

**Scope of Work  
Architectural/Engineering Services**

**Project Number 526-15-113**

**Renovate ICU**

**GENERAL SCOPE**

A/E will supply all labor, materials and services to include but is not limited to Architectural Specifications, electrical, plumbing, mechanical, clinical, structural, Value Engineering, progress phasing scheduling and estimating as well as other design considerations, to design for a complete and fully functional ICU. Design will include but is not limited to the following:

A) Modify ICU

- 1) Modify 8C ICU ward as necessary inclusive of ICU entrance, staff lounges, staff locker rooms, on call rooms, sleeping quarters, 20 patient beds rooms, offices, conference rooms, nurses station, storage rooms, linen rooms, medical supply, defibrillator crash carts, computer stations, clinical monitors, ABG rooms, etc.
- 2) This project is not a total renovation. Design for as minimal renovation and utilize existing walls, layouts as much as necessary to minimize downtimes and keep costs down. ICU has a lot of portions in reusable shape.
- 3) Renovate existing Waiting room. Modify space for efficient waiting room and corresponding offices. Look into possibility of interconnecting corridor between offices. Include all television and furniture layout.
- 4) Install intercom in waiting room for staff to communicate with family/visitors from ICU nurses station or reception area.
- 5) All office area to be as per VA design guide space criteria. Utilize as minimum criteria.
- 6) Replace existing nurse call system with hospital standard and tie into existing centralization network. Install most up to date Nurse Call system. Turnover of each area to service for each phase is to have functioning nurse call system and staff trained.
- 7) Ceiling tiles to be reused as possible except for patient rooms.
- 8) Patient rooms are to have more of a comfortable home environment as possible.
- 9) Sky Factory or equal digital scenery changing panels to be installed in each patient room, waiting room, ICU hallways and bereavement room. To be installed on patient walls or appropriate open equivalent space.
- 10) All sliding doors to be completely removed and replaced. No curtains to be used. Look into concept of E-glass, black out glass, or similar for privacy.
- 11) Add new bathrooms for patient rooms 10 and 11.
- 12) Negative pressure rooms 8, 9, 12 & 13 will remain negative pressure rooms but the replacement doors must have proper seals to properly maintain negative pressure

while doors are closed.

- 13) Make rooms 10 and 11 isolation rooms with anteroom before going into the patient room. Patient room to be negative pressure. Install all required mixing boxes.
- 14) Utilize x-ray spaces before patients rooms of 10 & 11 for anterooms.
- 15) Connect to existing exhaust fan and duct for room 10 & 11 if possible. If this is not adequate, look into designing extra exhaust fan for 10 & 11 and making new exhaust duct to roof. If duct has to be installed, use path which such as MER rooms which will not inconvenience office or equivalent spaces.
- 16) Install ball and tube indicator for four existing negative pressure rooms and 2 new isolation rooms.
- 17) All existing bathrooms to be completely renovated.
- 18) Bathroom in Physicians suite to have another entrance door built leading to on call room. Existing entrance door to remain. Shower to be built in bathroom as well.
- 19) Installation of regular walls instead of glass inside the patient rooms. Reduce existing glass between rooms to smaller glass panel.
- 20) Replace all glove boxes with new more appealing boxes.
- 21) Look into the possibility of installing bed pan washers in each patient room or as much as technically possible in the area.
- 22) Design for space of label maker in each room.
- 23) Allocate efficient space for garbage cans using methods such alcoves, recessed walls, etc.
- 24) Change all flooring with infectious control ratings. Look into concept of Epoxy or Stonehard floor or equal for patient care areas. Waiting rooms, Bereavement rooms can be wood vinyl tile.
- 25) Appealing and space efficient storage cabinets by sinks. Cabinets and storage bins to have locks.
- 26) All countertops for the entire area to be replaced with Corian.
- 27) Sink countertops to be changed.
- 28) Nurses station countertops to be changed. Reinstall all outlets, IT connections as necessary.
- 29) Sinks to have sensors and to eliminate touching sink for better infection control.
- 30) Lights to have dimming capabilities and other lighting methods for better comfort for patients.
- 31) Look into options for lights to turn off upon staff, family leaving, etc. leaving patient room.
- 32) Look into reusing Arjo lifts in patient rooms as they were just installed.
- 33) Look into reusing cameras to Nurses Station for clinical monitoring. Replace and/or modify as necessary.
- 34) Linen closets to be accessed from inside patient rooms and outside corridors. With as much storage space as possible. Top half to be used for linen and bottom half to have drawers for isolation PPE. Drawers are to be opened from the corridor.
- 35) Un-utilized sinks in computer bays by patient rooms to be removed.
- 36) Install eye wash stations and water fountains as necessary. Look into concept of dual stations with eye wash and water fountains.
- 37) Phones to have minimal noise as possible. (Coordinate with in-house IT as they may have to provide phones)

- 38) All rooms to have new flat screen TVs. Flat screen monitors to be furnished by VA. Specify type flat screen monitor for VA to purchase.
- 39) Provide all necessary connections for the TVs to properly function. Show all electrics, cable TV, nurse call wiring hook up configurations as necessary for new flat screen monitors to fully function.
- 40) Contractor to install the electrics for all TVs in each patient room and provide conduit, cable, tray, etc from nearest cable splice box to each television.
- 41) Design or note for contractor to determine with existing Nurse Call provider for specific wiring adapter for the existing nurse call system which the TV will need for pillow speaker to properly operate TV volume, channels, etc.
- 42) Ohio panels to be removed and replaced with booms with gas connections, outlets, all other utilities currently existing, etc. Booms to have exterior cover that is not prone to deterioration or rusting. Booms must not corrode due to use of cleaning chemicals.
- 43) Look into installing new dialysis connections made of a new durable material other than plastic to prevent possible breaks when the machine is moved.
- 44) Methods to prevent sewage backups from bathrooms and sinks into ICU.
- 45) Modify AHU as necessary to meet HVAC air exchanges and requirements for an ICU.
- 46) Utilize existing four negative pressure rooms. Install ball and tube indicator for these four rooms.
- 47) Install new temperature regulators in each room.
- 48) Design for more patient bathrooms as possible.
- 49) Replace all locker rooms for men, women, nurses, residents, etc. Make utilization of space and benches more efficient.
- 50) Replace staff lounge and dining rooms and make it more functional. Install new kitchenette and new countertops. No Formica.
- 51) Replace staff shower rooms for male and female.
- 52) For staff lounge, dining area, locker room, shower room install door with pre-installed electric wiring for electric locks and keypads with no batteries to be utilized for easier maintenance.
- 53) Supply room by staff lounge has lead lined walls. Walls are to be reutilized.
- 54) Central nurse's core to be renovated and overall concept utilized inclusive of linen rooms, ABG rooms, medical supply, X Ray if necessary, housekeeping room, etc.
- 55) Eliminate X Ray rooms space as much as possible to make room for fellows and grievance rooms.
- 56) Space for charts, assignment boards, binders, manuals, logs, etc at core area. Assignment boards to be electronic.
- 57) New hand rails and cove bases.
- 58) Current Sleep lab will remain. Adjacent office will be made to be a part of the main sleep lab space for storage of sleep lab materials, equipment, etc.
- 59) Make current on call space into 3 on call rooms. Currently it is split into 2 rooms. One large section and one small section. The small section will stay as is and the larger one will be split into 2 sections. Renovate this entire space inclusive of bathroom.
- 60) Install intercom system from nurse's core to visitor waiting area.
- 61) Modify clinical alarms as necessary. Look to utilize present concept and system as

- much as possible.
- 62) Allocate defibrillator crash cart spaces in common core area for both sides of ICU.
  - 63) New offices for all staff (Only within ICU core).
  - 64) Design for phasing to minimize impact to ICU. Half of ICU to operate at all times.
  - 65) Minimize visitor waiting room space as present one is too large. Utilize space for possible offices.
  - 66) Install glass doors for ICU entrance.
  - 67) ABG room with space for associated equipment and personnel to comfortably work.
  - 68) Existing room 8C-27 specific use to be determined by user and overall design team during design.
  - 69) Efficient space for computer bays for nurse use by patient rooms as existing layout.
  - 70) Minimize lighting from Nurses station and core area to patient rooms as much as possible.
  - 71) Dedicated room for housekeeping to clean specialized equipment.
  - 72) Consolidate offices in one area as much as possible to make room for ICU functions and needs.
  - 73) Renovate for new conference room. Install Sharp Aquos Board Interactive Display System or equal in conference room. Install all necessary IT Cat 5 or 6 and electrical needs.
    - A. Interactive Display System must have the following:
      - a. 60" in diagonal measurement.
      - b. Be a "Smartboard" screen display with multi-touch abilities
      - c. LED backlit flat panel
      - d. 1080p display
      - e. Include at least one HDMI input, one DVI input, one VGA input
    - B. The wall mount for Interactive Display system must have the following:
      - a. Be ultra-slim design
      - b. Able to mount a display with a measurement of 46"
      - c. Able to support a max load of 250 lbs.
  - 74) Efficient space for oxygen tanks and standing machines not to take spaces.
  - 75) Dedicated room for SPD supply, specialty items, IV supply. Medication, and supplies sensitive to specific temperatures to be put into specific temperature rooms with thermostats and temperature alarms.
  - 76) All supply rooms to be installed with more efficient cabinets, shelving, etc.
  - 77) Make existing medication rooms more efficient for storage of medical supplies. Room dimensions will remain the same.
  - 78) Design for new furniture layout in offices, conference rooms, bereavement rooms. Furniture to be provided by VA.
  - 79) Non-movable furniture such as cabinets, storage, nurses' stations, countertops, etc will be furnished by contractor.
  - 80) Any bear steel beams found to be fireproofed with spray on fireproofing utilizing Hilti or approved equal. Designer to verify this as much as possible in an active ICU.
  - 81) Reinstall PA system speakers and all other equipment not being removed in this project.

- 82) Repaint entire area. Utilize hospital standard of Benjamin Moore.
  - 83) Change all doors with fire rated doors as per NFPA 101.
  - 84) All locks to be Stanley best locks. All offices to have storeroom functions. Supply, staff areas to have electric keypad locks with preinstalled electric wiring.
  - 85) Look into the concept of possibly using copper hardware or hardware that has an infection control consideration.
  - 86) Reinstall Johnson Control system as necessary unless determined to remove completely in ICU area.
  - 87) Utilize existing electrical panels for life safety, essential equipment, critical and normal loads.
  - 88) Include notes and methods as possible to reduce noise and vibration as ICU will still be around construction site.
  - 89) Include notes for PPE equipment and OSHA certification requirements for all workers on construction site.
  - 90) Utility shutdowns to be isolated to area of work only. Medical Center and/or other areas not to be affected.
  - 91) Notes to coordinate with project engineer and in-house trades shops for sprinkler shutdowns, electrical, water, sanitary, HVAC, welding and cutting etc a week prior to shutdowns.
  - 92) Create drawing for and notes for rigging in new equipment and old equipment away.
  - 93) Provide common, path of egress, dead ends, smoke barriers walls, fire ratings, etc drawings for life safety.
  - 94) Provide infection control drawing as per VA and in-house policies. Label group and risk. Clearly state requirements of contractor on drawing. Provide clear path for removal of debris.
  - 95) If any work has to be done in an active location contractor is to use mobile enclosed tent or plastic enclosure to prevent and/or minimize the spread of dust and other germs by opening the ceiling tiles to install system.
  - 96) Include training for any possible new equipment for medical staff and maintenance staff.
- B) All design to be done as per VA specifications, NFPA 99, 101, NEC, VA design manuals, ANSI/TIA and BICSI standards.
- C) Coordinate all construction with Project Engineer prior to start of work.
- D) All penetrations made during installation around wiring, conduits, junction boxes, pull boxes; pipes, etc must be sealed with Fire Sealant Caulking and/or materials. Hilti fire sealant is hospital standard.
- E) Provide patchwork, paint, replacement of ceiling tiles, etc to any area destroyed during construction. All materials must match existing type.
- F) Any drawings provided by the Government are for reference only and it is the responsibility of the contractor to field verifies all drawings, installation methods and

dimensions for accuracy.

- G) Must clean construction site on a daily basis.
- H) Contractor is to furnish all warranties, operation and service manuals for the job and new equipment prior to final payment. All warranties begin when approved and accepted by Bronx VA.
- I) Contractor is responsible for securing the construction site, while maintaining the integrity of the Medical Center security.
- J) Contractor must comply with all necessary James J. Peters Bronx VA Medical Center policies in regards to Security issues, Parking, Safety Procedures, Infection Control Measures, Construction Waste Management, Ethical Conduct, etc.