

Technical Specifications

1 **STANDARD SPECIFICATIONS:** All materials and workmanship shall meet the requirements of the Town of Sewall's Point (TOWN) Code of Ordinances, Martin County Utilities Standard Specification and Minimum Design and Construction Standards, the Florida Department of Environmental Protection requirements, the South Florida Water Management requirements, the Florida Department of Transportation Standard Specifications for Road and Bridge Construction (2023 edition), and in accordance with these Contract Documents and Specifications for S. Sewall's Point Rd. Improvements - Phase 3 Stormwater Retrofit issued by CAPTEC Engineering, Inc. (ENGINEER)

1.1 These Technical Provisions are supplemental to the above Specifications and Standards.

1.2 This project is being contracted for the TOWN. Any reference to the "State" or "Department" in the Specifications (as legal TOWN) shall be replaced by "TOWN".

1.3 Any reference in the FDOT Standard Specifications to the Engineer or Department shall mean the ENGINEER on this project. Specific references are made to certain portions of the FDOT Standard Specifications to facilitate the CONTRACTOR.

2 **PROSECUTION OF THE WORK:** The CONTRACTOR shall begin the work within time limits stated in the Contract. The work shall be conducted in such manner and with sufficient labor, materials, tools and equipment necessary to complete the work within the time limit set forth in the Agreement. Should the organization of the CONTRACTOR, or its management, or the manner of carrying on the work be manifestly incompetent or inadequate to do the work as specified within the stated time, then the TOWN shall have the right to take charge of the work and furnish and provide the labor, materials and equipment necessary to complete the work as planned within the time limit set forth in the agreement and to charge the cost of all such work against the CONTRACTOR, and the CONTRACTOR and his Surety shall be held responsible therefore.

The CONTRACTOR shall submit prior to start of work, a CPM schedule which shows the order in which the CONTRACTOR proposes to carry on the work. The schedule shall be submitted at the Pre-Construction Meeting. The ENGINEER or TOWN may order the schedule to be supplemented or amended as necessary to afford proper continuity of the work.

3 **UTILITIES:** The CONTRACTOR shall be required to coordinate all work when necessary with the various utility companies in order that utility service may be maintained. The design ENGINEER has reflected on the plans those utilities he is aware of. The locations shown are approximate only. Any work involving conflict with utility companies shall be coordinated promptly without any delay to the project. The CONTRACTOR shall exercise due caution when working adjacent to such utilities. Any damage to the utilities resulting from the CONTRACTOR's operations shall be repaired at his expense. The CONTRACTOR shall notify each utility company involved at least ten (10) days prior to the start of construction to arrange for positive underground location, relocation, or support of its utility where that utility may be in conflict with or endangered by the proposed construction. The relocations to be completed by Martin County Utilities, Comcast Cable, FPL Company, AT&T, and other utility companies must be coordinated in the weekly construction meetings. All costs of permanent dry utility relocations to avoid conflict shall be the responsibility of the CONTRACTOR and the utility company involved. The Town has street lights located at twelve (12) locations along the improvements. The CONTRACTOR is responsible to remove and reinstall conduit lines and street lighting. No additional payment will be made to the CONTRACTOR for utility relocation coordination for any utility relocation. These items shall be paid for under Utility Coordination, and include all required deposits associated with the work.

3.1 All overhead, surface or underground structures and utilities encountered are to be carefully protected from injury or displacement. All damage to such structures is to be completely repaired within a reasonable time; needless delay will not be tolerated. The TOWN reserves the right to remedy such damage by ordering outside parties to make such repairs at the expense of the CONTRACTOR.

Additionally, all Service Points associated with proposed improvements shall be coordinated with FPL prior to construction.

All such repairs made by the CONTRACTOR are to be made to the satisfaction of the utility and the TOWN. All damaged utilities must be replaced or prevented from leaking. All repairs are to be inspected by the utility and the TOWN prior to backfilling.

- 3.2** The CONTRACTOR should be aware of the SUNSHINE STATE ONE CALL CENTER (formerly the UNCLE Notification Center), which has a free locating service for CONTRACTOR'S and excavators.

Two full business days before excavating, dial toll free 1-800-432-4770, and a locator will be dispatched to the work location.

The utilities and municipalities that are present members of SUNSHINE STATE ONE are as follows: Comcast Cable, Florida Power and Light Company, Martin County Utilities, Martin County Engineering – Traffic.

3.2.1 Utility Coordination

- a. The CONTRACTOR shall be responsible for making all necessary arrangements with governmental departments, utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, cable television, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the Work in order that such items may be properly shored, supported, and protected, or the CONTRACTOR shall be solely responsible for coordinating their relocation. The CONTRACTOR: shall (A) give all proper notices; (B) comply with requirements of such parties in the performance of its the Work; (C) permit entrance of such parties on the Work site in order that they may perform their necessary the Work; and (D) pay all charges and fees made by such parties for this the Work. The CONTRACTOR's attention is called to the fact that there may be delays on the Project due to the Work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.
- b. At all points where the Work constructed by the CONTRACTOR connects to existing utilities and services, the actual the Work of making the necessary connection to the existing service or utility shall be arranged for by the CONTRACTOR at no expense to the TOWN (unless specifically indicated otherwise). Services and utilities included within (but not limited to) this responsibility are roads, ditches, electrical, sewer, mechanical utilities, water, fencing, etc. Connections shall be made at a time that will result in the least possible interference with existing services.
- c. FPL calls attention to the fact that there may be energized, high voltage electric lines, both overhead and underground, located in the area of this Project. The CONTRACTOR must visually survey the area and take the necessary steps to identify all overhead and underground facilities prior to commencing construction to determine whether the construction of any proposed improvements will bring any person, tool, machinery, equipment, or object closer to FPL's power lines than the OSHA-prescribed limits. If the CONTRACTOR identifies such, it shall re-design the Project to allow for safe construction given the pre-existing power line location, or make arrangements with FPL to, either deenergize and ground its facilities, or relocate them. The CONTRACTOR must do this before allowing any construction near power lines. If it is necessary for the CONTRACTOR and/or subcontractor to operate or handle cranes, digging apparatus, draglines, mobile equipment, or any other equipment, tools or materials in such a manner that they might come closer to underground or overhead power lines than is permitted by local, state or federal regulations, the CONTRACTOR or subcontractor must notify FPL in writing of such planned operation prior to the commencement thereof and make all necessary arrangements with FPL in order to carry out the work in a safe manner. Any work in the vicinity of the electric lines should be suspended until these arrangements are finalized and implemented. The CONTRACTOR shall be required to complete a "Notification of FPL

Facilities” form prior to the commencement of the Work.

The work under 3.2.1 shall be incidental to the project cost.

- 3.3** Maintenance of Existing Utility Services: The CONTRACTOR shall fully cooperate at all times with the TOWN in order to maintain utility service with the least amount of interference and interruption possible. Public health and safety considerations shall exceed all others; the CONTRACTOR’s work shall, at all times, be subject to revision if necessary for public health and safety conditions. The creation of a public nuisance will not be permitted.
- 3.4** The ENGINEER and the TOWN reserve the right to require the CONTRACTOR to work twenty-four (24) hours per day in all cases where interference with existing water or sewer service may result in health hazards, offensive conditions or serious inconveniences to persons served by the system.
- 3.5** Potholing/Conflicts and Manholes/Inlets/Baffle Boxes: The CONTRACTOR shall abide by the following criteria concerning conflicts with other utilities. Costs associated with this section shall be paid under Mobilization.
- 3.5.1** In no case shall there be less than 0.5 feet between any two pipe lines or between pipe lines and structures.
 - 3.5.2** The ENGINEER shall have full authority to direct the placement of the various pipes and structures in order to facilitate construction, expedite completion and avoid conflicts.
 - 3.5.3** Where an existing utility is to go through a conflict manhole/inlet, the manhole/inlet shall have a steel sleeve through the structure wall to protect the utility from breakage.
 - 3.5.4** Prior to ordering Baffle Boxes, CONTRACTOR shall pothole immediate area to identify depth and separations of existing facilities in relation to Baffle Box installation. Any field verified findings of conflicts or items to note shall be brought to the attention of the Engineer of Record before proceeding. The CONTRACTOR will confirm design of the existing baffle boxes to ensure new components fit into the existing baffle boxes. A checklist of items to pothole prior to baffle box installation shall be provided and used as reference. All work related to baffle box installation shall be methodically planned and paid attention to for the purpose of avoiding delays while Crane equipment is on-site.
 - 3.5.5** CONTRACTOR to pothole existing utilities within vicinity of proposed storm structures prior to ordering / installing these improvements. This potholing shall identify depth and separations of existing facilities in relation to proposed improvements. Any field verified findings of conflicts or items to note shall be brought to the attention of the Engineer of Record before proceeding. Prior to beginning work on project, CONTRACTOR to clean-out all existing pipes and inlets within project limits. The EOR/CONTRACTOR will video stormwater inlets/pipes to determine whether they need to be replaced. The removal and replacement of existing inlets/pipes will be included within the pipe installation cost denoted on the Alternative Bid Schedule.
- 3.6** Mailboxes: The CONTRACTOR shall maintain mailboxes and mail service throughout the project as approved by the United States Postal Service. The cost of this item shall be included in the Lump Sum price for MOBILIZATION.
- 3.7** Physical Conditions (Including Underground Facilities): The CONTRACTOR shall have full responsibility for physical conditions, and Underground Facilities owned by the Martin County Utilities (MCU) and Town of Sewall’s Point (TOWN) or **others (FPL, AT&T, Comcast)**, as shown or indicated in the Contract Documents. The CONTRACTOR shall have full responsibility for reviewing and checking all such information and data. The TOWN shall not be responsible for accuracy or completeness of data, plans, and specifications and the CONTRACTOR shall have full responsibility for checking all information and data. If the Contract Documents necessitate amending to order changes in the Work due to Underground Facilities owned by the MCU or others, whether they be shown or indicated or newly

discovered, the TOWN shall authorize the required changes in the Work by Change Order. If those Underground Facilities owned by the MCU or **others (FPL, AT&T, Comcast)** cause or will cause delays in the performance or extend completion of all or part of the work, the CONTRACTOR shall absorb all related delay, extension, or acceleration costs, however caused, except that if the TOWN and the CONTRACTOR agree that the delays require a change in Contract Time, the TOWN shall authorize the necessary change in Contract Time only to the extent that such delays exceed 30 (thirty) days impact to controlling work items. However, an extension in Contract Time, when and if so granted shall be the CONTRACTOR's sole and exclusive remedy with respect to the TOWN for any delay, disruption, interference, inefficiency, acceleration, extension or hindrance, and associated costs, however caused, resulting from variance in the location or configuration of Underground Facilities owned by the MCU/TOWN or **others (FPL, AT&T, Comcast)** as shown or indicated, or from newly discovered Underground Facilities owned by the MCU/TOWN or **others (FPL, AT&T, Comcast)**.

3.8 Special Requirements for Underground Facilities: The CONTRACTOR shall have full responsibility for the following list. Except as otherwise provided, all costs involved and time required to perform these responsibilities shall be considered as having been included in the Contract Price and in the CONTRACTOR's schedule for the performance of the Work within the Contract Time, even if the Contract Documents need amending to authorize minor deviations or changes in the Work due to those Underground Facilities including utilities.

- a. Field locating any and all Underground Facilities including utilities shown or indicated as to depth and alignment in advance of excavation;
- b. Notifying the TOWN of any newly discovered Underground Facility and promptly notifying that the TOWN of that discovery;
- c. Shoring, blocking and protecting Underground Facilities including utilities shown, indicated or discovered;
- d. Coordination, scheduling and sequencing the Work with the TOWN's of all Underground Facilities shown, indicated or discovered;
- e. Repairing any damage to the satisfaction of the TOWN, to the extent that the damage was due to the CONTRACTOR's failure to adhere to the requirements, or to the fault or negligence of the CONTRACTOR; and
- f. The safety and protection of any affected the Work, and for repairing any damage done to the work.

3.9 If those Underground Facilities owned by the MCU/TOWN or **others (FPL, AT&T, Comcast)** cause or will cause delays in the performance or extend completion of all or part of the work, the CONTRACTOR shall absorb all related delay, extension or acceleration costs, however caused, except that if the TOWN and the CONTRACTOR agree that the delays require a change in Contract Time, the TOWN shall authorize the necessary change in Contract Time only to the extent that such delays exceed 30 (thirty) days impact to controlling work items. However, an extension in Contract Time, when and if so granted shall be the CONTRACTOR's sole and exclusive remedy with respect to the TOWN for any delay, disruption, interference, inefficiency, acceleration, extension or hindrance and associated costs, however caused, resulting from variance in the location or configuration of Underground Facilities owned by the MCU/TOWN or others shown or indicated, or from newly discovered Underground Facilities owned by the MCU/TOWN or others.

3.10 Unless it prejudices the Work already excavated and uncovered, the CONTRACTOR shall schedule layout, excavation and uncovering of the Work or Underground Facilities a sufficient time in advance to allow the TOWN's design professional's review, and the possible amending or supplementing of the Contract Documents.

Sections 3.7-3.10, the Utility Adjustments/Relocation/Coordination will be an allowance provided in the Contract General Bid Schedule.

- 4 **LABORATORY SAMPLING/TESTING:** Except as otherwise provided, sampling and testing of all materials, bacteriological testing, and the laboratory methods and testing equipment required under these specifications shall be in accordance with the latest standards of the American Society for Testing Materials or the latest standards or methods of the American Association of State Highway Transportation Officials (AASHTO), and FDEP.

All material tests will be made by an independent testing laboratory to be selected by the TOWN and approved by the ENGINEER. The testing results will be provided to the ENGINEER within seven (7) days of test being taken. A summary of all tests must be provided prior to project certification of completion is provided. The CONTRACTOR shall be responsible for scheduling all required testing. The cost of the testing will be paid for by the CONTRACTOR, and any failed tests and retesting will be paid for by the CONTRACTOR.

The CONTRACTOR will coordinate with CONTRACTOR's testing laboratory as required to obtain the required tests described in the contract documents.

5 **SURVEYING (LAYOUT & AS-BUILTS):**

I. SCOPE OF WORK

A. Provide surveying and field engineering services for the Project:

1. Professional surveying and mapping work required for execution of the contract, including verification of existing survey data, construction layout, and production of the As-Built/Record Survey.
2. Civil, structural or other professional engineering services required by the Contract Documents or as required in order to execute the CONTRACTOR'S construction methods.

B. Survey Services

CONTRACTOR shall retain the services of a registered Surveyor and Mapper, who is licensed in the State of Florida and approved by the TOWN ENGINEER, to provide professional surveying and mapping services to maintain survey control, layout and stake the Work and perform the As-Built Record/Survey during construction.

C. Field Engineering Services

1. Design for construction drawings (such as design of shoring, protection of existing structures and bracing for formwork) shall be designed, signed and sealed by a professional engineer licensed in the State of Florida.
2. When requested by the TOWN or as specified in the Contract Documents, inspections or tests shall be performed under the supervision of a licensed professional engineer. The licensed professional engineer shall sign and seal these inspections or tests.

II. IMPLEMENTATION

A. Qualifications of Surveyor and Mapper or Engineer

1. The Florida Licensed Professional Engineer(s) or Florida Registered Surveyor and Mapper(s), who are proposed by the CONTRACTOR to provide services for the Project, are subject to the approval of the TOWN ENGINEER. Prior to any services being performed, the CONTRACTOR shall submit the name and address of any proposed registered professional and a written acknowledgement from the Surveyor and Mapper stating that he has the hardware, software and adequate scope of services in his agreement with the CONTRACTOR to fully comply with the requirements of this specification. These submittals shall be provided to the TOWN prior to Notice to Proceed. It is recommended that the Surveyor and Mapper attend the Preconstruction meeting. It is mandatory that any Surveyor and Mapper who has not previously performed work for the TOWN in the past attend the Preconstruction meeting.
2. The Florida Licensed Professional Engineer shall be qualified in the discipline required for the specific services required for the project.

B. Project Survey Requirements

- 1.** Locate, reference and preserve all existing geodetic, GPS, horizontal and vertical control points and property corners shown on the Drawings prior to starting any construction Work. If the Surveyor and Mapper performing the Work discovers any discrepancies that will affect the Project, the CONTRACTOR must immediately report these findings to the TOWN and the TOWN ENGINEER. All survey work shall meet the requirements as defined in Florida Administrative Code, Chapter 5J-17. Reference and preserve all survey points during construction. If survey points are disturbed, it is the responsibility of the CONTRACTOR'S Surveyor and Mapper to reset the points per applicable requirements at the CONTRACTOR'S expense. Copies of the Surveyor and Mapper's field notes and/or electronic files for point replacement shall be provided to the TOWN ENGINEER through the CONTRACTOR.
 - a.** The Surveyor and Mapper shall locate all improvements for the Project As-Built/Record Survey using State Plane Coordinates as the horizontal datum and the benchmark referenced on the Drawings as the vertical datum. The TOWN will provide electronic files of the Drawings to be used by the Surveyor and Mapper in complying with these specifications.
 - b.** The construction layout shall be established from the baseline and reference points shown or listed on the Drawings. The accuracy of any method of staking shall be the responsibility of the CONTRACTOR. All construction layout staking shall be done such as to provide for easy verification of the work by the TOWN. Maintain stakes and/or markings on the ground identifying the stations for the construction baseline at a minimum 100-foot intervals or as required by the ENGINEER/CONTRACTOR during construction.
- 2.** Use survey control points to layout such work tasks as the following:
 - a.** Clearing, grubbing, work limits, right-of-way lines and easements.
 - b.** Foundations, column locations and all work associated with structures.
 - c.** Locations for pipelines and all associated structures and appurtenances.
 - d.** Road work:
 - i.** Stakes for grading, fill, curbs, radii, sidewalks and all other work requiring specific horizontal and/or vertical alignment.
 - ii.** Gravity utility pipe slope and invert elevations to assure precise location
 - e.** Locations and elevations required for any other Project work.
 - f.** A registered Surveyor and Mapper shall reference and replace any Project control points, geodetic control, boundary corners, benchmarks, section corners, and GIS/GPS monuments that may be lost or destroyed, at no additional cost to the TOWN. Establish replacement points based on the original survey control or as directed by the TOWN ENGINEER. Copies of all reference field notes and/or electronic files for point replacement must be submitted to the TOWN ENGINEER through the CONTRACTOR.
- 3.** Accuracy of all constructed improvements shall be within 0.125 feet ($\pm 1.5''$) horizontally and 0.0417 feet ($\pm 1/2''$) vertically of the location depicted on the Drawings, unless a more stringent requirement is stated elsewhere in the Contract Documents, in which case the more stringent requirement shall take precedence. Notwithstanding the above, these construction tolerances do not change the requirement of the improvement's proper function or design intent. The tolerance for all slopes of Improvements specified in the Plans shall be within 10% of the proposed design slope, unless a more stringent requirement is stated elsewhere in the Contract Documents, in which case the more stringent requirement shall take precedence. The CONTRACTOR shall require the Surveyor and Mapper to include a statement on the As-Built/Record Survey that all constructed improvements are within the specified tolerances unless specifically noted as not being within the constructed tolerance. These variances shall be brought to the Owner's attention with an asterisk and note next to the as-built information shown on the As-Built/Record Survey.

4. As-Built/Record Survey Requirements

- a. The CONTRACTOR shall require the Surveyor and Mapper to locate all improvements for the Project As-Built/Record Survey using station-offsets from baseline, State Plane Coordinates and the vertical datum referenced on the Drawings. The CONTRACTOR shall obtain an electronic copy of the Drawings from the TOWN for use as a base for the As-Built/Record Survey. The As Built/Record Survey shall clearly show the designed and constructed locations and elevations information for ease of comparison. This shall be accomplished by adding the As-Built/Record information on a separate CAD level or layer, while keeping all the design call-outs and construction requirements visible. Separate layers within the as-built layers/levels shall be provided for data of drainage, storm water, paving, water, and sewer relocated utilities. The As-Built/Record information shall be labeled as such and be shown with a bolder text weight in order to be easily identifiable. The As-Built/Record Survey shall include all storm and sanitary sewers and structures, clean-outs, potable and reclaimed water mains, meters, valves, force mains, gas mains, irrigation lines (2-inch and larger), process piping, electric and communication duct banks, traffic and pedestrian signals, pull boxes, cabinets, transformers, structures, drainage conveyance systems, swales, retention ponds, cross-section details, fences, pavement, curbs, sidewalks, driveways, relocated utilities, appurtenances and buildings. All pipe size, type and lengths shall be provided in comparison to design plan. All planned improvements referenced by station and offset on the Plans, shall also be referenced on the As-Built/Record Survey in the same manner. All constructed improvements that have location and/or elevation or detail information called-out on the Plans, shall have the same information identified on the As-Built/Record Survey. If a structure information table or detail was provided on the Plans, than the As-Built/Record information shall be shown on the table or detail. Design call-outs shall have a thin strike line through the design call-out and **all** As-Built/Record information must be labeled (or abbreviated "AB") and be shown in a bolder text that is completely legible. Pavement and drainage flowline elevation shots shall be taken at minimum 25' intervals and grade breaks. As-Built/Record Survey shots shall be taken at the same locations as shown on the Plans for ease of comparison. Any variations from required material sizes or types shall also be noted.

- b. The CONTRACTOR shall submit a copy of the current monthly updated As-Built Survey ("**Progressive As-Built/Record Survey**") signed and sealed on each page and also submit identically matching electronic files in PDF format and the same CAD file format as the original design. The Progressive As-Built/Record Survey shall be submitted to the CONTRACTOR/ENGINEER with each Application for Payment and indicate the horizontal and vertical locations of all constructed improvements to date with sufficient information and notes to easily determine if the improvements were constructed in conformance with the Contract Documents. The Progressive As-Built/Record Survey submittals shall include a cover sheet and include the surveyor's statement regarding the constructed improvements being within the specified tolerances or if not indicating the variances, as described above in paragraph II.B.3. The CONTRACTOR's submission of a Progressive As-Built/Record Survey or Final As-Built/Record Survey, as applicable, acceptable to the CONTRACTOR, with its Application for Payment, is a condition precedent to the ENGINEER's payment recommendation to the TOWN pursuant to Article 14 of the General Conditions. If no construction has been performed during the period, the CONTRACTOR shall provide documentation of such in accordance with the requirements CONSTRUCTION ENGINEERS INSPECTOR (CEI).

- c. The CONTRACTOR shall submit a minimum of Ten (10) signed and sealed sets of the final As-Built/Record Survey incorporating all Work performed under the Contract Documents ("**Final As-Built/Record Survey**") with the Application for Final Payment, as well as identically matching electronic files in PDF format and the same CAD file format as the original design (Microstation or AutoCAD). Electronic file submittals that have more than one file or a file for each plan sheet shall have an index and/or logical filename containing a description of the file's contents. The final conformed Drawings shall be used as the basis

for the As-Built/Record Survey. The sets shall be in design plan format containing a complete set of all of the original plan sheets. The Surveyor and Mapper shall only sign and seal those sheets containing As-Built/Record Survey information. Failure to provide accurate survey information in the proper format requested, may result in the TOWN determining the As-Built/Record Survey is incomplete.

- d. At Final Completion of the Project, the CONTRACTOR shall submit field mark-up drawings showing all other constructed improvements not included in the As-Built/Record Survey as required above. This includes improvements such as, but not limited to, conflicts, irrigation lines smaller than 2-inch, sprinkler heads, miscellaneous wiring, site furnishings and traffic control loops, and only applies to variations from what is shown on the Drawings. These mark-up drawings shall be compiled on a clean set of the original Drawings.
- e. If unidentified utilities (not shown on the Drawings) are encountered during the installation of the Work, their horizontal and vertical location shall be included in the As-Built/Record Survey. Provide the name and type of utility, the size and material type of pipe, conduit or structure and if known, the status (active or inactive) of the utility.
- f. The CONTRACTOR shall submit documentation to verify the accuracy of field surveying work at the request of the CEI Inspector or the TOWN ENGINEER.
- g. The CONTRACTOR shall submit certificate(s), signed by a licensed Professional Engineer or Registered Surveyor and Mapper, certifying that elevations and locations of improvements are in conformance with the Contract Documents, or, if not in conformance, certify as to variances from the Contract Documents.
- h. Payment for all services included within this Scope shall be included in the Lump Sum Price for SURVEYING (CONSTRUCTION LAYOUT AND AS-BUILTS).

- 6 **CONSTRUCTION VIDEO:** The CONTRACTOR is required to videotape the project area prior to construction commencement. CONTRACTOR shall provide a copy of the videotape/DVD of the Project site to TOWN for approval once complete and prior to issuance of Notice to Proceed. The cost of this shall be included in the Lump Sum item for the Mobilization.
- 7 **STORAGE SITES:** The CONTRACTOR shall furnish, at his expense, and where properly zoned areas suitable for field offices, material storage and equipment service and storage shall be included in the Mobilization Item. The CONTRACTOR shall maintain these areas in a clean, orderly condition so as not to cause a nuisance. Prior to issuance of Notice to Proceed, the CONTRACTOR shall provide a plan outlining area to be used for storage of equipment and materials to the ENGINEER for approval. Prior to final acceptance of the project, the CONTRACTOR shall restore all private and public property disturbed by the construction activities. Payment for this item shall be included in the Lump Sum price for MOBILIZATION. The Town owns the Lot at 78 S. Sewall's Point Road. Limited storage is allowed with daily clean-up and fill restoration is required prior to Final Acceptance of project completion.
- 8 **OWNERSHIP OF EXISTING MATERIALS:** All materials removed or excavated from the job site shall remain the property of the TOWN until released by the ENGINEER, at which time it shall become the property of the CONTRACTOR who shall dispose of it in a manner satisfactory to the ENGINEER. Upon direction of the ENGINEER, all suitable or unsuitable excavation, vegetation, debris, concrete or other materials shall be disposed of in areas provided by the CONTRACTOR and approved by the ENGINEER.
- 9 **MOBILIZATION:** The CONTRACTOR shall perform preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities. This item includes the costs of bonds, Right-of-Way Permitting (Town of Sewall's Point and Florida Department of Transportation), and any required insurance and any other pre-construction expense necessary for the start of the work, including the cost of utilities potholing / dewatering associated with the field review of existing structures intended to be re-used / construction

materials and services purchased between the Notice to Proceed and the first Pay Request. This item will be paid as Lump Sum under MOBILIZATION. Payment for all LUMP SUM items will be prorated through the length of the contract.

- 10 **RESPONSIBILITY FOR MATERIALS:** The CONTRACTOR shall be held responsible for any materials, equipment and work to the full amount of all payments made thereon, and he will be required to make good at his own cost any injury or damage which said material, equipment or work may sustain from any unforeseen obstructions or difficulties which may be encountered, or from any source or cause whatsoever, or from any action of the elements, before final acceptance thereof. No payment will be allowed for materials stored on-site prior to installation.
- 11 **LIMITS OF CONSTRUCTION:** Construction is limited to: public rights of way, and TOWN held parcels and easements, and temporary construction easements. The CONTRACTOR shall not, without written consent from the proper parties, enter or occupy with men, tools, or materials any land outside of the rights of way or property of the TOWN.
- 12 **ORDER AND DIRECTION OF WORK:** The work to be done under this Contract shall be under the general inspection of the ENGINEER. The sequence of construction shall be subject to the approval of the ENGINEER. At his discretion, the ENGINEER may, from time to time, direct the order in which and points at which the work shall be executed; and may exercise such control over the conduct of the work at any time or place that shall be required, in his opinion, to safeguard the interest of the TOWN and/or the public health and safety.
- 13 **EROSION AND SEDIMENT CONTROLS:** Based upon the ENGINEER supplied Storm Water Pollution Prevention Plan (SWPPP) Template, the plans and details and proposed construction sequencing; The CONTRACTOR shall, as “operator of the facility” obtain an NPDES permit through the Florida Department of Environmental Protection for the Project. The ENGINEER’S (SWPPP) is an example of items that may be needed to prevent erosion. The CONTRACTOR is responsible to enhance these items as needed to comply with the NPDES and State Water Quality Guidelines. Any enhancements are considered incidental to the cost of Erosion / Sediment Control. The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. (The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall Construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans or as may be directed by the ENGINEER). The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, temporary pipe plugs, staked turbidity barrier and silt fence. 50% of the cost of this item is to be paid at installation, with 40% to be paid in equal monthly payments spread out over the remaining contract time, beginning in the 2nd month, and a final 10% paid at substantial completion.
 - a. **Temporary Silt Fence:** The CONTRACTOR shall furnish, install, maintain, and remove temporary silt fences in accordance with the manufacturer’s directions, these Specifications, the details as shown on the plans, and the FDOT Standard Plans (2023 Edition). This item will be paid based on Linear Footage of silt fence installed under STAKED SILT FENCE.
 - b. **Floating Turbidity Barriers and Staked Turbidity Barriers:** The CONTRACTOR shall install, maintain, and remove 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. Barriers shall be placed prior to the commencement of any work that could impact the area of concern. Barriers shall be constructed and installed in accordance with the details shown in the plans and as shown in the FDOT Standard Plans (2023 Edition), or as approved by the ENGINEER. Ensure that the type barrier used and the deployment and maintenance of the barrier will minimize discharge of turbid waters from the construction site. The ENGINEER may approve alternate methods or materials. Operate turbidity barriers in such a manner to avoid or minimize the degradation of the water quality of the surrounding waters. This item will be paid based on Linear Footage of barriers installed under FLOATING TURBIDITY BARRIER.

- c. Soil Tracking Prevention Device /Roadway Sweeping: The CONTRACTOR shall be responsible for the control of dust and erosion created by vehicular and construction traffic entering or exiting the construction area as required by the NPDES permit. Existing driveways and points of access may be utilized and modified for this use. The work area shall be stabilized to reduce the tracking of mud and dirt onto the public right of way, additional sweeping will likely be required on a daily basis. This item is paid per the erosion and sediment item. This item is included in the Lump Sum price under the item Soil Tracking Prevention.
- d. Turbidity Monitoring: After all rain events CONTRACTOR to test the outfalls of the improvement area for turbidity. The Contract stipulates that the CONTRACTOR is responsible to make certain that during construction activities turbidity shall not exceed 29 NTU's above background. CONTRACTOR shall determine background for turbidity monitoring upstream of the improvements. This item is included in the Lump Sum price under the item EROSION AND SEDIMENT CONTROLS.
- e. Dust Control: Dust shall be kept down at all times, including non-working hours, weekends and holidays. Soil at the site and other areas disturbed by the CONTRACTOR's operations shall be sprinkled or treated with dust suppressor as necessary to control dust. Blowing will be permitted only for cleaning off non-particulate debris, such as reinforcing bars. No sandblasting will be permitted unless the dust there from is confined, except in areas approved by the TOWN. This item is included in the Lump Sum price under the item EROSION AND SEDIMENT CONTROLS.

- 14 **CLEARING /GRUBBING /DEMOLITION**: Clear and grub within the areas designated as Limits of Construction on the Plans. Clearing and Grubbing will be performed in accordance with Sub-sections 110-2 of the FDOT Standard Specifications. Remove and dispose of all trees, stumps, roots and other such protruding objects, buildings, existing flexible asphalt pavement, and other facilities necessary to prepare the area for the proposed construction. Remove and dispose of all product and debris, not required to be salvaged or not required to complete the construction. Also, perform certain miscellaneous work the ENGINEER considers necessary for the complete preparation of the overall project site, as follows: Completely remove and dispose of all buildings, fences, timber, brush, stumps, roots, slope paving, rip rap, rubbish, debris, and all other obstructions resting on or protruding through the surface of the existing ground and the surface of excavated areas to a depth of 12 inches below the existing ground surface, and all other structures and obstructions necessary to be removed and for which other items of the Contract do not specify the removal thereof, including septic tanks, building foundations, inlets, sidewalks, bridges and pipes. This work also includes the removal of existing pipe culverts, guardrails, concrete curbing, stormwater inlets, flexible pavement, and concrete headwalls as shown in the construction plans.

The Plans and Appendix depict tree limbs to be trimmed/removed, this is necessary to provide vehicle/truck clearance. Prior to any work, CONTRACTOR shall acquire Town of Sewall's Point Tree Removal permits (Town fees waived).

CONTRACTOR shall be aware of Temporary Construction Access (TCA) Agreement between the Town of Sewall's Point and Private Residences. CONTRACTOR shall review proposed improvements in the vicinity of each private residence and determine if limits of Clearing & Grubbing must encroach into the TCA's / affect existing landscaping. Any private lots where this likely to occur shall be noted and identified to the Engineer of Record for further coordination with the Town and Private Residences prior to construction.

Removal of Existing Structures will be performed in accordance with Sub-sections 110-6 of the FDOT Standard Specifications.

All such materials shall be disposed of in accordance with all applicable regulatory authorities. This item will be paid per acreage of project area under the applicable pay item. (See pay item notes in bid form).

- 15 **CONCRETE CURBING (TYPE F, TYPE B, MODIFIED VALLEY GUTTER)**: Concrete curb shall be measured in actual linear feet of curb that is installed along the face of the curb. Work shall include, but not be limited to excavation, hauling and disposal of debris, formwork, grade leveling and compaction, reinforcement, concrete testing, and any other items required for a complete and functional system. Unit price to include minimum 5.5" Black Base (Type B-12.5).

- 16 **ASPHALT MILLING:** Asphalt Milling shall be measured in actual square yards as measured by plan quantity. Specifically, the pay area for this item will be equal to the designed surface area. The CONTRACTOR is responsible for the removal of all asphalt millings and street sweeping. The CONTRACTOR shall be responsible for preventing milling particles from entering into the storm water inlets and curb inlets located in the construction area.
- 17 **STABILIZED SUBGRADE:** The stabilization of roadway subgrade shall be in accordance with Section 160 of the FDOT Standard Specifications. All stabilization must provide a minimum LBR of 40 following installation. No tolerance is acceptable for this contract. Payment for this item is included under the SUBGRADE item per square yard.
- 18 **BASE COURSE / BLACK BASE:** The Base Courses specified for this project shall be in accordance with Section 285 of the FDOT Standard Specifications. The Pay Area for all Base Material shall be equal to the designed surface area. Payment for this item is included under the BASE item as per ton. No additional compensation will be provided for exceeding the spread rate provided in the plans. Work shall include operations for preparing all plant-mixed hot bituminous mixtures for surface courses and bases, and the requirements for the equipment to be used in the construction of the pavements and bases.
- 19 **ASPHALT 2.5" SP 9.5 LEVEL C (2 LIFTS):** The Superpave Asphalt specified for this project shall be in accordance with Section 334 of the FDOT Standard Specifications. The Pay Area for all Asphalt shall be equal to the designed surface area. Payment for this item is included under the ASPHALT items per tons. No additional compensation will be provided for exceeding the spread rate provided in the plans. Work shall include operations for preparing all plant-mixed hot bituminous mixtures for surface courses and bases, and the requirements for the equipment to be used in the construction of the pavements and bases.
- 20 **THERMOPLASTIC TRAFFIC SIGNAGE AND MARKINGS:** This work specified under this section shall be in accordance with Section 711 of the FDOT Standard Specifications and FDOT standard plans index 711-001. No thermoplastic material or paint containing lead or chromium compound shall be used on this project. Price shall include interim/temporary painted markings in accordance with Section 710 of the FDOT Standard Specifications. Payment shall be made under the Pavement Striping / Signage Bid Item, per each and linear footage.
- 21 **MATCHING OF EXISTING PAVEMENT:** Matching of the existing pavement for the project's terminal points shall be accomplished by saw cutting the existing asphalt at the match location and constructing an asphalt butt joint with a minimum asphalt thickness of one-inch (1"). Cost associated with accomplishing this shall be included in the overall cost of the project.
- 22 **DRIVEWAY REPLACEMENT / REPAIR:** Work specified under this section shall include the replacement of Asphalt / Concrete / Brick Paver Driveways measured in square yardage of private property to be replaced and graded to match new roadway elevations. All driveways to be restored to conditions prior to construction. These driveway repairs include all fill, grading, subgrade, base and final layer of asphalt prior to complete project.

Stormwater pipes including inlets, piping, exfiltration, or NDS yard drains may require disruption to existing driveways prior to final driveway repair to meet new roadway elevations. For these instances, the CONTRACTOR shall disrupt the existing driveways as necessary to install these improvements and backfill and compact the disrupted area. Finally, place #57 stone over the backfilled trench to maintain access until final driveway adjustments / regrading completed tying into proposed roadway elevations.

- 23 **PRIVATE PROPERTY NOTICES:** The TOWN will distribute notices to the general public or adjacent business owners thirty (30) days in advance of construction. The notice will provide general information and allow the land owners the opportunity of removing any items within the construction area they specifically desire to remove. These Private Property Notices will be included in the Mobilization.

CONTRACTOR shall be aware of Temporary Construction Access (TCA) / Right-of-Entry (ROE) Forms between the Town of Sewall's Point and Private Residences. CONTRACTOR must maintain access for residents to their homes throughout construction. CONTRACTOR shall maintain mail and delivery service access to private lots at all times. CONTRACTOR shall avoid disrupting water service to private lots at all times. Any accidental disruption to water services must be immediately addressed and corrected.

24 EXCAVATION / EMBANKMENT: Excavation consists of all materials, equipment and labor to perform excavation as defined in Section 120 of the FDOT Standard Specifications. In addition, the work covered under this section consists of excavating, removing and satisfactorily disposing of, all materials of whatever nature, within the limits of construction. Included in this section is all excavation and finishing necessary for the construction, preparation and completion of all sub-bases, shoulders, ditches, slopes and intersections, all in accordance with the required alignment, grade and cross sections shown on the drawings or as directed by the ENGINEER.

- a. The CONTRACTOR shall perform all excavation necessary to accomplish the construction indicated on the plans.
- b. The CONTRACTOR shall do all shoring necessary to perform and protect the excavation and, as necessary, for the safety of the workers and any existing facilities. Wherever excavations are made below the grades indicated on the plans, firm material shall be used to restore the area to the proper grade and shall be compacted in accordance with these specifications. All excavation and embankment work shall conform to the Trench Safety Act Chapter 90-96 Laws of Florida. All Trench Safety requirements shall be incidental to the cost of excavation.
- c. The CONTRACTOR shall provide adequate equipment for the removal of storm or subsurface waters that may accumulate in the excavated areas. If subsurface water is encountered, the CONTRACTOR shall utilize approved means in compliance with the SFWMD dewatering permit to adequately dewater the excavation so that it will be dry for working and pipe laying. A well point system or other approved dewatering method shall be utilized if necessary to maintain the excavation in a dry condition for preparation of the trench bottom and for pipe laying.
- d. All existing improvements such as pavements, conduits, poles, pipes and other structures shall be carefully supported and fully protected from injury and, in case of damage; they shall be restored without compensation. Existing utilities and other underground obstructions are shown on the plans but the accuracy of the locations and depths is not guaranteed. The CONTRACTOR shall be responsible for damages to these existing utilities and shall, in case they are damaged, restore them to their original condition.
- e. The CONTRACTOR shall excavate and construct embankments as required for the creation of the berm, for borrow material, construct embankments, and otherwise use the materials excavated. Use suitable excavated materials or authorized borrow. Compact and dress excavated areas and embankments. CONTRACTOR shall perform survey of the site prior to beginning construction. Excavate (cut) various areas and (fill) embankment and other areas. The CONTRACTOR shall as-built the site after final grading and the quantity of excavation (cut) and embankment (fill) will be paid based on the compacted yardage. The CONTRACTOR will clear any excess material (difference between cut and fill) and dispose of it properly.
- f. It is the intent of this specification that all pipe and other structures shall be provided with a stable foundation and that any material which by reason of kind or condition is not or cannot be made stable by drainage or compaction shall be removed or replaced. Therefore, any material encountered at the elevation shown on the drawings or specified for pipe that will not or cannot be improved to provide a stable foundation for the pipe shall be removed and replaced. All unstable material below the grade line of the pipe shall be removed for the full width of the trench and replaced with suitable selected material, compacted as specified elsewhere in these specifications. For the purpose of this specification, muck, peat and other highly organic soils shall be considered to be unstable materials. Also, any soil which is or might become wet to such a degree that its moisture content is equal to or greater than 90 percent of its liquid limit will have to be specifically approved by the ENGINEER with regard to stability or shall be considered to be an unstable material requiring removal and replacement.
- g. All backfill material shall be clean and free of lumber, trash or other debris and shall be thoroughly compacted in layers not to exceed eight inches and brought to an elevation above the finished grade sufficient to allow for settlement. Prior to placing backfill, the areas around structures upon which the backfill is to be placed shall be cleaned of all trash and debris of any nature. Any sheeting and bracing allowed to be left in place shall be cut off a minimum of 2.5 ft. below finished grade.

- h. Finishing shall consist of the preparation, trimming and shaping to the lines and grades shown on the drawings, and all areas outside the paved areas in such a manner to receive grassing, sod or planting without additional work.
- i. Areas to be compacted shall be moistened or dried and compacted by either rolling, tamping or any other method approved by the ENGINEER in order to obtain the desired density. The CONTRACTOR shall inspect all compacted areas prior to further construction operations to ensure that satisfactory compaction has been obtained.
- j. This item will be paid based on cubic yardage of material added or deleted for a typical cross-section taken before and after construction by the CONTRACTOR's surveyor.
- k. The Construction of swales, removal of sediments in canals, construction of key ditches and navigation of top of banks is included within this item and is paid based on the difference of cross sections taken prior to and after construction in cubic yards.

25 PIPE CULVERTS: The work specified under this section shall be in accordance with section 430 of the FDOT Standard Specifications and shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price or the specific item with no additional cost to be incurred by the TOWN. Payment shall be made under the corresponding bid item found in the Schedule of Contract Values, per linear foot.

26 EXFILTRATION: The work specified under this section shall include trench excavation, installation of Mirafi 700X Filter Fabric (Or Approved Equal), Perforated & Non-Perforated 12" x 18" ERCP & 18" RCP, #4 Coarse Aggregate, and backfilling. Measured in linear feet.

27 INLETS, MANHOLES, MITERED ENDS, YARD DRAINS & BAFFLE BOXES: The work specified under this section shall be in accordance with Section 425 of the FDOT Standard Specifications and FDOT standard plans index 425-001, 010, 021, 052, 061, 080.

The quantities to be paid under this section shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the TOWN. For the purposes of this specification, all grates will be considered incidental to the construction of the inlets, manholes, and mitered end sections. All grates shall be "heavy duty" rated. Further, provision of mitered end sections shall also include the 8 ft. tapered pipe section as a part of the construction, with no additional cost to be incurred under the pipe items. Concrete Headwall shall be provided in accordance with the details outlined in the plans and indexes. Concrete shall have a minimum 28-day compressive strength of 3,000 psi. Reinforcing steel shall be provided per the FDOT standard indexes and as detailed in the plans. Payment shall be made under the corresponding bid item found in the Schedule of Contract Values, per each.

The CONTRACTOR is responsible for completing thorough investigations of the structural systems (i.e. pipe/inlets/baffle boxes) prior to ordering baffle boxes. Prior to ordering the baffle box the existing boxes will be measured for insertion of new components.

28 RIP RAP (BANK & SHORE): The work specified shall consist of the construction of riprap, rubble to be used as drainage slope protection as depicted in the plans. Concrete block is not acceptable for use. The work effort shall be in accordance with Section 530 of the FDOT Standard Specifications. The cost of this item shall include filter fabric in accordance with Section 514, 530 and Section 985 of the FDOT Standard Specifications. The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the TOWN. Price and payment will be full compensation for all work specified in this Section, including all materials, hauling, excavation, and backfill. Include the cost of dressing and shaping the existing fills (or subgrade) for placing riprap in the Contract unit price for riprap (Bank & Shore). Construction shall be per the detail included in the plan documents, and shall include cost of filter fabric. Payment shall be made under RIP RAP (BANK & SHORE) – per ton.

29 SHEET PILING / CAP / 6" THICK CONCRETE SUMP AREA: All sheet piling shall be Vinyl CMI Shoreguard SG-650 or approved equal.

Steel sheet pile alternatives shall be manufactured entirely from steel that meets or exceeds the characteristics listed in this specification. All sheet piling shall be wholly and completely manufactured in an ISO certified production facility.

Alternate products or manufacturers may be used, provided they have products in service for applications similar in scope and function to this project that meet or exceed all the performance requirements of this specification.

Alternate manufacturers shall provide no less than five (5) references for projects similar in scope and function and which have been in service for no less than one (1) year, which shall include the following:

- Detailed project description & location
- Completion Date
- Name and address of owner

Alternate manufacturers must submit all documentation (references, spec sheets, ISO certificates, etc.) and one (1) physical sample for each product requested for approval no less than ten (10) days prior to bid.

Installation shall be performed by the manufacturer's recommendations. The CONTRACTOR should coordinate with the supplier to ensure proper installation.

A Concrete Sheet Pile Cap with reinforcing Steel will be utilized at all outfall control structures. The alignment of the sheet pile and cap shall be installed true to the lines and grades given. Ensure that the horizontal tolerances of the sheet pile CAP shall not exceed more than 1 inch when measured with a 50' string line. CONTRACTOR will not be compensated for installation or removal of sheet piling or CAP that does not comply with this specification.

A 6-inch thick concrete sump will be installed withing the headwall and weir limits of the 3 Outfalls. The sheet piles, concrete cap and 6-inch thick concrete sumps are included within the Lump Sum Pay Items.

30 SOD: The CONTRACTOR is solely responsible for final acceptability of all sodded areas. All associated costs are included in the unit price of the sod. For issues not discussed in these specifications the CONTRACTOR is referred to Sections 575, 981, 982 and 983 of the FDOT Standard specification for Road and Bridge Construction.

Type: Sod shall be locally grown unless otherwise specified to conform to surrounding existing turf and shall be; healthy, with well-matted roots, be free of weeds and be supplier certified to be **free of Tropical Soda Apple** (solanum viarum). The CONTRACTOR will replace turf with the same type Sod removed from any areas.

Dimensions: Sod pieces shall be 1 ft x 2 ft and a minimum of 1 ¼ inches thick. ¾ inch of the sod thickness shall be roots and topsoil.

Placement:

- a. Sod shall be laid with the long side parallel to contours (perpendicular to the slope with the ends of the pieces butted together. Placement of sod shall proceed in this manner up the slope and end butts shall be staggered with adjoining rows.
- b. The combined number of overlaps and 1 inch or greater gaps between pieces shall not exceed 5 per 100 square feet.
- c. The combined number of 2 inch or greater overlaps and 2 inch or greater gaps between pieces shall not exceed 1 per 100 square feet.
- d. For final acceptance no more than 10% of the sodded area may consist of dead spots of greater than ½ foot square and no more than 5% of the sodded area shall consist of dead spots of greater than 1 foot square.

Lime and Fertilizer: To assure rapid establishment of sod the CONTRACTOR is urged to apply fertilizer and lime as follows or as determined by soil testing. Fertilization must be placed in compliance with Town of Sewall's Point.

- a. Fertilizer: 16-4-8 – 50% of Nitrogen to be slow release

- i. 265-lb/ac as placement
- ii. 135-lb/ac at 60 days after placement

Maintenance:

- a. Mowing – Grass is to be mowed to 6-inch height for final acceptance.
 - i. Mowing shall not remove any more than 1/3 of the grass leaves and be cut with sharp blade mowers.
 - ii. Mowing shall not occur for 3 weeks after planting. CONTRACTOR will be responsible to mow all areas once every two (2) weeks once three weeks is completed.
 - iii. Filling, leveling, repairing washouts or erosion – CONTRACTOR shall replace patches of dead sod and repair disturbed and damaged sod immediately upon being made aware of the condition.

31 RELOCATION OF EXISTING LIGHT POLES: The CONTRACTOR shall relocate existing light poles within the project limits. Unless otherwise directed by the Town of Sewall’s Point, lighting shall remain at existing intersection locations, to be relocated 1’ off of proposed improvements. New light pole bases shall be constructed at new locations and is included in cost quantified as Lump Sum.

32 CANOPY AREA TREE TRIMMING: As depicted on the Construction Plans, an area North of Ridgeview Road South along South Sewall’s Point Road has an established Tree Canopy that will require trimming by an Arborist. Allowable vertical clearance above final roadway elevations must be established. The CONTRACTOR shall coordinate this work to be completed before roadway construction in this area is completed before the roadway can be opened for public use. This item will include tree limb trimming per the Arborist recommendation found in the Appendix. This work will require a Town of Sewall’s Point Tree Removal permits (Town fees waived). The project has a landscape plan of work within the tree canopy area and within the STA’s. The plan/bid schedule denotes items that need to be relocated/replaced. In addition, the Town has depicted quantities in the attached miscellaneous bid schedule to replace trees as needed.

33 GROUND DISTURBANCE MONITORING (KNOWLES MOUND): As depicted on the Construction Plans, the parcel identified as #18 Crane’s Nest may be the site of historical Indian Mound. Ground disturbing activities related to proposed construction within the area specified on plans must be witnessed by an Archaeological Consultant to ensure no potential Indian Mounds are being impacted. The CONTRACTOR shall coordinate the Archaeological Consultant to be present for required improvements construction within the designated area. The ACOE Permit outlines monitoring requirements under the Cultural Resources/Historical Properties special conditions. The Archeological Monitoring scope by the CAPTEC sub-consultant is provided to illustrate the notifications and area of coverage expected by this archeological contract.

The CONTRACTOR will denote any additional construction cost for the installation of pipes (storm), inlets, baffle boxes and underground conduits within the monitoring area depicted on the plans of the potential mound. The Archeological Monitoring cost will be incurred by the TOWN directly.

34 STORMWATER TREATMENT AREA PLANTINGS & PREPARATION: After Clearing & Grubbing completed in proposed Stormwater Treatment Areas, the remaining topsoil must be tested for organic content to ensure characteristics are appropriate for proposed plantings, Prior to installation of landscaping, all plantings to be inspected by Hobe Sound Environmental Consultants for approval.

35 EMERGENCY PUMPING GENERATOR & SYSTEM CONFIGURATION: Mobile Generator Cost to include trailer and required licensing through Florida Motor Vehicle Department. Generator shall be configured to allow quick connection to Pump Control Panels (See Electrical Plans by Wojcieszak & Associates, Inc.).

All control panels shall be set 1’ above the 500-year storm elevation of 6.00’ NAVD. Control panels will be fitted with an easily visible indicator light that activates when pumping is occurring. Manual Turn-on switch fitted with tampering lock shall be easily accessible to Town Maintenance Staff. These costs shall be paid for under ‘Control Panel’ pay item.

- 36 **WATERING:** Sod and all plantings shall be watered with ½ inch of water immediately upon placement. In the following three weeks sod shall be watered with the greater of ½ inch of water 2 – 3 times weekly or the amount of water required to maintain moist conditions in the soil to a depth of 6 inches beneath the sod. After 3 weeks the sod shall be watered with the greater of 1/4 inch of water 2 – 3 times weekly or the amount of water required to maintain moist conditions in the soil to a depth of 4 inches beneath the sod and plantings. The cost of this item shall be considered incidental to sod and plantings and is included in that line item. In the event that the specified watering results in the moisture condition drier than those specified above, the CONTRACTOR may place straw mulch which is free of any noxious weed and in particular Tropical Soda Apple in an open uniform layer of 1 – 2 inches thickness to assist in moisture retention. Watering / straw mulch is included in the price of all plants and sod.
- 37 **DEWATERING:** A dewatering plan has not been prepared by the ENGINEER. Should the CONTRACTOR need to dewater, the CONTRACTOR shall be responsible for obtaining required South Florida Water Management District Water Use Permit prior to commencement of dewatering. All applicable fees and additional costs of a dewatering permit shall be the responsibility of the CONTRACTOR, at no additional cost to the TOWN. This work shall be communicated to the pipe CONTRACTOR. All dewatering associated with proposed improvements must meet local noise ordinances / be provided noise containment and mitigation (particularly during evening hours and Sundays). Dewatering shall coincide with allowable time frames of work note previously.
- a. Unless specifically authorized by the ENGINEER, all pipe, embankment and improved soil shall be laid in the dry, and the CONTRACTOR shall do such pumping as is required for proper execution of the work and to dispose of the water without damage or undue inconvenience of the work, the surrounding area, or the public. He shall not dam, divert or cause water to flow in excess in existing gutters, swales, pavements or other structures, and to this end may be required to conduct the water to a suitable place of discharge. Well point system or other approved equipment shall be used to maintain excavations in a dry condition for pipe laying.
 - b. The CONTRACTOR shall provide adequate equipment for the removal of storm or subsurface waters that may accumulate in the excavation. If subsurface water is encountered, the CONTRACTOR shall utilize suitable equipment to adequately dewater the excavation so that it will be dry for grading work and pipe laying. A well point system or other ENGINEER approved dewatering method shall be utilized, as necessary, to maintain the excavation in a dry condition for preparation of the trench bottom and for grading and pipe laying. Dewatering in proximity to the Indian River Lagoon may have specific SFWMD permit requirements.
 - c. Dewatering by trench pumping will not be permitted if migration of fine-grained natural material from bottom, side walls or bedding material will occur. In the event that satisfactory dewatering cannot be accomplished due to subsurface conditions or where dewatering could damage existing structures, the CONTRACTOR shall obtain the ENGINEER's approval of wet trench construction procedure before commencing construction. Dewatering shall cease in a manner to allow the subsurface water to slowly return to normal levels.
 - d. Water pumped from the trench or other excavation shall be disposed of in storm sewers having adequate capacity, canals or suitable disposal pits. CONTRACTOR is responsible for acquiring all permits required to discharge the water and shall protect waterways from turbidity during the dewatering operation. In areas where adequate disposal sites are not available, partially backfilled trenches may be used for water disposal only when the CONTRACTOR's plan for trench disposal is approved in writing by the ENGINEER. The CONTRACTOR's plan shall include temporary culverts, barricades and other protective measures to prevent damage to property or injury to any person or persons. No flooding of streets, roadways, driveways or private property will be permitted.
 - e. CONTRACTOR will provide supplementary pumps as required to maintain water level in any adjacent ponds, wetland areas, or other water bodies.
 - f. CONTRACTOR is responsible for insuring compliance with all General, Special, and Limiting Conditions of the South Florida Water Management District Permits obtained for this project.
 - g. Engines driving dewatering pumps shall be equipped with residential type mufflers.

h. Payment will be incidental to the corresponding bid items found in the Schedule of Contract Values.

38 CONTROL AND DISPOSAL OF WASTE: Wastes shall be picked up and placed in containers that are emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and any other areas. On completion, the areas shall be left clean and natural looking. All sights of temporary construction and activities incidental to construction of the required permanent work in place shall be obliterated.

Disposal of Rubbish and Debris: CONTRACTOR shall transport all waste off of TOWN's property and dispose of it in a manner that complies with federal, state and local requirements. This item shall be included in the Mobilization, and Clearing and Grubbing pay item.

39 GRANTS: This project is financial with the following grants.

- Florida Department of Environmental Protection Resiliency Grant Agreement (No. 22FRP103)
- Florida Division of Emergency Management HMGP Grant Agreement (No. 4283-058-A/H0928)

The CONTRACTOR must comply with Special Conditions #9 (pages 35-37) and Statutes & Regulations (Attachment B: pages 39-41) of the HMGP Grant. Contract Provisions Guide dated June 2021 (FL-207-21-0001).

The CONTRACTOR must comply with Items 9, 12, 22, 23, 25-31 & 35 of the FDEP Resiliency Grant and Attachment 2 applicable items, Attachment 4 applicable items and Exhibit D (pages 1-6).

END OF SECTION