

Green Mountain Care Board
89 Main Street
Montpelier, VT 05620

[phone] 802-828-2177
www.gmcboard.vermont.gov

Kevin Mullin, Chair
Cornelius Hogan
Jessica Holmes, PhD
Robin Lunge, JD, MHCDS
Maureen Usifer
Susan Barrett, JD, Executive Director

DELIVERED ELECTRONICALLY

June 13, 2017

Mr. Steven Gordon
Brattleboro Memorial Hospital
17 Belmont Ave.
Brattleboro, VT 05301

RE: Docket No. GMCB-001-16con, Construction of Four Story Building to House Replacement Operating Room Suite, Central Sterile Processing, Medical Offices and Replacement of Boilers. Project Cost: \$22,692,789

Dear Mr. Gordon:

The information regarding mechanical, electrical, plumbing and fire protection requested below is needed to complete our review. Please provide the following:

HVAC:

- Schematic Design Narrative
 1. Chiller: Provide support for the recommendation of air cooled chillers given their high operational cost. Explain whether there is a plan to utilize water side economizers with the air-cooled chiller.
 2. FGI Guidelines: Clarify which version of the FGI Guidelines will be followed. Summary indicates both 2010 and 2014 versions.
 3. Dehumidification Strategy: Describe how given OR conditions will be accomplished during high humidity summer operation. With straight chilled water cooling it may be difficult to attain surgical suite conditions.
 4. Safety Factors: Explain how spikes in temperature and RH above the given design criteria will be accounted for in system design to ensure OR area conditions do not creep outside the given criteria.
 5. Describe the strategy to avoid re-entrainment of building exhaust through the AHUs.
 6. Describe water source/water treatment for humidification system.



Electrical

- Schematic Design Narrative

1. Normal power electrical service is specified for 600 amps, 208Y/120 volt. Clarify what equipment this branch will serve.
2. It is unclear what equipment will be powered from each electrical power branch. Provide clarification.
3. Confirm that motors ½ hp or greater fed with 3-phase power shall be provided with a dedicated disconnect switch at unit.
4. Confirm that motors less than ½ hp fed with single phase power shall be provided with a dedicated motor toggle switch with thermal overloads at unit.
5. Clarify whether there will be day-light harvesting sensors & dimmable fixtures in general public areas.
6. Identify the power branch that the lighting systems be powered from.
7. Clarify requirements for isolated ground receptacles for computer (PC) loads.
8. Article 517.41(e), of the “National Electric Code”, (NEC) requires receptacle to have a distinct color and/or illuminated outlets. Clarify where these receptacles are going to be located and the methods.
9. Narrative indicated fire alarm system duct smoke detectors to be installed for any unit 2000cfm or above. Upon activation, explain whether these devices will be set to the system into alarm or trouble mode.
10. There is no mention of an Uninterruptable Power Supply (UPS) system. Verify and describe this system.
11. There is no mention of a CATV system. Verify and describe this system.
12. There is no mention of temporary light and power. Verify and describe this system.
13. Describe the scope of work to provide both normal and emergency power to the elevator(s) if any.
14. Clarify the use of color coded fire alarm MC type cable.
15. Clarify the use of different colors & markings to provide clear indication between normal/emergency/critical receptacles, wiring, conduit and junction boxes.
16. Clarify the color coding of the fire alarm wiring system.
17. Clarify the use of stainless steel cover plates in procedure rooms.
18. Clarify the labeling of all receptacles, switches, electrical switchgear, etc.

Fire Protection:

- Schematic Design Narrative:

1. Provide for review current hydrant flow test data to base hydraulic calculations on.
2. Quick response concealed type sprinklers are not approved by Factory Mutual. Comment on the option of specifying standard response concealed type sprinklers or quick response chrome plated recessed pendant sprinklers.
3. Include seismic bracing requirements for entire standpipe/sprinkler system.
4. Include requirement for a “Fire-Watch” condition with local fire department when existing system is to be shut-down.



Plumbing:

- Schematic Design Narrative:

Sanitary Drain & Venting Systems

1. Provide listing and applicable year for Plumbing Code.

Storm Drainage System

1. Provide listing and applicable year for Plumbing Code.
2. Verify that an emergency overflow system is not required.

Medical Gas Systems:

1. Verify existing medical gas systems are sized to handle additional capacity.
2. Verify that all valve box locations have a wall between the valve box and any oxygen outlets.
3. Clarify requirements for vacuum relief line up through roof.
4. Clarify requirements for pressure relief lines from medical gas manifolds up through roof.
5. Verify that after systems have been installed, a third-party testing company will test all systems to verify compliance with NFPA 99.

Plumbing Fixtures:

1. Confirm use of microbial handles for bacterial protection where applicable.
2. Confirm all plumbing fixtures comply with current “NO LEAD” criteria.
3. Confirm bariatric plumbing fixtures are not required.
4. Verify all fixtures to be hospital grade.

Domestic Cold Water, Hot Water and Hot Water Return Systems:

1. Verify that domestic hot water is stored at 140 deg. F to prevent Legionella bacteria from developing.
2. Verify systems will be coordinated with local health department and meet health department criteria.



In responding, restate the question in bold font and respond in unbolded font. Send the original and two hard copies (three-hole punch one hard copy) with a Verification Under Oath to my attention at the Green Mountain Care Board, 89 Main Street, Montpelier, Vermont 05620, and an electronic copy to me at donna.jerry@vermont.gov. If you have further questions, please do not hesitate to contact me at 802-828-2918.

Sincerely,

S/ Donna Jerry

Donna Jerry

Senior Health Policy Analyst

