SECTION 011100

SUMMARY OF WORK

PART 1 GENERAL

1.01 LOCATION OF WORK

A. Work is located at 11 well stations throughout Morris County for the Southeast Morris County Municipal Utilities Authority (SMCMUA).

1.02 DELINEATION OF CONTRACT WORK

A. The Work under the Chemical Feed Systems Upgrade Project shall be separated into the following contracts. The scope of work is described in Paragraph 1.03.

B. Owner performed work

C. General "G" Contract

D. The "Contractor" shall refer to the bidder awarded Contract G for work items throughout the drawings and specifications. Paragraph 1.03 clarifies the specific work items for each contract.

1.03 SCOPE OF WORK

A. Furnish all labor, materials, equipment and incidentals required to perform the Work as shown on the Contract Drawings and specified herein.

B. The following will be performed by the Owner, unless otherwise noted on the individual station drawings:

1. Demolition and disposal of process mechanical components of the chemical feed systems, including piping, chemical tanks, chemical injection, scales, concrete pads, pumps, hose bibs, tank mixers, tablet chlorination units.

2. Relocation of equipment including SCADA, hose bibs, empty panels, dust pans, brooms, cabinets, chlorine analyzers, pH analyzers.

3. Furnish, install and test all new process mechanical components of the chemical feed systems including piping, valves, appurtenances, chemical feed skid with splash containment shelf, chemical tanks, drum transfer pumps, tank fill connections, chemical injection, and wall penetrations.

4. Furnish, install, calibrate and test all new instrumentation including spill containment scales, leak detectors, level instruments, alarms, pH analyzers, and chlorine analyzers.
5. Furnish, install and test all new control panels and RTUs.

6. Termination of control wires into control panel and instrumentation.

7. Termination of all electrical wiring to equipment and panels supplied by Owner.

8. Perform pipeline cleaning, testing and disinfection of interior piping.

9. Perform integration and programming of all new equipment.

10. Perform testing and startup of process equipment, instrumentation and control panels.

C. The following shall be performed by the Contractor under Contract G, unless otherwise noted on the individual station drawings:

1. Mobilization and demobilization from the sites.

2. Perform all field engineering and surveying.

3. Preparation of submittals, monthly progress reports and as-built record drawings.

4. Provide construction photography.

5. Installation of temporary facilities, including design where appropriate, required to stage personnel, equipment and materials necessary to perform the Work.

6. Implementation of erosion, sedimentation and pollution control measures.

7. Perform clearing, grubbing, dewatering.

8. Installation of temporary gates and fences for security of site and materials.

9. Perform test pits as required to locate existing underground utilities.

10. Demolition of structural and masonry components including concrete curbs, foundations, doors, walls, windows, concrete platforms, stairs, containment platform ramps, aluminum platforms.

11. Demolition of electrical components for mechanical and electrical equipment being demolished or relocated, such as conduit and wiring, for the existing tablet chlorination units, chemical feed systems, transformers, disconnect switches, scales.

12. Demolition of electrical equipment including lighting panels, transformers, outlets,
main breakers, junction boxes, power panels, MCCs, and receptacles.

13. Demolition and/or relocation of HVAC components including thermostats, heaters, fans.

14. Demolition and disposal of plumbing components including eyewash/showers.

15. Furnish, install and test (where applicable) all new civil components including grading, underground pipe installation for water and sanitary piping, asphalt pavement, concrete curbs, gravel, connection to sanitary sewers, fences.

16. Furnish, install and test all new structural and masonry components including foundations, new brick and CMU buildings, relocation and retrofitting of existing pre-engineered buildings, relocation of stairs, foundation penetrations, concrete curbs, concrete pads, floor coatings.

17. Furnish, install and test all new plumbing components, including the eyewash/showers and hot water heaters, lab sinks, water piping and valves, backflow preventers, drain piping to exterior.

18. Furnish, install and test all new HVAC components, including exhaust fans, louvers, fans and heaters.

19. Relocation of electrical components, including conduit, wiring and junction boxes, for equipment being relocated, such as tablet chlorination units, chemical feed systems, transformers, disconnect switches.

20. Furnish, install and test all new electrical components including wiring, conduit, lighting, lighting panels, meter bases, main breakers, transformers, disconnect switches, receptacles. Contractor to terminate wires to equipment supplied by Contractor.

21. Furnish and install conduit and wiring for instrumentation, equipment and control panels provided by Owner. Owner to terminate wires to items supplied by Owner.

22. Perform landscaping and re-vegetation of all disturbed areas.

23. Install new paving and perform milling and paving for any disturbed pavement.

24. Reconstruction of disturbed concrete walkways and curbs;

25. Disposal of all excess or unsuitable materials.

26. Perform general cleanup and site maintenance.
27. Obtain all building permits, dewatering permits for foundations and occupancy certificates.

1.04 WORK SEQUENCE

A. Perform Work in sequence to ensure completion of the Work in the Contract Time based on SMCMUA's schedule. Completion dates of the various stages shall be in accordance with the approved construction schedule submitted by the Contractor.

B. SMCMUA must be able to supply drinking water to its customers at all times during construction. The allowable shutdown time shall be approved by the Owner at least 14 days in advance of the scheduled shutdown. Shutdowns may be subject to season, weather and current plant operations. Some stations are limited to a 24 hour shutdown. Written approval from the Owner shall be obtained prior to any shutdowns.

C. The Work described herein for Contract G shall be completed in 2020 for the following stations. The completion dates below are the dates by which the chemical feed upgrades and associated support systems, such as electrical and plumbing components, shall be fully operational and in use by the Owner.

1. Complete upgrade to Lidgerwood Well Station – May 1, 2020
2. Complete upgrade to Turnbull Well Station – May 1, 2020
3. Complete upgrade to Littleton Well Station – June 1, 2020
4. Complete upgrade to Todd Well Station – June 1, 2020
5. Complete upgrade to Black Brook Well Station – July 1, 2020
6. Complete upgrade to Magyar Well Station – July 1, 2020
7. Complete construction of Wing Well Addition and all upgrades – August 1, 2020
8. Complete upgrade to McCabe Well Station – September 1, 2020
9. Complete upgrade to Jockey Hollow Pump Station – October 1, 2020
10. Complete construction of W. Hanover Meter Building – November 1, 2020
11. Complete upgrade of Shongum Pump Station – December 1, 2020
12. Complete upgrade of Clyde Potts Treatment Plant – December 31, 2020
13. Complete all work - December 31, 2020

1.05 CONTRACTORS' USE OF PREMISES

A. Contractor shall limit its use of the premises to easements and public streets for their Work and for storage to allow for Owner Occupancy.

B. Coordinate use of premises with Owner and Engineer.

C. Contractor shall assume full responsibility for security of all their personnel and subcontractors' materials and equipment stored on the site.
D. If directed by the Owner or Engineer, move any stored items which interface with operations of Owner or other contractors or public access.

E. Obtain and pay for use of additional storage or work areas if needed to perform the Work.

1.06 OWNER OCCUPANCY

A. Owner will occupy premises during performance of the work for the conduct of their normal operations. Coordinate all construction operations with Owner to minimize conflict and to facilitate Property Owner use of affected lands.

END OF SECTION