BIRDSALL SERVICES GROUP

BIRDSALL ENGINEERING ◦ DI STASIO & VAN BUREN ◦ LGA ENGINEERING ◦ MORRIS, JOHNSON & ASSOCIATES ◦ PMK GROUP

City of Hackensack Zoning Board of Adjustment
65 Central Avenue
Hackensack, NJ 07601

October 29, 2009
Job No. 2-06728-200002

Attn: Marcella A. Sbarbaro, Secretary

Re: Application V# 23-08 SP# 21-08
Block 344, Lots 3-5 & 14
Bergen Passaic Long Term Acute Care Hospital LLC
City of Hackensack, Hudson County, NJ
Traffic Review No. 1

Dear Board Members:

We have reviewed the following documents submitted for the above referenced application:

- *"Traffic Assessment Study – Bergen Passaic Long Term Acute Care Hospital (LTACH)"*, prepared by Eric L. Keller, P.E. of Omland Engineering Associates, Inc. and dated September 28, 2009.
- *"Bergen Passaic LTACH, 329 Prospect Avenue, Hackensack, New Jersey"* prepared by MDSzerbaty Associates Architecture, LLC and MPFP, LLC dated December 11, 2008.

The following are our initial comments relative to the above documents:

A. Traffic Assessment Study

1. We note that the Traffic Assessment Study has been prepared to address projections for the year 2011. This may not be a reasonable design year for this type of facility. A more reasonable design year might be 2013 given the approval process, time to construct, and fit out the entire building. Therefore, the applicant should provide testimony regarding the anticipated opening date of the facility.

2. The report states that automatic traffic recorders were installed on Summit Avenue and Prospect Avenue in 2009. The data from these recorders was not included with the traffic report. These should be submitted.

3. The AM traffic count summary sheet for the intersection of Prospect Avenue and Passaic Avenue shows this in the label but labels Passaic Avenue and Central Avenue in the volume data fields. This discrepancy must be resolved.

4. The traffic count data sheets for the intersection of Prospect Avenue and Passaic Avenue show that Passaic Avenue runs north and south whereas

Passaic Avenue runs east and west. In addition, the peak hour volumes illustrated in Figure 2, which were used for the capacity analysis, do not match the peak hour volumes on the traffic count summary sheet. This discrepancy must be resolved.

5. There are slight discrepancies between the peak hour traffic count summary sheets for the intersections of Prospect Avenue and Central Avenue, and Summit Avenue and Central Avenue. These discrepancies should be resolved.

6. At the intersection of Summit Avenue and Central Avenue, the 2011 no-build and build traffic volumes should be revised accordingly on Figures 3 and 6 and in the HCS Detailed Reports in Appendix II.

7. Figure 6 shows a peak hour traffic volume of 218 for the Central Avenue right turn from the east at the intersection with Summit Avenue during the AM peak hour whereas the HCS Detailed Report in Appendix II for the 2011 Build Conditions at Summit and Central Avenues shows a peak hour traffic volume of 219. This discrepancy must be resolved.

8. The peak hour factors used for the capacity analysis are generic and uniform for all movements at each intersection, and are higher than the actual recorded peak hour factors from the traffic counts. This could better levels of service than calculated. The engineer should revise the capacity calculations using the observed peak hour factors, or provide justification for the peak hour factors used in the calculations.

9. It states in Appendix V that all admissions to the LTACH facility will arrive via medical transport, 40 of the 84 patients (48%) for each dialysis treatment period will arrive via medical transport or van, and that 80% of the participants in the adult day care program will arrive via passenger van. The study that this is based on *"Actual experience at other similar facilities is closer to 90 percent"*. The applicant should address the Board regarding the background information that these estimates were based on.

10. The trip generation calculations, found in Appendix V, assumed that each medical transport van would carry ten (10) patients. Based upon our discussions with several medical transport companies, four (4) to six (6) passengers per van is more reasonable. We also note that N.J.A.C. 8:40-5.2(d) states that *"A Mobility Assistance Vehicle shall not carry more than nine passengers at any given time."* Reducing the van occupancy will change the trip generation estimate and may affect the results if the intersection capacity

analysis. The Engineer should address this and provide revised calculations or justification supporting their position.

11. It states in the trip generation portion of the proposed conditions section of the Study that *"12 patient admissions and 12 patient discharges would occur each day and they are assumed to occur uniformly throughout the day from 8 AM to 8 PM."* We note that N.J.A.C. 8:39-5.4(a) prohibits the discharge of patients between 5 PM and 8 AM. The Engineer should address this and provide revised calculation.

12. Table 4 indicates 22 patient-care staff members will be on staff per shift, based on the 84 treatment stations in the dialysis unit being fully occupied. We note that N.J.A.C. 8:43A-24.7(d) states that *"At least one registered nurse, licensed practical nurse, or trained patient care technician shall be on duty for every three patients receiving dialysis services."* As a result, the staffing requirements for the dialysis unit at full occupancy will be 28 patient-care staff members. The Engineer should address this and provide revised calculation.

13. Table 5 indicates that 8 of the dialysis patients will come from the LTACH facility, 40 will arrive by medical transport van and 36 will arrive by private vehicle for each treatment period. The Engineer should address this and provide revised calculations or justification supporting their position (also refer to comment #9).

14. The report indicates that parking requirements have only been considered for the staff of each proposed use and the visitors for the proposed LTACH facility. It is assumed that each dialysis patient and adult day care participant will be dropped off. Thus, they were not accounted for in the parking calculations. It is reasonable to assume that there may be some people may stay and wait for a patient in dialysis. In addition, some may arrive early and park in the garage to enter the building to drop-off or pick-up a patient or participant. This will result in a short-term parking demand that may result in an insufficient number of parking spaces being provided. The Engineer should address this and provide revised calculations or justification supporting their position.

15. The trip generation estimates consider only three (3) visitors per hour for the 144 bed LTACH starting at 7:00 AM to 8:00 PM. This seems to be light since it is evenly spread out over an 11-hour period, and does not consider typical peak visiting hours. The Engineer should address this and provide revised calculations or justification supporting their position.

16. Appendix VI contains a table of expected truck deliveries at the site. The applicant should testimony regarding the background information that led to this anticipated schedule. Of concern is the schedule for waste pickup (one time per 2 weeks), delivery of chemicals for dietary, laundry and housekeeping (I time per month). It also seems that there would be deliveries for housekeeping items such as linens, towels, etc., that may be on a daily basis. The Engineer should address this.

17. Tractor-trailers, trash vehicles, and liquid oxygen deliveries must use driveway on the northerly side of the building. There are also a number of large box trucks making deliveries. Will the large box truck deliveries use this driveway, or will they enter the parking garage? If they enter the parking garage, is there adequate headroom and turning radii for these vehicles?

B. LTACH Plans

1. It shows on the Building Floor Plans that a service drive is proposed from Prospect Avenue on the northerly side of the building. Based upon the proposed layout of the building and service drive, it appears that there will be an inadequate amount of space for delivery and trash collection trucks to turn around while on site. As a result, the trucks will either need to back into or out of the service drive resulting in a backup of traffic on Prospect Avenue, which is undesirable. The Engineer should address the Board regarding possible alternative site designs that were considered.

2. The traffic report states that the service drive on Prospect Avenue will be utilized only for food service deliveries, bulk oxygen deliveries and refuse collection. In addition, if large box trucks must use this driveway (comment #A 17), additional backing in/out maneuvers will occur. The applicant should address the Board regarding how he plans to control the maneuvers to provide a safe operation

3. The applicant should address the Board regarding their plans to insure that all other delivery trucks will use the parking garage for deliveries and not use the service driveway.

4. The Engineer should identify those areas in the immediate vicinity of the garage access and service drive so that the potential impact of parking on the

available sight distance and the ability to maneuver in or out of the service drive can be evaluated.

5. It is recommended that a vehicle turning template be provided showing how a tractor trailer will maneuver into or out of the service drive.

6. The plans illustrate a right turn only proposed at the exit drive from the plaza drop off area to Summit Avenue. In addition, the plans show that the entrance to the underground parking garage from Summit Avenue will be to the south of the exit drive from the plaza drop off area. Our office is concerned that visitors may first drop off an individual off at the plaza drop off area, then elect to park in the garage. This will create "U-turn" movements from the driveway into parking garage access, thus increasing vehicle maneuvers on Summit Avenue. The width of Summit Avenue does not preclude this maneuver from occurring. The Engineer/Applicant should provide testimony to the Board regarding their plans to resolve this issue.

7. Sheet P1, parking floor plans, illustrates four (4) box truck loading spaces proposed at the easterly end of parking level SL1 of the underground parking garage. Based upon the movement pattern shown on the plan, it appears that insufficient space will be provided for box trucks to access the easterly most parking space in this area. The Engineer should show how box trucks would maneuver into and out of this parking space.

8. The applicant should provide testimony to the Board that adequate vertical clearance will be provided for all delivery trucks and medical transport vehicles that are anticipated to enter the underground parking garage.

9. Based upon the proposed parking layout for each floor, it appears that cars parked in the adjacent parking spaces will block access to the stairwell located at the northwest corner of the building. The Engineer/Architect should address the accessibility to the stairwell with vehicles parked in these spaces. The plans may need to be revised to insure cars parked in these spaces will not interfere with the stairwell access.

10. The parking floor plans do not indicate the width of the parking stalls in the underground parking garage. This should be shown on the plans.

The above comments represent our initial review of the provided materials. We reserve the right to provide further comment based on the applicant's response to our comments, upon receipt of additional information, or testimony provided at the public hearing.

Very truly yours,

BIRDSALL ENGINEERING, INC.

Frank A. Miskovich, P.E., C.M.E.
Vice President Transportation Services

FAM:WEM:lkc

cc: Joseph Mellone, Construction Official
Richard Malagiere, Esq. Attorney to the Board
Gregory J. Polyniak, PE, Engineer to the Board
Joseph L. Basralian, Esq., Attorney for Applicant
Eric L. Keller, P.E., Omland Engineering Associates, Inc.

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