



August 5, 2002

Italian Club Building and Cultural Trust
c/o Mr. Kenneth C. Ferlita, AIA
The MacEwen Group, Incorporated
1408 Swann Avenue
Tampa, Florida 33606

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**Subject: Report of Structural Engineering Evaluation – ADDENDUM 1
Second Elevated Floor Slab and Stage Framing
Italian Club
Ybor City
Tampa, Florida**

Dear Mr. Ferlita,

Biller Reinhardt Structural Group, Inc. (BRSBG) has previously completed a limited condition survey and evaluation of the second elevated floor slab and its associated structural elements in the ballroom of the building bounded by Columns 30, 31, 32 and 33 and the adjacent stage area framing. Our report issued May 24, 2002, had the following conclusions (please refer to attached Partial Plan):

- a. BRSBG believes the second elevated reinforced concrete floor slab in the ballroom of the building, bounded by Columns 30, 31, 32 and 33, is structurally adequate for its current use. The top of the slab is finished with a raised wood floor covered by carpet. When viewed from the top side, the slab appears to be deflected. Since no significant visible deflection or structural distress was observed on the underside of the slab, BRSBG believes that most of this visible deflection from the top side of the slab can be attributed to variations in the raised wood floor.
- b. BRSBG believes the 2x10 wood joists for the stage area framing are in adequate for the building code minimum live load of 100 psf. BRSBG believes that the stage area framing be limited to a maximum live load of 50 psf.

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- c. The wide flange steel beams supporting the wood joists appear to connect into Beam B5, and BRSB has concerns with this beam (see item below).
- d. BRSB has concerns regarding Beam B5, which spans east-west between columns 30 and 31. This beam appears to have been originally designed for the partial support of the 11 inch thick concrete slab and its associated loading. The upper stage area was originally open to the stage below at the auditorium level. BRSB believes the additional stage framing and its associated loading significantly overstresses the beam beyond current building code requirements. No drawings or information are available for review regarding the stage framing, so BRSB is unable to determine if additional reinforcement was applied to Beam B5 before the additional stage area framing was installed.
- e. BRSB evaluated the two beams designated B17. These beams span north-south on the east and west edges of the 11-inch thick slab. Analyses show that the design capacity is less than that for factored loads, but greater than required for service loads.
- f. BRSB evaluated the beam designated B15. This beam spans east-west between columns designated 32 and 33 along the on the north edge of the 11-inch thick slab. Analyses show that the design capacity is less than required for service loads under the applicable building code.

Based on the above listed conclusions, BRSB recommended the following in our report issued May 24, 2002:

- a. Any exposed steel reinforcement like the observed stirrups should be coated with an epoxy/cement protective coating, such as Corr-Bond by Euclid, Emaco P24 by Master Builders, or Sika Armatec 110 EpoCem by Sika.
- b. BRSB recommends the severe restriction of use for the stage area framing, on the area north of the stage affecting Beam B5, and the area affecting Beam B15. The dance floor is currently located in the area north of the stage and BRSB recommends not utilizing this area for this purpose. BRSB recommends severe restriction of use for the third floor ballroom at this time.
- c. BRSB recommends conducting load tests to verify the capacities of Beam B5, Beam B15 and beams designated B17. The load tests should be conducted in general accordance with *ACI 437 Strength Evaluation of Existing Concrete Buildings*. Since complete information is not available



for the stage framing and the elements affected by the stage framing, BRSB also recommends supplementing this analytical evaluation with load testing to more accurately assess the stage framing and determine allowable live loading.

Before proceeding with the load tests, BRSB was requested to conduct additional research to determine if previous restoration and/or renovation work included strengthening any of the above mentioned beams with capacity concerns. The following summarizes the information that was made available:

1. BRSB contacted Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A. Mr. Nuzum reported that, to his knowledge, no full building analysis was conducted for the elevator addition project.
2. BRSB contacted Mr. Thomas Tarcy of Stanley D. Lindsey and Associates, LTD. Repairs were previously made in the ballroom slab. The slab and steel reinforcement were cut to install fire sprinkler piping. The steel reinforcement was repaired and the concrete was patched. Mr. Tarcy reported that the floor was restored to its original capacity for its original use of open seating. The floor slab was not analyzed or strengthened for harmonic motion induced by an impact loading such as dancing.
3. BRSB received and reviewed a letter dated April 11, 1997, from Mr. Stanley H. Passeur of Stanley D. Lindsey and Associates, LTD., to Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A. The letter summarizes structural issues regarding the elevator addition project and the repair of the ballroom slab which was damaged by the installation of the fire sprinkler piping.
4. BRSB received and reviewed a letter dated October 10, 1997, from Mr. Stanley H. Passeur of Stanley D. Lindsey and Associates, LTD., to Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A. The letter addresses the reduced capacity of the ballroom slab which was damaged by the installation of the fire sprinkler piping.
5. BRSB received and reviewed the *Report of Ground Penetrating Radar Scans, Testing of Reinforcing Steel and Concrete* dated April 23, 1998, prepared by Law Engineering and Environmental Services, Inc., for Mr. Joseph Capitano. The report addresses the existing construction of the ballroom slab and repairs to the concrete and reinforcing steel damaged by the installation of the fire sprinkler piping.



6. BRSG received and reviewed various sketches prepared by Mr. Stanley H. Paseur of Stanley D. Lindsey and Associates, LTD., and faxed to Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A. The faxes are dated from May 13, 1997, to June 5, 1997. The sketches are in regards to the elevator addition project.
7. BRSG received and reviewed a letter dated October 10, 1997, from Mr. Thomas S. Tarcy of Stanley D. Lindsey and Associates, LTD., to Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A. The letter addresses various issues regarding the elevator addition project and the repairs to the concrete and reinforcing steel damaged by the installation of the fire sprinkler piping. The letter also makes reference to the 3rd Floor Stage Area:

“The existing structure can adequately support the proposed HVAC unit layout at the Stage area shown on drawings dated 20 November 1997.”

Based on the information made available, BRSG does not believe any structural elements of the ballroom floor system were reinforced to increase their capacity, but structural elements were only repaired to restore them to their original capacity for the original use of open seating. The ballroom floor slab and its associated structural elements were not analyzed or strengthened for harmonic motion induced by an impact loading such as dancing. Reportedly, the ballroom is currently used for large social gatherings, including wedding receptions. For these occasions, a band typically sets up within the stage area and a dance floor is located at the south end of the 11-inch thick slab area, north of the stage area. As referenced in the letter dated October 10, 1997, from Mr. Thomas S. Tarcy of Stanley D. Lindsey and Associates, LTD., to Mr. Larry Nuzum of Walton H. Chancey & Associates Architects, P.A., drawings of the 3rd Floor Stage area exist.

BRSG maintains our recommendations for not utilizing the ballroom area for dancing and severe restriction of use for the third floor ballroom at this time until the drawings for the 3rd Floor Stage area can be located and reviewed.

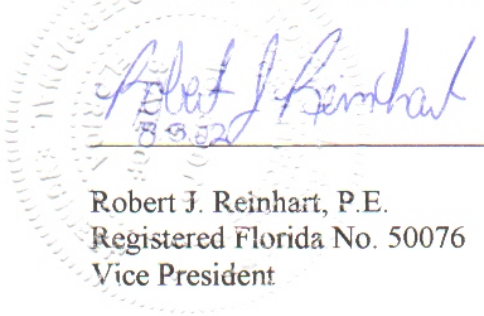


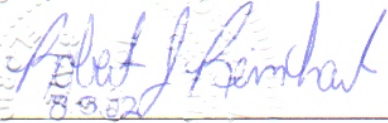
In addition to the 3rd Floor Stage drawing review, BRSG recommends removing a portion of the floor deck above the stage area framing to visually observed Beam B5 and the connection of the stage framing to this beam. See attached Partial Plan for recommend location for access.

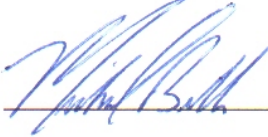
We appreciate the opportunity to provide our structural engineering services to you on this project. If you have any questions, please call our office.

Sincerely,

Biller Reinhart Structural Group, Inc.
State of Florida Certificate of Authorization No. 9149



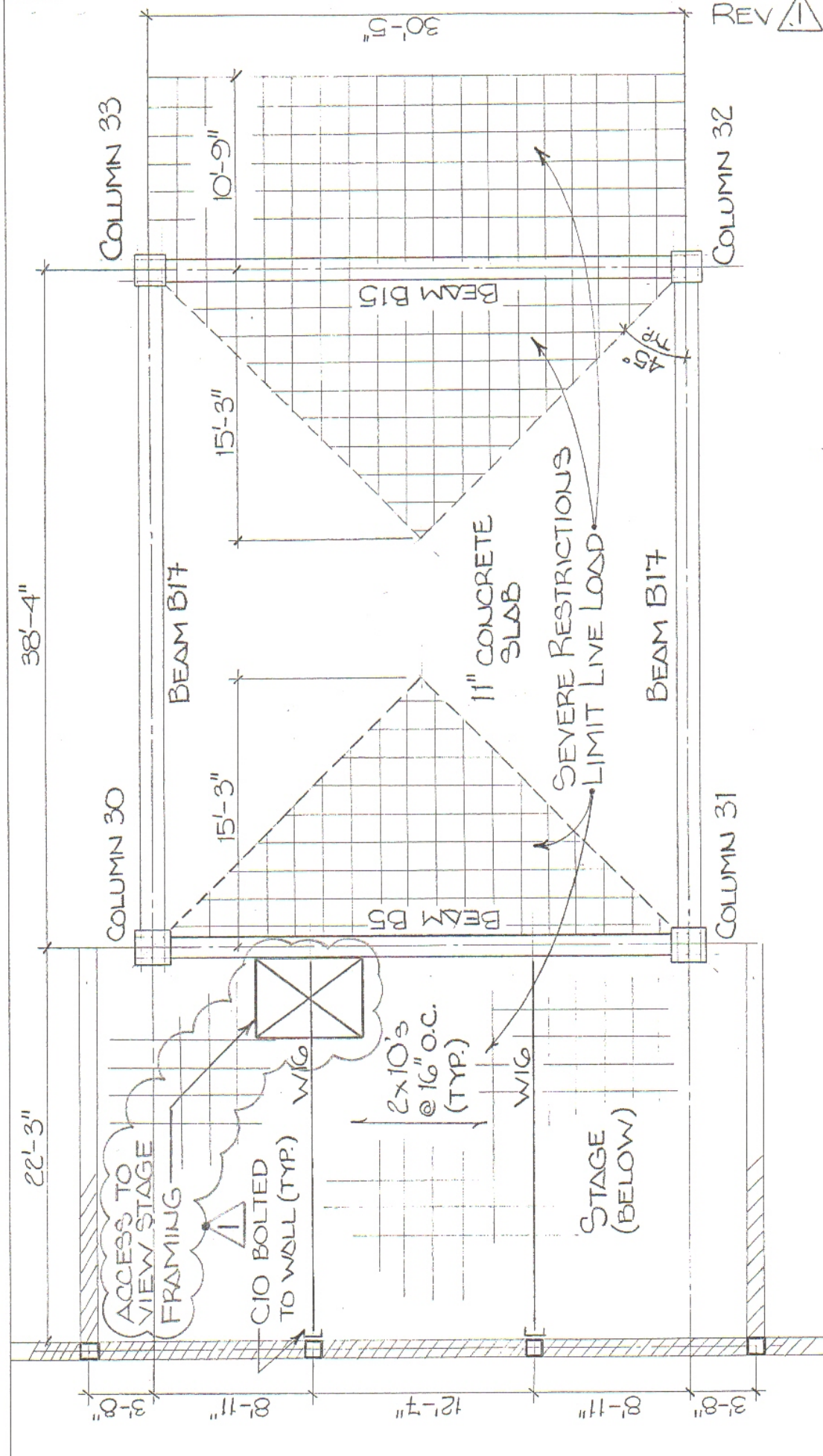

Robert J. Reinhart, P.E.
Registered Florida No. 50076
Vice President



Michael H. Biller, P.E.
President

Attachments: Partial Plan – 2nd Elevated Floor Slab/Ballroom





PARTIAL PLAN - 2ND ELEVATED FLOOR SLAB/BALLROOM
N.T.S.