

**TECHNICAL SPECIFICATIONS**  
**FISH Preserve Habitat**  
**Restoration Project**  
**Phase III**



Florida Fish and Wildlife Conservation  
Commission (FWC)  
620 South Meridian Street  
Tallahassee, Florida 32399-1600

**SECTION 01010 - SUMMARY OF PROJECT**

1. GENERAL
- 1.1 SECTION INCLUDES
  - Scope and Sequence of Work.
  - Contract Description.
  - Work Limits.
  - Clearing Within Existing Rights-of-Way.
  - CONTRACTOR'S Use of Premises.
- 1.2 SCOPE AND SEQUENCE OF WORK
  - CONTRACTOR shall furnish all labor, materials, equipment, and incidentals necessary to complete the following Tasks according to the following general sequences:
    - Install silt fence and turbidity barrier, as indicated on the drawings and as needed near water bodies.
    - Prepare existing subgrade by performing any needed excavation, filling grading and compaction.
    - Clear and strip the area within the work limits at the proposed location shown on the Drawings.
    - Dispose of the trees and stumps and all deleterious materials.
    - Remove turbidity barriers and silt fences.
    - Perform final cleanup and removal of all construction equipment and materials from within the Work limits.
    - Install plant material at the proposed location shown on the Drawing.
- 1.3 WORK LIMITS
  - All work shall be conducted within the work limits as bound by erosion control facilities shown on the drawings and specified herein.
  - CONTRACTOR is permitted to secure staging or access areas at his own choosing, expense and liability. The staging shall be reviewed and approved by the FWC PROJECT MANAGER (herein referred to as the PROJECT MANAGER).
  - CONTRACTOR shall prevent the public from entering the Work limits in the immediate vicinity of all earthwork operations. CONTRACTOR shall erect and maintain signage and barriers as may be necessary to restrict public access to and in the immediate vicinity of all construction equipment, temporary gates, dams, pumping equipment, and other equipment associated with earthwork activities.
  - Under no circumstances shall CONTRACTOR disturb any areas outside the work limits. Any damage to areas outside the work limits resulting from CONTRACTOR'S operations shall be repaired to equal or better conditions at CONTRACTOR'S expense.
- 1.4 CLEARING WITHIN EXISTING RIGHTS-OF-WAY
  - CONTRACTOR shall adhere to requirements of appropriate agency issuing permits for construction within its ROW.
- 1.5 CONTRACTOR'S USE OF PREMISES
  - CONTRACTOR shall coordinate use of premises with OWNER and the PROJECT MANAGER.
  - CONTRACTOR shall assume full responsibility for security of their own and subcontractor's materials and equipment stored on the site.

If directed by the PROJECT MANAGER or OWNER, CONTRACTOR shall move any stored items that interfere with operations of the OWNER and the PROJECT MANAGER.

2. PRODUCTS  
Not Used.
3. EXECUTION  
Not Used.

END OF SECTION

SECTION 01039 - COORDINATION AND MEETINGS

1. GENERAL
- 1.1 SECTION INCLUDES
  - Coordination and project conditions.
  - Field Engineering.
  - Preconstruction meeting.
  - Site mobilization meeting.
  - Progress meetings.
  - Pre-installation meetings.
- 1.2 COORDINATION AND PROJECT CONDITIONS
  - Coordinate scheduling, submittal, and work of the various sections of the contract documents to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
  - Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
  - Coordinate completion and clean-up of work of separate sections in preparation for Substantial Completion.
  - After FWC occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- 1.3 FIELD ENGINEERING
  - Contractor shall locate and protect survey control and reference points. Control datum for survey is that shown on Drawings.
  - Verify setbacks and easements; confirm drawing dimensions and elevations.
  - Provide field Engineering services. Establish elevations, lines, and levels, utilizing recognized Engineering survey practices.
  - Submit a copy of site drawings and certificate signed by either registered Land Surveyor or Professional Engineer that the elevations and locations of the Work are in conformance with the Contract Documents.
- 1.4 PRECONSTRUCTION MEETING
  - The PROJECT MANAGER will schedule a meeting after Notice of Award.
  - Attendance Required: The PROJECT MANAGER and Contractor.
  - Agenda:
    - Submission of executed bonds and insurance certificates.
    - Distribution of Contract Documents.

- Submission of list of list of Products, schedule of values, and progress schedule.
- Designation of personnel representing the parties' in Contract.
- Procedures and processing of field decisions, submittal, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- Scheduling.
- 1.5 SITE MOBILIZATION MEETING
- The PROJECT MANAGER will schedule a meeting at the Project site prior to Contractor occupancy.
- Attendance Required: PROJECT MANAGER, Contractor, Contractor's Superintendent, and major Subcontractors.
- Agenda:
- Use of premises by the Owner, PROJECT MANAGER, and Contractor.
- Construction facilities and controls provided by FWC.
- Survey and layout.
- Security and housekeeping procedures.
- Schedules.
- Application for payment procedures.
- Procedures for testing.
- Procedures for maintaining record documents.
- 1.6 PROGRESS MEETINGS
- Schedule and administer meetings throughout progress of the Work at maximum weekly intervals.
- Attendance Required: The PROJECT MANAGER, Job superintendent, major Subcontractors and suppliers, as appropriate to agenda topics for each meeting.
- Agenda:
- Review of Work progress.
- Field observations, problems, and decisions.
- Identification of problems which impede planned progress.
- Review of submittal schedule and status of submittal.
- Review of off-site fabrication and delivery schedules.
- Maintenance of progress schedule.
- Corrective measures to regain projected schedules.
- Planned progress during succeeding work period.
- Coordination of projected progress.
- Maintenance of quality and work standards.
- Effect of proposed changes on progress schedule and coordination.
- Other business relating to Work.
- 1.7 EMERGENCY MEETING
- Emergency meeting can occur at any time at the mutual agreement of concerned parties.
2. PRODUCTS
- Not Used.
3. EXECUTION
- Not Used.

END OF SECTION

**SECTION 01520 - POLLUTION CONTROL**

1. General
- 1.1 Scope

CONTRACTOR shall furnish all labor including supervision, materials, equipment, and incidentals necessary to eliminate or minimize pollution caused by the construction operations. CONTRACTOR shall also control the generation, storage, and disposal of solid, petroleum, and hazardous wastes.
- 1.2 CRITERIA
  - Air Pollution Control

Air Pollution Control shall be in accordance with Federal, State, and County regulations.

Do not cause or allow the emissions from any transport, handling, construction or storage activity to remain visible in the atmosphere beyond the property line of the emission source.

Take precautions to minimize dust emissions from Operations involving demolition, excavation, grading, and clearing of land and disposal of solid waste.

Take precautions to prevent visible particulate matter from being deposited upon public roadways as a direct result of construction or hauling operations. Precautions shall include the removal of particulate matter from equipment before movement to paved streets, or the prompt removal of material from paved streets onto which such material has been deposited.
  - Solid and Hazardous Waste

Solid and Hazardous Waste Control shall be in accordance with Federal, State, and County regulations.

CONTRACTOR is solely responsible for the disposal of any hazardous waste that is generated by the CONTRACTOR'S operation.
2. PRODUCTS

Not Used.
3. EXECUTION
- 3.1 PERFORMANCE

In order to implement these regulations, CONTRACTOR shall use the following procedures and techniques:

  - A. Air Pollution
    1. Particulates and Dust
      - a. Cover loads of materials, debris and soil transported from construction sites.
      - b. Water down and sweep streets, which have heavy volumes of construction vehicles carrying debris and excavated materials on a daily basis.
      - c. Establish regular cycles and locations for washing trucks, which haul soil from the site.
      - d. Particulates, such as dust, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress.
      - e. CONTRACTOR shall keep the construction areas free from particulates that would cause air pollution standards to be exceeded or that would cause a hazard.

- f. Water down construction sites as needed to suppress dust, during handling of excavated soil or debris or during demolition.
2. Burning, if permitted, shall be conducted in accordance with State and local requirements, and permits. CONTRACTOR is responsible for obtaining all required permits for burning.
3. Use construction equipment that has been designed and equipped to prevent or control air pollution in conformance with applicable Federal, State and local regulations. CONTRACTOR shall have available evidence of such design and equipment shall be maintained and made available for inspection by PROJECT MANAGER.
4. Establish and maintain records of the routine maintenance program for internal combustion engine powered vehicles and equipment used on the project. CONTRACTOR shall hold these records available for inspection.
- B. Solid and Hazardous Waste
  1. Solid wastes shall be properly stored, handled, and disposed of the Work limits on a regular schedule in accordance with applicable Federal, State, and local requirements and rules.
  2. Petroleum Waste
    - a. Fuel, oil, and lubricants shall be properly stored and handled in a way to prevent spills and evaporation, and recycled or disposed of in accordance with 40 CFR 279, State, and local regulations.
    - b. Should any spilling of fuel occur, CONTRACTOR shall immediately recover the contaminated soils and dispose of it according to applicable regulations.
  3. Hazardous Wastes
    - a. Hazardous wastes, as defined in 40 CFR 261, shall be stored and disposed of in accordance with 40 CFR 261 and State and local regulations.
    - b. Hazardous wastes and materials shall be packed, labeled, and transported in accordance with 49 CFR 173 and State and location regulations.
    - c. Hazardous material shall be disposed of in Class I or Class II-1 waste disposal facilities.
  4. Spill Prevention and Mitigation of Petroleum and Hazardous Wastes
    - a. Storage, handling and disposal of solid, petroleum, and hazardous wastes shall be conducted so as to prevent spills and contamination of air, ground, drainage, local bodies of water, or wetlands.
    - b. Should any spilling occur, CONTRACTOR shall immediately notify the PROJECT MANAGER and OWNER Representative and take all necessary measures to contain and cleanup any spill or contamination as required by applicable laws and regulations.
    - c. CONTRACTOR shall be liable in the amounts established in 40 CFR, Part 113 when it can be shown that oil was discharged as a result of willful negligence or willful misconduct.
    - d. The penalty for failure to report the discharge of oil shall be in accordance with the provision of 33 CFR, Part 153.
    - e. Haul routes for transporting solid, petroleum, or hazardous wastes are subject to the approval of PROJECT MANAGER.
  5. Other wastes and materials than previously discussed Construction and Demolition, vegetative waste, etc.) shall be handled and disposed of from

the Work limits in accordance with applicable federal, state, and local regulations.

6. CONTRACTOR shall restore all disturbed areas at the end of the Project in accordance with applicable federal, state, and local regulations.

END OF SECTION

### SECTION 01530 - ENVIRONMENTAL PROTECTION

#### 1. GENERAL

##### 1.1 SCOPE

CONTRACTOR shall implement all necessary measures to prevent environmental damage resulting from the construction operations and shall comply with applicable Federal, State, or local laws, regulations, and ordinances.

The term "environmental damage" is defined as the presence of hazardous, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances; affect other species, biological communities, or ecosystems; or degrade the quality of the environment for aesthetic, cultural, and/or historical purposes.

The control of environmental damage requires consideration of land, water, and air, and includes management of visual aesthetics, noise, solid waste, as well as other pollutants.

CONTRACTOR shall comply with all conditions of permits obtained for the project from Federal, State and local agencies.

##### 1.2 SUBMITTALS AND NOTIFICATIONS

###### A. Logs/Final Summary Report.

1. CONTRACTOR shall submit as specified, logs and final summary report of sightings and incidents with protected species as specified in this SECTION.

###### B. Environmental Protection Plan

1. Prior to start of construction, The PROJECT MANAGER may provide CONTRACTOR with an Environmental Protection Plan. The plan will include any environmental issues of particular concern anticipated within and near the work limits.
2. Adherence to the environmental plan shall not relieve CONTRACTOR of the responsibility for adequate and continuing control of pollutants and other environmental protection measures.
3. The PROJECT MANAGER reserves the right to request the CONTRACTOR to make changes to the Environmental Protection Plan or operations if the PROJECT MANAGER determined that the environmental protection requirements are not being met.
4. CONTRACTOR shall immediately notify the PROJECT MANAGER of any observed noncompliance with the aforementioned Federal, State, or local laws or regulations, permits and other elements of the environmental protection plan.

5. If CONTRACTOR fails to comply promptly, the PROJECT MANAGER may issue an order stopping of all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted, or costs or damages allowed to CONTRACTOR for any such suspension.
2. PRODUCTS  
Not Used.
3. EXECUTION
- 3.1 PROTECTION OF LANDSCAPE AND TREES
  - A. Prior to the beginning of any construction, CONTRACTOR shall use the Drawings to identify and mark the Work limits. If required, tree removal within the Work limits shall be conducted according to County requirements.
  - B. Disturbance of landscape outside the Work limits is not permitted.
  - C. CONTRACTOR shall also clearly mark and protect by temporary fencing or any other approved techniques all landscape features and isolated areas to be preserved within the Work limits, which may include trees, shrubs, native grasses, topsoil, and other land forms.
  - D. Branches of protected trees, if required, shall be sharp cut to clear for construction and pruning shall subsequently be performed and sealant applied to restore the natural shape of the tree.
  - E. CONTRACTOR shall remove dead or damaged protected trees determined, by the PROJECT MANAGER, to be incapable of restoration to normal health growth. CONTRACTOR shall replace each removed tree up to 4-inch caliper at breast height with a tree of an equal type and size. For trees larger than 4-inch caliper, CONTRACTOR shall replace each tree with one 4-inch caliper tree per 4-inch caliper increment.
  - F. Monuments and markers shall be protected before construction operations commence.
- 3.2 PROTECTION OF WATER RESOURCES
  - A. CONTRACTOR shall implement all necessary measures to avoid pollution of surface waters, ground waters, and wetlands due to soil erosion, sedimentation, turbid discharges, and spills or leak of hazardous and petroleum wastes. CONTRACTOR is warned that the pumping or release of oil or bilge water containing oil into navigable waters or into areas which would permit the oil to flow into such waters is prohibited by Section 13 of the River and Harbor Act (30 Stat. 1152; 33 U.S.C. 407). Violation of this prohibition is subject to the penalties under the referenced Acts.
  - B. CONTRACTOR shall implement all measures to control erosion and sedimentation within the construction areas. Erosion Control measures are detailed on the Drawings, however the CONTRACTOR is required to take all necessary actions to prevent runoff or turbidity in adjacent waterbodies.
  - C. CONTRACTOR shall implement all measures to minimize pollution as a result of solid, petroleum, and hazardous wastes.
  - D. CONTRACTOR shall conduct earthwork operations in a manner to minimize turbidity and shall meet the turbidity and water quality requirements of all applicable local, state or federal regulations.



### 3.3 PROTECTION OF AIR RESOURCES

- A. CONTRACTOR shall implement all measures set forth in SECTION 01520 to minimize pollution of air resources and to comply with Federal, State, and local codes and regulations.

### 3.4 PRESERVATION AND RECOVERY OF HISTORIC, ARCHEOLOGICAL, AND CULTURAL RESOURCES

#### A. Applicable Laws

The National Historic Preservation Act is commonly associated with construction activities.

- B. In accordance with the Department of Historical Resources requirements, project personnel, contractors, subcontractors, heavy equipment operators, and anyone working on the project may be required to attend a short informational "Cultural / Archeological Resources" training session explaining what might be expected to be found during project activities, including steps that must be taken if cultural resources are found.

#### C. Inadvertent Discoveries

- 1. If, during construction activities, CONTRACTOR observes items that may have historic or archeological values such observations shall be reported immediately to the PROJECT MANAGER so a determination for what, if any, additional action is needed. Examples of historic, archeological and cultural resources are bones, remains, artifacts, shell, midden, charcoal or other deposits, rocks or coral, evidences of agricultural or other human activity, alignments, and constructed features. CONTRACTOR shall cease all activities that may result in the destruction of these resources and shall prevent his employees from further removing, or otherwise damaging, such resources.

#### D. Downtime due to Inadvertent Discoveries

- 1. Upon discovery and subsequent reporting of a possible inadvertent discovery of cultural resources, CONTRACTOR shall seek to continue work well away from, or otherwise protectively avoiding, the area of interest, or in some other manner that strives to continue productive activities in keeping with the contract.
- 2. Should an inadvertent discovery be of the nature that substantial impacts to the work schedule are evident, such delays shall be coordinated with The PROJECT MANAGER.

### 3.5 PROTECTION OF WILDLIFE RESOURCES

- A. CONTRACTOR shall implement all measures to minimize Interference with, disturbance to, or damage of migratory birds and protected species within the Work limits and shall comply with applicable Federal and State laws.

- B. CONTRACTOR shall document and immediately report to OWNER Representative any observations of protected species throughout the Work limits. The report shall document where and when the observations were made and what measures were taken to resolve the problems. In addition, CONTRACTOR shall take the following measures:

#### 1. Migratory Birds

- a. The migratory birds are protected by the Florida Endangered and Threatened Species Act of 1977, Title XXVIII, Chapter 372.072, and the U.S. Fish and Wildlife Service pursuant to the Migratory Bird Treaty Act

- of 1918 and the Endangered and Threatened Species Act of 1982, as amended.
- b. If any nesting activity of migratory birds is observed in the Work areas, CONTRACTOR shall immediately notify the OWNER Representative which shall have sole authority for any work stoppages, creation of the buffer area, or restart of construction activities.
  - c. CONTRACTOR may be held responsible for harming the birds, their eggs, or their nests. Should nesting begin within the construction area, a temporary buffer shall be created around the nests and marked to avoid entry until nesting is completed and the chicks fledged. The size of the buffer will be dependent on the species of birds nesting. A detailed report of potential wildlife impacts and buffer criteria will be made available to the CONTRACTOR. Also, a bulletin board shall be placed and maintained by CONTRACTOR in the contracting shed with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that "BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE FEDERAL MIGRATORY BIRD TREATY ACT".
  - d. The decision to allow construction in a former nesting site shall be determined by the PROJECT MANAGER.
2. Gopher Tortoise
- a. CONTRACTOR shall instruct his employees to look for and avoid any tortoises wandering onto the Work areas during construction.
  - b. If Gopher Tortoises or their burrows are observed in the Work areas, CONTRACTOR shall cease all construction activities within a minimum buffer of 50 feet in radius until the tortoises are relocated by OWNER. CONTRACTOR shall flag the 50-foot buffer.
3. Eastern Indigo Snake
- a. If an indigo snake is observed in the construction areas, CONTRACTOR shall allow the Indigo Snake sufficient time to move away from the site on its own before resuming construction.
  - b. If an Indigo Snake is harmed within construction areas, CONTRACTOR shall immediately notify the OWNER Representative and the offending activity ceased until the problem is resolved.
4. American Bald Eagle
- a. If an active nest of an American Bald Eagle is observed within or nearby the Work limits, CONTRACTOR shall cease all construction and dredging activities within a 660-foot radius around their nests during the nesting season, which typically extends from October 15 to May 15 of each year, unless otherwise documented or changed by OWNER.
  - b. No unauthorized person shall be permitted to examine or approach the nest within the 660-foot buffer during the nesting season. This prohibition applies only to construction-related activities, not normal boat traffic on the lake, which may be tolerated by nesting bald eagles.
5. Audubon's Crested Caracara
- a. If an active nest of an Audubon's Crested Caracara is observed within or nearby the Work limits, CONTRACTOR shall cease all construction and dredging activities within a 1,500-meter radius around their nest during

- the nesting season, which typically extends from December to February each year, unless otherwise documented or changed by OWNER.
- b. No unauthorized person shall be permitted to examine or approach the nest within the 1,500-meter buffer during the nesting season. This prohibition applies only to construction-related activities.
6. Work Delay
- a. Delays in work due to CONTRACTOR'S fault of negligence or failure to comply with the above requirements shall not be compensable. Any adjustments to the Contract performance period or price that is required as a result of compliance with this section shall be made in accordance with the General Conditions.
- 3.6 DAILY PROJECT CLEANUP REQUIREMENTS
- A. CONTRACTOR shall maintain a clean and hazard free work area including removal of all unused or unacceptable excavation materials, waste, and shall sweep all affected paved streets, sidewalks and parking lots in accordance with Federal, State, County, City and Local laws, rules, regulations and standards and ROW owners, and acceptable to the PROJECT MANAGER.
- 3.7 FINAL CLEANUP AND RESTORATION
- A. CONTRACTOR shall clean up any areas used for construction and shall restore all landscape features and vegetation damaged or destroyed during construction operations outside the Work limits.

END OF SECTION

#### **SECTION 01610 - MOBILIZATION AND DEMOBILIZATION**

- 1. GENERAL
- 1.1 DESCRIPTION
- A. Mobilization shall include general preparation work and operations for beginning of 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, sanitary and other facilities, as required by these specifications, the special provisions, and State and local laws and regulations. Demobilization shall include general preparation for transfer of all construction equipment to the home base, and cleanup of stockpile areas. The costs of bonds and any required insurance, and any other pre-construction expense necessary for the start of work, excluding the cost of construction materials, shall also be included in this Section.
- 1.2 EQUIPMENT TYPES AND NUMBERS
- A. Unless restricted to a specific type by the plans, specifications, special provisions, or by the PROJECT MANAGER, the CONTRACTOR is permitted to perform the work using equipment, tools, machinery, etc., of their own choosing. Any construction equipment having contact with any

hard surface road shall be equipped with rubber tires or treads. All site preparation and construction work shall be conducted by machinery, unless otherwise indicated on the Drawings, specified herein, or directed in the field by the PROJECT MANAGER or his Representatives.

1.3 EQUIPMENT CONDITION AND APPROVAL

- A. All equipment to be used in Project construction shall be on the site in due time prior to its need, in working condition, and shall be subject to approval by the PROJECT MANAGER. Disapproved equipment shall be removed from the job, or altered or repaired, as required by the PROJECT MANAGER. The number of units, the sizes, etc., of the equipment on hand shall be adequate to ensure completion of the work within the contract time.
- B. Consistent with public interest, safety, and good practice, all equipment, tools, and machinery used shall be maintained in a satisfactory working condition throughout the period they are on the job site. This will include adequate equipment maintenance procedures to ensure the elimination of unnecessary noise, leakage, oil spills, or any other unwanted conditions caused by loose body parts or failure of all construction equipment.
- C. Excessive tailgate banging by haul trucks will be prohibited.
- D. All stationary equipment such as pumps, compressors, generators, etc., shall be screened from noise sensitive receivers if that equipment is to operate beyond normal working hours. If it is feasible, this equipment shall be screened during normal working hours to reduce noise impacts.
- E. No heavy equipment shall be brought to the Project site until it has been thoroughly cleansed as a precaution against invasion by exotic vegetation. All heavy equipment shall be subject to the PROJECT MANAGER's inspection prior to mobilization on site.
- F. CONTRACTOR shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present.

2. PRODUCTS

Not Used.

3. EXECUTION

Not Used.

END OF SECTION

**SECTION 01700 - CONTRACT CLOSEOUT**

1. GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final payment.
- C. Final cleaning.
- D. Project record documents.
- E. Warranties and bonds.
- F. Guarantees.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been Reviewed and as-built survey signed by a professional land surveyor, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for the PROJECT MANAGER's review.
  - B. Provide submittals to the PROJECT MANAGER that are required by governing or other authorities.
  - C. Submit final Application for Payment identifying total Adjusted Contract Sum, previous payments, and sum remaining due.
- 1.3 FINAL PAYMENT
- A. Within thirty (30) calendar days from the date of Contract Completion, the Commission shall pay or cause to be paid to the Contractor, the entire unpaid balance of the then Contract Sum, less the amount of any sums which continue to be retained to satisfy the cost of performing any change in the Work which is the subject of any claim or dispute and which has not yet been satisfactorily performed by the Contractor, provided that the parties have not otherwise stipulated in the Certificate of Substantial Completion, and provided further that the Work has been satisfactorily completed, the Contractor's obligations under the Contract have been fully performed, and a final Certificate for Payment has been issued by the PROJECT MANAGER.
  - B. The Contractor's application for final payment shall be accompanied by the documentation required by the General Terms and Conditions.
- 1.4 FINAL CLEANING
- A. Execute final cleaning prior to final project assessment.
  - B. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- 1.5 PROJECT RECORD DOCUMENTS
- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
    - 1. Drawings.
    - 2. Specifications.
    - 3. Addenda.
    - 4. Change Orders and other modifications to the Contract.
    - 5. Reviewed Shop Drawings, Product Data, and Samples.
    - 6. Manufacturer's instruction for assembly, installation, and adjusting.
  - B. Ensure entries are complete and accurate, enabling future reference by Commission.
  - C. Store record documents separate from documents used for construction.
  - D. Record information concurrent with construction progress.
  - E. Specifications: Legibly mark and record at each Product Section description of actual Products installed, including the following:
    - 1. Manufacturer's name and product model and number.
    - 2. Product substitutions or alternates utilized.
    - 3. Changes made by Addenda and modifications.
  - F. Submit documents to the PROJECT MANAGER with claim for final Application for Payment.
- 1.6 WARRANTIES AND BONDS
- A. Provide notarized copies.

- B. Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.
- D. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten 10 days after acceptance, listing date of acceptance as start of warranty period.

1.7 GUARANTEES

- A. All work performed by the Contractor in completing the subject project shall be guaranteed by the Contractor against all defects resulting from the use of materials, equipment and workmanship for a period of one year from the date of Final Completion of the project.
  - B. If, within any guarantee period, repairs or changes are Required in connection with the guarantee work, which in the opinion of the PROJECT MANAGER is rendered necessary as a result of the use of materials, equipment or workmanship which are defective or inferior or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Commission and without expense to the Commission, proceed to:
    - 1. Place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein; and
    - 2. Make good all damages to the structure or site or equipment or contents thereof, which, in the opinion of the PROJECT MANAGER, is the result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the Contract; and
    - 3. Make good any work or materials or the equipment and contents of structures or site disturbed in fulfilling any such guarantee.
  - C. If the Contractor, after receipt of any such written notice, fails within seventy-two (72) hours to commence at the job site with performance of the work necessary to remedy all defects in the work described in such notice so as to provide the Commission with the subject project completed in accordance with all requirements of the Contract Documents, or fails to complete the performance of such remedial work within a reasonable time after commencing same, the Commission shall be entitled to have such defective work remedied on the account of the Contractor and his Surety, in which event, the Contractor and his Surety shall be fully liable for all costs and expenses reasonably incurred by the Commission in having such defective work remedied.
- 2. PRODUCTS  
Not Used.
  - 3. EXECUTION  
Not Used.

END OF SECTION

**SECTION 02090 - EROSION CONTROL**

## 1. GENERAL

## 1.1 SCOPE

- A. The work specified in this Section consists of measures required to control erosion on the project, so as to prevent pollution of water, detrimental effects of public or private property adjacent to the project right of way, and damage to work on the project. These measures will consist of construction and maintenance of temporary erosion control features or, where practical, the construction and maintenance of permanent erosion control features as shown in the plans or as may be directed by the PROJECT MANAGER.
- B. The installation of temporary erosion control features shall be coordinated with the construction of the permanent erosion control features to the extent necessary to assure economical, effective and continuous control of erosion and water pollution throughout the life of the contract.

## 1.2 CONTROL OF CONTRACTOR'S OPERATIONS

- A. The Contractor shall take sufficient precautions to Prevent pollution of streams, canals, lakes, reservoirs, and other water impoundments, with fuels, oils, bitumen, calcium chloride, or other harmful materials. Also, he shall conduct and schedule his operations so as to avoid or otherwise minimize pollution or siltation of such streams, etc., and to avoid interference with movement of migratory fish. No residue from dust collectors or washers shall be dumped into any live stream.
- B. Construction operations in rivers, streams, lakes, reservoirs, canals, and other impoundments shall be restricted to those areas where it is necessary to perform filling or excavation to accomplish the work shown in the plans and to those areas which must be entered to construct temporary or permanent structures. As soon as conditions permit, rivers, streams, and impoundments shall be promptly cleared of all obstruction placed therein or caused by construction operations.
- C. Except as necessary for construction, excavated material shall not be deposited in rivers, streams, canals, or impoundments, or in a position close enough thereto, to be washed away by high water or runoff.
- D. Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms, the water shall be treated by one or more of the following methods prior to discharge into State waters: pumping into grassed swales or appropriate vegetated areas, sediment basins, or confined by an appropriate enclosure such as turbidity barriers when other methods are not considered appropriate.
- E. The Contractor shall not disturb lands or waters outside the limits of construction as staked except as may be found necessary and authorized by the PROJECT MANAGER.

## 1.3 PRECONSTRUCTION MEETING

- A. At the preconstruction meeting the Contractor shall present his proposed plans and schedules for construction of the project in accordance with the requirements of this Section. The schedule shall be based on an analysis of project conditions and shall be in written form. This

schedule shall specifically indicate the sequence of clearing and grubbing, earthwork operations and construction of permanent erosion control features, and the proposed uses of temporary erosion control features. It shall also include proposed methods to prevent pollution of streams, lakes, reservoirs, canals, and other impoundments, as the result of construction operations. The Contractor shall also outline his proposed methods of controlling erosion and preventing pollution on haul roads and in borrow pits, material pits, and areas used for disposal of waste materials from the project.

- B. No work shall be started until the aforementioned plans and schedules have been accepted by the PROJECT MANAGER. The Contractor will be responsible for accomplishment of the work in accordance with the accepted plans and schedules. The PROJECT MANAGER may approve changes made necessary by unforeseen circumstances which are beyond the control of the Contractor.
- C. The location of, and method of operation in, borrow pits, material pits, and disposal areas furnished by the Contractor for waste material from the project (other than commercially operated sources) shall meet the approval of the PROJECT MANAGER as being such that erosion during and after completion of the work will not result in probability of detrimental siltation or water pollution.

#### 1.4 CONSTRUCTION REQUIREMENTS

- A. Incorporation of Erosion Control Features:
  - 1. Permanent erosion control features shall be incorporated into the Project at the earliest practical time.
  - 2. Uses of temporary erosion control features will be authorized to correct conditions that develop during construction which were not foreseen at the time of design, to control erosion prior to the time it is practical to construct permanent control features, or to provide immediate temporary control of erosion that develops during normal construction operations but is not associated with permanent erosion control features on the project.
- B. Temporary erosion control features may be authorized for use in controlling erosion in areas where stage construction other conditions not under the control of the Contractor, preclude completion of a section of roadway in a continuous manner and in areas where construction operations which must be performed subsequently, will cause damage to permanent erosion control features constructed.
- C. Scheduling of Successive Operations: The Contractor shall schedule his 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 exposed, uncompleted construction to the elements shall be as short as practicable.
- D. Temporary Silt Fences:
  - 1. This work shall consist of furnishing, installing, maintaining and removing temporary silt fences, in accordance with the manufacturer's directions, these specifications, the details as shown on the plans and the FDOT Roadway and Traffic Design Standards.



- E. Clearing and grubbing shall be so scheduled and performed that grading operations can follow immediately thereafter if conditions on the project permit.
- 2. MATERIALS
  - 2.1 TESTING
    - A. No testing of materials used in construction of temporary erosion control features will be required. Acceptance will be on the basis of visual inspection by the PROJECT MANAGER.
  - 2.2 TEMPORARY SILT FENCES
    - A. Materials used for the construction of temporary silt fence, staked turbidity barriers and floating turbidity barrier may be new or used subject to the approval of the PROJECT MANAGER.
    - B. The geotextile fabric shall be a woven or nonwoven fabric. The fabric shall conform to those applications for erosion control.
    - C. The type and size of posts, wire mesh reinforcement (if required) and method of installation will be at the option of the Contractor. These options, in the opinion of the PROJECT MANAGER, must be adequate to provide a reasonable assurance that a durable, effective installation for sediment control is accomplished.
- 3. EXECUTION
  - 3.1 GENERAL
    - A. All products to be installed according to the manufacturer's instructions.
    - B. Temporary erosion and water pollution control features shall consist of, but not be limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, staked turbidity barrier and silt fence.
    - C. Design details for some of these items may be found in the project plans and Water Quality Section of the latest edition of the Florida Department of Transportation Roadway and Traffic Design Standards.
    - D. Installation of all sediment control devices shall be in a timely manner to insure the control of sediment and the protection of lakes, streams, or any wetlands associated there with and to any adjacent property outside the Work limits as may be required.
    - E. At sites where exposure to such sensitive areas are prevalent, installation of any sediment control device shall be completed prior to the commencement of any earthwork.
    - F. After installation of sediment control devices, the Contractor will be required to repair portions of any devices damaged by his equipment and such repair will be at his expense.
    - G. Temporary silt fence shall be erected at upland locations across ditch lines and at temporary locations as shown on the plans or approved by the PROJECT MANAGER where continuous construction activities change the natural contour and drainage runoff. The attachment to existing trees will not be permitted unless approved by the PROJECT MANAGER.
    - H. Floating Turbidity Barriers and Staked Turbidity Barriers:
      - 1. This work shall consist of installing, maintaining, and removal of turbidity barriers to contain turbidity that may occur as the result of

- dredging, filling, or other construction activities which may cause turbidity to occur in the waters of the State. The barriers will be installed in accordance with the details shown in the plans or as approved by the PROJECT MANAGER. The type barrier used, the deployment and maintenance of the barrier will be such as to minimize dispersion of turbid waters from the construction site. Alternate methods or materials may be approved by the PROJECT MANAGER provided that compliance with applicable permit conditions and State water quality standards are maintained.
2. Turbidity barriers will only be used under conditions where they are effective and where there is an impact on the surrounding waters. This will cause the quantity of each item to vary up or down, or be eliminated depending on wind, water depth and experience gained from different operations. This will not relieve the Contractor of the responsibility for operating in such a manner as to avoid or minimize the degradation of the water quality of the surrounding waters.
- 3.2 INSPECTION AND MAINTENANCE
    - A. The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. Any deficiencies shall be immediately corrected by the Contractor.
    - B. Sediment deposits shall be removed when the deposit reaches approximately one half of the volume capacity of the temporary silt fence as directed by the PROJECT MANAGER. Any sediment deposits remaining in place after the temporary silt fence is no longer required shall be dressed to conform with the finished grade, prepared and seeded.
  - 3.3 REMOVAL OF TEMPORARY EROSION CONTROL FEATURES
    - A. In general, any temporary erosion control features existing at the time of construction of the permanent erosion control features in an area of the project shall be removed or incorporated into the soil in such a manner that no detrimental effect will result. The PROJECT MANAGER may direct that temporary features be left in place.
  - 3.4 MAINTENANCE OF EROSION CONTROL FEATURES
    - A. The Contractor shall, at his expense, provide routine maintenance of permanent and temporary erosion control features until the project is completed and accepted. If such erosion control features must be reconstructed due to the Contractor's negligence or carelessness or, in the case of temporary erosion control features, failure by the Contractor to install permanent erosion control features as scheduled, such replacement shall be at the Contractor's expense. If reconstruction of permanent or temporary erosion control features is necessary due to factors beyond the control of the Contractor, payment for replacement will be made under the appropriate contract pay item or items.
  - 3.5 PROTECTION DURING SUSPENSION OF CONTRACT TIME
    - A. In the event that it is necessary that the construction operations be suspended for any appreciable length of time, the Contractor shall shape the top of the earthwork in such a manner as to permit runoff of rainwater and shall construct earth berms along the top edges of embankments to intercept runoff water. Temporary slope drains shall be provided to carry runoff from cuts and embankments which are located in

the vicinity of rivers, streams, canals, lakes, and impoundments. Should such preventive measures fail, the Contractor shall immediately take such other action as necessary to effectively prevent erosion and siltation. The PROJECT MANAGER may direct the Contractor to perform, during such suspensions of time, any other erosion control work deemed necessary.

END OF SECTION

### SECTION 02100 - SITE PREPARATION

1. GENERAL
- 1.1 Scope
- A. Description of Work
1. The Contractor shall provide all labor, materials and equipment to perform all clearing and grubbing as shown on the Drawings and as specified herein.
- 1.2 REGULATORY REQUIREMENTS
- A. Federal, state and local laws and code requirements shall control the disposal of excavated material, ground cover, trees and shrubs.
- 1.3 PROTECTION
- A. Streets, roads, adjacent property and other works to remain shall be protected throughout the work as defined in the General Conditions.
- B. Existing trees, shrubs and bushes designated to be preserved shall be protected as follows:
  1. Trees shall be protected by fencing, barricades, or wrapping as may be required.
  2. Shrubs and bushes shall be protected by fences or barricades as may be required.
  3. Shallow-rooted plants shall be protected at ground\surface under and in some cases outside the spread of branches by fences, barricades, or ground cover protection as may be required.
2. PRODUCTS
- 2.1 MATERIALS
- A. Materials shall be at the Contractor's option.
- B. Present on-site materials excavated in the course of construction which are deemed suitable by the PROJECT MANAGER shall be stored on the site for use as backfill.
3. EXECUTION
- 3.1 GENERAL DESCRIPTION
- A. All operations must be confined to the property of the Owner as designated on the plans. All damage done to property resulting from the Contractor's negligence shall be repaired without charge to the satisfaction of the Owner with the exception of those items (trees, shrubs, etc.) that must be removed for construction and have been agreed upon beforehand, in writing, between the Contractor and the Owner.
- 3.2 CLEARING

- A. Limits of clearing shall be kept to the minimum necessary to install the temporary access road, excavate and haul the backfill material, and dewatering if necessary.
  - B. Any vegetation in construction zones shall not be removed until inspected and/or tagged by the PROJECT MANAGER. No trees shall be removed within the construction zone or Rights-of-Way except the following:
  - C. All trees bordering any construction zone shall be protected by acceptable methods. Trees damaged by the Contractor will be either repaired or replaced as determined by the PROJECT MANAGER at the Contractor's expense.
  - D. Vegetation within the areas to be cleared, which may be designated to be preserved by the PROJECT MANAGER, shall be left standing and uninjured.
- 3.3 GRUBBING
- A. Limits of grubbing shall coincide with the limits of clearing.
- 3.4 TRIMMING OF TREES
- A. When required, with the PROJECT MANAGER's approval, trees shall be trimmed to remove branches or roots which interfere with construction or traffic.
- 3.5 SALVAGE
- A. Material which is to be salvaged, as a result of the clearing operations, shall include the following items which are to be turned over to the Owner if the Owner so desires:
    - 1. Logs over 12 inches, butt diameter
    - 2. Branches over 6 inches, butt diameter.
    - 3. Parts suitable for use as mulch.
    - 4. Live plants suitable for replanting.
  - B. All salvageable material not desired by the Owner shall be removed as part of the work.
- 3.6 DISPOSAL
- A. Burning or burying of materials on site will not be permitted.
  - B. Prior to depositing surplus material at any off-site location, the Contractor shall obtain a written agreement between himself/herself and the owner of the property on which the disposal is proposed. This agreement shall be provided to the PROJECT MANAGER. Contractor's disposal shall comply with all Federal, State, and Local laws and regulations.

END OF SECTION

**SECTION 02200 - EARTHWORK**

- 1. General
  - 1.1 Scope
    - A. CONTRACTOR shall furnish all labor, materials, equipment, and incidentals necessary to perform all earthwork required for the excavation and grading as shown in the Drawings.
    - B. The earthwork shall include, but not be limited to: staking and layout, excavation, filling, backfilling, compaction grading, temporary

improvement of haul routes if necessary, hauling, disposal of surplus and unsuitable materials, temporary site dewatering as necessary to complete the earthwork in the dry, and final conformance surveying.

1.2 RELATED DOCUMENTS AND STANDARDS

- A. The most recent edition of the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction.
- B. The most recent edition of the Florida Department of Transportation, Roadway and Traffic Design Standards.
- C. State of Florida Minimum Technical Standards for survey, Chapter 61G17-6, Florida Administrative Code, and Section 472.027, Florida Statutes.
- D. American Society for Testing and Materials (ASTM).
- E. American Association of State Highway Transportation Officials (AASHTO).
- F. U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

1.3 DEFINITIONS

- A. Excavation: Removal of soils or sediment, either temporarily or permanently, as specified or as necessary for construction of the Project.
- B. Over-excavation: Excavation exceeding that specified or shown on the Drawings.
- C. Fill: Earth material placed permanently above the existing grade.
- D. Backfill: Earth material placed permanently in an excavated area or trench.
- E. Borrow: Earth material brought from off the site to be used as Fill or Backfill.
- F. Structures: Embankments, water control structures, foundations, and other man-made, stationary features above and below ground.
- G. Cohesive Soils: Cohesive soil materials include clays, silts, silty clay, sandy clay, and clayey sand. Moisture-density relations of compacted cohesive soils, when plotted on graphs, will show normal moisture-density curves.
- H. Non-cohesive Soils: Non-cohesive soil materials include gravels, gravel-sand mixtures, sands, and gravelly-sands. Moisture-density relations of compacted non-cohesive soils, when plotted on graphs, will show straight lines or reverse shaped moisture density curves.

1.4 SUBMITTALS

- A. CONTRACTOR shall submit to PROJECT MANAGER three (3) copies of any traffic control permits obtained for this Project.
- B. CONTRACTOR shall submit in writing for approval by the PROJECT MANAGER a plan that details the means and methods CONTRACTOR will use to meet the earthwork requirements of this Project. CONTRACTOR shall not commence construction until this plan is approved by the PROJECT MANAGER.
- C. Upon completion of the work under this Project, CONTRACTOR shall submit to the OW PROJECT MANAGER one (1) reproducible, two (2) blueprints, and one (1) electronic AutoCAD file of "as-built" survey record drawings prepared and certified by a Florida licensed surveyor showing that all new proposed elevations have been met in accordance with the Drawings and these specifications.

- 2. PRODUCTS
- 2.1 GENERAL
- A. All Fill and Backfill materials shall be subject to the approval of the PROJECT MANAGER.
- 2.2 FILL AND BACKFILL
- A. Fill and Backfill required for earthwork shall consist of cohesive and/or non-cohesive soils excavated from the excavation areas shown on the Drawings.
- B. Fill and Backfill shall be excavated, tilled, and dried as needed to achieve the specified compaction.
- C. Excavated materials, which meet the above requirements for Fill or Backfill, shall be used for earthwork.
- 3. EXECUTION
- 3.1 GENERAL
- A. CONTRACTOR shall verify the location of all underground and above ground utilities prior to commencement of earthwork. Utilities to be left in place shall be protected from damage.
- B. Excavations shall be done with methods that will prevent surface water and subsurface water from flowing into excavations and will also prevent flooding of the site and surrounding area.
- 3.2 TEMPORARY DEWATERING
- A. CONTRACTOR shall install and maintain temporary dewatering systems and associated surface water control measures as needed to keep excavations free of surface and groundwater. Specifically, CONTRACTOR shall temporarily pump water out of the site in order to perform the earthwork in as dry conditions as possible
- B. CONTRACTOR shall obtain, pay for and comply with all required dewatering and discharge permits from appropriate regulatory authorities.
- C. The dewatering systems may include well points, gravity ditches with collection sumps, or other as required by the regulatory authorities.
- D. CONTRACTOR shall take all necessary precautions to preclude the accidental discharge of fuel, oil, etc. in order to prevent adverse effects on the groundwater quality in the vicinity.
- E. Dewatering and disposal of water shall be conducted in a manner that will not cause settlements or damages of adjacent properties or interfere with normal drainage patterns in accordance with appropriate local and state regulations.
- F. CONTRACTOR shall be responsible for repairing and correcting any disturbances to natural bearing soils or damages to adjacent structures or properties resulting from the dewatering operation at CONTRACTOR'S own expense.
- 3.3 EXCAVATION
- A. Prior to excavation, CONTRACTOR shall review and be aware of existing site and subsurface conditions and shall locate and flag all underground utilities and structures that may exist within the excavation areas. If utility relocation is required, CONTRACTOR shall comply with the requirements of SECTION 01010 of these specifications. CONTRACTOR shall immediately replace or repair damaged utilities or structures caused by his or her activities at CONTRACTOR'S own expense.

- B. Excavation shall be conducted within the Work Limits to the dimensions, grades, and elevations shown on the Drawings or specified herein; as necessary to accomplish the construction indicated on the Drawings; or as required to obtain suitable Fill and Backfill materials for the earthwork. All irregularities in the bottom of excavations shall be backfilled to the required grades.
  - C. In the event that hard rock or other obstructions are encountered during excavation, CONTRACTOR shall immediately contact the PROJECT MANAGER to review and, if necessary, modify and approve the final elevations or alignments of excavation areas prior to implementation.
- 3.4 EXCAVATED MATERIALS
- A. Excavated materials that meet the above requirements for Fill or Backfill may be stockpiled within the Work Limits and used in earthwork. The stockpiles shall not obstruct any traffic, access, roadways, streets, and shall not alter existing stormwater drainage patterns and channels. CONTRACTOR shall conform to federal, state, and local codes governing the safe loading of trenches with excavated material.
    - 1. Surplus unsuitable materials generated from excavation shall be graded in place as directed by the PROJECT MANAGER. OWNER reserves the right to claim and use, for its own benefit, all surplus materials.
- 3.5 FILL PLACEMENT
- A. Fill shall be placed in relatively level lifts, and then back-bladed and rolled to achieve a reasonable level of compaction.
- 3.6 LOCATION OF EXCAVATED MATERIAL
- A. During excavation, CONTRACTOR shall place the excavated material only within the Project Work Limits, or haul and place within the identified backfill areas. Do not obstruct any roadways. Conform to federal, state, and local codes governing the safe loading of trenches with excavated material.
- 3.7 STORMWATER FACILITIES
- A. Maintain all existing drainage patterns and control runoff from the construction area to prevent erosion, sedimentation, or flooding due to the construction. CONTRACTOR shall maintain a clear path for all surface water drainage structures and ditches during all phases of construction and shall use whatever means necessary to manage stormwater such that impact to construction and/or surrounding facilities is minimized.
- 3.8 SITE GRADING
- A. Site grading shall be performed to the lines, grades, elevations, and cross sections that existed prior to beginning earthwork or as shown on the Drawings. Accuracy of the grading is critical due to the required hydrology for restoration of the site.
  - B. PROJECT MANAGER reserves the right to make minor adjustments or revisions in lines or grades, as conditions arise from inspection, if found necessary as the work progresses due to discrepancies on the Drawings or in order to obtain satisfactory construction.
- 3.9 PROTECTION OF PROPERTY AND ENVIRONMENT
- A. CONTRACTOR shall install and/or implement the following property and environmental protection measures:

1. The temporary erosion and sedimentation control measures as shown on the Drawings and specified in SECTION 02090\of these specifications.
  2. The pollution and noise control measures of SECTION 01520 of these specifications.
  3. The environmental protection measures of SECTION 01530 of these specifications.
- 3.10 SEEDING AND MULCHING EXCAVATED AREAS
- A. CONTRACTOR shall implement the requirements and measures of SECTION 02900 of these specifications for seeding the excavated and re-graded areas within the Work Limits and mulching the associated transitions and slopes as shown on the Drawings.
- 3.11 FINAL ACCEPTANCE AND AS-BUILT SURVEY
- A. After completion of the earthwork, CONTRACTOR shall retain the services of a third-party, State of Florida licensed Surveyor to perform a final acceptance survey of the re-graded elevations within the Work Limits of the backfilled channel. This survey is to confirm that the finished site grades conform to the lines and grades shown on the Drawings and to verify quantities of material. The Surveyor hired by the CONTRACTOR shall be subject to approval by OWNER. The final acceptance and as-built survey shall be performed in accordance with State of Florida Minimum Technical Standards, with a density of measurements as necessary to provide a map of finished ground surface elevations and contours, with a contour interval of 0.5 feet. CONTRACTOR shall furnish to the PROJECT MANAGER "as-built" record drawings resulting from the final survey, prepared and certified by the approved Surveyor. CONTRACTOR shall correct deviations from line and grade in excess of the tolerances specified at no expense to OWNER.

END OF SECTION