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October 3, 2022

**To: NC Department of Insurance
Office of the State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202**

**RE: Embassy at Morehead City (The)
Morehead City, NC (Carteret County)**

Attn: Travis L. Crabtree, Building and Fire Code Consultant

Mr. Crabtree,

Please accept the following as our response to the NC Department of Insurance, Office of the State Fire Marshal review comments dated 09-22-2022

Comment 1: Provide a full set of signed and sealed Civil drawings in hard copy and electronic version. Civil drawings, please include but not limited to: gas lines, electrical underground, water line sizes and materials, generator location, heavy-duty pavement locations across parking/drive areas and a note of 76,000 lbs min., 4-inch Storz fire department connection location on the front of the building/property and detail, backflow preventer details/pit details, turning radii for inside and outside turns, Key box locations at both front entry doors and sprinkler riser room 134, etc.

Response 1: A full set of signed and sealed Civil Drawings will be provided.

Comment 2: Provide a 2018 North Carolina Appendix B, as required by the 2018 NC Administrative and Enforcement Code, section 104.1.1. All sections including Fire Protection Requirements table with page references for all UL designs, Life Safety, Accessible Parking, Energy, Structural, Mechanical and Electrical sections to all be completely filled out as this create a snapshot review of the entire building. It will not be acceptable to just list See Civil, Energy, Structural, Mechanical and Electrical sections within the full submittal. <https://www.ncosfm.gov/codes/codes-current->

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Response 2: Please find completed Appendix B, pages 1-7 for Architectural. The other pages of Appendix B are located on the relative trade consultants drawings.

Comment 3: Page A0.3 — The edition of the North Carolina State Electrical Code is incorrect, please update.

Response 3: This has been corrected to 2018.

Comment 4: Page A0.3 — Smoke Compartment Diagram 1-B shows that area at 15,204 sf and the Exit Width Tabulation Table shows this same area at 13,204 sf. These should match.

Response 4: It was corrected as 15,204 s.f. is the correct figure.

Comment 5: Page AO.3 — Exit Width Tabulation Table code section references do not match the 2018 NC Building and Fire code sections. Please update.

Response 5: These have been corrected to match the 2018 NCBC.

Comment 6: Page AO.3 — Occupant Load Factors for area SC 1-A kitchen and business areas do not match Table 1004.1.2 of the 2018 NC Building and Fire Code. Please confirm.

Response 6: These have been corrected to match the 2018 NCBC T1004.1.2.

Comment 7: Page AO.3 — Occupant Load Factors for area SC 1-8 business area does not match Table 1004.1.2 of the 2018 NC Building and Fire Code. Please confirm.

Response 7: These have been corrected to match the 2018 NCBC T1004.1.2.

Comment 8: Page A0.3 — Occupant Load Factors for area SC 1-C A-3 assembly and business areas do not match Table 1004.1.2 of the 2018 NC Building and Fire Code. Please confirm.

Response 8: These have been corrected to match the 2018 NCBC T1004.1.2.

Comment 9: Page A0.3 — Occupant Load Factors for area SC 2-A A-2 assembly area does not match Table 1004.1.2 of the 2018 NC



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Building and Fire Code. Please confirm.

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Response 9: These have been corrected to match the 2018 NCBC T1004.1.2.

Comment 10: Page AO.3 — Occupant Load Factors for area SC 2-8 business area does not match Table 1004.1.2 of the 2018 NC Building and Fire Code. Please confirm.

Response 10: These have been corrected to match the 2018 NCBC T1004.1.2.

Comment 11: Comments 6, 7, 8, 9 and 10 will impact occupant load and exit capacity required columns on the Exit Width Tabulation Table.

Response 11: The Exit Width Tabulation has been corrected and updated.

Comment 12: Page A0.3 — Provide occupant load calculations for both courtyards.

Response 12: Per the NCDOT Fire Marshal, I have provided an “occupant load not to exceed 50 persons” note for each courtyard on Sheets A0.4-A0.5. Since the occupants in the courtyards (Closed to the public) are comprised of staff, residents, and resident visitors which are already included in the building’s occupant load calculations, the enclosed courtyards do not add additional occupant loading to the buildings or exiting requirements. Since each courtyard has access to multiple adjacent smoke compartments for egress requirements, they cannot be listed as belonging to a specific smoke compartment.

Comment 13: Appendix B — Fire Protection Requirements Table to include UL Designs U311, U333, U336, U344, U356, U419, FC-4503, P545 and G.A. #RC2601. Sheet numbers and details to be included.

Response 13: These references have been included on Appendix B, page 4.

Comment 14: Appendix B — Special Approvals shall list NC Department of Insurance, NCDOT? and Carteret County Health Department.

Response 14: These special approvals have been included on Appendix B, page 6.

Comment 15: Page AO.5 - The “travel lines” shown for Physical Therapy room 409 is not drawn correctly: The Code contemplates right angle



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(not 45 or 60 degree) turns since the former produces the most conservative (i.e., longest) Travel Distance To An Exit; please revise the Plans accordingly.

Response 15: The exit travel lines in the Physical Therapy room 409 has been modified.

Comment 16: Life Safety (Egress) Sheets — Interior and exterior emergency lights shall be shown on the Life Safety Plans.

Response 16: Interior and exterior emergency egress lighting has been shown on the Life Safety Plans for reference only since the Architect of Record has not designed the lighting selection or placement of fixtures. You should still refer to the signed and sealed electrical lighting plans for the final lighting installation instructions.

Comment 17: Life Safety (Egress) sheets - Identify all doors with panic hardware, includes electrical rooms with over 800-amp equipment. 2020 NC Electrical Code, Article 110.26 (C) (3), 2018 NC Building and Fire Codes, Section 1010.1.10

Response 17: The Life Safety Sheets A0.-A0.5 have been updated to show doors with panic hardware/exit devices and special locking arrangements.

Comment 18: Life Safety sheet — Provide overall building(s) diagonal length and exit remoteness distances.

Response 18: Rooms requiring two exits have the room diagonal length and distance between exits shown on Sheets A0.4-A0.5.

Comment 19: Page A1.1 — Parking Count Table shows only two ADA parking spaces. Table 1106.1 of the 2018 NC Building Code requires four ADA spaces based on 80 spaces on this site.

Response 19: The Civil and Architectural site plans have been corrected to include 78 regular spaces and 4 ADA spaces for a total of 82 spaces.

Comment 20: Page A1.1 - The first accessible space in each parking facility cluster closest to the entrance shall be identified as a van space per NC Building Code, Section 1106.5. This shall be located on the shortest accessible route of travel from accessible parking to the accessible entrance.

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Response 20: The location of the accessible spaces has been changed. There are now 4 van accessible spaces. See the revised Civil and Architectural Site plans.

Comment 21: Page A1.1 - Each parking facility cluster (four clusters shown) shall have accessible parking. 2018 NCBC 1106.6 and 1105.1.3. See January 2017 NCDOT Access Update Newsletter, Page 2.

Response 21: Accessible parking has been shifted into each of the 4 clusters. See the revised Civil and Architectural Site plans.

Comment 22: Submit manufacturers signed, sealed and dated pre-engineered roof truss drawings including layout.

Response 22: Signed and Sealed, Pre-engineered roof truss drawings will be submitted when we receive them, prior to construction.

Comment 23: Pages A2.2 and/or P1.3 - Provide roof drain calculations for each area of the flat roof sections (mechanical wells). It is understood most of the roof has gutters. 2018 NC Plumbing Code, sections 1105 and 1106

Response 23: Roof Drain calculations have been added to Sheet P1.3.

Comment 24: Page A3.1 — M.C. Dining 310 has no door identifier.

Response 24: Door 310 identifier has been added.

Comment 25: Pages A3.1 and A3.2 — Confirm doors 200, 201, 205, 301, 305, 306, 310, 403, 404, 406, 407, 411, 412, 413, 414, 416, 420 and 428 are not part of structural bearing wall and therefore not required to be rated as they are just a part of a smoke partition. Similar positioned doors in Smoke Compartment #1 are rated.

Response 25: The listed doors are not located in structural walls and therefore do not need to be fire-rated.

Comment 26: Pages AO.4, A4.1 and A4.2 — Exit signage in Corridors C201, C300 and Physical Therapy 409 should match.

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Response 26: The excess exit signage has been removed from sheets A4.1-A4.2 to match Sheet A0.4.

Comment 27: Pages A6.4 and A6.5 — Design detail GA #RC2601 is shown using a 2 x 6-inch framing, the detail I find on-line shows this installation requiring a 2 x 10-inch framing. Please confirm.

Response 27: Please refer to the last line of the assembly description, “Ceiling provides one-hour fire resistance protection for wood framing, including trusses.” The same would be true if we selected GA #RC2602. The two layers of 5/8” Type ‘x’ gypsum board at right angles is what is providing the fire resistance rating and not the wood framing, regardless of framing size.

Comment 28: Page A9.1 — Door hardware groups for doors, C106, 107, 111, 112, 120A, 121A, 134, 135, 136, 205, 304, 309, 310, 400, 401, 420 and 428 all have hardware listed for Panic/Exit device but they are not listed properly under the Notes Column.

Response 28: These doors have had the added note for panic/exit device added to sheet A9.1.

Comment 29: Page A9.1 — Gate Hardware #H-53C does not appear to have panic capabilities for G001 and G002. Please confirm these have the keypads per Note #4.

Response 29 These two gates do have panic hardware that is locked down similar to the doors in the Memory Care wing. There are keypads at both gates.

Comment 30: Page A9.1 — Smoke Tight Assemblies are not identified in the Notes Column for doors 100A, 106, 130B, 130C, 200B, 200D, 200E, 205A, 205B, 210A, 309A, 309B, 409A, 409B, 409D, 420A and 420B as shown per their respective hardware groups.

Response 30: Doors 100A and 106 are shown to have smoke tight assemblies on A9.1. Doors 130B, 130C, 200B, 200D, 200E, 205A, 205B, 210A, 309A, 309B, 409A, 409B, 409D, and 420A are not installed in a smoke tight wall and therefore are not required to have smoke tight assemblies nor closers. Most of the noted doors are closet doors located inside rooms.

Comment 31: Page A9.1— Hardware groups H-02 and H-30C are shown for



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doors 100A and C104A to be Fire/Smoke tight per Note #2 but these groups are not listed as such on Page A9.2. Please confirm.

Response 31: C104A is an exterior door so smoke tight assembly is not required, so has been removed from A9.1. 100A is...

Comment 32: Page S3 — Footing detail dimensions do not match the recommendations in the Geotech report. Please confirm as the footing details are too small.

Response 32: Minimum isolated footer size per Geotech is 2'-6" square. Smallest on structural is 3'-0" square. Minimum wall footing size per Geotech is 1'-6" wide. Structural wall footing size is 2'-0" wide. If this comment is referring to detail 10, this is a column on a strip footer and this detail is not referenced. The detail has been removed for clarification.

Comment 33: Page SN1 — Structural Design Data Sheet appears to have this project as an 1-3 occupancy. Please confirm.

Response 33: Intent was to show Risk Category III from ASCE 7-10. This has been clarified on the sheet.

Comment 34: Page SN1 — Special Inspection Table references x5 do not match the 2018 NC Building Code chapter 17 code sections. Please confirm.

Response 34: The section numbers have been updated.

Comment 35: Provide a Hazardous Materials Disclosure Inventory Statement formatted in accordance with Table 307.1 of the North Carolina Building Code that includes the volume of diesel fuel, oxygen, chemicals, aerosols, hand sanitizers, paints and cleaners, etc. planned for this nursing home project with regard to what would be on-site when open. These shall be identified as a solid, liquid or gas and be identified in pounds, gallons or cubic feet. Please provide a breakdown of the amounts being used and whether they are being used in an open or closed system. Control area may need to be identified as well.

Response 35: xxx (Embassy)

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Comment 36: Architectural and Structural Sheets, Clear height under drive-thru canopy to be at least 13 feet 6 inches for emergency responder access. 2018 NC Fire Code, section 503.2.1

Response 36: Architectural sections show the Porte Cochere as having a clear height of 14'-0". HC: Top of steel is 17'-9" at the drive thru canopy. There is adequate room to meet this minimum clear height. The "10'-0" u.n.o." elevation in detail 5/S4 has been removed and added a note on the plans for clarification.

Comment 37: The current fire flow for this project requires 4,750 gpm for a 4-hour minimum. The flow must meet or exceed the requirements found in the 2018 NC Fire Code Appendix B, or ISO Fire Suppression Rating Schedule or NFPA 1142 or other approved method. Provide a letter from the AHJ on how they will meet this requirement. 2018 NC Fire Code sections 507.3 and 903.3.5

Response 37: xxx (Plumbing)

Comment 38: Pages M1.1 and M2.0 — Both of these sheets are stamped "Preliminary — Not For Construction", these should be removed and stamped "For Construction" or "Permitting" or similar wording.

Response 38: The phrase, "Preliminary-Not for Construction" has been removed. The permitting date of the drawings is located in the title block of each sheet. See the attached signed and sealed copies.

Comment 39: Mechanical sheets - Provide duct detector locations for GP-1, GP-8 and GP-11 along with an installation detail.

Response 39: For units GP-1, GP-8 & GP-11, the location of the duct detector has been shown on sheets M2.1 & M2.2. On sheet M1.1, a detail for installing the duct detectors has been added.

Comment 40: Page FA1.1 — The visual fire alarm device in Multi-purpose Room 200 appears to be sized too small for the area to be covered. NFPA 72 Table 18.5.5.4. 1 (a)

Response 40: The size has been corrected on sheet FA1.1.

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Comment 41: Page FA1.2 — Manual fire alarm pull station needed at the end of Corridor C106. A device box is shown with a capital “S”, it is believed it should be an “F”. 2018 NC Fire Code section 907.4.2.1

Response 41: The ‘S’ has been changed to ‘F’ on sheet FA1.2.

Comment 42: Page FA1.2 — Visual alarm devices needed in Toilet Rooms 127 and 128 off of Corridor C105. NC Building and Fire Codes, Section 907.5.2.3.

Response 42: Devices have been added to those rooms.

Comment 43: Pages FA0.1 and FA1.2 — The Fire Alarm Legend has no symbol for the Fire Alarm Control Panel (FACP) per NFPA 170 and the location/identification of the FACP could not be located on the drawings. It is requested to be in the Riser Room/HWH 134 per Morehead City Fire Department.

Response 43: FACP symbol has been added to legend, location shown on plan in requested room. Electrical plan has also been modified to show new location.

Comment 44: Pages FA1.1 and FA1.2 — Additional carbon monoxide detectors required throughout per 2018 NC Mechanical Code section 313.4. Currently the only detectors found are inside and around the kitchen and laundry rooms. There are 11 gas packs and eight fresh air makeup units all using natural gas throughout the facility.

Response 44: Carbon Monoxide detection has been added to the first room burning HVAC unit. Plans indicate which unit is being covered by each device. being served by the main duct leaving each forced air fuel.

Comment 45: Provide UL listing information for the generator automatic transfer switch(es).

Response 45: See note on sheet E5.1 (added on previous revision) and specifications for ATS listings. All equipment shall comply.

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We will provide a separate response letter for comments based on the review of the plumbing, mechanical and electrical drawings.

Please let us know if you have any questions.

Respectfully,

David Glenn Jr.,
Project Architect

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October 24, 2022

**To: NC Department of Health and Human Services
2705 Mail Service Center
Raleigh, NC 27699-2705**

**RE: Project No. NH-2967 MAS/DWC
FID No. 200738
CON No. P-11958-20
Embassy at Morehead City (The)
Develop a 92-Bed Replacement Nursing Facility
Morehead City (Carteret County)**

Permit # BDWW2021-04199

RE: Architectural & Engineering Review Comments dated 10-07-2022

Mr. Mark A. Saulnier, Architect, DHSR Construction Section.

Mr. David W. Creech, Engineering Plan Reviewer, DHSR Construction Section.

Please accept the following as our response to the NC Department of Health and Human Services Architectural & Engineering comments dated 10-07-2022

Comment 1: In reply to response to Comment #4, remove the exit signs directing into Music 428 on Sheet A05 & E2.2 since the two exits from the courtyard are now directed to Exit Corridor C104A & Living Room 421.

Response 1: This exit sign has been removed form Room #428 (MC Dining, not Music, Room) on the plans.

Comment 2: In reply to response to Comment #4, the 1-hour wall rating is to protect the structure, not to provide rated separation, so the rated door is not necessary to protect the opening (you could have an opening in a 1- hour protected wall that doesn't have a door at all). You can use a 20-minute door, but this may cause confusion when there is no closer. We have run into this on other projects and you will want to discuss this with the local code official. The walls are 1-hour protected for the structure, but the intent is that these are corridor smoke partitions and wall rating labels should be clear to avoid confusion. There should be no closers on resident room

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doors, since these are problematic for the residents and the ability of the staff to monitor them and for evacuation.

Response 2: We have removed the 20-minute designation from these doors and the resident room doors have no closers.

Comment 3: Based on the response to comment #7, the microwave oven locking feature will not be installed because residents who are incapable will not be allowed to have a microwave. Licensure Rule 10A NCAC 13F.0311(b)(5) states ovens, ranges, and cook tops located in resident rooms shall have a locking feature provided. Provide the facilities policies and procedures guidelines for our review and acceptance.

Response 3: Any microwave installed in a resident room will be required to have the locking feature per Licensure Rule 10A NCAC 13F.0311(b)(5).

Comment 4: Based on responses to comments #ed 8, 9, and 10, each egress path from the Memory Care Unit will be equipped with a maglock system based on the requirements listed in 2018 NCSBC 407.12. Based on the drawings provided sheet E0.1, E3.1 and E3.2 illustrate delays to the release of all doors equipped throughout with Access Control System Electromagnetic Locking devices (Symbol ML). Update the drawings to reflect the location of each 407.12 special locking system door and illustrate all components

Response 4: The Architectural Life Safety Plans and Electrical plans have had the locking arrangements updated to meet the code requirements.

The additional 13 items/documentation listed will be available at the time of the inspection and prior to your recommendation for occupancy and licensure.

Please let us know if you have any questions.

Respectfully,

David Glenn Jr.,
Project Architect

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