STATEMENT OF WORK (SOW):

PROJECT NO.: 632-25-101

PROJECT NAME: Upgrade of Chiller Plant

Project Background:

Chiller, medical vacuum and medical air equipment servicing the Northport Veterans Administration Medical Center (VAMC), located at 79 Middleville Road, Northport, NY 11768, is nearing the end of its useful life. The project will remove existing equipment and associated services, upgrade and expand the sub-basement Mechanical Equipment Room (MER), and install new upgraded equipment and associated services/connections to replace the removed components.

This project shall furnish all necessary professional Construction services to upgrade the chiller plant in accordance with the project drawings, specifications and Veterans Administrations guidelines for the Northport VAMC.

Contractor shall provide all labor, material, tools, equipment, expertise, administration, supervision, and transportation as necessary to perform all work in accordance with provided contract documents attached to the contract.

Work associated with the project, titled "Upgrade of Chiller Plant" numbered 632-25-101, shall be located within and adjacent to building 200 and shall be split into two phases. Phase 2 work shall not commence until all work, identified as phase 1 has been completed and phase 1 equipment is providing uninterrupted service to the VAMC.

This project shall demolish the existing equipment and portions of the services of the chiller plant, medical air and medical vacuum systems. New work shall include the renovation of the existing MER, construction of new spaces adjacent to the MER and the installation of new chiller plant, medical air and medical vacuum equipment along with the connection to the associated systems. New spaces will be constructed for the expansion of the MER and installation of the new equipment. Temporary chillers shall be furnished, installed and start servicing the VAMC during phase 1 and shall be maintained throughout the renovation, providing uninterrupted chilled water to the VAMC until the new chiller plant is fully functional. An expansion of the MER to house new chiller pumps and a lift station shall be constructed adjacent to the MER. The new medical gas equipment, the medical air and medical vacuum systems, shall be furnished and installed within a new space called Medical Gas Room. The medical gas equipment shall start servicing the VAMC during phase 1, shall be fully maintained during phase 2 and remain in service once the project is completed. The Medical Gas Room shall be constructed within the unexcavated area on the East side of the MER.

Scope of Work:

1. The following lists provide a brief description of the project scope:
   A. Architectural – Work scope shall include but not be limited to:
      1) General:
         A) Demolition as required to prepare work areas for new installations.
         B) Excavations and regrading in areas of new work.
            a. Excavation work shall not undermine the existing foundation of the building.

C) Construction of floor slabs, stair, ramp, CMU walls, ceilings, and installation of new swing doors, frames and hardware.
D) Patch to match existing wall openings that are no longer in use.
E) Preparation, of existing and new building components, and installation of new finishes.
F) Installation of fire penetration protection as required by assembly ratings.

2) PHASE 1: The following work shall be completed prior to issuance of a notice to proceed for the start of Phase 2 work. This work is required to prepare the MER for the Chiller Plant upgrade. Phase 1 work scope shall include the following:
   A) Medical Gas Room - The complete construction of the Medical Gas Room, a new room approximately 22'-1" x 15'-0" in area, located beyond the southeast corner of the MER in the unexcavated area of the sub-basement.
      a. Demolition as required for new work. This includes excavations, re-grading, demolition and/or relocation of MEP equipment and services to prepare the space for the new installations.
      b. Installation of a new floor slab with a hunched footing. The new floor slab shall be 5-inch-thick concrete, set level, at a finished floor elevation of minus one foot, one inch (- 1'-1") below the existing MER slab.
      c. Two (2) 4" high housekeeping equipment pads sized for the medical gas equipment shall be installed.
      d. Perimeter walls of the new space shall use the existing cast in place concrete MER walls and install new walls as described herein. The existing MER walls shall serve as the north and west walls of the new space. For the new south and east walls, install CMU walls extending from top of slab to 10'-8" above the finished slab or 9'-7" above the existing MER room floor.
      e. In the existing cast in place concrete wall, remove the existing fan, motor and housing completely and modify the existing 4'-0" x 4'-0" fan opening to provide a 4'-0" wide by 2'-0" high opening for the installation of two (2) new fans.
      f. A walkable ceiling will enclose the room and provide maintenance a platform for servicing mechanical systems above.
      g. The room interior will be exposed to the underside of the walkable ceiling structure above.
      h. Two (2) double swing doors, 6'-0" wide by 7'-2" high, with door frames and hardware shall be installed in the east wall.
      i. Coordinate with MEP documents for required service removals, relocations and installations.
      j. Room finishes shall be as follows:
         i. Floors - resinous epoxy or urethane.
         ii. Base – 4" high integral resinous coved base.
         iii. Walls - epoxy paint.
         iv. Ceiling - exposed to the underside of the walkable ceiling above.
   B) Chiller Pump Room - The complete construction of the Chiller Pump Room, this is an expansion of the MER located adjacent to the southwest corner of the MER, encompassing approximately 39'-0" x 22'-6" in area, of the sub-basement.
      a. Demolition as required for new work. This includes saw-cutting of an existing floor slab, demolition of a portion of the slab, excavations, re-grading,

demolition and/or relocation of MEP equipment and services to prepare the space for the new installations.

b. Installation of a new floor slab with a hunched footing. The new floor slab shall be 6-inch-thick concrete, set level with the existing MER finished floor.
c. Installation of a concrete stair with handrails.
d. Installation of a concrete ramp.
e. Two (2) 4” high housekeeping equipment pads sized for the equipment to be installed.
f. Installation of a concrete ejector pit.
g. Perimeter walls of the new space shall use the existing cast in place concrete walls and install new walls as described herein. The existing western building foundation wall shall be utilized for the western wall of the space. The existing Southern wall of the MER shall serve as the north wall of the new space. For the new southern and eastern walls, install CMU walls extending from top of slab to underside of the structure/deck above. Install penetration openings as required for new and existing ductwork, piping and conduits.
h. The room interior will be exposed to the underside of the structure/deck above.
i. Two (2) swing doors with door frames and hardware shall be installed. One door shall be a double swing door, 6’-0” wide by 7’-2” high installed in the eastern wall, and the other shall be a single swing door 3’-0” wide by 7’-2” high installed in the southern wall.
j. Coordinate with MEP documents for required service removals, relocations and installations.
k. Room finishes shall be as follows:
    i. Floors - resinous epoxy or urethane.
    ii. Walls - epoxy paint.
    iii. Base – integral resinous coved base.
    iv. Ceiling - exposed to the underside of the structure/deck above.

3) <u>PHASE 2:</u> Phase 2 work scope shall commence after completion and acceptance of all phase 1 work. Phase 2 work scope shall include all other work associated with the contract as noted below and as shown in the contract documents.
   A) <u>Mechanical Equipment Room (MER)</u> – The renovation of the MER as required for the removal and installation of equipment.
      a. Demolition as required for new work. This includes the removal of the existing Employee Break room and all associated accessories, caged enclosures, housekeeping pads, portions of floor slabs as required for demolition and new service installations, excavations, and the preparation of surfaces for new finishes.
      b. New Construction shall consist of preparation of the existing space for new installations.
      c. New construction work shall include patching of opening in floor slabs, and walls no longer in use and not required for new installations.
      d. Patching of sections of floor slabs removed for floor drain and under-slab piping removal and installation.
      e. Installation of new equipment housekeeping pads. (Coordinate sizes and locations with MEP work.)

f. Installation of fire penetration protection as required by assembly ratings.
g. The MER room interior will be exposed to the underside of the structure above.
h. MER Room finishes shall be as follows:
   i. Floors - resinous epoxy or urethane.
   ii. Walls - epoxy paint.
   iii. Base – 4" high coved resinous epoxy or urethane base.
   iv. Ceiling - exposed to the underside of the structure above.

B) Climate Control Room – This room functions as the control room for mechanical equipment serving the Medical Center. Panels no longer in use will be removed along with the associated housekeeping pad. Room finishes will be renovated or replaced with new.
   a. Demolition as required for new work. This includes the removal of;
      i. Some of the existing equipment and associated services. (Coordinate extent with MEP work.)
      ii. Saw-cutting and removal of a portion of the housekeeping pad.
      iii. Quarry tile floor finish and mud base.
      iv. Ceiling tiles, grids and ceiling mounted MEP components.
      v. The preparation of surfaces for new finishes.
   b. New Construction shall consist of preparation of the existing and installation of new finishes.
      i. Room finishes shall be as follows:
         - Floors - resinous epoxy or urethane.
         - Walls - epoxy paint.
         - Base – At existing housekeeping pad and concrete/masonry walls, 4" high coved resinous epoxy or urethane base. At prefabricated walls, 4" high vinyl coved base.
         - Ceiling – Installation of new ceiling tiles, grids and ceiling mounted MEP components.

B. Structural – Work scope shall include but not be limited to:
   1) PHASE 1:
      A) Concrete slab installations.
      B) Concrete housekeeping pad installations coordinated with equipment selected.
      C) Masonry wall installations.
      D) Roof above the Medical Gas Room.
      E) Drains and piping installations.
      F) Support for piping and conduits.
      G) Outside equipment pads for temporary equipment.
   2) PHASE 2:
      A) Concrete housekeeping pad installations coordinated with equipment selected.
      B) Trench drains and piping installations and slab repair.
      C) Support for piping and conduits.

C. Mechanical – Work scope shall include but not be limited to:
   1) PHASE-1: Construction of temporary chilled water system
      A) Prior to submitting a bid, Contractor will examine the areaway at the entrance to the chiller plant, where demolished equipment is to be removed and where new equipment is to be rigged into plant. Contractor shall also examine the area

where temporary chillers are to be located and the path where demolished equipment and new equipment will be transmitted.

B) Prior to any demolition or new construction, contractor shall test and record existing chilled water flow rates for Building 200, Buildings 8 and 9, Building 200N and AC-11 (Chiller Plant). Submit test report to the COR for review.
C) Remove existing booster pump and store as directed by VAMC.
D) Demolish existing outdoor pipe manifold and construct new pipe manifold, tie into existing supply and return pipe headers.
E) Furnish and install new temporary chilled water supply and return piping from existing pipe headers into chiller plant including stop valves, strainers, balancing valves, pipe supports and all accessories and appurtenances; extend and connect to existing piping systems for Building 200, Buildings 8 and 9, Building 200N and AC-11 (Chiller Plant).
F) Insulate all existing and new chilled water piping at piping manifold. Insulate all new chilled water piping inside chiller plant; repair insulation and repair pipe insulation at new tie-ins to piping for Building 200, Buildings 8 and 9, Building 200N and AC-11 (Chiller Plant).
G) Demolish four existing abandoned piping runs in the chiller plant.
H) Furnish two temporary nominal 450-Ton chillers on site for duration of chiller replacement project. Tie into outdoor chilled water manifold with flexible hoses.
I) Leave a path for delivery of new chillers under Phase-2 construction.
J) All required rigging.

2) <u>PHASE-2:</u> Replace existing chillers.
   A) Isolate chilled water systems for Building 200, Buildings 8 and 9, Building 200N and AC-11 (Chiller Plant) from chiller plant.
   B) Reclaim refrigerant from four (4) existing nominal 700-Ton chillers.
   C) Demolish four (4) nominal 700-Ton chillers, including accessories and appurtenances, in their entirety.
   D) Demolish four (4) existing chilled water pumps, including insulation, valves, check valves, strainers, control valves, controls, accessories and appurtenances, in their entirety.
   E) Demolish plate and frame heat exchanger including controls, accessories, appurtenances, etc. in its entirety.
   F) Demolish chilled water piping, where indicated, inside the chiller plant including insulation, valves, supports, expansion tank, air separator, chemical shot feeder, etc.
   G) Demolish existing condenser water pumps, including valves, check valves, strainers, control valves, controls, accessories and appurtenances in their entirety.
   H) Demolish condenser water piping, where indicated, inside the chiller plant including valves, supports, chemical water treatment systems, etc. The existing cooling towers remain and are to be reused.
   I) Demolish existing refrigerant exhaust piping from each of the four chillers where indicated; retain existing common riser pipe inside the chiller plant and outside the building for reuse under new construction.
   J) Furnish and install four (4) new nominal 800-Ton water cooled centrifugal chillers. The chillers will require breakdown at the riggers yard by the

manufacturer's technicians and reassembly in the chiller plant by the manufacturer's technicians. Contractor will examine the areaway at the entrance to the chiller plant, where equipment is to be rigged into plant, prior to submitting a bid.

K) Furnish and install four (4) new vertical split case chilled water pumps with VFD drives including accessories and appurtenances.
L) Furnish and install two (2) new vertical split case secondary chilled water pumps with VFD drives including accessories and appurtenances.
M) Furnish and install two (2) new vertical split case tertiary chilled water pumps with VFD drives to serve building 200 including accessories and appurtenances.
N) Furnish and install two (2) new vertical split case tertiary chilled water pumps with VFD drives to serve building 200N including accessories and appurtenances.
O) Furnish and install two (2) new vertical split case tertiary chilled water pumps with VFD drives to serve buildings 8 and nine including accessories and appurtenances.
P) Furnish and install four (4) new vertical split case condenser water pumps with VFD drives including accessories and appurtenances.
Q) Furnish and install plate and frame heat exchanger including stop valves, strainers, balancing valves, control valves, expansion tank, air separator and all accessories and appurtenances.
R) Furnish and install new chilled water piping for a primary, secondary, tertiary chilled water system, including stop valves, strainers, balancing valves, control valves, pipe supports, expansion tank, air separator and all accessories and appurtenances.
S) Furnish and install new condenser water piping including stop valves, strainers, balancing valves, control valves, pipe supports, all accessories and appurtenances.
T) Furnish and install new make-up water piping system with an RPZ, etc., connected to the new expansion tank including pressure relief valve, stop valves, strainer, pipe supports, insulation, accessories and appurtenances.
U) Furnish and install new refrigerant exhaust piping from new chillers including pipe supports; tie into existing exhaust riser in chiller plant.
V) Furnish and install new heat recovery system including piping, valves, pumps, pipe supports, insulation, accessories and appurtenances, etc. Tie into existing domestic water system.
W) Sheet metal work including modification to existing Chiller Plant emergency exhaust system, including accessories and appurtenances.
X) Insulate all chilled water piping including colored PVC jacket for indoor piping and aluminum jacket for outdoor piping.
Y) Relocate existing air compressor; include compressed air piping to tie back into existing system.
Z) Clean existing cooling towers of all dirt and scale, lubricate tower fans, etc. Inspect existing controls, etc. and report any deficiencies to the COR.
AA) Provide testing and balancing for air and water systems.
BB) Furnish and install shot feeder and corrosion inhibitor chemical for chilled water system.

CC) Furnish and install chemical system for condenser water including corrosion inhibitor chemicals and biocides, chemical storage tanks, injection quills, pumps, corrosion coupon rack, conductivity sensor and automatic blowdown, etc.

DD) Provide all rigging.

EE) Furnish and install new DDC controls; the DDC controls shall be an extension of the facility's Johnson FX system including unitary controllers, pressure and temperature sensors, control wiring. Additionally, controls shall include all control logic design and graphics for new chillers, pumps, existing cooling towers for a complete chilled water/condenser control system in every respect. New DDC controls shall be tied into the facility's BMS.

D. Electrical – Work scope shall include but not be limited to:

1) PHASE 1:

A) Provide power to two temporary nominal 450-Ton chillers from the existing electrical 5kV distribution in Building 200. Install temporary 5kV feeder from main electrical switchgear room to temporary chillers. Temporary feeder shall be tapped on the secondary side of 13.2kV-4.16kV transformer and shall be installed in the RGS conduit for the entire length. Install temporary 4.16kV-480V step-down transformers with required overcurrent protection and disconnecting means to supply temporary chillers with all accessories and appurtenances.

B) Establish temporary power and lighting in the project area prior to demolition of existing systems.

C) Provide power for medical vacuum and medical air systems from existing Motor Control Center (MCC) located in Building 200 climate control room. Provide all required modifications to MCC to accommodate new circuit breakers to supply both systems.

D) Selectively demolish electrical power including conduits, supports, controls, etc. to chillers and related components, pumps, lighting fixtures, etc. as indicated on demolition plans. Prior to any demolition work, all circuitry serving the chiller plant shall be traced out and labeled by the contractor.

2) PHASE 2:

A) Provide power to four new chillers from Automatic Transfer Switches (ATSs) installed and tested under separate contracts. Contractor shall provide power feeders from ATSs to new chillers as indicated on design documents. Feeders shall be extended to two quick-connect panels furnished with key interlock system. Quick connect panels shall be installed outdoors as noted on plans

B) Install new emergency distribution boards and electrical panels as indicated on plans. Install new feeders and branch circuitry to support chiller plant upgrade.

C) Provide new lighting fixtures and lighting controls throughout the area of work as noted on plans. New lighting fixture placement shall be coordinated with and not restricted by new equipment and piping systems.

D) Provide power to new chilled water, secondary chilled water, tertiary chilled water, condenser water pumps as noted on mechanical plans. All pumps shall be provided with VFDs. Pumps shall be supplied from new emergency distribution boards as noted on design documentation.

E. Plumbing – Work scope shall include but not be limited to:

1) PHASE 1:

A) Install new quadruplex medical vacuum source pump skid.

B) Install new quadruplex medical air source pump skid.
C) Install duplex sewage ejector pumps and pit assembly.
D) Install new WAGD piping from new first (1st) floor OR rooms (under separate project) to the new medical vacuum source pump at the sub-basement & commission the system.
E) Install new medical vacuum supply and exhaust piping from existing system to the new med air/vac pump room (as shown on the drawings).
F) Install new medical air inlet and supply piping from existing system to the new med air/vac pump room (as shown on the drawings).
G) Install new medical vacuum supply and exhaust piping from existing system to the new med air/vac pump room (as shown on the drawings).
H) Tie-in Medical Vacuum supply and exhaust piping to new vacuum source pumps & commission the system.
I) Tie-in Medical air inlet and supply piping to new medical air source pumps & commission the system.
J) Install new floor drains in chiller pump room and new medical air/vac room with all associated waste and vent piping.
K) Refer to electrical drawings for required electrical work.

2) PHASE 2:
   A) Install new trench drains, floor drains and associated waste and vent piping in chiller plant.
   B) Install new domestic cold, hot water and hot water return piping for new hose bibbs, and new plumbing fixtures, including backflow preventers for HVAC equipment make up water connection(s).
   C) Install new plumbing fixtures as shown on drawings.
   D) Tie-in WAGD piping to new vacuum source pumps.
   E) Remove existing medical air and vacuum source equipment upon commissioning of new replacement equipment and final approval from Northport VAMC.
   F) Refer to electrical drawings for required electrical work.

F. Fire Protection – Work scope shall include but not be limited to:
   1) PHASE 1:
      A) Remove existing fire protection piping, sprinkler heads and associated components as shown on drawings.
      B) Install new fire protection piping, sprinkler heads and associated components as shown on drawings.
      C) Refer to electrical drawings for required electrical / fire alarm work.
   2) PHASE 2:
      A) Remove existing fire protection piping, sprinkler heads and associated components as shown on drawings.
      B) Install new fire protection piping, sprinkler heads and associated components as shown on drawings.
      C) Refer to electrical drawings for required electrical / fire alarm work.

Performance Period:

1. The contract completion time is 730 calendar days from receipt of Notice to Proceed.
2. The Medical Center must maintain its operation 24 hours a day 7 days a week. Therefore, any interruption in service shall be minimized and shall be scheduled and coordinated with

the COR to ensure that no lapses in operation occur. It is the CONTRACTOR'S responsibility to develop a work plan and schedule defining the duration of the work with milestone subtasks.

3. Arrange such phasing dates to ensure accomplishment of this work in successive phases mutually agreeable to COR and Contractor, as follows:
   A. Phase 1:
      1) Medical Gas Room
         a. Full room fit out
         b. Medical Vacuum Equipment
         c. Medical Air Equipment
         d. All associated service connections, accessories and appurtenances.
      2) Chiller Pump Room
         a. Full room fit out
      3) Temporary Chillers
         a. Full site preparation
         b. Temporary Chillers installed
      4) Equipment startup and servicing the Medical Center
   B. Phase 2:
      1) Mechanical Equipment Room (MER)
         a. Demolition
         b. Full room fit out
         c. Equipment installations
         d. All associated service connections, accessories and appurtenances.
      2) Chiller pump room
         a. Equipment installations
         b. All associated service connections, accessories and appurtenances.
      3) Climate Control Room
         a. Demolition
         b. Full room fit out
         c. Equipment installations
         d. All associated service connections, accessories and appurtenances.
      4) Equipment startup
4. Core working hours for contractors to follow at the site are 8:00AM to 4:30PM unless indicated otherwise in the contract documents or as follows.
5. Work at the VAMC site shall not take place on Federal holidays, weekends and/or after hours unless directed by the CO.
6. After-hours work is to be expected for working in sensitive areas, which shall be directed by the COR and authorized by the CO.
7. Certain construction activities such as but not limited to the use of noise and/or vibration generating equipment (including demolition, drilling for anchor installation, etc.) shall be performed off normal working hours.
8. Certain construction activities such as utility shutdowns, rigging of equipment or materials, use of noise and/or vibration generating equipment (including demolition, drilling for anchor installation, etc.) shall be coordinated with the COR and shall be done within designated time periods that may include off hours or weekends even if not explicitly called out in the contract documents. The determination will be made during the coordination with the facility. Contractor shall provide a written notice to the COR, a minimum of 27 calendar days

prior of the intended activity to coordinate with the facility the exact date and start to finish times for such work.

9. If it is determined that construction activities need to take place during off-hours, the contractor shall submit an off-hours request with the date and start to finish times, a brief description of the work to be done and a justification to the COR. The request shall include the phrase “This request is at no additional cost to the Government.”

Contractor Requirements:

1. Contractor shall take all measures and provide all material necessary for protecting existing equipment and property in affected areas of construction against dust and debris, so that equipment and affected areas to be used in the Medical Centers operations will not be hindered.
2. Contractor shall maintain existing utility services for Medical Center at all times.
3. Contractors shall minimize interference of construction activities with flow of Medical Center traffic.
4. Contractor shall coordinate the work for this contract with other construction operations as directed by COR.
5. Request for interruption of any services must be approved by the COR, however contractors shall first make a request in writing (email, letter, etc.) requesting any interruption of any service at least 27 calendar days in advance. Some work may need to take place on nights and weekends. There shall be no live electrical work at any time.
6. Contractor shall support Commissioning Agent and efforts.

Quality Control:

1. Contractor Quality Control (CQC) plan shall comply with the requirements in Section 01 45 00, Quality Control.
2. Submit the CQC Plan no later than 30 days after receipt of Notice to Proceed (NTP) proposed to implement the requirements of the FAR Clause 52.246.12 titled “Inspection of Construction”. The Government will consider an Interim CQC Plan for the first 30 days of operation, which must be accepted within 10 business days of NTP. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an Interim plan applicable to the particular feature of work to be started. Work outside of the accepted Interim CQC Plan will not be permitted to begin until acceptance of a CQC Plan or another Interim CQC Plan containing the additional work scope is accepted.
3. CQC is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the contract. At least three phases of control are required to be conducted by the CQC System Manager for each definable feature of the construction work as follows: Preparatory Phase, Initial Phase, Follow-Up Phase.
4. Acceptance of the Contractor’s plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the CQC Plan and operations including removal of personnel as necessary, to obtain the quality specified.
5. Any services not expressly stated in this statement of work are not authorized. No other person, including the COR or any other VA personnel are authorized to request additional work be performed by the contractor. Any additional services performed that are not authorized by the contracting officer will be considered inclusive.

Operations and Storage Areas:

1. The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the COR. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.
2. The contractor is responsible for fixing any damage to public or private property caused by their actions at no extra cost to the government.

Personnel:

1. The Contractor shall provide experienced personnel to perform the required services. Contractor personnel shall be fully trained. In the event the Government is required to provide training for Contractor personnel the Contractor shall reimburse the Government for all associated costs.

As Built Drawings:

1. The contractor shall maintain two full size sets of as-built drawings which shall be kept current during construction of the project, to include all contract changes, modifications and clarifications. Contractor shall deliver two approved completed sets of as-built drawings in the electronic version (scanned PDF) to the COR within 15 calendar days after each completed phase.
2. Upon conclusion of this project and after the acceptance of the project by the COR, the contractor shall provide within 15 calendar days, as-builts drawings in PDF and AutoCAD format, (latest version) to the project COR and CO.

Testing and Inspection:

1. Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the appropriate ASTM standards.
2. Once job is finished, Contractor will inform the COR to inspect and approve the work performed.

Project Schedule and Payment:

1. The Contractor shall develop a Critical Path Method (CPM) plan and schedule demonstrating fulfillment of the contract requirements (Project Schedule). Project Schedule shall utilize the plan for scheduling, coordinating and monitoring work under this contract (including all activities of subcontractors, equipment vendors and suppliers). Conventional Critical Path Method (CPM) technique shall be utilized to satisfy both time and cost applications. Contractor shall submit a Critical Path Method (CPM) schedule for Construction phase with estimated dates and itemized cost of work to the Contracting Officer for review and approval before Notice to proceed.
2. Show on the project schedule the sequence of work activities/events required for complete performance of all items of work. Describe work activities/events clearly, so the work is readily identifiable for assessment of completion.
3. The Contractor shall submit the following supporting data in addition to the project schedule:
   A. The appropriate project calendar including working days and holidays.

B. The planned number of shifts per day.
C. The number of hours per shift.

4. Within 45 calendar days after receipt of Notice to Proceed, the Contractor shall submit for the Contracting Officer's review the CPM schedule. The submittal shall also include three copies of a computer-produced activity/event ID schedule showing project duration; phase completion dates; and other data, including event cost. The final Project Schedule in its original form shall contain no contract changes or delays which may have been incurred during the final network diagram development period and shall reflect the entire contract duration as defined in the bid documents. The Contractor shall cost load all work activities/events except procurement activities. The cumulative amount of all cost loaded work activities/events (including alternates) shall equal the total contract price.
5. Every 30 days, the contractor shall submit an application and certificate for payment using approved updated schedule activities and cost data.
6. Monthly payment requests shall include: a listing of all agreed upon project schedule changes and associated data; and an electronic file (s) of the resulting monthly updated schedule.
7. The Contractor's payment approval depends on submitting a satisfactory monthly project schedule update.
8. Regular monthly project meetings will be conducted to provide updates on the schedule.
9. The cost of revisions to the Project Schedule not resulting from contract changes is the responsibility of the Contractor.

Safety, Security and Inspection Requirements:

1. Comply with 29 CFR 1926, comply with 29 CFR 1910 as incorporated by reference within 29 CFR 1926, comply with ASSE A10.34, and all applicable federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards for resolution before starting work. Where Contract the requirements, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern except with specific approval and acceptance by the Contracting Officer Representative or Government Designated Authority.
2. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out.
3. The APP (Accident Prevention Plan) shall be prepared by a qualified person who is employed by the Prime Contractor. The APP shall include accident/incident investigation procedure.
4. Submit the APP to the Contracting Officer Representative for review for compliance with contract requirements 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.
5. Work shall not begin until the AHA (ACTIVITY HAZARD ANALYSES) for the work activity has been accepted by the Contracting Officer Representative.
6. The Prime Contractor shall designate a minimum of one SSHO at each project site that will be identified as the SSHO (SITE SAFETY AND HEALTH OFFICER) to administer the Contractor's safety program and government-accepted Accident Prevention Plan. Each subcontractor shall designate a minimum of one CP (COMPETENT PERSON”) in

compliance with 29 CFR 1926.20 (b)(2) that will be identified as a CP to administer their individual safety programs.

7. The SSHO shall conduct frequent and regular safety inspections (daily) of the site and each of the subcontractors CPs shall conduct frequent and regular safety inspections (daily) of their work operations as required by 29 CFR 1926.20(b)(2). Each week, the SSHO shall conduct a formal documented inspection of the entire construction areas with the subcontractors' "Trade Safety and Health CPs" present in their work areas. Coordinate with and report findings and corrective actions weekly to Contracting Officer Representative.
8. PPE is governed in all areas by the nature of the work the employee is performing.
9. Infection Control is critical in all medical center facilities. Interior construction activities causing disturbance of existing dust, or creating new dust, must be conducted within ventilation-controlled areas that minimize the flow of airborne particles into patient areas. Exterior construction activities causing disturbance of soil or creating dust in some other manner must be controlled.
10. Contractor shall provide written certification that all contract employees assigned to the work site have had a pre-placement tuberculin screening within 90 days prior to assignment to the worksite and have been found to have negative TB screening reactions.
11. Fire Safety Plan: Establish and maintain a site-specific fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to Contracting Officer Representative.
12. Mandatory training and certifications that are applicable to this project are the responsibility of Prime Contractor. OSHA 10-hour training is required for all workers on site and OSHA 30-hour training is required for Trade Competent Persons (CPs).
13. The contractors shall designate a competent person refer to specification 01 35 26, Safety Requirements for Training documentation. All contractor personnel and its sub-contractors, when directed to, shall wear face masks all the time while on VA property.

VA Sensitive Information:

1. This contract does not involve VA sensitive information and contractor personnel do not require access to VA systems. Information made available to the contractor or subcontractor by VA for the performance or administration of this contract or information developed by the contractor/subcontractor in performance or administration of the contract shall be used only for those purposes and shall not be used in any other way without the prior written agreement of VA.

VA Privacy Training for Personnel without Access to VA Computer Systems or Direct Access to or the Use of VA Sensitive Information:

1. All contractors on site personnel are required to be trained annually on the Department of Veterans Affairs privacy requirements. "Privacy" represents what must be protected by VA in the collection, use, and disclosure of personal information whether the medium is electronic, paper or verbal.
2. Where contractors on site personnel do not use VA sensitive information, protected health information (PHI), or access VA computer systems, the form titled "VA Privacy Training for Personnel without Access to VA Computer Systems or Direct Access to or the Use of VA Sensitive Information" shall be read in its entirety and signed to complete the basic privacy training requirements.

3. Where contractors on site personnel will have access to VA computer systems, sensitive information or protected health information (PHI), additional training shall be required. Coordinate with the COR for these requirements.
4. Completion of the training is required before on site personnel will be provided with access to the medical center and project site.
5. The contractor shall ensure the required training courses are completed and maintained annually for the duration of the project and shall submit all completed documentation to the project COR for the project files.

Construction Security Requirements:

6. The security plan defines both physical and administrative security procedures that will remain in effect for the duration of the project. The General Contractor is responsible for assuring that all sub-contractors working on the project and their employees comply with the regulations.
7. Contractors shall be responsible to plan and coordinate all work with the COR who will coordinate and provide access. Contractors are responsible for safety, record keeping, security monitoring, and inspection of area. Maintain Certified Payroll and Daily Logs.
8. Contractors shall provide the COR with a list of contractor staff participating in the work and shall submit in writing an ID request with company name, address, telephone number, name of each individual contractor employee and position title, SS# (by fax), home address, copy of OSHA 10 hour; see VA Specification section 01 00 00 General Requirements for a complete list of required documents.
9. General Contractor's employees shall not enter the project site without an appropriate badge. They may be subject to inspection of their personal effects when entering or leaving the project site.
10. Contractor shall provide all information as required by facility to receive the appropriate badges.

Shop Drawings, Submittals and Product Data:

1. All submittals are required to be approved prior to the start of the specified work activity. VA approval of a submittal does not relieve the Contractor of the responsibility for any error which may exist.

2. The duration for VA review of any required submittal, shop drawing, or other submittals will not be less than 20 work days.

3. Provide the requested information for an item within 30 days. In the event the Contractor fails to deliver O&M Data within the time limits specified, the Contracting Officer may withhold from progress payments 50 percent of the price of the item with which such O&M Data are applicable.

4. Payment will not be made for materials used in the project until the necessary approvals are obtained.

5. Submittals shall comply with the requirements in Section 01 33 23 Shop Drawings, Product Data, and Samples. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the contract requirements. When Section 01 91 00 General Commissioning Requirements is included in the contract, the submittals required by

the section have to be coordinated with the Section 01 33 23 Shop Drawings, Product Data, and Samples to ensure adequate time is allowed for each type of submittal required.

VISN 2 Autodesk Build Construction management platform (ACC):

Contract Requirements:

1. Construction contractors and A/E design firms, selected by award to perform work at VISN 2 VA facilities, are required to utilize VISN 2 Autodesk Build Construction management platform, also called Autodesk Construction Cloud (ACC). Access to the platform and training portal will be provided by VISN 2 through project Contracting Officer Representative (COR) at no cost for the duration of the project. Autodesk Build is the management and collaborative environment that VISN 2 uses for all its Non-Recurring Maintenance (NRM), Minor Program projects, Feasibility Studies, Commissioning and Retro-Commissioning contracts. There is no user, license, or subscription fee to the contractor for using this cloud-based platform.
2. Contractor shall accomplish and complete the following tasks upon award of contract:
   A. Request access to ACC platform and ProductivityNOW eLearning Site to project VA COR NLT 14 days from contract award.
   B. Only staff that shall utilize the platform to be granted access. Examples: Project manager, sub-contractors POC, Site manager, Safety officer, etc.
   C. The access request shall be in writing and include a list of staff. The list shall include the following information:
      1) Full Name
      2) Company Name
      3) Email Address
      4) Role/Position on the project (i.e., Project manager, site super)
   D. Upon granting access, staff shall complete required ACC training through ProductivityNOW platform within 12 Calendar days.
   E. Upon successful completion of training, contractor shall submit certificates of completion to COR NLT 2 business days.
3. Access to ProductivityNOW eLearning will expire after 12 Calendar days after online access is granted. Contractor shall complete ACC training within that period.
4. Additional Staff and Subcontractors can be added at any time with a request submission to the project COR as described above.
5. The contractor shall only use the ACC platform for contract required submissions, official project correspondence to be acknowledged, reviewed, and actioned by the responsible party. No additional time shall be added to the contract, nor an increase in contract amount be provided for the contractor's failure to utilize the ACC platform as the project's official communication and collaboration system. Any correspondence out of platform shall not be the governing authority contradicting direction and will be at the contractor's expense. Official project correspondence and collaboration includes but not limited to: RFIs, submittals, schedules, shutdown requests, actionable tasks, reports, testing, safety inspections, photos, and site surveys.
6. Contractor must inform the COR of any staff changes NLT 2 business days from the change. Staff changes pertains to staff who was granted access to the ACC platform. Contractor shall request termination of access, replacement of personnel and/or any other action that might impact the contractor ability to maintain required utilization of the platform.

7. Contractor submission requirements cannot be accepted for work to begin without meeting all ACC Platform requirements outlined herein, including completing required ACC platform training.