

December 13, 2010

Ms. Marcy Onieal
Town Manager
Town of Black Mountain
160 Midland Avenue
Black Mountain, NC 28711

Subject: Structural Engineering Report – Floor loading evaluation – golf club,
Black Mountain, NC
Project Number: 209210

Dear Ms. Onieal:

As requested, a Medlock & Associates Engineering, PA (MAE) representative conducted a site observation at the golf club in Black Mountain, North Carolina on Thursday, December 9, 2010 to evaluate the live load capacity of the upper level of the structure.

Based on the site observations, field measurements, structural analysis, and prior experience with similar situations, we note our findings, comments and recommendations below. No invasive testing or investigation was conducted by MAE during the site observations:

- The women's club section is supported by a concrete slab-on-grade. It is our opinion that this floor is substantial to support a floor live load of 100 PSF.
- The remainder of the main level interior floor framing systems vary in live load capacity from 32 PSF to 75 PSF. See the attached drawing for loading information and locations.
- The exterior decks are rated between 18 PSF and 27 PSF live load capacity.
- At this time, it is our opinion that the existing structure would require structural upgrades to be utilized for commercial loading values including use as a lounge, snack bar, or restaurant.
- It is our opinion that upgrades to the existing structure could be performed to bring the floor system up to a live load rating of 100 PSF. The proposed upgrades would probably require a combination of additional joists, new beams, and new columns with footings, which may limit the use of the existing basement area in the building.
- If upgraded to a 100 PSF live load, the existing structure could be utilized for most commercial applications. We have attached sheets 281 and 282 from the 2009 North Carolina Commercial Building Codes listing required floor design loads based on occupancy for your perusal.
- If the existing floor plan and square footage meet your proposed requirements, we would recommend upgrading the structure as opposed to demolishing the structure and rebuilding, as the costs would be significantly less.
- We would recommend that structural upgrades should be designed by an engineer licensed in the State of North Carolina.
- All non-structural code (egress, life safety, etc.) issues should be addressed by a design professional or licensed contractor familiar with commercial code issues.
- We would proceed for a price of two thousand eight hundred dollars (\$2,800.00) for providing permit and construction plans for the required upgrades (in addition to the bill for this initial assessment). We will provide a proposal or work with a purchase order if you choose to utilize our additional services. Please advise us of your decision.


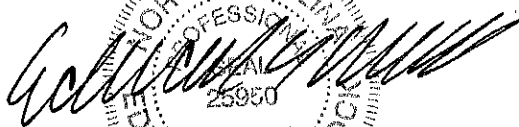
The scope of this report is limited to matters discussed herein and is based on visual observations and measurements taken in the field. No opinion is offered, and none should be inferred, regarding unobserved aspects of this structure or the structure taken as a whole.

We are pleased to be of service. If you have any questions regarding this report or require further assistance, please call.

Sincerely,

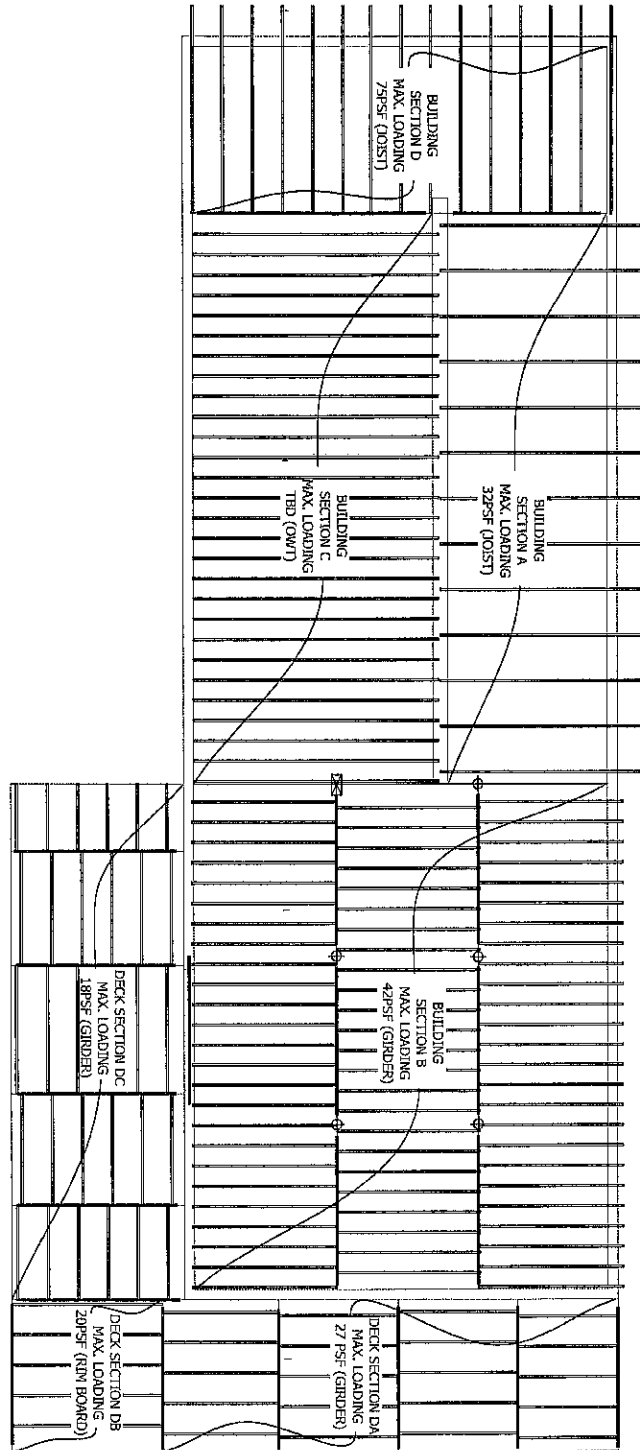


Frank Ungert, EI
Project Manager

Edward K. Medlock, PE
Senior Engineer, President

12-13-10

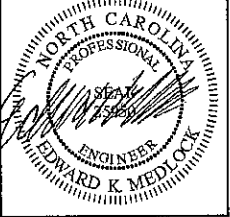


12-13-10

Project No: 209210
 Sheet No.: SK-1
 1 OF 1
 FLOOR LOADING EVALUATION
 GOLF CLUB
 BLACK MOUNTAIN
 NORTH CAROLINA
 Drawing Title:
REFERENCE PLAN

MEDLOCK & ASSOCIATES
 ENGINEERING, P.A.
 STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE

Designed: FUN
 Drawn: FUN
 Checked: EKM
 Reviewed: EKM
 Scale: AS NOTED
 Date: 12-13-10
 53 Asheland Avenue,
 Suite 101
 Asheville, NC 28801
 Phone: (828) 232-4448
 Fax: (828) 232-5224



**BLACK MOUNTAIN GOLF CLUB (MULTI-USE BUILDING)
ON-SITE FIELD EVALUATION**

SNACK SHOP: 1409 SF + 473 SF (PORCH) /1882 SF
MEN'S CLUB: 1042 SF + 850 SF (DECK)/1892 SF
WOMEN'S CLUB: 718 SF
TOTAL AREA: 3169 SF heated/1323 SF deck& porch

Snack Shop: The floor system is not adequate for NCSBC required loading (100psf). Additional posts, beams, floor joists, concrete footings will need to be added to reach the requirements.

Men's Club: The floor system is not adequate for NCSBC required loading (100psf). The floor joists are adequate to carry the load however the beams are not. Adding concrete footings, with a post under each beam between existing posts will take care of the problem.

Deck: The existing deck presents a serious safety issue, with load capacity varying between 18 & 27psf. The deck should not be used at all until the condition is remedied. To reach required load bearing capacity (100psf), concrete footings and 2 posts will need to be added under each existing beam and a joist added between each existing pair of joists. This deck fails to meet even residential loading capacity (40psf). Recommend removal of furnishings, locking or boarding up access points, and posting notice of danger condition.

Women's Club: The floor system (concrete slab on grade) is adequate for NCSBC required loading (100psf).

This report is limited to analysis of floor system loading capacity only and does not address deficient conditions with regard to space allocation, aesthetic/maintenance/repair needs, building code violations or ADA compliance. While certain non-compliant building conditions may be considered grandfathered under the building code in effect at the time of construction, public buildings are required to be accessible in accordance with all provisions of the Americans with Disabilities Act (ADA). While private clubs are exempt from ADA requirements, public buildings are not. Recommend seeking building inspector's ruling or legal counsel to determine whether a public building leased to a private club would be required to meet ADA provisions.



Quality Builders Since 1982

January 31, 2011

Town of Black Mountain
19th Hole/Golf Course
15 Ross Drive
Black Mountain, NC 28711

Below is a proposal to do the following work:

Foundation & Framing Repair

AREA 1

- Add 2 – 2" x 10" x 30' (p.t.) girders under existing joists
- Add 5 – 20" x 20" x 10" concrete footing at posts
- Add 5 – 6" x 6" x 8' (p.t.) ground contact posts
- Build double doors at entrance with post in centers of doors

AREA 2

- Add 4" x 6"s, 36" oc
- Add 6 – 20" x 20" x 10" concrete footings at posts
- Add 6 – 6" x 6" x 8' (p.t.)
- Remove existing planters at exterior of building and install 2 x 12's continuous with vinyl flashing

AREA 3

- Add 2 rows of 2" x 2" x 12' girders under 2" x 10" floor joists
- Add 9 – 20" x 20" x 10" concrete footing at posts
- Add 9 – 6" x 6" x 8' (p.t.)
- Reinstall doors with post at center of doors

AREA 4

- Add 2" x 8" p.t. joists at 24" o.c. throughout Area 4
- Add 21 – 16" x 16" x 10" concrete footings at 4 x 4 posts
- Add 1 – 20" x 20" x 10" concrete footing at 6 x 6 post
- Add 21 – 4' x 4" x random length p.t. ground contact posts with bolted post plates.
- Add 1 – 6" x 6" x 7' p.t.

MISCELLANEOUS

- Add joist hangers and red head bolts thru out, as needed
- All wood columns to be syp #2 ACQ ground contact, p.t.
- All exterior joists to be syp #2 ACQ above ground, p.t.
- All columns to be fastened with galvanized post plates with anchor

TOTAL

\$ 13,900

Thank you for the opportunity to bid this project. Please contact me if you have any questions or you may sign below to accept this bid.

This quote is based on Attachment A, floor plan dated 1.31.2011

Thank you,



Jim McConnaughy
Ewing & McConnaughy
828-669-1133 (office)
828-231-9767 (mobile)

Town of Black Mountain Representative