AMENDMENT NO.: 1
TO AGREEMENT
BETWEEN
OWNER AND ENGINEER

This Amendment No.: 1 is made and entered into this ~~day~~ 29 of October, 2021 to the Task Order No. 1 made as of November 24, 2020 ("Task Order") under the Master Agreement for On-Call Professional Services between the Town of Apex ("OWNER") and CDM Smith Inc. ("ENGINEER") dated September 4, 2018 ("Master Agreement").

WHEREAS, OWNER and ENGINEER entered into the Agreement for the Sunset Hills Lift Station Improvements Project ("Project"), and

WHEREAS, the parties desire to amend the Task Order so as to amend the scope of work, time periods of performance and payment, and/or responsibilities of ENGINEER; and

WHEREAS, the Task Order provides that any amendments shall be valid only when expressed in writing and signed by the parties.

NOW THEREFORE, in consideration of the mutual understandings and Agreements contained herein, the parties agree to amend the Task Order as follows:

1. The Basic Services of ENGINEER as described in the Task Order are amended and supplemented as follows:

   Design, permitting, bidding and construction administration and observation, start-up services, and record drawings for the Project as identified in attached Exhibit A.

2. The responsibilities of OWNER as described in the Task Order are amended and supplemented as follows:

   See Exhibit A.

3. The time periods for the performance of ENGINEER's services as set forth in the Task Order are amended and supplemented as follows:

   ENGINEER to begin within one (1) week of receiving OWNER's Notice To Proceed (NTP) and complete the services within twenty-six (26) months or as directed by the OWNER

4. The payment for services rendered by ENGINEER shall be as set forth below:

   ENGINEER's compensation under this Amendment 1 is on a lump sum basis. The fee for the Amendment is a not to exceed amount (NTE) of $537,600, for Engineering Services for Design and Construction as listed in the attached Exhibit A.

   Current Contract Value: $69,775
   Add Amendment 1: $537,600
   New Contract Value: $607,375

5. Except as herein modified, all terms and conditions of the Task Order shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this amendment on the date indicated above for the purpose herein expressed.

OWNER Catherine Crosby Town Manager

DATE:

ENGINEER

DATE: 10/18/2021

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

Vance Holloman Finance Director

EXHIBIT A
TO AGREEMENT BETWEEN OWNER AND ENGINEER
October 15, 2021

This is an exhibit attached to and made a part of and incorporated by reference into the Original Agreement, dated July 27, 2021, between CDM Smith Inc. (ENGINEER) and Town of Apex (OWNER) for professional services.

1.0 ENGINEER'S SERVICES

ENGINEER recently completed an evaluation of the Sunset Hills Lift Station (SHLS) and subsequent Technical Memorandum which resulted in the recommendation of lift station upgrades, conceptual site layout and future force main size increase. The OWNER has requested that the ENGINEER provide professional engineering services in support of the design of the Sunset Hills Lift Station Upgrades (the Project). This Amendment No. 1 includes the next phases of the Project including, design, permitting, bidding, construction administration and observation, start-up services, and record drawings.

2.0 SCOPE OF WORK

ENGINEER will provide the following services under this Scope of Work:

- Task 500 – Project Management and Meetings
- Task 600 – Surveying, SUE and Mapping
- Task 700 – Geotechnical Investigation
- Task 800 – Final Design
- Task 900 – Permits and Approvals
- Task 1000 – Bidding and Award
- Task 1100 – Construction Contract Administration
- Task 1200 – Start-up and Training
- Task 1300 – Record Drawings and Closeout

A description of each of the tasks above is provided below. Additional services may be provided by the ENGINEER upon separate written authorization from the OWNER for a mutually agreed upon scope and budget.

Task 500 – Project Management and Meetings

The project management task includes those activities involved with the detailed planning and subsequent monitoring and control of the Project. This Scope of Work assumes a duration of 26 months. In addition to the ENGINEER's normal in-house staff management, document control, job tracking procedures, and invoicing.

This task also includes quality control where the ENGINEER will undertake quality control activities in accordance with the ENGINEER's Quality Management System (QMS) that includes monthly reviews and project status reporting, communication plans, and independent specialist reviews.

Task 600 – Surveying, SUE, and Mapping

The ENGINEER and its sub-consultant shall perform surveying services to provide accurate information as to the horizontal and vertical locations of all existing structures, land features, property identification, and utilities to allow for the proper design of the new lift station.

All surveying shall be in accordance with current North Carolina surveying standards and conducted using conventional, GPS, or other accepted methods. Local benchmark(s) as established by the National Geodetic Survey shall be used to establish horizontal and vertical control within the Project limits. The NAD83 and NAVD88 horizontal and vertical datums, respectively, shall be used.

Field Survey

An existing conditions survey will be performed to the area shown in Figure 1. Surface features will be located by the survey inclusive of existing structures, parking areas, greenway (within the proximity of the proposed lift station site), concrete pads, gravel and paved driveways and parking areas, fences, ditches, parcel data, adjacent parcel data, adjacent roadway rights-of-way and visible improvements within the project area. Individual trees within parking/landscaped areas will be field located and identified on the final plan. Edges of wooded areas will be field located. Individual trees within wooded/natural areas will not be field located and are specifically excluded from this proposal.

Visible above ground evidence of utilities to include power poles, valves, stormwater culverts, etc. will be located by the survey. Corresponding top, bottom and invert elevations of storm and sanitary structures that are accessible will also be recorded. Pipe sizes entering and exiting these structures will also be noted where accurately attainable. Storm drainage and sanitary systems will be traced and located to one structure beyond the survey limits of the project. Above ground visible evidence of utilities will be located and shown on the final deliverable.

A topographic survey of the area will be performed within the survey area. Elevations will be shown to the nearest 0.1' on lawn or "soft" areas and to the nearest 0.01' on paved or "hard" surfaces elevations. Contours will be created at a one-foot interval.

Subsurface Utility Engineering (SUE) Quality Level B

Level B SUE is the method by which approximate horizontal data is acquired for underground utilities, such as water, force main, electric, etc. The utilities shall be marked with paint or flags and then surveyed. The utilities shall be located utilizing electromagnetic equipment. Inside the property lines of the existing lift station, the SUE will be supplemented with information from available record drawings and plant staff knowledge of the facility. Level B SUE shall be performed within the entire Project area limits included in the Field Survey.

Task 700 – Geotechnical Investigation

The ENGINEER has included one (1) soil boring that will be performed in addition to the one (1) soil boring performed during the evaluation stage under the previous agreement to confirm presence of partially weather rock and the foundation design of the proposed wet well.

ENGINEER will retain the services of a subcontractor to perform a geotechnical investigation to observe subsurface conditions and support the design of the Project. The scope of the subsurface investigation will consist of one (1) Standard Penetration Test (SPT) boring at the future wet well location. In general, drill depth will extend to 2 feet below the proposed structure invert, which is estimated to be approximately 30 feet, and rock coring up to 10 feet. Where refusal is encountered above the planned depth of boring, rock coring will be performed for up to five (5) feet or to a depth of two (2) feet below the structure invert, whichever is less. The boring will be backfilled with soil cuttings.

Upon completion of the geotechnical investigation, ENGINEER will prepare a geotechnical data report summarizing the subsurface conditions observed in the borings and containing the data (boring log, laboratory testing, etc.) collected during the investigation, foundation design recommendations, and construction considerations. Horizontal location of the test hole will be located using GPS services and marked for survey.

Task 800 – Final Design

ENGINEER shall develop the final design of the lift station facilities, which consist of the following:

- A new triplex submersible lift station with two (2) 75 HP submersible pumps and firm capacity of 0.8 million gallons per day (mgd) (550 gallons per minute (gpm)) with expansion capable of up to approximately 2.5 MGD for buildout flows. Design will include site improvements as well as associated electrical (including outdoor standby generator), SCADA, and structural. Site improvements will consist of adding up to 2 feet of fill and relocating structures out of the 100-year flood plain.

Design Drawings and Specifications

ENGINEER shall prepare Contract Documents to include final drawings showing the scope, extent, and character of the work to be performed and furnished by Contractor, and Technical Specifications (which shall be prepared in general conformance with the 50-division format of the Construction Specifications Institute). The OWNER's front end (Division 0) specifications will be used. ENGINEER will develop all technical specifications. The Contract Documents will be developed as a single package assuming one construction project.

Drawings shall be prepared on 22"x 34" sheets. Plan drawings will be at 1" = 10' horizontal scale. Profile drawings for piping is not anticipated. For purposes of establishing a budget the following drawing list has been developed:

General

- Cover and Sheet Index

- General Notes, Abbreviations

Civil

- Pump Station – Existing Site/Demo Plan – Paving, Grading, E&S
- Pump Station – Site Plan and Yard Piping Plan
- Plan and profile for gravity sewer and force main tie-ins
- Civil Details (up to 3 sheets)

Structural

- Structural General Notes and Abbreviations
- Wetwell and Valve Vault Top & Foundation Plan
- Wetwell and Valve Vault Sections and Details
- Odor Control System and Generator Foundation Plans and Sections
- Standard Concrete Details I
- Standard Concrete Details II
- Standard Miscellaneous Metals Details
- Structural Special Inspections I
- Structural Special Inspections II

Mechanical

- Mechanical General Notes & Legend
- Pump Station - Plan and Section I
- Pump Station - Section II
- Odor Control
- Mechanical Details (up to 2 sheets)

Electrical

- Electrical Legend I
- Electrical Legend II
- Electrical Notes
- Electrical Site Plan
- Single Line Diagram
- Riser and Control Diagrams
- Sunset Hills Pump Station Electrical Plan
- Electrical Details

Automation

- Automation Legend I
- Automation Legend II
- System Architecture Drawing (this will show communications interfaces)
- P&ID – Sunset Hills Triplex Pump Station
- P&ID – Odor Control System
- P&ID – Miscellaneous Electrical System Monitoring
- Instrumentation Installation Diagrams I

ENGINEER will provide design documents for OWNER's review at the 60, and 90 percent milestones. Key technical specifications will be provided at the 60 percent milestone and full specifications will be provided at subsequent milestones. ENGINEER will submit the 60 percent, 90 percent and bid set packages electronically in PDF format to the OWNER for review. ENGINEER will meet with OWNER to discuss review comments at the 60 and 90 percent milestones.

The final bid set will be issued after permits have been acquired. Up to three (3) full size and three (3) half size hard copies and an electronic copy (PDF) of the final drawings and specifications will be provided to the OWNER.

Additionally, the ENGINEER will provide a preliminary site plan prior to the 60% submittal for owner review and comment.

Opinion of Probable Construction Costs

The ENGINEER shall update the opinion of probable construction cost (OPCC) at 60 percent and with the final Bid Set.

Deliverables

ENGINEER will provide submittals at the 60 and 90 percent design stages for OWNER review. ENGINEER will meet with the OWNER to discuss review comments for each of the design submittals. Meeting minutes and follow-up action items will be developed and distributed to meeting attendees. After review comments have been addressed from the 90 percent submittal, a Final Bid Set will be developed for bid advertisement.

- 60% Design Submittal includes key technical specifications, a majority of the design drawings and an updated OPCC.
- 90% Design Submittal includes all specifications and design drawings in enough detail to submit signed and sealed sets for permits.
- Bid Set includes final contract documents (all drawings and specifications advanced to 100%) and updated OPCC.

Review Meetings

ENGINEER will meet with OWNER to discuss the preliminary site plan as well as review comments on the 60 and 90 percent submittals.

TASK 900 – Permits and Approvals

ENGINEER will prepare the applications for the required permits and approvals for submittal to the respective agencies. ENGINEER will prepare the submittal packages and submit to the applicable regulatory agency on the OWNER's behalf, unless the OWNER elects to submit them. The following permits and approvals are assumed to be required:

- NCDEQ Fast-Track Sewer System Extension Permit (Pump Station)

- Town of Apex Floodplain Development Permit and No-Rise Certification
- Town of Apex Minor Site Plan and Construction Plan

ENGINEER will coordinate with the regulatory agencies as necessary throughout the permit application and review process. As part of this subtask, once the permit applications are submitted, ENGINEER shall maintain contact with the regulatory agencies to monitor and, where possible, facilitate the review process.

It is assumed that generator included as part of this Project will be an emergency generator and will be exempt from air quality permitting under 15A NCAC 02q .0807.

Permitting fees will be paid by the ENGINEER and have been included as part of the fee. It is assumed that no delineations are needed for jurisdictional Waters of the US or State. It is assumed that no Stormwater Permitting or NCDOT driveway permits will be required.

TASK 1000 – Bidding and Award

ENGINEER shall perform the following services related to Bidding and Award. This Scope of Work assumes that the design will be distributed as a single bid package. Under this task, ENGINEER will distribute bid packages to prospective bidders, attend a pre-bid meeting and develop/distribute meeting minutes to attendees, issue addenda as needed, and prepare a bid tabulation sheet and recommendation to award. Pre-qualification of bidders is not included.

TASK 1100 – Construction Contract Administration

The ENGINEER shall provide Contract Construction Administration services for the construction package based on assumed duration of 12 months from issuance of Contractor Notice-to-Proceed (NTP) to Final Completion. An increase in construction duration will require an Amendment.

ENGINEER shall consult with and advise OWNER and act as OWNER's representative as set forth herein. OWNER's instructions to the Contractor shall be issued through ENGINEER who shall have the authority to act on behalf of OWNER in dealings with Contractor to the extent provided in this Agreement. Conformed drawings and technical specifications will be prepared that incorporate addenda and bid alternatives prior to the start of construction.

Meetings

The ENGINEER shall participate in a pre-construction meeting with the OWNER and contractor to kick-off the Project. An agenda will be developed for the meeting and minutes compiled and distributed to all meeting participants.

The ENGINEER shall meet with OWNER and contractor representative and other key Project team members on a monthly basis to discuss Project progress and all significant issues. A total of 12 monthly progress meetings are assumed.

Project Coordination/Management

The ENGINEER shall coordinate work efforts between all key project team members including the OWNER, subconsultants and other local entities having input into this Project (i.e NCDEQ, etc.). The ENGINEER shall also provide day-to-day project management and adherence to project schedule and budget.

Visits to Site and Observation of Construction

ENGINEER shall make visits to the site at intervals appropriate to the stage of construction to observe as an experienced and qualified design professional the progress and quality of the work and to determine if the work is proceeding in accordance with the Contract Documents. However, ENGINEER's observations shall not be intended to involve work beyond the responsibility specifically assigned to ENGINEER in this Agreement and the Contract Documents. On the basis of on-site observations, ENGINEER shall keep the OWNER informed of the progress and quality of the work and shall alert the OWNER to defects and deficiencies in the work of the Contractor. ENGINEER shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures of construction selected by Contractor or for safety and environmental programs and precautions incidental to the work. ENGINEER shall not be responsible for the failure of the Contractor, their Subcontractors, or any other persons performing any of the work to comply with laws, rules, regulations, ordinances, code, or orders, or for failure of any of them to carry out the work in accordance with the Contract Documents except as otherwise expressly provided herein.

The purpose of ENGINEER's visits to the site shall be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase, and, in addition, by the exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for OWNER a greater degree of confidence that the completed work of Contractor shall conform to the Contract Documents, and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor.

Up to one half day per week during the assumed 12-month construction duration has been included for onsite observation by the ENGINEER (in addition to the OWNER'S RPR). When possible, the site visits shall coincide with monthly progress meetings.

Defective Work

ENGINEER shall have authority to disapprove or reject Contractors' work while it is in progress if ENGINEER believes that such work does not conform to the Contract Documents or that it will prejudice the integrity of the design concept of the Project as reflected in the Contract Documents. ENGINEER shall have access to the work at all times.

Shop Drawings

ENGINEER shall review and approve or take other appropriate action with respect to Shop Drawings, samples, and other data which Contractor is required to submit, but only for conformance with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents and in compliance with the information given in the Contract Documents. Such reviews or other action shall not

include means, methods, techniques, sequences, or procedures of construction or safety programs and precautions incident thereto. It is assumed that shop drawings will be reviewed no more than twice by ENGINEER, and that subsequent submittal reviews will be at the Contractor's expense. Up to 25 shop drawings have been assumed for this Scope of Work.

Clarifications and Interpretations: Field Orders

ENGINEER shall issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the work. ENGINEER will respond to Request for Information (RFI) submittals from the Contractor. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. ENGINEER may issue Field Orders authorizing minor variations from the requirements of the Contract Documents. Field Orders shall not involve change in Contract Price or Time. Up to six (6) RFI's have been assumed for this Scope of Work.

Change Orders and Work Change Directives

ENGINEER shall recommend Change Orders and Work Change Directives to OWNER as appropriate and shall prepare Change Orders and Work Change Directives as required. ENGINEER shall not issue such Change Orders and Work Change Directives until OWNER has approved and accepted Contractor's cost and schedule change to implement such Change Orders and Work Change Directives. Up to three (3) work change directives have been assumed for this Scope of Work.

Substitutes

ENGINEER shall evaluate and determine the acceptability of substitute materials and equipment proposed by Contractor.

Inspections and Tests

ENGINEER shall make recommendations to OWNER regarding the advisability of requiring special inspections or testing of the Work and have authority to receive and review all certificates of inspections, testing, and approvals required by laws, rules, regulations, ordinances, codes, orders, or the Contract Documents to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents. It is assumed OWNER will contract separately with a special inspections firm, and that ENGINEER will review the results of those tests and inspections.

Disagreements between OWNER and Contractor

ENGINEER shall act as initial interpreter of the requirements of the Contract Documents, judge the acceptability of the work, and make decisions on all claims of OWNER and Contractor relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. In rendering such decisions, ENGINEER shall be fair and not show partiality to OWNER or Contractor and not be liable for the results of any such interpretations or decisions rendered in good faith. This Scope of Work assumes that no mediation, litigation, or other legal and/or third-party involvement for change orders, liquidated damages, or disagreements between OWNER and Contractor shall be required.

Applications for Payment

Based on ENGINEER's on-site observations as an experienced and qualified design professional and on review of Applications for Payment and the accompanying data, and schedules ENGINEER shall determine the amounts that ENGINEER recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute ENGINEER's representation to OWNER, based on such observations and review, that, to the best of ENGINEER's knowledge, information and belief, the work has progressed to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractors being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the work. In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents). The responsibilities of ENGINEER contained in this task are expressly subject to the limitations set forth herein and other express or general limitations in this Agreement and elsewhere.

Contractor's Completion Documents

ENGINEER shall receive, review, and transmit to OWNER with written comments maintenance and operating instructions, schedules, guarantees, certificates of insurance, marked-up record drawings (including shop drawings, samples and other pertinent data), bonds, certificates of inspection, and tests and approvals of equipment which are to be provided by Contractor in accordance with the Contract Documents. ENGINEER shall determine that their content complies with the requirements of the Contract Documents.

Substantial Completion

Following notice from Contractor that Contractor considers the entire work ready for its intended use, ENGINEER and OWNER, accompanied by Contractor, shall conduct one (1) inspection to determine if the work is substantially complete. If after considering any objections by the OWNER, ENGINEER considers the work substantially complete, then ENGINEER shall deliver a notice of substantial completion to OWNER and Contractor.

ENGINEER shall conduct a final inspection to determine if the completed work is acceptable to ENGINEER and OWNER so that ENGINEER may recommend, in writing, final payment to Contractor and may give written notice to OWNER and Contractor that the work is acceptable, subject to any conditions therein expressed. Accompanying the recommendation for final payment, ENGINEER shall indicate that the work is acceptable to the best of ENGINEER's knowledge, information, and belief and based on the extent of the services performed and furnished by ENGINEER under this Agreement.

ENGINEER shall provide ENGINEER's certification that the work has been completed in accordance with OWNER's approved plans and specifications.

Final notice services will be performed for the construction contract.

Final Notice of Acceptability of Work

Prior to final payment to the Contractor, and in company with the OWNER, ENGINEER shall visit the Project to observe any apparent defects in the completed work, assist OWNER in consultations and discussions with Contractor concerning correction of such defects, and make recommendations as to replacement or correction of defective work.

TASK 1200 – Start-up

The ENGINEER shall provide start-up services for the new pump station and associated equipment after final completion of all work has been performed. An operations and maintenance manual will be developed for the constructed facilities. Related subtask described below.

On-Site Startup Support

ENGINEER shall provide startup assistance for the constructed facilities. The ENGINEER shall provide an operations and maintenance (O&M) Specialist for up to 1 day of on-site support to assist the OWNER in the testing and commissioning of the project.

In addition, an O&M Specialist will review the contractor's startup and testing program and instructions for field, performance testing, and manufacturer's startup activities, including checkout, testing and initial operations. Written comments will be provided to the OWNER and contractor after review.

An O&M Specialist will observe the contractor's startup activities, wet testing and performance testing and initial startup and operation by manufacturer's representatives. The O&M Specialist will observe, witness, and document all startup and testing activities of the contractor and manufacturer and provide written documentation to the OWNER.

An O&M Specialist will review the vendor supplied O&M manuals for compliance with specifications for level of detail and appropriateness of the manual content. The vendor manuals will be reviewed for appropriate guidance to maintain and repair the installed equipment, as well as providing trouble-shooting guidelines, and appropriate component information.

TASK 1300 – Record Drawings and Closeout

ENGINEER shall prepare a set of reproducible record prints of Record Drawings showing those changes made during the construction process based on the marked-up prints, shop drawings, drawings, and other data furnished by the Contractor to ENGINEER for the bid package. The record prints shall also incorporate the changes made during construction. ENGINEER shall provide a signed and sealed pdf of the record drawings as well as the electronic drawing files (in the latest version of AutoCAD or such version as the parties agree to the OWNER).

3.0 ASSUMPTIONS

The ENGINEER has made the following assumptions in addition to the assumptions included in the scope of services listed above. Changes to these assumptions can be included as an Amendment to this Agreement.

- Only the permits included in Task 900 will be required.
- Permanent and/or temporary easements will not be required
- Cathodic protection for pipelines will not be required.
- ENGINEER may rely upon the accuracy of OWNER provided data for the execution of the Project.
- Up to one (1) bidding phase will be performed

4.0 OWNER'S RESPONSIBILITIES

The responsibilities of OWNER in addition to those in the main agreement are as follows:

- Provide ENGINEER with all requested data.
- Provide access to site as needed.
- OWNER shall provide review comments on submittals within two (2) weeks of receipt of deliverable.
- OWNER shall pay all Stormwater NPDES coverage annual fees, and other fees not specifically listed in this Scope of Work.
- OWNER shall coordinate communications with other Town Departments, such as the Planning and Parks and Recreation Services.
- OWNER will provide a RPR full-time for a more continuous observation of work than described in Task 1100 performed by the ENGINEER.

5.0 SCHEDULE

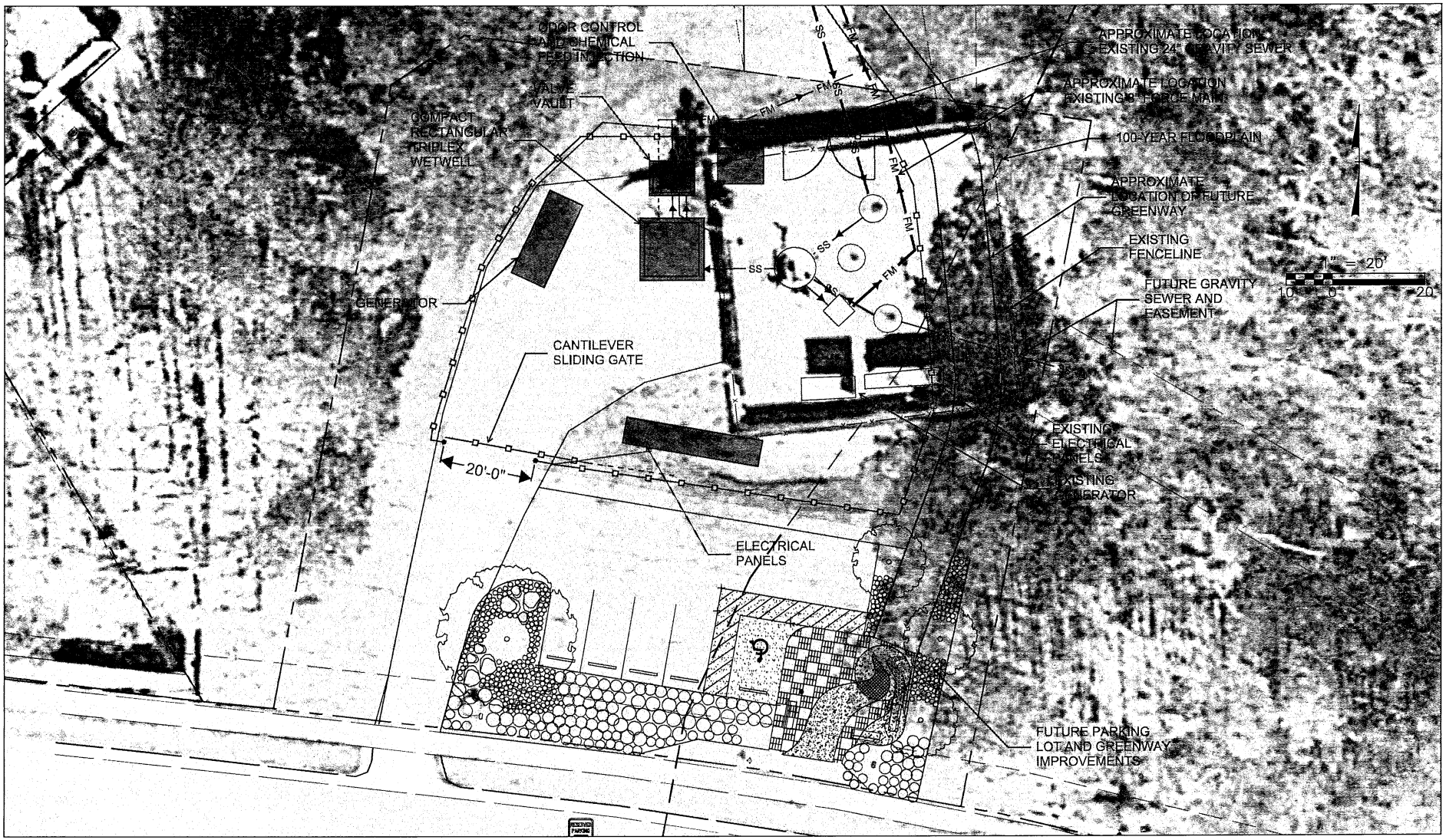
It is anticipated that the project will take twenty-six (26) months to complete, starting within two weeks of receipt of a formal notice to proceed (NTP). ENGINEER will prepare an updated detailed schedule within the first thirty (30) calendar days after NTP. Should schedule shift or extend due to OWNER or Contractor delays, an amendment will be necessary.

6.0 PAYMENT AND COMPENSATION

Total compensation to the ENGINEER for the work described above shall be a lump sum fee not to exceed of $537,600 unless changed by a duly authorized amendment. Invoices will be submitted monthly based on estimated project percent complete, with a final invoice submitted once all project deliverables are completed. Additional services, if applicable and approved by the OWNER, will be compensated at an agreed upon lump sum fee. The cost breakdown per task is presented in the table below.

Task	Description	Lump Sum
Task 500	Project Management and Meetings	$37,100
Task 600	Surveying and Mapping	$11,800
Task 700	Geotechnical Investigation	$10,000
Task 800	Final Design	$278,300
Task 900	Permits and Approvals	$41,200
Task 1000	Bidding and Award	$19,200
Task 1100	Construction Contract Administration	$115,000
Task 1200	Start-up	$8,000
Task 1300	Record Drawings and Closeout	$17,000
	TOTAL =	**$537,600**

FIGURE 1 - PROPOSED SURVEY LIMITS



CDM Smith

May 2021