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## MEMORANDUM

To: Linda Roberts, Chair and Planning Board Members  
From: David B. Clouser, PE, LS  
Date: November 13, 2008  
Re: **Blumenthal-Brickman Bennett College Redevelopment Project –  
Subdivision, Site Plan, and Special Permit Review**  
(SBL: 6764-01-283780, 289736, 346799, 352784, 353764, 383842 and 387757)

The purpose of this Memorandum is to provide the Board with an outline of the subdivision, site plan and special permit review process for the Board's consideration of granting approval for a Preliminary Plan Unit Development Plan. Our comments and recommendations are provided as a result of our review of:

- the project's Expanded Environmental Assessment Form (Volumes 1 and 2, including Exhibits), dated October 1, 2008, and prepared by Blumenthal-Brickman Associates;
- the Subdivision Plan and Site Plan Set (23 Sheets), dated last revised July 21, 2008, and prepared by TRC Engineers, Inc.;
- review comments with respect to the project's proposed water and sewer system in correspondence submitted by the Village's Engineer (the Chazen Companies), dated October 23, 2008 and subsequent e-mail correspondence dated November 5, 2008 and November 7, 2008;
- review comments regarding traffic and pedestrian accessibility issues submitted by the Planning Board's Traffic Consultants (Resource System Group, Inc.), dated September 28, 2006, October 11, 2006, and November 6, 2008;
- review comments regarding Phase 1 and Phase 2 Environmental Site Assessment reports submitted by Conrad Geoscience Corporation, dated October 12, 2006 and January 19, 2007;
- transcripts of the three public hearings held and written public comments that were submitted as a part of the project file record which was closed on November 5, 2008; and
- information contained in the document titled *Independent Review of the Blumenthal-Brickman Proposal for Bennett College* submitted by Morris Associates, dated October 29, 2008.

As a result of our review of the project's subdivision plans, we suggest the Board consider granting Sketch Plan approval. Consideration of a preliminary development plan approval includes the Board's authority to modify certain technical standards that provide design

no

Modify certain technical standards  
Private water system  
No sewer hook up.

flexibility that enhance the efficiency and the use of land and natural resources without compromising the health and safety of Village residents. We have outlined these site-specific technical standards that the Board may consider modifying for this development to adapt to existing site conditions without resulting in additional land and natural resources disturbance.

A continuation of the Board's previous discussion of sidewalk and street widths would also be beneficial at this time. Finally, our office has prepared a list of details and conditions for the Board's consideration that we recommend be met by the Applicant prior to consideration of final development plan approval.

#### **I. Subdivision Sketch Plan Approval -**

Sheet C-100 of the submitted project plans, titled "Preliminary Plat Plan" provides the layout of the proposed subdivision lots as required and §201-14 (C.) of the Village Subdivision Code. Additional detail with regards to site grading, drainage and utilities is provided in the remainder of the plan set. All proposed lots appear to meet the Schedule of Lot and Bulk Requirements" (Attachment 2 of the §230 Zoning Code) for the Conservation Density Development (CDD) of the Bennett Campus District (BCD).

This proposed subdivision would be classified as a major subdivision since five or more lots are being proposed. The Owner's consent to subdivide plan has been provided. As the Board is aware, the subdivision proposes a private street system, a privately owned central water system, connection to the Village's public sewer system and management of common areas and infrastructure by a Homeowners Association (HOA).

Based on our review of the preliminary design submitted for this subdivision, we suggest that the Board consider granting Sketch Plan approval of this layout with the understanding that as the project's design progresses revisions to this plan may be required. Granting Sketch Plan approval provides an acknowledgment that the preliminary subdivision layout appears to be reasonable but does not provide the applicant with any guarantee of lot count or final design acceptance.

#### **II. Modification of Technical Standards -**

1. Right-Of-Way Width: §201-31 (B) (3) provides that dead-end residential streets should have a minimum right-of-way of 50 feet. Additionally, §201-31 (A) (10) provides that the circular turnaround of a permanent dead-end street should have a minimum radius of 50 feet. The current proposal specifies a 40' wide street right-of-way for the entire development and a 33' radius at the permanent turnaround for the to cul-de-sac near the end of Chapel Road East. These reduced street right-of-way widths that are being proposed in this development are typical of a Traditional Neighborhood Design which promotes minimum street widths. The Board may wish to consider the modifying the Village street right-of-way width standards for these proposed private roads to allow flexibility in the CDD design. Based on the roadway design submitted, we do not believe that the modification of this street standard will compromise public health or safety.

2. Intersection Design Standards: The Board may wish to consider the following modifications to the Village street standards for the proposed private roads to allow for flexibility in the development's proposed CDD design.
- §201-31 (D) (1) states that streets shall be laid out to intersect as nearly as possible to right angles and the intersecting street shall remain approximately perpendicular to the intersected street for 100 feet. This horizontal alignment requirement is not met at the intersections of Route 44 and Chapel Road West, and Bennett Commons and Chapel Road East; and
  - §201-31 (D) (4) states that an approach to an intersection must have a leveling distance of 60 feet before the intersection where the slope is no greater than 1.5%. This grade requirement is not met in the most recent plan submittal.

Our office has reviewed the proposed roadway intersection design for this development with due consideration for traffic safety. We have also reviewed emergency vehicle access compatibility with this proposed design and find that suitable access is provided, especially considering the 25 mph speed limit for these minor roadways. It is our opinion that traffic safety will not be compromised by the modification of these intersection design standards and will result in less disturbance to the land and natural resources which would occur if these stricter grade limitations were imposed.

3. Dead-End Street Length: The Board may wish to consider modifying the Village street standards §201-31 (10) (i.e., permanent dead-end streets shall be limited in length to 1,000 feet) recognizing that the Site Plans indicate that Chapel Road East is approximately 1,300 feet in length. This modification of the length allowed for a dead-end, private street provides for the flexibility in the CDD design, as prescribed in the BCD section of the Zoning Code, and is reasonable considering access alternatives available to the land's development and its property boundary configuration. Based on the roadway design submitted, we do not believe that the modification of this street standard will compromise public health or safety.
4. Number of Dwelling Units Located on Dead-End Streets: The Board may wish to discuss modifying the Village Code requirement which states that no more than 5 dwelling units can be situated on a dead-end road. § 201-31 (A) (2) (b). The existing property configuration does not allow for connectivity of Chapel Road East, nor does the Traditional Neighborhood Design concept that is preferred in the CDD suggest neighborhoods being traversed by collector-type roadways. Based on the roadway design submitted, we do not believe that the modification of this street standard will compromise public health or safety.
5. Parking: Zoning Code §230-16 J. (2) requires that reasonable and appropriate offstreet parking be provided for structures on land uses, and allows determination of the number of spaces required by the Planning Board for uses that do not fall within the listed use categories in this section of the Code. Parking requirements for the residences are met by the proposed plan, but the additional parking necessary for the Chapel/Park/Pool area do not appear to fit precisely within the use categories. If this use was classified as a center of public amusement, then the requirement would be one parking space for each 100 ft.<sup>2</sup> of floor space used for public amusement.

In this regard, our office recommends that the Board consider revising the parking requirement in this instance to 1 space per 200 square feet of floor space due to the nature of the proposed development which promotes pedestrian traffic to the chapel / pool area, and in

reduced  
4 to 5

accordance with parking recommendations in the American Planning Association's publication entitled "Off-Street Parking Requirements." With regard to parking requirements for the pool, we recommend numeral one parking space for each 100 ft.<sup>2</sup> of pool water surface area, based on the expected primary use by the development's residents.

The total parking requirements for this amenity using the above parking space criteria would be a total of 31 spaces for the development's amenities. 33 parking spaces are provided by the proposed development's design. Accordingly, we believe that the design as submitted provides adequate parking for these amenities.

### **III. Sidewalk Width and Streets Width -**

As the Board discussed at a previous workshop meeting, the pedestrian and traffic circulation system for the development must meet future residents' needs and also provide safe access for emergency and service vehicles. These minimum requirements must be considered along with the Traditional Neighborhood Design intent to reduce street widths as much as possible while still remaining functional.

With regards to the development's sidewalks, we recommend that the sidewalk width be revised to 5 feet compared to the 4 feet width as is shown in the present development plans. This increased width, although requiring additional impervious surface, will provide for the minimum with considered usable for pedestrians walking side-by-side. Our office acknowledges that the particular design of this development meets ADA accessibility standards (due to driveway turnaround areas space no greater than 200 feet). Our recommendation reflects anticipated pedestrian use patterns rather than just ADA requirements being met. The Board may wish to consider this recommendation and provide guidance to the Applicant for preparation of final plans and details.

With regard to the development's roadway width, the Board meets to consider whether parking along one side of the street is desired. The most recently submitted development plans proposed a street width of 24 feet, which evidently was a width requested by the Village Fire Department. If no parking is allowed along the street, then a street width of 20 feet would be acceptable for these minor roadways and would deter increased vehicle speeds. If parking on one side of the street is allowed, then a minimum of 27 feet should be provided. We would suggest that the Board accept the presently proposed 24 feet wide street width as a preliminary plan proposal, with some expectation that the street design may change prior to final plan approval. The Board should come to some conclusion on this matter as soon as practicable in conjunction with discussing this issue further with the Fire Department.

### **IV. Additional Information Required Prior To Final Plan Approval -**

As a result of our review of the project's plans and information submitted by the Village's other Consultants and substantive comment from the public, we recommend that the following revisions, additions and details be provided by the Applicant prior to Final Plan Unit Development Plan approval:

#### **1. Subdivision Plan Requirements -**

# Lack of Village Easement

- a. Easements. Include all existing easements to remain and proposed utility (including the easement across lands of Cardinal Hayes), sight and access easements. Label all areas proposed to be encumbered by conservation easements. Provide plan notes describing the easement purpose and any restrictions that might be imposed.
- b. Wellhead Protection Area. Indicate the wellhead protection area on the plan and described by note the land use restrictions that will be associated therewith.
- c. Homeowner's Association (HOA): Both the Subdivision Plan and the Site Plan should include a note describing the HOA responsibilities and assurance to the Village for maintenance in perpetuity of the proposed development amenities and open space, roadways, and infrastructure. The Applicant should particularly specify that the proposed stormwater infrastructure maintenance is the responsibility of the HOA. A detailed HOA agreement should be submitted to the Board's counsel for review prior to final plan approval.
- d. No Further Subdivision Note. A note stating "No Further Subdivision" of the property, including common open-space areas, should be included on the Site Plan prior to preliminary plan approval.
- e. Preliminary and Final Subdivision Plan Requirements. Village Subdivision Code §201-17 (A) and (B) should be reviewed by the Applicant and subdivision plans revised for corrections of Vicinity Map, Area Map and Preliminary Plat. Future submittals must conform to Subdivision Code §201-17 (A) (2), §201-17 (A) (3) (c), §201-17 (B) and §201-29 (B) with regards to specific plat and bonding requirements. These plan additions should be provided prior to final subdivision plat approval.
- f. Bennett Commons Right-of-way. The area of the existing Bennett Commons turnaround right-of-way that will be abandoned should be shown on the subdivision plan.
- g. Intersection Property Corners. §201-31 (D) (2) states that all street intersection corners shall be rounded by curves of at least 25' in radius at the property line. These subdivision plan should be revised to comply with this requirement.

## 2. Site Plan Requirements -

- a. Utility Profiles. Water main and sanitary sewer profiles should be submitted for review.
- b. Water Meters. As indicated by code §230-13 (E) (5) (e), utilities (water, electric, etc.) shall be separately metered and separately billed. The Applicant should incorporate this information into the project's design prior to final plan approval. Notes and details in this regard should be added to the site plan.
- c. Landscaping, Buffering and Visibility Issues.
  - i. The Applicant should ensure that the design meets all of the vegetative screening requirements per §230-13 E (2) (a), specifically, the proposed water treatment building, parking areas, etc. The viewshed that must be

preserved is located between Rt. 343 and the footprint of Halcyon Hall in accordance with the BCD zoning requirements.

- ii. Consideration of additional landscaping should be provided for screening of adjacent properties, and particularly screening the direct view of the development from the O'Dea residence. This may require additional planning to supplement the existing vegetation in this area.
  - iii. Future plan submittals should address sight distance requirements in relation to the proposed landscaping at each of the four corners of the intersection of Bennett Commons with Chapel Road East and West. Per Village Code 230-11 (P), no planting more than 3 feet in height (measured from road surface at nearest edge of road) shall be erected within sight distance viewshed. §201-31 (A) (11) requires minimum stopping sight distances in relation to traffic speeds and should be used for intersection design. The Applicant should refer to §201-31 (A) (12) for further direction regarding sight easements at street corners. Sight distance related easements should be shown on plans prior to preliminary plan approval. Specific sight distance grading details should be provided prior to final plan approval.
  - iv. A landscaping note should be added to the plans specifying that all plantings will be maintained and a vigorous growing condition at all times, and that plants that must be replaced will be replaced with a similar species and size and that these replacements will be planted in the next growing season.
- d. Water Supply Pumping, Treatment and Connection Detail. Information and details pertaining to the proposed water supply and its proposed connection to the Village water system should be provided prior to final plan approval. The Applicant's final design and Engineer's Report should be reviewed by the Village Engineer for conformity with Village standards as well as be approved by the Dutchess County Department of Health.
- e. Fire Protection.
- i. Water system modeling of the proposed storage tank should be provided prior to final plan approval to document that the proposed water supply design adequately meets all residential and fire suppression pressure requirements for the project.
  - ii. Fire hydrants should be spaced a maximum of 400 feet apart. This requirement is not met along Chapel Road West in the vicinity of proposed Lots 7, 10 and 11. Our office recommends adding a hydrant at this location.
  - iii. Describe how the buildings will conform to the NY State Fire Code.
  - iv. The proposed 60,000 gallon underground water storage tank and water treatment building are to be located on the west parcel adjacent to the wellheads. The Applicant should discuss the emergency water pump backup system in case of equipment and power failure.

- v. Correspondence from Fire Chief Hawks should be provided to the Board stating that the proposed fire protection systems, water supply infrastructure, etc. are designed in accordance with all Village standards.
- f. Architectural Details.
- i. The Applicant should provide the Board with information regarding the architectural features which encroach upon building setback lines on several of the proposed lots. §230-11 (K) specifies that no projections from a building with a roof, walls, parapets or other forms of enclosure shall be allowed to encroach building setbacks.
  - ii. The Applicant should provide the Board with a written statement documenting that the type and style of dwelling units specified on the plans will be built on the respective lots. This information is designed to ensure that deviations from the proposal do not occur following Board approval.
- g. Easements.
- i. The Applicant should consider a trail easement be located on the cul-de-sac of Meadow Way between proposed Lots 26 and 27 to provide pedestrians additional access to open space #2.
  - ii. The Applicant should consider creating an easement designed to provide pedestrian access to open space #1 which is inaccessible to the public since it is located behind Lots 3-8.
- h. Stormwater Issues:
- i. As discussed in the SWPPP, each stormwater treatment structure must have a pretreatment device that is designed in accordance with the NYSDEC *Design Manual*. Although the SWPPP discusses the requirement for pretreatment, the Site Plans do not appear to include pretreatment for the stormwater treatment structures. For example, the underground storage facility located adjacent to Aldrich Circle requires pretreatment of up to 100% of the Water Quality Volume (depending on the soil's percolation rate), but the drainage network shows a direct connection to the underground facility, with no pretreatment shown. Similarly, the main detention pond (to the south of Aldridge Circle) does not have a pretreatment forebay. Typically, pretreatment devices require additional area to construct. Due to the space constraints on the site, the plan should be revised to show that pretreatment can be provided in accordance with NYSDEC requirements. These pretreatment details should be provided prior to final plan approval.
  - ii. A Bioretention Area is shown adjacent to Kettering Circle to provide water quality treatment. The NYSDEC allows a maximum ponding depth of 6 inches for Bioretention structures, however, this area has been graded to 5 feet deep. A detail should be provided that the proposed design meets NYSDEC requirements in this regard prior to final plan approval.

- iii. The Site Plan *Details* indicate that a 4' diameter drywell with a depth of 3 or 4 feet will be utilized for treatment of roof drainage discharge from a portion of the duplex units and homes. In our experience, a drywall with a larger volume (larger depth and/or diameter) would be used for a roof area of this size. The drywell sizing criteria should be provided prior to final plan approval. With regard to the drywell calculations provided in the SWPPP Appendices, it is unclear how the "Percolation Volume" was calculated. A simulated storm should be calculated using computer software to ensure that the drywell can accommodate the storm events. The drywell structures should be sized as necessary in accordance with the modeling calculation results. This information should be provided for review prior to final plan approval.
- iv. To our knowledge, the stormwater calculations included within the SWPPP do not include information on routing. A routing diagram or summary should be provided prior to final plan approval.
- v. With regard to the underground stormwater facilities being proposed, although the plans depict a simplified schematic detail of the proposed underground stormwater storage facilities (located in the area between Chapel Road West and Aldrich Circle), additional detail with regard to the layout, connections inverts, minimum cover, materials, etc. should be provided prior to final plan approval.
- vi. It appears that there are several trees to be planted in the immediate vicinity of the aforementioned underground stormwater storage facilities. The Applicant should provide documentation that the presence of maturing tree roots will not hinder the effectiveness of the underground stormwater facilities.
- vii. The Dry Well detail provided on Sheet 502 (Detail 8) indicates that a 4" drain line connects to the dry well. We presume that these 4" drain lines will be connected to the down spouts from the homes, and if so, they should be shown on the plan prior to final plan approval.

Additionally, the dry well sump chamber (as mentioned in the SWPPP) should be shown on the site details prior to final plan approval.

i. Signage.

- iii. Details of all proposed signage (i.e. traffic direction, parking, etc.) for the development per §230-44 C (4) (j) should be submitted prior to final plan approval;
  - i. Signs should be installed to prohibit parking at the cul-de-sac ends where the pavement width is reduced.

j. Site Lighting.

- i. §230-13 (Zoning) states that in an effort to protect the natural beauty of Millbrook, the design should include inoffensive site lighting that both plays on the (historic) stonework (of Halcyon Hall), and provides a level



of security to the area. The Applicant should describe how the proposed design will comply with that criteria.

- ii. The Applicant should provide a lighting / photometric plan for the site to the Board for their review to ensure that all site lighting adheres to §230-11 O and §230-44 C (4) (I). This plan should be provided prior to final plan approval.
- k. Waste Disposal Facilities. Future plan submittals should include the location and detail of the trash receptacles, containers, etc. for the proposed site per §230-44 C (4) (m). The Applicant should ensure that all refuse collection facilities are adequately screened as applicable per Village Code. These details should be provided prior to final plan approval.
- l. Locking Gate for Halcyon Hall Area / Chapel / Pool: §230-13 E (2) (a) states that a locking gate designed to protect the historic stonework and open space common areas may be required for the project site. The Applicant should provide information detailing how the proposal will meet this requirement.
- m. Tree Removal Note. A note must be added to the project plans limiting tree removal of 8 inch caliper or greater (DBH) to mitigate the loss of roosting habitat for the Indiana Bat.
- n. Wastewater Pump Station. An Engineer's Report and detailed design of the required upgrade to the Village wastewater pump station must be added to the plans.
- o. Miscellaneous Issues To Be Addressed By the Applicant:
  - i. Documentation of all required permit approvals.
  - ii. Flow confirmation letter from the Dutchess County Department of Health.
  - iii. Detailed Construction Phasing Plan, with information regarding major stages of the development, including demolition, site clearing, earthwork, street construction, drainage, site lighting, Park area development, and landscaping. Time frames for all of these major items of work should be provided.
  - iv. Soil sampling results for all tank removal and NYSDEC closure reports.
  - v. Provide financial surety equal to the estimated cost of all roadway, sidewalk, drainage, water, sewer, lighting and landscaping improvements that are being proposed by this development. The amount of the surety must be estimated by the Owner's professionals and submitted for approval by the Village Engineer. The financial guarantee will include cost provisions for prevailing wage public works contracts and an estimate of cost increases for at least a three-year period. This financial surety must automatically renew until project completion and can be reduced only after acceptance of the work by the Village Engineer. The form of the required financial surety must be acceptable to the Village Attorney.
  - vi. Provide financial surety equal to the estimated cost of all demolition work that is proposed by this development. The amount of the surety must be

estimated by the Owner's professionals and submitted for approval by the Village Engineer. The financial guarantee will include cost provisions for prevailing wage public works contracts and an estimate of cost increases for at least a three-year period. This financial surety must automatically renew until project completion and can be reduced only after acceptance of the work by the Village Engineer. The form of the required financial surety must be acceptable to the Village Attorney.

The Board will require that the Applicant provide detailed information pertaining to the procedures that will be taken to ensure that the lead, asbestos, etc. within the buildings to be demolished will not become a health concern among residents living in the immediate vicinity of the project site. This information should be provided prior to final plan approval

- vii. Provide detailed information regarding disposal of the water treatment plant sludge which must comply with regulations of the NYSDEC, US EPA and NRC.
- viii. Provide and Engineer's Report on the pressure differential and back flow prevention equipment for the connection between the Village water supply system and the private central water supply system for review by the Village Engineer. If found beneficial to the Village, this backup water supply connection should be made by the Applicant at no cost to the Village.
- ix. Define the Applicant's level of participation in the Village's Inflow and Infiltration detection and repair program to its wastewater collection system. Propose cost-sharing to satisfy §230-13 E. (2) (f) of the BCD Code requirements. The level of participation by the Applicant must be acceptable to the Village for compliance with this Code requirement.

The Applicant should respond to each of the above items in writing with respect to how they have been addressed in future plan submittals. Our office will provide additional comments when additional information becomes available.

Please feel free to contact our office at your convenience if you have any questions or comments.