeoCell. Require attendance of parties directly affecting work of this section, including contractor, engineer, installer, and manufacturer's representative. Review preparation, installation, and coordination with other work.

#### 1.6 Delivery, Storage, and Handling

- K. Delivery: deliver materials to site in manufacturers original, unopened pallets and packaging, with labels clearly identifying product name and manufacturer.
- L. Storage: Store materials in clean, dry area in accordance with manufacturer's instructions.
- M. Handling: Protect materials during handling and installation to prevent damage.

### Part 2 Products

#### 2.1 Manufacturer

- A. Vodaland, 3120 Riverport Tech Center Drive, Maryland Heights, MO 63043 (314) 717-1551
- B. Or Approved Equal

#### 2.2 Cellular Confinement System

- C. Model: GeoCell 8710-M (4")
  - 1. Cell Depth 4 inches
  - 2. Nominal Expanded Cell Size: 11-5/8<sup>th</sup> inches wide by 11-5/8<sup>th</sup> inches long
  - 3. Nominal Expanded Cell Area: 127.69<sup>2</sup> inches
  - 4. Nominal Expanded Section : 9 feet by 17 feet
  - 5. Cells per section: 20 cells long by 8 cells wide
  - 6. Nominal Expanded Section Area: 153<sup>2</sup> feet
- D. Material Properties
  - 1. Material: 100% recycled, Modified polyethylene (PPE).
  - 2. Polymer Density, ASTM D 1505: 0.95-0.965 g/cm<sup>3</sup> (58.4-60.2 lb/ft<sup>3</sup>).
  - 3. Environmental Stress Crack Resistance, ASTM D 5394 >400 hours.
  - 4. Minimum Carbon Black Content, ASTM D 1603: 1.5 percent weight.
  - 5. Nominal Sheet Thickness, ASTM D 5199: 1.25mm (60 mils) plus 10 percent, minus 5 percent if textured.
  - 6. If textured the polyethylene strip shall be textured with a multitude of rhomboidal (diamond shape) indentions. The rhomboidal indentions shall have surface density of 22 to 31 per cm<sup>2</sup> (140 to 200 per in<sup>2</sup>).
- E. Cell Wall: Solid.
- F. Cell Wall Perforated.
  - 1. Horizontal Rows: 10-mm diameter holes, 16.6 mm on center.
  - 2. Stagger horizontal rows and separate 8.3 mm relative to hole centers.

3. Edge of Cell Wall to Nearest Edge of Perforations: 7.93 mm.
4. Centerline of Weld to Nearest Edge of Perforations: 27.9 mm minimum.
5. Perforations Remove: 12 percent plus or minus 1 percent of cell wall area.

## 2.3 Accessories

### A. J-Hooks:

1. Material with sufficient strength to support and anchor GeoCell.
2. Steel Reinforced Bars: Galvanized
  - Diameter: 0.500 inch
  - Length: 12 inch
  - Hook: 180-degree bend

### B. Tendons:

1. Tensile Strength: Sufficient to support total theoretical load.
2. Material: High-tenacity, [polypropylene] fibers woven into webbing.

## 2.4 Infill Materials

- ### A. Infill Materials: Granular fill excavated from Pond 3.

## 2.5 Other Geosynthetic Components

- ### A. Non-woven Geo-textiles: as specified in Section 985.

# PART 3 EXECUTION

## 3.1 Examination

- ### A. Examine area to receive GeoCells. Notify Engineer if area is not acceptable. Do not begin preparation or installation until unacceptable conditions have been corrected.

## 3.2 Preparation

- A. Prepare site by removing vegetative cover, debris, and unacceptable soils from area where GeoCells will be installed.
- B. Replace removed soils with acceptable materials.
- C. Complete earthwork, including toe-in trenches when required for slope or channel lining applications, as specified in Section 120.
- D. Install non-woven Geo-Textiles as specified in Section 985.

## 3.3 Installation

- A. Install GeoCell in accordance with manufacturer's instructions indicated on the drawings.
- B. Anchor GeoCell sections as necessary to resist sliding due to gravitational forces and sheet flow.
- C. Ensure top edges of adjoining cell walls are flush with each other and in proper alignment.

- D. Deliver infill material to GeoCell from top of slope or channel to bottom in accordance with manufacturer's instructions.
- E. Limit drop height of infill material to a maximum of 1 m (3 feet) to prevent damage to GeoCells.
- F. Overfill expanded GeoCell sections by 25 to 50 mm (1 to 2 inches) to allow for settling and compaction, when using granular infill materials.
- G. Compact granular infill materials to top of GeoCells.
- H. Manually rake and machine finish concrete infill material.

END OF SECTION