SECTION 01 11 00

SUMMARY OF WORK

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Work phases.
 - 3. Work under other contracts.
 - 4. Contractor use of premises.
 - 5. Occupancy requirements for buildings.
 - 6. Work Restrictions.
 - 7. Special Construction Requirements.
 - 8. Additional Reports.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Location: Golden Gate National Recreation Area, California, Stinson Beach, Marin County.
- B. The Work consists of the following:
 - 1. The Work includes the installation of a sewer recirculating textile treatment facility (RTF) with inflow equalization tank and outflow distribution tank, pressure disposal drainfield, replacement/installation of one (1) septic tank, one (1) pump station vault, rehabilitation of two (2) pump station vaults, one (1) septic tank, replacement of six (6) lift station pumps, installation of two (2) new lift station pumps, four (4) force mains, three (3) gravity sewer service lines and related piping and appurtenances with alarm modifications and telemetry system additions within Stinson Beach. The work includes *bid options* for replacement/installation of two (2) septic tanks, two (2) pump station vaults, one (1) septic tank, one (1) force main.
 - 2. All concrete septic and wet well tanks are to be pressure tested, those that fail will have penetrations sealed and tank retested. (EXCEPTION: If bid option to replace tank is awarded, tank to be replaced shall not be pressure tested. Only new tank replacement installed shall be tested.
 - 3. This Project will be constructed under a single prime contract.
 - 4. The Contractor will be responsible for their work which will include:
 - a. Clean and inspect septic tanks and pump vaults for serviceability. If found unserviceable Contractor shall excavate and replace tanks or vaults with appropriately sized concrete septic tanks and vaults as specified in the specifications. (Tanks having the highest risk of being unserviceable are bid options. Other tanks outside bid options found to be unserviceable will require an equitable adjustment for replacement.) Contractor shall use best management practices for all tank excavations and piping installation.

- b. Provide and install submersible pumps and pump chambers compatible to the pump vaults to include all wiring, controls, floats, alarms, and appurtenances as specified. Pump vaults shall be plumbed into the riser of the pump vault and the pump controls wired to the central wastewater treatment system that will consist of a proprietary recirculating textile filter (RTF). Contractor shall employ best management practices for all underground piping and wiring installation.
- c. Provide and construct the central wastewater treatment system that utilizes a proprietary RTF technology. Contractor shall ensure pumping stations and their controls are compatible and appropriately sized to support the centralized wastewater treatment system. Contractor shall employ best management practices for all underground tank, piping and wiring installation to prevent site environmental impacts.
- d. Supply and install final lift station to pump treated effluent to the subsurface drainfield as shown on the plans and specifications. Work shall include all piping (base bid item) and controls wiring (bid option item) necessary to manage and control the system from the NPS Supervisory Control and Data Acquisition (SCADA).
 - i. SCADA integration is a bid option item.
 - ii. The NPS SCADA system to be integrated into is "Mission Control"
 - iii. Local audio/visual alarms is a base bid component
- e. Provide and install subsurface drainfield with pre-fabricated infiltrators as shown on plans and specifications.
- f. Contractor shall ensure all materials, equipment, equipment installation, and construction will produce fully functional lift stations, wastewater treatment systems, and subsurface drainfield that are capable of being controlled (by the SCADA system bid option).
- g. Install electrical conduit and wire as depicted, including utility service and all of main conduit group between control building and electrical components.
- h. Install communications conduit, cable, and ancillaries as depicted and specified.
- i. Install piping and valves as shown on plans to convey septic tank effluent to the RTF system, RTF treated effluent to the subsurface drainfield, and dispersal of treated wastewater through-out the subsurface drainfield.
- j. Fill with imported material to rough grade elevation, including special foundation excavation and special engineered sub-grade for reinforced earth.
- k. Construct, install, and integrate electrical and wastewater treatment system control equipment with the NPS SCADA system "Mission Control".
 - i. SCADA integration is a bid option item.
 - ii. The NPS SCADA system to be integrated into is "Mission Control"
 - iii. Local audio/visual alarms is a base bid component.
- 1. Fine grade and restore site surfaces as depicted on plans.
- m. Cleanup, repair, and restore areas temporarily used during construction, including fence repair and fence replacement.

1.3 WORK PHASES

A. The Work shall be conducted in phases in the below order, with each phase substantially complete before beginning the next phase. Purpose of phasing is to minimize service outages/temporary services and impacts to adjacent property owners during construction. Note that local weather conditions will have greater impact to some of the phases with respect to the State of California SWPPP permitting and monitoring and should be considered in the approach and scheduling of work. Modification to phasing may be considered if benefits can be demonstrated that achieve fundamental purpose of phasing.

<u>Phase I:</u> Disposal Field – Installation of complete disposal field system that will allow for system to be put into service without additional construction (other than calibration during startup of the force main pumping system to the disposal field). Includes soil stabilization requirements based on Golden Gate National Recreation Area (GGNRA) standard BMP's as per Appendix D, and approved SWPPP/permit. Includes security fencing and site clean up; does not include any required paving/patching as that can be done concurrently with other paving/patching for the project.

<u>Phase II:</u> Force Main Disposal Field to Secondary Treatment (RTF System) – Installation of 3" force main from disposal field to secondary treatment system, recirculating textile filter system located within the NPS administrative area. Work also includes vault for future connection of disinfection system and conduit and associated pull boxes from zone valve control box in disposal field to secondary treatment area.

<u>Phase III:</u> Secondary Treatment (RTF System) – Installation of recirculating textile filter system to include new power service, water system hose bibs for servicing RTF system pods, final grading and replace wood fence removed along west side of work area with new fence. The RTF system will be ready for system startup and calibration by manufacture's certified representative at completion of this phase.

Phase IV: NPS Administrative/Maintenance Area Tank and Gravity Sewer Main

(*Base Bid*) Installation of new gravity sewer main from existing septic tank to RTF equalization tank. Servicing the existing septic tank, sealing of penetrations as needed to pass pressure test and abandonment of existing wet well tank.

(Bid Option) Remove and dispose of existing 1,800 gallon septic tank. Replace with and install 1,200 gallon septic tank.

Phase V: Secondary Treatment (RTF System) Start-Up and Initial Calibration – This phase will be initiated immediately following the work from Phase IV. Work includes RTF system startup by manufactures certified representative and initial system calibration. Concurrently the NPS Administrative/Maintenance Area will be cut-over to the new RTF system and disposal field and utilized for system startup and calibration. Due to small waste water production by NPS Administrative/Maintenance Area, water may be required to be added to system for startup. Contractor is responsible for providing water as per specification 01 11 00 Summary of Work section 1.7 Work Restrictions. Contractor is responsible for maintaining, operating and servicing if necessary the RTF system and disposal field until whole project substantial completion and NPS owner training. Initial system startup and calibration by certified manufactures representative can NOT be conducted at same time as NPS owner training. NPS owner training will be done after substantial completion and final calibration of the RTF system and other project pump stations.

Phase VI: Force Main Conveyance

(*Base Bid*) Install 3" force mains from North Comfort Station, Central Comfort Station, Lifeguard/Ranger Building, South Comfort Station extension to secondary treatment system (RTF). Includes all project paving and patching as necessary.

(*Bid Options*) Install new 3" HDPE force main along existing 3" force main and abandon existing force main in place.

Phase VII: South Comfort Station

(Base Bid) Work includes servicing existing 5,300 gallon septic tank and wet well tanks, sealing penetrations to pass pressure test. Remove existing pump and control system and replace with new pumps and control system with local audio/visual alarm system. Connect new pump system into existing 3" force main. At completion of phase, the comfort station will operate on new RTF and disposal field. Pressure test of existing wet well tank is not required if bid option to replace tank is awarded.

(*Bid Options*) Work includes removal and disposal of existing 5,300 gallon wet well tank and replace with 3,000 gallon concrete tank in same location pressure tested. Replace main 100amp electrical panel and provide SCADA call out notification system integrated with new local audio/visual alarm provided in base bid work.

Phase VIII: North Comfort Station

(Base Bid) Work includes servicing existing 5,300 gallon septic tank and wet well tanks, sealing penetrations to pass pressure test. Remove existing pump and control system and replace with new pumps and control system with local audio/visual alarm system. Connect new pump system into new 3" force main. At completion of phase, the comfort station will operate on new RTF and disposal field. Pressure test of existing septic tank is not required if bid option to replace tank is awarded.

(*Bid Options*) Work includes removal and disposal of existing 5,300 gallon septic tank and replace with 3,000 gallon concrete tank in same location pressure tested. Replace main 100amp electrical panel and provide SCADA call out notification system integrated with new local audio/visual alarm provided in base bid work.

Phase IX: Central Comfort Station

(Base Bid) Work includes servicing existing 5,300 gallon septic tank and wet well tanks, sealing penetrations to pass pressure test. Remove existing pump and control system and replace with new pumps and control system with local audio/visual alarm system. Connect new pump system into new 3" force main. At completion of phase, the comfort station will operate on new RTF and disposal field. Pressure test of existing septic and wet well tanks is not required if bid option to replace tanks is awarded.

(*Bid Options*) Work includes demolition in place of the existing wet well tank and adaptive reuse (sitting area) of the existing septic tank. Install two new concrete 5,000 gallon septic and wet well tanks on east downslope side of comfort station. The work includes all mechanical piping and electrical to gravity flow from comfort station to septic tank and then to wet well tank. Replace main 100amp electrical panel and provide SCADA call out notification system integrated with new local audio/visual alarm provided in base bid work.

Phase X: Lifeguard/Ranger Building Primary Treatment System

(*Base Bid*) Work includes installation of new 1,500 gallon septic tank and wet well tanks. Remove existing pump and control system (at Ranger Building) and replace with new pumps and control system in new wet well with local audio/visual alarm system. Demolish existing 5,300 gallon septic tank in place, demolish ranger building lift station. Connect new pump system into new 3" force main. At completion of phase, the lifeguard and ranger building will operate on new RTF and disposal field.

(*Bid Options*) Work includes providing SCADA call out notification system integrated with new local audio/visual alarm provided in base bid work.

Central Comfort Station and Lifeguard/Ranger Building change in phase order based on time of year, weather and visitation such that work is done during low visitation.

Phase XI: Substantial Completion

Within two (2) week of declaring substantial completion, final calibration of secondary treatment system (RTF) and new pump stations at each primary treatment location by authorized manufacture representative will be conducted. The day following final calibration will be NPS owner training by same representative who calibrated systems. Owner training will **NOT** occur until final calibration is completed, if calibration is not complete by scheduled date of owner training, the training will be rescheduled at cost to contractor.

1.4 CONTRACTOR USE OF SITE

- A. General: Contractor shall have limited use of the site for construction operations. Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine constructions operations to within the fenced perimeter of the Stinson Beach as specifically delineated on the construction drawings

- 2. Access: U.S. Highway 1 to Marine Way will be used for all access to Stinson Beach for construction personnel, construction equipment, deliveries, etc. Private Road to Administrative building area shall not be used for these activities unless approved by NPS COR for deliveries that exceed the bridge load limit for Marine Way road access.
- Contractor is responsible upon start-up and cut over of facilities to the new secondary 3. treatment system (RTF) and disposal field to maintain the operation of the secondary treatment system until substantial completion and owner training has been completed. Contractor will provide certified manufactures representative to conduct field startup of the RTF system and upon substantial completion a second site visit to conduct final calibration of the system, ensure system is performing as per design/manufactured and finally conduct owner training.
- 4. Park Archeologist is required to be on site during all excavation, contractor's weekly meeting two week look ahead must specifically address ground disturbance coordination. During excavation if any items encountered are of potential archeological importance, contractor will stop work in that location and relocate work effort to other parts of the project until the site is cleared by the NPS.
- Utilities to support construction activities by contractor: 5.
 - Water: Contractor to install NPS approved backflow preventer and meter at NPS specified location. Contractor will be billed monthly at rate of \$65 per 1,000 gallons not to exceed 10,000 gallons per day. Prior to using water, agreement between NPS and contractor must be signed. Billings are sent electronically via email, thus additional information from contractor is point of contact information to send billings and finally company tax ID number.
 - b. Power: Contractor may use power from existing facilities while working directly on the facilities. Acceptable uses are for equipment associated with direct construction of the project. Objective to allowing contractor utilize power at facilities is to limit use of portable generators when possible to reduce noise and greenhouse gases (carbon footprint of project).
- B. Storage of Materials: Confine storage of materials to within the areas as described and delineated on the construction drawings for Stinson Beach wastewater system replacement.

C. Preservation of Natural Features:

- All equipment shall be power washed and inspected before being off-loaded at Stinson Beach Park to ensure it is free of non-native weeds and/or seeds. In addition sources of imported rock, sand, gravel, and soil shall be inspected for invasive non-native plants, weeds and/or seeds. The Contractor shall submit a list of proposed sources, end use and temporary storage requirements for imported material, 30 calendar days prior to delivery. Imported material shall be free of non-native weeds and/or seeds. Imported material shall be shipped directly from the source to the Park without intermediary storage or staging. Shipping vessels shall be covered to prevent spillage or blowing of their contents while in transit.
- Prior to moving equipment from different locations on with the project site (i.e. South 2. Comfort Station Area to North Comfort Station Area) the equipment must be high air pressure cleaned and inspected by NPS COR prior to relocating in order to prevent spread of invasive plants.

- 3. Prior to mobilizing equipment into each unique area within the project site (i.e. South Comfort Station Area to North Comfort Station Area) contractor shall notify NPS two (2) weeks prior so that arrangements can be made for removal of invasive weeds within work area; EXCEPTION is disposal field where contractor shall remove top 6" of soil from project site.
- 4. Top 6" of soil in any area will not be re-utilized as suitable fill within 18 inches from finish grade to prevent spread of invasive vegetation.
- Prevent damage to natural surroundings. Restore damaged areas, repairing or replacing 5. damaged trees and plants, at no additional expense to the Government.
- 6. Provide temporary barriers to protect existing trees and plants and root zones.
- Do not remove, injure, or destroy trees or other plants without prior approval. 7.
- 8. Do not fasten ropes, cables, or guys to existing trees.
- 9. Carefully supervise excavating, grading, filling, and other construction operations near trees to prevent damage.
- 10. Erosion control measures will be in accordance with GGNRA's BMP's per Appendix D, weed free, rice straw, and burlap outer filter/cover; **NO** plastic netting products.
- The NPS will conduct re-vegetation and restoration of the project area post project 11. completion. Contractor is responsible for erosion control and stabilization of each area as specified in construction drawings and in accordance with GGNRA's BMP's in appendix of the specifications; lastly in accordance with State of California General Construction SWPPP Permit.
- D. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Government, Government's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - Schedule deliveries to minimize use of driveways and entrances. 1.
 - 2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- E. Construction Camp: Establishment of a camp within the park will not be permitted.
- Hauling Restrictions: Comply with all legal load restrictions in the hauling of materials. Load F. restrictions on park roads are identical to the state load restrictions with such additional regulations as may be imposed by the Park Superintendent. Information regarding rules and regulations for vehicular traffic on park roads may be obtained from the Office of the Park Superintendent. A special permit will not relieve Contractor of liability for damage which may result from moving of equipment. Ensure Marine Way (main public entrance to Stinson Beach) bridge load limit is not exceeded; contractor's responsibility.

1.5 PUBLIC USE OF SITE

Contractor shall at all times conduct his operations to ensure the least inconvenience to the A. public. Specific Stinson Beach comfort stations may be non-operational, when required, upon specific approval of Contracting Officer (CO) for a maximum of thirty (30) consecutive days in accordance with phasing 01 11 00 Summary of Work section 1.3 Work Phases. Only one comfort station may be out of service at one time. Exception may be granted for low visitation periods.

1.6 OCCUPANCY REQUIRMENTS FOR BUILDINGS

A. Existing Buildings

- 1. Partial Government Occupancy: Government will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Government during construction operations to minimize conflicts and facilitate Government usage. Perform the Work so as not to interfere with Government's operations. Maintain existing exits, unless otherwise indicated.
 - a. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from the Contracting Officer (CO).

1.7 WORK RESTRICTIONS

- A. On-Site Work Hours: Work shall be generally performed during normal business working hours of **8:00 a.m. to 4:30 p.m.**, Monday through Friday, no Federal Holidays. Extension of work hours *may* be authorized to allow for ten (10) hour work days with noise restrictions upon request and approval by Contracting Officer.
- B. Vegetation Removal Restriction
 - 1. No vegetation removal shall be performed during "Bird Nesting Season" from March 1st to July 31st.

C. Existing Utilities

- 1. Existing Utilities: USA Notification & Utility Field Meeting
 - a. The Contractor shall contact Underground Service Alert (USA) (1-800-642-2444) seven (7) calendar days prior to start of each ground disturbing phase and shall be responsible for maintaining a valid USA location tag through renewal during the construction. The Contractor shall schedule a utility field meeting prior to any excavation. This shall be so stated in the USA notification. The Contractor shall be responsible to coordinate the utility field meeting at which time he shall explain the limits and impacts to USA member utilities.
 - b. The majority of the utilities within Stinson Beach are owned by NPS. As such, very few utilities will actually be marked out by USA. It is the Contractor's responsibility to field locate & mark all utilities within the project work area. Field location and marking shall be performed a minimum of three (3) days prior to ground disturbance; notify CO upon completion of field location and marking for CO review and approval. No trenching shall be performed prior to CO approval.
- 2. Contractor shall be responsible for locating and preventing damage to known utilities. If damage occurs, repair utility at no additional expense to the Government.
- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Government or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Contracting Officer not less than five (5) days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Contracting Officer's written permission.

- 3. Hours for Utility Shutdowns: Specific Stinson Beach comfort stations may be nonoperational, when required, upon specific approval of Contracting Officer for a maximum of thirty (30) consecutive days.
- Contractor shall coordinate all power outages with PG&E; a minimum of two (2) weeks' 4. notice of outages will be provided to NPS; include all fees and inspection costs associated with new service connection. See appendix for PG&E estimated service connection costs.

SPECIAL CONSTRUCTION REQUIREMENTS 1.8

- A. Contractor shall be responsible for all fees, inspection, and coordination associated with electrical power service; see Appendix C for PG&E engineering estimate fee.
- B. State of California SWPPP: Contractor is required to provide QSD and QSP to include submit SWPPP permit documents to the NPS. NPS will review and upon approval will pull permit; contractor is required to pay permit fee(s). Typically it takes up to thirty (30) days between NPS approved SWPPP document from contractor to issued permit; contractor to plan work schedule accordingly. Project anticipated level of SWPPP permit I or II depending largely on contractor's schedule; likely that working through wet season (November thru April) will push permit into Level II.
- C. Contractor is to provide public signage to inform public of closed facilities and notice of intent to close and/or open facility five (5) days prior to closure/opening. Signage for closed facilities will include what similar facilities are open to the public (Comfort Stations). Signs to be posted on "A" frames as per: http://www.plasticade.com/sign frames/signicade/ or Equivalent. Signs will conform to GGNRA standard signage; Appendix E.

1.9 ADDITIONAL REPORTS

- Supplemental Exploration to "Pot Hole" Utilities and Observe Subsurface Conditions Letter A. Dated December 9, 2014. Exploration encountered subsurface ground water approximately five feet below ground surface in the parking lot area and filter treatment area; Appendix A.
- B. Geotech Report done for percolation for disposal area; Appendix B.
- C. PG&E Engineering Estimate Fee; Appendix C.
- D. NPS Standard BMPs; Appendix D.
- E. NPS Standard Signage; Appendix E.
- F. State Water Resource Control Board (SWRCB) Sewer Water Separation Conditional Variance; Appendix F

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 27 00

DEFINITION OF CONTRACT LINE ITEMS

PART 1 – GENERAL

1.1 SUMMARY

- A. The intent of this section is to explain, in general, what is and what is not included in a contract line item, and the limits or cut-off points where one item ends and another begins.
- B. If no contract line item exists for a portion of the work, include the costs in a related item.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 LIST OF CONTRACT LINE ITEMS

- A. Contract Line Item No.1 Mobilization & Demobilization
 - 1. This item consists of mobilization, demobilization, and temporary controls.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- B. Contract Line Item No.2 Storm Water Pollution Prevention Plan (SWPPP)
 - 1. This item consists of temporary erosion control measures for best management practices of storm water management and runoff.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- C. Contract Line Item No.3 PG&E Permit and Service Connection
 - 1. This item consists of work and cost associate with the new PG&E service to the filtration system, including but not limited to utility permitting, review fees, utility submittals and coordination, temporary electrical service, all necessary components for a permanent electrical service.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- D. Contract Line Item No.4 Disposal Field Vegetation Removal
 - 1. This item consists of work and cost associate with the removal of trees, limbing of trees, protection of trees and clearing and grubbing of approximately one half acre of gently sloping ground to prepare the site for a new drainfield.
 - 2. No separate measurement will be made.

- 3. Payment will be made at the contract lump sum price.
- E. Contract Line Item No.5 Pressure Disposal Field and Fence
 - 1. This item consists of work and cost associated with the installation of a new pressure disposal field. Work includes trench excavation, installation of infiltrators, associated piping and valves, concrete inspection vaults with a dispersal design providing a fully functional operating system that meets county requirements for orifice sizing and spacing with appropriate system squirt heights. Work also includes installation of a 6-ft. chain link fence with vehicular access gate to enclose the drain-field.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- F. Contract Line Item No. 6 Three Inch HDPE Force Main (Recirculating Treatment Facility (RTF) to Disposal Field)
 - 1. This item consists of work and cost associated with installation of a 3" HDPE force main and conduit for future valve control from the RTF to the pressure disposal field, associated components include concrete vault with tee in force main for future waste water treatment and (grey water) distribution, pull box.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lineal foot unit price.
- G. Contract Line Item No. 7 Three Inch HDPE Force Main (From Primary Treatment, i.e. North, Central and South Comfort Station Septic Tanks and Lifeguard Ranger Building Septic Tank Pump Vaults)
 - 1. This item consists of work and cost associated with installation of multiple stand alone 3" HDPE force mains from the North, Central and South Comfort Station Septic Tanks and Lifeguard Ranger Building Septic Tank Pump Vaults, associated components include two air vacuum and release valves in a concrete vault.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lineal foot unit price.
- H. Contract Line Item No. 8 Asphalt Paving
 - 1. This item consists of work and cost associated with pavement mill grind removal and asphalt concrete replacement for trenching across or along paved pedestrian paths and drive aisles or driveways.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract ton unit price.
- I. Contract Line Item No. 9 Tank and Disposal Field Abandonment
 - 1. This item consists of work and cost associated with abandonment of the Lifeguard Tower / Ranger Building septic tank, Central Comfort Station septic tank and pump vault tank and three disposal fields.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.

- J. Contract Line Item No. 10 Service and Pressure Test Tanks
 - 1. This item consists of work and cost associated with pumping removal of tank contents, pressure wash cleaning of tank, leak testing of tanks and sealing tanks that do not pass leak test and leak re-testing tanks.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- K. Contract Line Item No. 11 Life Guard / Ranger Building Septic and Wet Well Tanks
 - 1. This item consists of work and cost associated with installation of new septic tank and wet well tank installation and two separate gravity sewer laterals. Associated work involves tie in to existing gravity sewer laterals, adding clean outs and removal of one existing package lift station and disconnect.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- L. Contract Line Item No. 12 Wastewater Filter Secondary Treatment Facility, and Wood Fence Removal and Replacement.
 - 1. This item consists of work and cost associated with installation of the new wastewater filter treatment facility, associated inflow equalization tank and outflow distribution tank, all necessary components for a fully operational treatment system. Work also includes removal and replacement of existing wood fence necessary during construction.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- M. Contract Line Item No. 13 Primary Treatment, (Wet Wells) Pump, Control and Local Alarm System.
 - 1. This item consists of work and cost associated with demolition and replacement of pump vault pumps, and associated components including float level switches and alarms, conduit and wiring, and other electrical components.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- N. Contract Line Item No. 14 Gravity Sewer Main Lifeguard, Ranger Building, Administrative / Maintenance Area.
 - 1. This item consists of work and cost associated with construction excavation and installation of three new gravity sewer laterals with clean outs, demolition of two package lift stations and disconnects. Associated work includes AC surface repair.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lineal foot unit price.
- O. Contract Line Item No. 15 Conduit and Pull Boxes for Future Remote SCADA Call Out System.
 - 1. This item consists of work and cost associated with installation of HDPE communication conduits and pull boxes for future SCADA system.
 - 2. No separate measurement will be made.

3. Payment will be made at the contract lineal foot unit price.

3.2 LIST OF CONTRACT BID OPTIONS

- A. Contract Bid Option No. A Replace South Comfort Station Pump Vault
 - 1. This item consists of removal and disposal of existing 5,300 gallon wet well tank and replacement with 3,000 gallon concrete tank in the same location, pressure tested.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- B. Contract Bid Option No. B Replace North Comfort Station Septic Tank
 - 1. This item consists of removal and disposal of existing 5,300 gallon septic tank and replacement with 3,000 gallon concrete tank in the same location, pressure tested.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- C. Contract Bid Option No. C Replace Central Comfort Station Septic Tank and Pump Vault
 - 1. This item consists of demolition in place of the existing wet well tank and adaptive reuse (sitting area) of the existing septic tank. Install two new concrete 5,000 gallon septic and wet well tanks on east downslope side of comfort station. The work includes all mechanical piping and electrical to gravity flow from comfort station to septic tank and then to wet well tank.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- D. Contract Bid Option No. D Remote SCADA system.
 - 1. This item consists of providing SCADA capable call out notification system integrated with new local audio/visual alarm provided in base bid work.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- E. Contract Bid Option No. E Replace Electrical Panels at Comfort Stations
 - 1. This item consists of removal of old electrical panels and replace with main 100amp electrical panel.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract each unit price.

- F. Contract Bid Option No. F Mill and Pave Lifeguard Driveway
 - 1. This item consists of mill grind removal of existing AC pavement driveway, reuse mill grind as base course material under new AC pavement, install new AC pavement driveway.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract ton unit price.
- G. Contract Bid Option No. G Pipe Burst Three Inch PVC Existing Force Main From South Comfort Station to Secondary Treatment (RTF) With Three Inch HDPE Replacement
 - 1. This item consists of pipe bursting existing 3 inch pvc force main from the South Comfort Station wet well pump vault to the RTF with 3 inch HDPE piping.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.
- H. Contract Bid Option No. H Mill and Pave Ten Foot Wide Pedestrian Path
 - 1. This item consists of mill grind removal of existing AC pavement pedestrian path, reuse mill grind as base course material under new AC pavement, fine grade path to meet ADA/ABA requirements and regrade area between Ranger Building and where path joins the lifeguard tower pavement to eliminate existing ponding of water on path, install new AC pavement pedestrian pathway.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract ton unit price.
- I. Contract Bid Option No. I Replace 1,800 Gallon Septic Tank (Admin Area)
 - 1. This item consists of removal and disposal of existing 1,800 gallon septic tank, with installation of new 1,200 gallon precast concrete septic tank. Includes asphalt concrete saw cut removal and asphalt concrete surface repair.
 - 2. No separate measurement will be made.
 - 3. Payment will be made at the contract lump sum price.

END OF SECTION