

# TRANSPORTATION MANAGEMENT SERVICES TRANSPORTATION ENGINEERING, STORMWATER MANAGEMENT

2885 SOUTH HORSESHOE DRIVE NAPLES FL 34104

POINCIANA VILLAGE STORMWATER IMPROVEMENTS COUNTY PROJECT NO. 50200

SUPPLEMENTAL REQUIREMENTS ISSUED FOR BIDDING

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950 Encore Way Naples FL 34110 Florida Certificate of Authorization No. 30462 Bowman Project No. 340116-01-001/2021.016

# COLLIER COUNTY GROWTH MANAGEMENT DEPARTMENT TRANSPORTATION MANAGEMENT SERVICES

## POINCIANA VILLAGE STORMWATER IMPROVEMENTS SUPPLEMENTAL PROJECT REQUIREMENTS

The following Supplemental Project Requirements have been provided for the Poinciana Village Stormwater Improvements project. These project requirements are intended to supplement the Collier County Construction Standards Handbook for Work Within the Public Right of Way and FDOT Road Design and Construction Standards (2025-2026). These documents can be obtained from the Collier County and FDOT websites. In addition, the City of Naples Utility Specifications & Standards Manual shall apply for work on their facilities.

### COLLIER COUNTY GROWTH MANAGEMENT DEPARTMENT TRANSPORTATION MANAGEMENT SERVICES

# POINCIANA VILLAGE STORMWATER IMPROVEMENTS SUPPLEMENTAL REQUIREMENTS

#### DIVISION 1 – GENERAL REQUIREMENTS

Section 01110 – Summary of Work

Section 01130 – Measurement and Payment

Section 01135 – Owner Directed Contingency Fund

Section 01150 - Protection of Existing Facilities

Section 01200 - Project Meetings

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Section 014127 - NPDES Requirements for Construction Activities Impacting More Than One Acre

Section 01420 – Reference Standards

Section 01430 – Materials Testing

Section 01470 - Color Audio-Video Construction Record

Section 01510 - Temporary Utilities

Section 01540 - Security

Section 01541 - Field Engineering

Section 01781 – Project Record Documents

#### ADDITIONAL ITEMS

- Forge Engineering Subsurface Investigation
- AIM Engineering & Surveying Subsurface Utility Engineering Investigation
- Existing Easement Assessment Report
- Collier County Supplementary Conditions
- Collier County Preconstruction Assessment Form (Sample)
- City of Naples Asbestos Work Plan Specifications

#### SECTION 01110 SUMMARY OF WORK

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

General description of the Work required under this Contract. All work shall be completed in accordance with the construction plans, Collier County Construction Standards Handbook for Work Within the Public Right of Way and FDOT Road Design and Construction (2025-2026) and the Supplemental Project Requirements.

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work for this Contract shall include, but not be limited to, the removal and replacement of the existing stormwater management system within Poinciana Village and additions to it. The work is to occur at 21 locations and the perimeter ditch location and includes: clearing of existing easements and right of way; removal of existing stormwater structures and piping; grading, shaping, and stabilization of the perimeter ditch; installation of new stormwater structures and piping; coordination and adjustment of existing utilities; and roadway and easement restoration.
- B. The Contract Amount shall be determined utilizing the Bid Form as provided. All materials, labor and equipment shall be provided by the Contractor. The County will <u>not</u> provide any materials.
- C. All excavation shall be unclassified with no additional payment for excavation of rock, muck or other unsuitable materials. No additional payment shall be made for dewatering. Contractor shall be responsible for the determination of all field conditions.
- D. The Contractor shall organize, coordinate schedule and execute the Contract Work so as to be in strict compliance with the Special Project Requirements as noted on Contract Drawings.
- E. The work also includes Maintenance of Traffic throughout the project. The Contractor shall develop a phased plan of construction to maintain access for residents. This plan shall be submitted for review and approval by the County prior to construction.
- F. The Contractor shall be responsible for the implementation, maintenance and inspection of stormwater pollution prevention control measures in accordance with FAC Chapter 62-621. The Contractor shall prepare and review implementation of the Stormwater Pollution Prevention Plan (SWPPP) with the County prior to the start of construction.

- G. The Contractor shall prepare and provide a Storm/Inclement Weather Contingency Plan for the project. This plan shall be submitted for review prior to the commencement of any construction activities.
- H. The Contractor shall prepare and provide a site-specific Safety Plan for the project. This plan shall be submitted for review prior to the commencement of any construction activities.

#### 1.03 SITE ACCESS AND STORAGE

- A. Site access shall be from Airport Road and other local roadways. Site access shall be maintained throughout construction for residents, deliveries, and emergency vehicles. Access to the perimeter ditch shall be through existing side yard easements at identified locations on the plans. This access shall be marked and fenced off by the Contractor. Care shall be taken by the Contractor to minimize disturbance to the adjacent property owners and residents. The Contractor, at their option, may obtain additional access locations. The Contractor shall provide proof of legal access to the County and shall be responsible for all conditions and restoration that may be required as part of the agreement.
- B. Site material and equipment storage shall be limited to the existing right of way. The Contractor shall coordinate delivery of materials to the site to minimize onsite storage. Materials and equipment storage shall not obstruct roadway and driveway access or visibility. Contractor shall be responsible for restoring the right of way to its previous condition or better upon completion of work.
- C. The Contractor may utilize additional material and equipment storage areas onsite or offsite. Those storage areas on properties not owned or controlled by the Contractor shall be through a legal agreement with a copy of the agreement provided to the County. All offsite storage shall be in conformance with local zoning and development requirements. The Contractor shall be responsible for all conditions and restoration that may be required as part of the agreement.
- D. The Contractor shall be responsible for securing all materials and be responsible for any damage or theft of any materials until final project acceptance.

#### 1.04 WORK BY OTHERS

During the construction period for this project, the Owner (either with his own forces or under a separate contract) will be performing other work that will require the cooperation of the Contractor in scheduling and his coordination to avoid conflicts. This coordination shall include submitting weekly schedules and cooperating with other contractors.

#### 1.05 PROJECT PHASING

A project phasing plan has been provided on the plans. This phasing plan has been developed to minimize disruption during construction. Phase 1 shall include the west and north perimeter ditch and Locations 13 through 21. Phase 2 shall include the south perimeter ditch and Locations 1 through 12. Only two street/side yard locations may be under construction at any one time. Prior to authorization for additional areas, the sites shall be restored with initial pavement patching completed. The final pavement overlays shall be completed at the completion of each phase. The Contractor may submit an alternative plan for County review and consideration. No guarantee of acceptance is provided.

#### 1.06 PROJECT SCHEDULE

- A. The Contractor shall prepare and submit a project schedule prior to construction for review. The schedule shall identify project milestones including work on individual locations identified in the plans. This project schedule shall be updated monthly and submitted monthly. The project schedule shall be supplemented with a two-week lookahead submitted every two weeks.
- B. Time is of the essence for this project and disruption to homeowners must be kept minimal. The County has a right to request a detailed plan from the Contractor if the Contractor is not expected to finish the project within the contract time. The project will commence upon Notice to Proceed (NTP) from the Owner and be in effect until completion of the project as follows. Substantial Completion shall be made with 360 calendar days of the NTP and Final Completion within 30 calendar days of Substantial Completion.

#### 1.07 PROJECT INQUIRIES

- A. All inquiries from property owners and residents related to the project including scope of work, site access, equipment, etc. shall be directed to the County Project Manager.
- B. All Requests for Additional Information (RFIs) shall be submitted in a timely manner to the County Project Manager and Engineer. RFIs shall be submitted on a standard form with sketches and photographs of the item requiring additional information.

#### 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 reflect the bid proposal form contained in the construction contract.
- B. The schedule shall be given in sufficient detail for proper identification of the percentage 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.

C. The Contractor's applications for payment shall be submitted in accordance with the contract and all Collier County requirements.

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

#### PART 3 - EXECUTION

#### 3.01 MEASUREMENT AND PAYMENT

- A. Make payment on the basis of work actually completing 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. Payment for each item includes compensation for all incidental items, cleanup, and restorations. The cost of cleanup and surface restorations (including payement replacement) will be considered as the percentage retained in accordance with the Contract Documents, and complete payment will not be made until cleanup, restorations and as-builts are completed.
- B. Incidental items to construction shall include, but not be limited to, the following items. No separate payment shall be made for these items and shall be included in the Bid Price of the Payment Item to which it is associated.
  - 1. Trench excavation, sheeting, shoring, and bracing.
  - 2. Dewatering and associated water quality testing as stipulated in permits.
  - 3. Best management practices and controls required to meet dewatering discharge water quality standards.
  - 4. Erosion and sedimentation control and turbidity screening.
  - 5. Excavation, fill, backfill, pipe bedding (including 57 stone), compaction, and grading including furnishing and installing imported material as required.
  - 6. Excavation of all material encountered including rock, organic, inorganic, and unsuitable material and all material transportation and disposal.
  - 7. Right of way (ROW), site, and all disturbed area restoration including grading, sod, mulch, plantings, trees, landscape, etc. Sod type shall be determined by the type of sod that constitutes 50% or more of the property to be restored.
  - 8. Final and temporary restoration.
  - 9. Removal and temporary replacement of driveways and roadways disturbed during construction to maintain stable condition until permanent restoration is completed.
  - 10. Tree trimming (within the ROW and outside the ROW) and removal (within the ROW).
  - 11. Removal, repair, and replacement of existing irrigation located within the ROW.
  - 12. Maintaining irrigation systems operable during construction.

- 13. Removal and disposal of existing stormwater pipes, culverts, mitered ends, headwalls, and associated structures.
- 14. Removal and replacement of existing bollards (wooden, metal, or concrete).
- 15. Cleanup and site dust control including daily sweeping and watering as needed to maintain a clean work area and daily collecting and disposal of all trash and debris within the project site.
- 16. Testing includes all materials, fees, certifications, and equipment.
- 17. Maintenance of utility service.
- 18. Manhole cover/frame adjustment.
- 19. Water main box adjustment.
- 20. Bump mill of existing pavements.
- 21. Appurtenant work.
- 22. Removal of fencing and other structures within the ROW and easements.
- 23. Saw cutting.
- 24. Coordination with other contractors for work within the ROW and/or private property.
- 25. All transportation, storage, and labor.
- 26. Notifications to property owners of construction schedule and service interruptions.
- 27. Contractor Project Manager or Supervisor onsite during any construction activity.

#### C. Description of special non-FDOT Items

- 1. Construction Video: Measurement and Payment shall be Lump Sum for the Project. The Preconstruction Video shall be taken in Phases. Payment will be pro-rated during construction. Video shall be completed in accordance with the Contract requirements with electronic copies provided. The Preconstruction Videos shall be supplemented with still photographs as needed. The Post Construction Video shall be taken when all work within a project location is completed. In conjunction with the video, the Contractor shall complete the Preconstruction Assessment form for all driveway, side yard, and rear yard easements in which work is to be performed.
- 2. Project Sign: Measurement and Payment shall be by each for the project. Work shall include all labor, material, and equipment to provide, install and maintain the Project Sign(s) at the site. Upon completion of the Work, the sign(s) shall be removed and disposed of properly.
- 3. Record Survey: Measurement and Payment shall be by Lump Sum for the project. The survey is to be completed in phases. Payment will be pro-rated during construction. Record Survey shall be completed in accordance with the Contract requirements. Record Survey shall be submitted within 15 days of completion of work at each location and completion of each phase of the perimeter ditch work.
- 4. Playground Equipment Remove and Reinstall: Measurement and Payment shall be Lump Sum for the removal of the existing park playground equipment to facilitate installation of the new culvert. It shall include all labor, material, and equipment

necessary for its removal, safe storage, and reinstallation upon completion of the culvert installation. New landscape timber and mulch to match existing shall be provided. New concrete foundation shall be provided as needed for reinstallation. All work shall be coordinated through the Project Manager and with the County Parks Department.

- 5. Paver Driveway Remove/Replace: Measurement and Payment shall be per square yard for the removal and reinstallation of existing paver driveways removed by construction. It shall include, but not be limited to, removal, stacking and protection of existing pavers, all temporary surfacing to maintain access, excavation and grading, installation of paver driveway, and miscellaneous surface restoration.
- 6. Utility Adjustment/Conflicts: Measurement and Payment shall be per each by type and size as applicable. This shall include water service adjustment, sewer service adjustment, water main conflict adjustment, and force main conflict adjustment. Work shall include, but not be limited to, all surface removal, excavation, bedding, utility adjustment (including proper restraining and disposal of removed materials), clearance of all water services and mains, backfilling and compacting, and miscellaneous surface restoration.
- 7. Light Pole Holding: Measurement and Payment shall be per each light/utility pole requiring holding due to construction of the stormwater system improvements. Work shall include, but not be limited to, coordinating with the utility and cost of holding the facility for completion of the work.
- 8. Landscape Hedge: Measurement and Payment shall be Lump Sum for the installation of the landscape hedge at the location specifically identified. Work shall include, but not be limited to, removal of existing vegetation, soil preparation, installation of new material and maintenance until acceptance by the County.
- 9. Owner Directed Contingency: Measurement and Payment shall be made at the appropriate contract price based on lump sum, unit price or on a time and material basis depending upon the nature of the work. The Contractor shall submit pricing including labor, material, and equipment for review prior to work. A Work Directive with a Change Order with the associated backup material shall be issued by the Collier County Project Manager prior to the work being completed by the Contractor. This shall be for unanticipated work due to unforeseen conditions and other items.

#### OWNER DIRECTED CONTINGENCY FUND

#### PART 1 – GENERAL

- 1.01 SECTION INCLUDES
- 1.02 CONTRACT CONTINGENCY
  - A. The Contractor shall include in its Contract Price a contingency equal to funds shown in the bid schedule for additional work required due to unforeseen conditions.
  - B. The price negotiated (between Contractor and Owner) for any work falling under this category shall be compensation in full for all labor, materials and equipment necessary. Compensation for unforeseen conditions will be made at the appropriate contract price based on time and materials. Prior to work commencing, the Contractor shall submit their standard labor, material, and equipment rates for County review. Upon review and acceptance, these standard labor and equipment rates shall serve as the basis of compensation for emergency or time and material allowance work.
  - C. A Contingency for Unforeseen Conditions has been included. This shall be for unanticipated work only due to unforeseen conditions and other items.
  - D. The provisions for the Contingency Fund are not a guarantee the Contractor will be paid any portion of the full amount of such Contingency Fund.

#### 1.03 CONTINGENCY FUND

- A. Refer to the Bid Schedule for the Contingency Fund amount.
- B. A Contingency for Owner's use as directed for unforeseen work and costs associated with existing underground piping and obstructions and other items.

#### 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 structures 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 notify the County Project Manager and Engineer.
- C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.
- D. The Contractor shall prepare and submit monthly log of all exploratory work conducted on existing utilities including water, wastewater mains and services, and private utilities. Failure to submit monthly may result in rejection of application for payment.

#### 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 County Project Manager and 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 a 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 made 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 County Project Manager and 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 approved for trimming or removal by the County Project Manager and Engineer.
- B. All 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.

#### 1.09 VIBRATION MONITORING

A. The Contractor is responsible for providing a third-party independent consultant to perform vibration monitoring adjacent to existing homes and structures during all construction activities. The Contractor shall submit for review and approval the name and qualifications of the consultant. The monitoring equipment shall be located within the equipment manufacturer's allowable tolerance distance from construction activities at all times. All monitoring shall be done at the limits of the right of way or easement as applicable. Reports shall include location of the equipment, time, and maximum PPV, either once per day if the vibration monitor is not relocated or upon each relocation of the vibration monitoring device. Upon either detecting vibration levels reaching 0.5 inches per second or damage to the structure, immediately stop the source of vibrations, backfill any open excavations, notify the County Project Manager and Engineer and provide a corrective action plan for acceptance by the County Project Manager and Engineer. Vibration monitoring and reporting shall follow the US Bureau of Mines standards and reports shall be signed and sealed by a State of Florida Professional Engineer and delivered weekly to the County, EOR, and CEI. The Contractor's qualified subcontractor shall be the only party allowed to determine the proper location for monitoring and setting up the vibration monitoring equipment. Vibration monitoring reports, signed and sealed, shall include a statement whether the recorded levels met or did not meet 0.5 inches per second and recommended levels stated in the US Bureau of Mines, R18507 Structural Response and Damage Produced by Ground Vibration from Blasting, If at any time a structural damage complaint is received by the County, the Contractor shall, within two (2) business days, provide a signed and sealed vibration monitoring report for the affected area. On a monthly basis, the Contractor shall submit signed and sealed vibration monitoring reports.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

#### **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 County Representative shall prepare and distribute the meeting agenda and shall preside at the meeting. The County Representative shall record and distribute minutes of the proceedings and decisions.

#### B. Attendance:

- 1. County Project Manager
- 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 or phasing
- 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 County Representative will prepare and distribute agenda, preside at meetings and record minutes of proceedings and decisions. The County Representative will distribute copies of minutes to participants.

#### C. Attendance:

- 1. County Project Manager
- 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 quality and work standards.
- 8. Maintaining job site and security.
- 9. Maintaining community relations and resolution of resident concerns.
- 10. Complete other current business.
- 11. Schedule for the next progress meeting.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

#### **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 to the County Project Manager and Engineer, 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 of all trades.
- C. Sign each sheet of shop drawings and product data, and each sample; label to certify compliance with requirements of Contract Documents. <u>Notify County Project Manager and Engineer of any deviations from requirements of Contract Documents in writing at time of submittal</u>.
- 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 resubmittals), 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 one piece of material or equipment. All submittals with color documentation shall be submitted in color.

- H. items and as required by the Contract Documents:
  - 1. Pipe
  - 2. Structures
  - 3. Utility Adjustment Materials
  - 4. Soil Stabilization Materials
  - 5. Concrete, Concrete Reinforcing, and Grout
  - 6. Backfill and Flowable Fill Materials
  - 7. Asphalt Mix Design
  - 8. Compaction Results (Soil and Base Material)
  - 9. Maintenance of Traffic Plan (Phased)
  - 10, Utility Adjustment Phasing & Plan
  - 11. Stormwater Pollution Prevention Plan (SWPPP)
  - 12. Storm/Inclement Weather Contingency Plan
  - 13. Site Specific Safety Plan
  - 14. Project Schedule and Monthly Updates
  - 15. Two-Week Look Ahead (Submit Bi-Weekly)
  - 16. Weekly Vibration Monitoring Test Reports
  - 17. Preconstruction and Post Construction Videos

- 18. Preconstruction Assessment Reports
- 19. Monthly Red Lines of Installed Facilities
- 20. Record Survey

#### 1.05 NUMBER OF COPIES

A. In the event of non-digital submittal, hard copy should be submitted. Provide the number of copies listed below.

	Numb	er of Copies
Submittal	To Engineer	Returned to Contractor
Progress Schedules	4 copies	1 copy
Shop Drawings & Product Data	5 copies	1 copy
Samples & Test Reports	3 copies	1 copy
O&M Data	3 copies	
Certificates of Compliance	3 copies	que des lans
Request for Substitution	2 copies	1 copy
Requests for authorization, requests		
for information, and other similar	2 copies	1 copy
requests		

B. Additional Copies: If additional copies of shop drawings, product data, or shop drawings and product data are required by the Contractor, submit up to two additional copies to Engineer.

#### 1.06 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.

#### 1.07 PROGRESS SCHEDULES

Submit progress schedules in accordance with Contract documents

#### 1.08 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.

#### 1.09 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.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

#### 1.10 SAMPLES

- A. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Owner selection.
- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Approved samples that may be used in the Work are indicated in the Specification section.
- D. Label each sample with identification required for transmittal letter.
- E. Provide field samples of finishes at Project, at location acceptable to Engineer, as required by individual Specifications section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.
- D. Accepted samples shall establish the standards by which the completed Work will be judged.

#### 1.11 TEST REPORTS

Submit test reports as specified in this section and Section 01430 – Materials Testing to the County Project Manager and Engineer.

#### 1.12 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 County Project Manager and Engineer.

#### 1.13 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.

#### 1.14 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)

#### REGULATORY REQUIREMENTS

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Requirements and procedures for obtaining permits and complying with permits.

#### 1.02 PERMITS

- A. Contractor will obtain County, State and Federal permits not obtained by County, including but not limited to building permits, fence permits, South Florida Water Management District dewatering permits, burning permits, tree removal permits, excavation permits, demolition permits and Florida Dept. of Environmental Protection NPDES Stormwater Pollution Prevention Plan permit.
- B. The Contractor shall apply for and obtain all necessary lane closure permits from the Collier County Growth Management Department. Copies shall be provided to the County Project Manager and Engineer. No lane closures will be permitted between the hours of 7:00 AM through 9:00 AM and 3:30 PM through 6:30 PM on weekdays.
- C. The Contractor must file a minimum of 48 hours prior to start of construction a Notice of Intent with the DEP.
- D. Contractor shall schedule and document all inspections and re-inspections (if needed) required by permitting agencies.
- E. County will obtain the County utilities and engineering approvals.

#### F. Documents:

- 1. County will furnish signed and sealed sets of Contract Documents for permit applications.
- County will furnish copies of permits obtained by County and required to be posted on the job site. Copies of permits will be forwarded to Contractor prior to start of construction.
- 3. Contractor shall furnish copies of permits obtained by the Contractor. Forward copies of permits to the County prior to commencement of work requiring permits.
- G. A Collier County Right of Way permit is not required for this work. The Contractor shall complete all work in conformance with the Collier County Construction Standards

Handbook for Work Within the Public Right of Way and Collier County Standard Detail Drawings.

#### 1.03 CODES AND ORDINANCES

- A. Codes applicable to this project include, but are not necessarily limited to, the following:
  - 1. Standard building codes as applicable.
  - 2. <u>Title 29, Part 1926, Construction Safety and Health Regulations</u>, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
  - 3. <u>Title 29, Part 1910, Occupational Safety and Health Standards</u>, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
  - 4. Accessibility Requirements Manual, Department of Community Affairs, Florida Board of Building Codes and Standards.
  - 5. The Americans with Disabilities Act (ADA) 1990 36 CFR Part 1191 Architectural and Transportation Barriers Compliance Requirements.
  - 6. NFPA 101 Life Safety Code, Latest Edition.
  - Standard Fire Prevention Code, Latest Edition.
  - 8. State Fire Marshal's Uniform Fire Safety Rules.
  - 9. Florida Department of Transportation Standards and Specifications.
  - 10. Collier County Right of Way Ordinance.
  - 11. City of Naples Utilities Standards.
- B. All materials and workmanship shall conform to local city or county ordinances.
- C. If there is a conflict in regulations, codes, or regulations and codes, the more stringent requirements shall govern.

#### PART 2 - PRODUCTS (not used)

#### PART 3 - EXECUTION

#### 3.01 VERIFICATION AND CONFORMANCE

A. Conform to all requirements of all permits.

#### NPDES REQUIREMENTS

#### FOR CONSTRUCTION ACTIVITIES IMPACTING MORE THAN ONE ACRE

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. This Section describes the required documentation to be prepared and signed by the Contractor before conducting construction operations, in accordance with the terms and conditions of the National Pollutant Discharge Elimination Systems (NPDES) Stormwater Permit, as required by Florida Administrative Code (F.A.C.) Chapter 62-621.
- B. The Contractor shall be responsible for implementation, maintenance and inspection of stormwater pollution prevention control measures in accordance with F.A.C. Chapter 62-621 including, but not limited to, erosion and sediment control, stormwater management plans, waste collection and disposal, offsite vehicle tracking, and other practices shown on the drawings and/or specified elsewhere in this or other specifications. The stormwater pollution prevention control measures shall include protection of offsite public and private storm sewer facilities potentially impacted during construction. Stormwater facilities include streets, inlets, pipes, ditches, swales, canals, culverts, control structures, and detention/retention areas.
- C. The Contractor shall prepare and review implementation of the Stormwater Pollution Prevention Plan (SWPPP) in a meeting with the County Project Manager and Engineer prior to start of construction.

#### 1.02 UNIT PRICES

A. Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work to be performed under this Section in pay items of which this work is a component.

#### 1.03 REFERENCE DOCUMENTS

- A. ASTM D3786 Standard Test Method for Hydraulic Bursting Strength for Knitted Goods and Nonwoven Fabrics.
- B. ASTM D4632 Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

014127-1

#### PART 2 - PRODUCTS (not used)

#### PART 3 - EXECUTION

#### 3.01 NOTICE OF INTENT (NOI)

A. Fill out, sign and date a Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, (FDEP Form 62-621.300(4)(b)). Submit the signed copy of the NOI to the County Project Manager or designee. The County Manager or designee will submit the completed form to the FDEP along with the required permit fee.

#### 3.02 CERTIFICATION REQUIREMENTS

- A. On the attached Operators Information form, fill out the name, address and telephone number for Contractor, persons or firms responsible for maintenance and inspection of erosion and sediment control measures, and all Subcontractors.
- B. The Contractor and Subcontractors name in the Operator's Information form shall read, sign and date the attached Contractor's/Subcontractor's Certification form.
- C. The persons or firms responsible for maintenance and inspection of erosion and sediment control measures shall read, sign and date the attached Erosion Control Contractor's Inspection and Maintenance Certification form.
- D. Submit all forms to the County Project Manager before beginning construction.

#### 3.03 RETENTION OF RECORDS

- A. Retain a copy of the SWPPP at the construction site and at the Contractor's office from the date that it became effective to the date of project completion.
- B. At project closeout, submit to the County Project Manager or designee all NPDES forms and certifications, as well as a copy of the SWPPP. Stormwater pollution prevention records will be retained by the County Project Manager for a period of three (3) years from the date of project completion.

#### 3.04 REQUIRED NOTICES

- A. The following notices shall be posted from the date that the SWPPP goes into effect until the date of final site stabilization:
  - 1. A copy of the submitted NOI and a brief project description, as given in the SWPPP, shall be posed at the construction site and at the Contractor's office in a prominent place for public viewing.

- 2. Notice to drivers of equipment and vehicles, instructing them to stop, check and clean tires of debris and mud before driving onto traffic lanes. Post such notices at every stabilized construction exit area.
- 3. Post a notice of waste disposal procedures in an easily visible location on site.
- 4. Notice of hazardous material handling and emergency procedures shall be posted with the NOI on site. Keep copies of Material Safety Data Sheets at a location on site that is known to all personnel.
- 5. Keep a copy of each signed certification at the construction site and at the Contractor's office.

REQUIRED FORMS FOLLOW

#### **OPERATOR'S INFORMATION**

Owner's Name and Addre	ess:	Transportation Management Services Transportation Engineering, Stormwater Management 2885 South Horseshoe Drive Naples Florida 34104
Contractor's Name and A	ddress:	
General Contractor		
	Telephone:	
Site Superintendent		
	Telephone:	
Erosion Control and Maintenance Inspection		
	Telephone:	
Subcontractor's Name ar	nd Addresses:	

Phone: \_\_\_\_\_\_ Phone: \_\_\_\_\_

#### CONTRACTOR'S / SUBCONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of Florida's National Pollutant Discharge Elimination System (NPDES) Construction General Permit that authorizes stormwater discharges associated with activity from the construction site identified as part of this certification, and that I have received a copy of the SWPPP.

Signature:		 
Name: (printed or typed)		
Title:		
Company:		 
Address:	 	 
Signature:	 	
Name: (printed or typed)		 · ····
Title:		
Company:		
Address:		 
Signature:		 ***************************************
Name: (printed or typed)		
Title:		
Company:		
Address:		

# EROSION CONTROL CONTRACTOR'S INSPECTION AND MAINTENANCE CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of Florida's National Pollutant Discharge Elimination System (NPDES) Construction General Permit that authorizes stormwater discharges associated with activity from the construction site identified as part of this certification, and that I have received a copy of the SWPPP.

Signature:		 	 	
Name: (printed or typed)			 	
Title:	MARK THE STREET	 	 	
Company:	AUG. 1	 	 	
Address:				
Date:				

# STORMWATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT

PROJECT:			Apply)		
CONTRACTOR:		electory	i i i i i i i i i i i i i i i i i i i		
INSPECTOR:		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Application of the state of the		
DATE:	4 Account	de de des de			
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POINCIANA VILLAGE NPDES REQUIREMENTS

#### REFERENCE STANDARDS

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Description of reference standards and requirements relative to reference standards.

#### 1.02 OUALITY CONTROL

For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

#### 1.03 REFERENCE PUBLICATIONS

- A. The date of reference publications shall be the latest in effect at the time of the award of Contract.
- B. Reporting and resolving discrepancies relative to reference publications shall be as specified in the General Conditions and Division 1 of the specifications.
- C. Document precedence shall be as specified in the General Conditions.

#### 1.04 SCHEDULE OF STANDARDS ORGANIZATIONS

Aluminum Association

AAMA Architectural Aluminum Manufacturer's Association

AAN American Association of Nurserymen, Inc.

AASHTO American Association of State Highway and Transportation Officials

ACI American Concrete Institute

ACPA American Concrete Pipe Association

AFBMA Anti-Friction Bearing Manufacturer's Association, Inc.

AGC Associated General Contractors of America

AGMA American Gear Manufacturer's Association

AA

AHDGA American Hot Dip Galvanizers Association

Al Asphalt Institute

AIA American Institute of Architects

AISC American Institute of Steel Construction

AIS! American Iron and Steel Institute

AITC American Institute of Timber Construction

AMCA Air Moving and Conditioning Association

ANSI American National Standards Institute

APA American Plywood Association

API American Petroleum Institute

APHA American Public Health Association

APWA American Public Works Association

AREA American Railway Engineering Association

ASA Acoustical Society of America

ASAE American Society of Agricultural Engineers

ASCE American Society of Civil Engineers

ASHRAE American Society of Heating, Refrigerating, and Air-Conditioning Engineers

ASLE American Society of Lubricating Engineers

ASME American Society of Mechanical Engineers

ASMM Architectural Sheet Metal Manual

ASTM American Society for Testing and Materials

AWPA American Wood-Preservers' Association

AWPI American Wood Preservers Institute

AWWA American Water Works Association

AWS American Welding Society

BHMA Builders Hardware Manufacturer's Association

CMA Concrete Masonry Association

CRSI Concrete Reinforcing Steel Institute

DEP Florida Department of Environmental Protection

DIPRA Ductile Iron Pipe Research Association

EIA Electronic Industries Association

EJCDC Engineers' Joint Contract Documents Committee

EPA Environmental Protection Agency

ETL Electrical Test Laboratories

FDEP Florida Department of Environmental Protection

FDOT Florida Department of Transportation

FS Federal Specification General Services Administration Specification and

Consumer Information Distribution Section (WFSIS)

HI Hydraulic Institute

IEEE Institute of Electrical and Electronics Engineers

IES Illuminating Engineering Society

IMIAC International Masonry Industry All-Weather Council

IPCEA Insulated Power Cable Engineers Association

ISA Instrument Society of America

ISO International Organization for Standardization

MBMA Metal Building Manufacturer's Association

MTI Marine Testing Institute

NAAMM National Association of Architectural Metal Manufacturers

NACE National Association of Corrosion Engineers

NBS National Bureau of Standards

NEC National Electric Code

NEMA National Electrical Manufacturers' Association

NFPA National Fire Protection Association

NRCA National Roofing Contractor's Association

OSHA Occupational Safety and Health Administration, Federal Department of Labor

PCA Portland Cement Association

SBC Standard Building Code

SDI Steel Door Institute

SJI Steel Joist Institute

SMACCNA Sheet Metal and Air Conditioning Contractors National Association

SSPC Steel Structures Painting Council

UL Underwriter's Laboratories, Inc.

WEF Water Environment Federation

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

# MATERIALS TESTING

# PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Requirements and procedures for testing laboratory services.

# 1.02 REFERENCES

- A. General: as specified in Section 01420 Reference Standards.
- B. ANSI/ASTM Standards
  - ANSI/ASTM D3740 Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
  - 2. ANSI/ASTM E329 Practice for Inspection and Testing Agencies for Concrete, Steel, Bituminous Materials as Used in Construction

# 1.03 SELECTION AND PAYMENT

- A. The Contractor shall employ services of one or more independent testing laboratories to perform specified inspection and testing.
- B. Employment of testing laboratory shall in no way relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.

#### 1.04 OUALITY ASSURANCE

- A. Standards: Comply with requirements of ANSI/ASTM E329 and ANSI/ASTM D3740.
- B. Laboratory: Authorized to operate in State in which Project is located.
- C. Laboratory Staff: Maintain a full time Registered Professional Engineer on staff to review services.
- D. Testing Equipment: Calibrated at reasonable intervals with devices of accuracy traceable to either National Bureau of Standards (NBS) Standards or accepted values of natural physical constants.

# 1.05 LABORATORY RESPONSIBILITIES

A. Test samples submitted by Contractor.

- B. Provide qualified personnel at site. Cooperate with County Project Manager and Engineer and Contractor in performance of services.
- C. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.
- D. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- E. Promptly at the time of testing notify County Project Manager, Engineer and Contractor of observed irregularities or non-conformance of Work or Products.
- F. Perform additional inspections and tests required by County Project Manager and Engineer.
- G. Attend preconstruction conferences and progress meetings as appropriate.

#### 1.06 LABORATORY REPORTS

A. After each inspection and test, the laboratory shall promptly submit three (3) copies of laboratory report to County Project Manager, Engineer, and Contractor. Submittal shall be made within three (3) days of the test. Electronic submittal shall be accepted.

# B. Report shall include:

- Date issued,
- 2. Project title and number,
- 3. Name of inspector or technician,
- 4. Date and time of sampling or inspection,
- 5. Identification of product and Specifications section,
- 6. Location in the Project, that test was performed,
- 7. Type of inspection or test,
- 8. Date of test,
- 9. Results of tests,
- Conformance with Contract Documents.
- C. When requested by County Project Manger or Engineer, provide interpretation of test results.

# 1.07 LIMITS ON TESTING LABORATORY AUTHORITY

A. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

- B. Laboratory may not approve or accept any portion of the Work.
- C. Laboratory may not assume any duties of Contractor.
- D. Laboratory has no authority to stop the Work.

#### 1.08 CONTRACTOR RESPONSIBILITIES

- A. Deliver to laboratory, at designated location, adequate samples of proposed materials that require testing, along with proposed design data as required.
- B. Cooperate with laboratory personnel and provide access to the Work.
- C. Provide incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the site or at source of Products to be tested, to facilitate tests and inspections, storage and curing of test samples.
- D. Notify County Project Manager, Engineer, and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.
- E. Payment for testing and laboratory services.

#### 1.09 SCHEDULE OF INSPECTIONS AND TESTS

A. Testing shall be completed in accordance with the FDOT, Collier County, or following requirements whichever is more stringent.

#### B, Trench Backfill

- 1. In unpaved areas, the Contractor shall perform a minimum of one density test per lift of backfill per 400 lineal feet. At Location 1 through 21, one set of compaction tests (minimum) shall be taken per location.
- 2. In paved areas, the Contractor shall perform a minimum of one density test per lift of backfill per 100 lineal feet. At roadway crossing, a minimum of one density test per lift of backfill per roadway lane shall be performed. Additional testing shall be performed by the Contractor if required by the authority having jurisdiction.
- 3. Asphalt testing shall be completed in accordance with the FDOT Specification and the requirements of the authority having jurisdiction. During initial pavement patching a CTQP Technician shall not be required. During all overlay operations a CTQP Technician shall be required.

# C. Perimeter Ditch

1. Contractor shall compact material to 90% maximum dry density in 8" lifts and per requirement of soil stabilization material manufacturer's recommendations. Testing shall consist of a minimum of 3 tests per every 500 lineal feet. Additional

visual observation will be made by the County concerning adequate compaction efforts being utilized.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

# COLOR AUDIO-VIDEO CONSTRUCTION RECORD

#### PART 1 - GENERAL

#### 1.01 SCOPE

Prior to commencing work on individual phases, the Contractor shall take a continuous color audio-video digital recording of Project site by location to serve as a record of preconstruction conditions. Additional still photographs shall be taken to supplement the recording as needed. Upon completion of work at a location, a continuous color audio-video digital recording shall be taken by the Contractor. It shall be taken in the same sequence of the preconstruction video. Additional still photographs shall be taken to supplement the recording as needed.

#### 1.02 APPROVAL

No construction shall begin prior to review and approval by County Project Manager and Engineer of the recording covering construction area. The Engineer shall have authority to reject all or any portion of the recording not conforming to specifications and order that it be done again at no additional charge. The Contractor shall reschedule unacceptable coverage within five days after being notified. The County Project Manager and Engineer shall designate those areas, if any, to be omitted from or added to the audio-video coverage. Recordings shall not be made more than 60 days prior to construction in any area. All digital and written records shall become property of the County. Prior to video recording, there will be a meeting between the County Project Manager, Engineer, Contractor and electrographer.

#### 1.03 PROFESSIONAL ELECTROGRAPHERS

Engage the services of a professional electrographer. The color audio-video recording shall be prepared by a responsible commercial firm known to be skilled and regularly engaged in the business of preconstruction color audio-video documentation. The electrographer shall furnish to Engineer a list of names and addresses of two references that electrographer has performed color audio-video recording for projects of a similar nature.

#### PART 2 - PRODUCTS

# 2.01 AUDIO-VIDEO RECORDING

Audio-video recording shall be submitted electronically. No flash drives shall be permitted.

#### 2.02 EQUIPMENT

- A. Furnish all equipment, accessories, materials and labor to perform this service. The total audio-video system shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls or any other form of imperfection. The audio portion of the recording shall reproduce the commentary of the camera operator with proper volume, clarity and be free from distortion and interruptions.
- B. The color video camera used in the recording system shall have a horizontal resolution of 300 lines at center, a luminance signal to noise ratio of 45 dB and a minimum illumination requirement of 25 foot-candles.

# PART 3 - EXECUTION

#### 3.01 SCHEDULING

No recording shall be done during precipitation, mist or fog. Recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recording and to produce bright, sharp video recordings of those subjects.

# 3,02 RECORDED INFORMATION - AUDIO

Each recording shall begin with current date, project name and Owner and followed by general location, i.e., viewing side and direction of progress. Audio track shall consist of an original live recording. Recording shall contain the narrative commentary of electrographer, recorded simultaneously with his fixed elevation video record of the zone of influence of construction.

#### 3.03 RECORDED INFORMATION - VIDEO

All video recordings must, by electronic means, display continuously and simultaneously generated with the actual taping transparent digital information to include the date and time of recording, and station numbers as shown on the Drawings. Date information shall contain the month, day and year. Time information shall contain the hour, minutes and seconds. Additional information shall be displayed periodically. Such information shall include but not be limited to project name, contract number, name of street or structure, direction of travel and view. This transparent information shall appear on the extreme upper left hand third of the screen.

# 3.04 AREA OF COVERAGE

A. Recorded coverage shall include all surface features located within the zone of construction and extending a minimum of 20 feet adjacent supported by appropriate audio coverage. Coverage shall include, but not be limited to, existing above ground utilities; below grade utility marking; existing sidewalks, walkways, and driveways; existing pavement and drainage; exterior of adjacent houses, sheds, and pools; existing wells,

- irrigation systems (with irrigation system on for all zones); and existing overall yards, shrubs, trees, and miscellaneous features. Special attention shall be made to any cracks or damage to existing houses, garages, structures, and pavement areas.
- B. When a conventional wheeled vehicle is appropriate for use, distance from the camera lens to the ground shall not be less than twelve feet. Rate of speed in the general direction of travel of the vehicle used during recording shall not exceed 15 feet per minute. Panning, zoom-in and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object. Tape coverage may be required in areas not accessible by vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Engineer.

# **TEMPORARY UTILITIES**

# PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Requirements for temporary utilities.

# 1.02 TEMPORARY SERVICES

- A. Each temporary service shall meet the requirements of the utility having authority over the temporary service. Provide metering and isolation to meet requirements of utility authority over temporary service.
- B. Obtain permission of utility having authority over temporary service prior to connecting temporary service.
- C. Remove temporary services after temporary services are no longer needed for construction operations, site security, field offices, or testing. Restore to preconstruction condition.

## 1.03 APPLICATION AND PAYMENT FOR TEMPORARY SERVICES

- A. Make applications and arrangements and pay all fees and charges for temporary electrical, potable water, non-potable water, sanitary and telephone services.
- B. Provide and pay for temporary generators, pumps, wiring, switches, piping, connections, meters, and appurtenances for temporary utilities.
- C. The following permanent utility services and services relative to temporary utilities shall be provided by the Owner.
  - 1. Electricity for facilities that are occupied and operated by the Owner.
  - 2. Potable water for facilities that are occupied and operated by the Owner.
  - 3. Telephone service for facilities that are occupied and operated by the Owner.

# 1.04 ELECTRICITY, LIGHTING

- A. For facilities connected to permanent electrical services, the Contractor shall pay the Owner by deductive cost Change Order for all electrical power used in new facilities until facility is accepted, occupied, and operated by the Owner.
- B. Provide temporary electrical service, or services, for the following:

- 1. Power tools for construction operations.
- 2. Construction lighting.
- 3. Security lighting.
- 4. Field offices and sheds.
- 5. Testing specified in individual Sections.
- C. Provide construction lighting as required for the following:
  - 1. Prosecution of Work;
  - 2. Observation of Work by Engineer, Owner, and regulatory authorities;
  - 3. Access to facilities occupied by Owner within project site.
- D. Wiring for Temporary Electrical Services
  - 1. Properly install and maintain wiring for temporary lighting and power.
  - 2. Provide separate circuits for temporary lighting and for temporary power.
  - 3. Provide branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords.
  - 4. Securely fasten wiring and electrical devices.
  - 5. Temporary lighting and power facilities shall meet the requirements of OSHA Safety and Health Standards for Construction.

#### 1.05 WATER

- A. The Contractor shall provide temporary water services for the following:
  - 1. Potable water or non-potable water for construction operations.
  - 2. Potable water for consumption by Contractor's and subcontractors' personnel.
  - 3. Potable water for field offices.
  - 4. Potable water or non-potable water for fire protection on the construction site.
- B. Piping for Temporary Water Services
  - 1. Provide pipe, fittings, valves, and hydrants for temporary water service, or services.
  - Provide temporary pumps, storage tanks, and controls if available water volume, pressure, or volume and pressure are not sufficient for construction operations.
  - 3. Extend branch piping with outlets located so that water is available by use of hoses.

- 4. Securely anchor and support temporary water piping.
- 5. Provide warning signs at each temporary non-potable water outlet.

#### 1.06 SANITARY FACILITIES

- A. The Contractor shall provide sanitary facilities (fixed toilets or portable chemical toilets) for Contractor's and subcontractor personnel.
- B. Sanitary Facilities for Contractor's and Subcontractor Personnel shall meet the requirements of OSHA Safety and Health Standards for Construction.
- C. Seclude sanitary facilities from public observation as follows:
  - 1. Locate sanitary facilities so that sanitary facilities cannot be observed by public, or
  - 2. Provide screening around sanitary facilities so that public cannot observe sanitary facilities.
- D. Maintain sanitary facilities so that sanitary facilities are clean and dry at all times.
- E. Enforce use of sanitary facilities. Do not commit nuisances on the project site.

# 1.07 HEAT, VENTILATION, AND AIR CONDITIONING

- A. The Contractor shall provide temporary heat, ventilation, and air conditioning for the following:
  - 1. Construction operations.
  - 2. Protection, drying, and curing of materials and finishes.
  - 3. Field offices and sheds.
- B. Temporary heat and ventilation for construction operations shall meet the requirements of OSHA Safety and Health Standards for Construction.

## 1.08 TELEPHONE SERVICE

- A. The Contractor shall provide temporary, land line, or cellular telephone service for the following:
  - 1. Communications regarding construction operations.
  - 2. Emergency services.
  - 3. Field offices.

# PART 2 - PRODUCTS (not used)

# PART 3 - EXECUTION (not used)

#### **SECURITY**

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Requirements for project site security

#### 1.02 SITE SECURITY

- A. Facilities Partially Occupied by Owner: Site security of partially occupied sites shall be joint responsibility of Contractor and Owner.
  - 1. The Contractor shall provide security for the following:
    - a. Contractor's and subcontractors' staging areas and storage areas.
    - b. Field offices and sheds.
    - c. New facilities under construction.
    - d. Existing facilities being renovated.
  - 2. The Owner shall provide security for the following:
    - a. Facilities occupied by Owner.
    - b. Site areas solely occupied by Owner.
- B. All field workers associated with execution of the Contract Work must obtain security badges from the Facilities Department of Collier County.
  - 1. Each worker must go to the Facilities Department at the Government Center on Tamiami Trail East for fingerprinting, photographing and completion of security application. Workers that fail the security clearance requirements shall not be allowed on the project.
  - 2. The Contractor shall be responsible for payment to the County of the fee associated with each security badge.
  - The Contractor is responsible for renewal of the security badges and for maintaining a current badge for each worker.
  - 4. The Contractor shall retrieve the security badge from each worker no longer employed at the site and turn badge over to the County.

C. The Contractor shall be fully responsible for security of construction equipment, products, small tools, and other items related to the construction.

# 1.03 SECURITY PROGRAM

- A. The Contractor shall protect Work from theft, vandalism, and unauthorized entry.
- B. The Contractor shall maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

# 1.04 ENTRY CONTROL

A. The Contractor shall restrict entrance of persons and vehicles into construction site.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

# FIELD ENGINEERING

## PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

Surveying services required for proper layout of work and record information.

#### 1.02 QUALITY CONTROL

A Land Surveyor: Registered in the State of Florida and acceptable to County Project Manager and Engineer shall be used for layout of all process piping, layout of building footprints and all Record Drawing information. Refer to Section 01781 – Project Record Documents.

#### 1.03 SUBMITTALS

- A. Submit name, address, and telephone number of Registered Land Surveyor to the County Project Manager and Engineer before starting work.
- B. On request, submit documentation verifying accuracy of survey work for project boundary and vertical and horizontal control.
- C. Submit certificate signed by Surveyor with Project Record Documents certifying that elevations and locations of improvements are in conformance, or non-conformance, with Contract Documents.

#### 1.04 PROJECT RECORD DOCUMENTS

- A. Maintain complete, accurate log of control and survey work as it progresses.
- B. Maintain one set of plans that all record drawing information is kept on. These plans shall show the record information within one week of installation of work or information being made available. Record Drawings will be available for review by the Engineer at any time during the normal work day.
- C. Submit Record Documents as specified in Section 01781 Project Record Documents.

# PART 2 - PRODUCTS (not used)

# PART 3 - EXECUTION

#### 3.01 INSPECTION

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Engineer of any discrepancies discovered.

#### 3.02 SURVEY REFERENCE POINTS

- A. Protect survey control points prior to starting site work; preserve permanent reference points during construction. Make no changes without prior written notice to Engineer.
- B. Promptly report to County Project Manager and Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons. Replace dislocated survey control points based on original survey control.

#### 3.03 SURVEY REQUIREMENTS

- A. Engineer shall provide one bench mark for vertical control and horizontal control during construction. Contractor shall be responsible for laying out the work, shall protect and preserve the established bench mark and shall make no changes or relocations without prior approval of Owner. Contractor shall report to County Project Manager and Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.
- B. Contractor shall establish line and levels, locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements, including pavements, stakes for grading, fill and topsoil placement, utility locations, slopes, and invert, or centerline, elevations. Submit cut sheets for gravity sewers to Engineer three days prior to construction.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, and ground floor elevations.
  - 4. Piping locations, slopes, and invert, or centerline, elevations.
- C. Periodically verify layouts by same means.
- Contractor shall provide horizontal and vertical record locations of improvements as specified in Section 001781 – Project Record Documents and shall include the following:

- 1. Center line location of all storm services (boxes and end sections) with top of structure elevation, bottom, pipe inverts, and pipe type.
- 2. Center line location and finish elevation of the perimeter line at stations identified on the construction plans.
- 3. Location of all relocated water and wastewater services.
- 4. Location and elevation of all water and wastewater utility relocations including deflections. This shall include tope and bottom of all vertical deflections.
- E. The record survey shall be on an ongoing manner. Record surveys shall be submitted at completion of each location and at the completion of each phase of the perimeter ditch.

# PROJECT RECORD DOCUMENTS

# PART 1 – GENERAL

# 1.01 SECTION INCLUDES

Requirements for preparation, maintenance and submittal of project record documents. The Contractor's attention is specifically directed to Part 3.02.B of this Section.

# 1.02 SUBMITTALS

- A. General: as specified in Section 1330 Submittals
- B. At Contract close out, deliver one copy of record documents to County Project Manager and Engineer.

#### 1,03 REQUIREMENTS

Contractor shall maintain at the site for the Owner one record copy of:

- A. Drawings
- B. Specifications
- C. Addenda
- D. Change orders and other modifications to the Contract
- E. Engineer's field orders or written instructions
- F. Approved shop drawings, working drawings and samples
- G. Field test records
- H. Construction photographs
- I. Detailed Progress Schedule
- J. As-built markup progress plan set

# PART 2 – PRODUCTS (not used)

#### PART 3 - EXECUTION

# 3.01 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Project record documents shall be stored in Contractor's field office or other location approved by the County Project Manager apart from documents used for construction
- B. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- C. Make documents and samples available at all times for inspection by the Engineer and County Project Manager.

# 3.02 RECORDING

#### A. General

- 1. Label each document "PROJECT RECORD" in neat, large printed letters.
- 2. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- 3. Record information in red ink.

# B. Record Drawings

- 1. Record information on Drawings shall be as specified in Section 01541 Field Engineering. The Record Drawings require certification of all as-built information, including vertical and horizontal data, for above and below ground improvements by a Florida Registered Land Surveyor.
- 2. Drawings shall indicate all deviations from Contract Drawings including:
  - a) Field changes of dimension and detail
  - b) Changes made by Change Order
  - c) Details, utilities, piping or structures not on original Contract Drawings.
  - d) Equipment and piping relocations.

# C. Specifications and Addenda

Legibly mark each Section to record:

- Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
- 2. Changes made by Field Order or Change Order.

# D. Shop Drawings

- 1. Keep one copy of the final, approved shop drawing with the Record Documents. Do not keep previously rejected submittals unless they are necessary to complete the submittal.
- 2. Record documents should include all shop drawing information submitted. Additional information submitted during the Engineer's review process should be filed with the appropriate submittal.

# POINCIANA VILLAGE STORMWATER IMPROVEMENTS

# SUPPLEMENTAL REQUIREMENTS ADDITIONAL ITEMS – GEOTECHNICAL EXPLORATION

Following is a copy of Forge Engineering, Inc. Report of Geotechnical Exploration for the Poinciana Village Stormwater Improvement. This report is provided for the bidders' general information only. The bidders shall be responsible for conducting their own review of the site for determining the existing conditions. Any questions concerning this report shall be directed to the County Project Manager and Engineer.