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## MEMORANDUM

**To:** Township of South Orange Village  
Planning Board Chairman & Members

**From:** Eric L. Keller, PE, PP, LEED AP  
Planning Board Consulting Engineer

**Re:** Application No. 266  
184 Valley Street – Block 2003, Lot 1  
Preliminary & Final Site Plan with c-Variance Relief  
Technical Review #3  
BCG Project # 080373-SO-016

**Date:** March 29, 2019

**CC:** Ojetti Davis, Planning Board Secretary  
William Sullivan, Esq., Board Attorney  
Philip Abramson, PP, Village Planner  
Jay Bohn, Esq., Applicant's Attorney

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We have received the following documents for the purposes of conducting an engineering technical review:

1. Plan set entitled "184 Valley Street, County Orange, Block 2003 Lot 1, Proposed New 3 Story Mix Use Building to be used as two retain and two apartment units" consisting of 9 sheets prepared by Daniel A. Roma, RA of Artek Studio LLC dated 2/21/19 with several sheets being revised through March 20, 2019. **We note that Sheet 3 of the plan set is revised yet contains no revision date.** This plan set is unsigned and was received via email on March 25, 2019. A signed hard copy of the plans was received on March 27, 2019;
2. Plan sheet entitled "Grading Plan, 184 Valley Street, Block 2003, Lot 1, Township of South Orange, Essex County, NJ" prepared by Frank Matarazzo of Matarazzo Engineering, LLC dated 12/13/18 and revised through 2/21/19.
3. Dynamic Traffic Memorandum from Craig W Peregoy, P.E. dated February 21, 2019 with regard to traffic impacts.

The application proposes to remove an existing parking lot at the intersection of Valley Street and Fourth Street and construct a three (3) story mixed use structure containing one (1) commercial space on the first floor and two (2) residential units on the upper floors. The current submission proposes four (4) tandem parking stalls within the structure and two (2) exterior parking stalls along Fourth Street.

We also did not receive a point-by-point response to our prior technical review and a number of our prior comments have not been addressed with this resubmittal. We have carried forward those prior comments.

Our technical review comments on the various submitted documents are as follows:

**Artek Plans:**

1. Signed and sealed copies of the boundary and topographic surveys shall be provided, and these documents are to be referenced on the various plan sets of the architect and engineer. It is assumed that the survey is also a boundary survey and should be revised to indicate same in the title block. Should this not be a boundary survey same shall be provided. **Not Addressed – the client has requested that this be provided when construction documents are prepared. Per the MLUL, a boundary survey is required;**
2. We have reviewed the Traffic Memorandum from Dynamic Traffic and have no objection to the conclusions presented therein;
3. The proposed face of curb will be located less than two (2') feet from the northerly property line (scaled dimension). The plans propose to install site lighting as well as landscaping in this area. Based upon this dimension, it does not appear practical to construct anything in this area as there will be inadequate area for same. The plans should be revised to address same, particularly given the width of the granite block curb and concrete foundation;
4. The accessible route from the parking lot to the commercial building entrance should be shown and grading detail provided to verify that the route meets all accessible grading requirements. **The route has been provided however there is not adequate grading information to verify that the route complies with applicable standards;**
5. Testimony should be provided with regard to the ownership of the two trees to be removed along the northern property line;
6. The plans propose to install two White Weeping Cherry trees within the right of way. Same should be substituted by a more suitable species for a streetscape environment. **The plans are updated to propose Red Sunset Red Maple. This tree has a mature spread width of 35' and will be 9' off the building face. A more appropriate species such as a Gingko Biloba Princeton Sentry or Acer Rubrum Armstrong.;**
7. The Euonymus Fortunei shrub is an invasive species and is susceptible to disease. Same should be substituted;
8. Testimony should be provided with regard to which lot the existing shrubs fronting upon the proposed parking lot are located. Based upon the survey, same appear to be located on Lot 2. Should this be the case, the applicant will be required to receive consent from the adjacent property owner for removal of same;
9. The buffer along the property line with Lot 29 should be increased to screen the parking lot from the adjacent parcel;

10. The plans propose Emerald Green Arborvitae in an area where vehicles will potentially overhang and has limited area on the subject lot. Testimony on how these shrubs can be planted on the subject lot shall be provided. In addition, if same are to be installed, they should be spaced three feet on center to screen the adjacent residential use on Lot 2;
11. The plans now propose a landing for the handicap ramp at the entrance for the commercial space. This area should be further detailed. We note that a retaining wall will be required in addition to railings. The ramp width should be dimensioned and a 5'x5' landing is required at the bottom of the ramp. In addition, this ramp is proposed in the public right of way and not within the property. This will require approval from the governing body;
12. The plans should clearly depict the limits of curb and sidewalk replacement within the right of way;
13. Testimony should be provided with regard to how vehicles will maneuver into and out of the garage area as there is no space to maneuver on site. In addition, vehicles will back out of the parking stalls on site directly onto Fourth Street;
14. The plans show a gap between the existing retaining wall on Lot 2 and the proposed wall on site. The wall in this area will be approximately three (3') feet in height. Detailed grading in the area shall be provided. Based upon the current design this area will be subject to scour and erosion;
15. Note 6 on Sheet 3 of 11 states that overland flow of stormwater runoff over sidewalks and driveways is not permitted. Based upon the proposed grading, overland flow is directed to a valley gutter on site which will then concentrate flow over the sidewalk. The grading should be updated to comply with this note;
16. The Granite Block Curb Detail should be revised to show full height blocks in the depressed section. All blocks should be the same height;
17. The sidewalk detail shall be revised to included welded wire fabric reinforcement within the driveway section;
18. The applicant is proposing to utilize bollard lighting in the parking lot. Same should be revised to provide pole mounted fixtures. As stated previously, there is insufficient area to install these fixtures as there is less than two (2') feet between the property line and the face of curb;
19. The location of the light fixtures at the residential entrance should be further reviewed. We note that they do not appear to coincide with the locations shown on the elevations;
20. The Parking Lot Paver Detail should be updated to show the depth of the aggregate base and not just a minimum;
21. The building elevations show foundation plantings. Testimony should be provided with regard to same;
22. The left side elevation should be revised to show the meter locations
23. The plans propose a wall sconce fixture four feet above grade in the trash enclosure area. Same will conflict with the operation of the trash cans and should be revised;

24. Sheet 2 of the plan set shows the handicap access aisle to be 23.6 feet from the face of the building while the Grading Plan shows a dimension of 22.6 feet. Testimony should be presented on which dimension is correct as well as on-site vehicle circulation;
25. The lot coverage calculations shown on the cover sheet show a deduction of 10 percent for the proposed pavers. The calculation should be revised to not account for this credit, as it is inconsistent with the Village code requirements for lot coverage;
26. The revised plan illustrates a van accessible access aisle to the north of the handicap stall. We note that there is deficient traffic aisle width between the building and parking stall. Per code the accessible aisle cannot be used for vehicle circulation. The plan should be revised to propose a code complying distance of twenty four (24) feet between the accessible aisle and the building facade;
27. Setback lines should be shown on the Site Plan. **Not addressed;**
28. No inverts are provided for the sanitary sewer lateral. Same shall be provided along with the lateral slope, it must be noted that the minimum slope for a 4" diameter lateral is two (2%) percent;
29. Testimony should be provided regarding the location of the gas meters and access to them. **Meters are shown on the north corner of the structure facing Lot 2. We note that there are windows proposed in this general area per sheet 9 of 11. The meters should be shown on the elevation and testimony should be provided with regard to the minimum clearances between electric and gas meters as well as clearances from windows. We note that while these meters are on the side of the structure, they will be in the front yard of Lot 2. The applicant should consider relocating the meters toward the rear of the property so they are not in the adjacent front yard;**
30. We note that there are deficient light levels provided in the parking lot. Testimony should be provided, and the plans revised to comply with Section 185-116 of the Code. It appears that proposed fixture L-1 is within the parking area. Additional detail with regard to the location of same should be provided on the plan. Testimony should be provided with regard to the color temperature of the proposed LED lighting;
31. The plans should reflect the location of existing street lighting. **Not addressed;**

#### **Matarazzo Engineering Plan**

32. The proposed accessible parking stall should have the grading reviewed. We note that this area shall have a maximum slope of two (2%) percent in any direction. **The revised grading shows slopes in the parking stall area greater than 2% and shall be revised. Spot elevations should be provided at all four corners of the parking stall and aisle as well as along the accessible route to demonstrate proper slopes are being maintained;**
33. The Grading Plan does not provide spot grades at the 4<sup>th</sup> street commercial entry. The architectural plans indicate that this is a ramp. ADA regulations require a landing at the doorway. The grading in this area is to be clarified. **The drawing is revised to show a ramp on the east side of the door and steps to the west. Additional dimensions should be provided as a retaining wall will be required in this area;**

34. The grading plan should provide proposed elevations for the sidewalk and driveway. We note that the maximum cross slope for the sidewalk is two (2%) percent.
35. The plan sheet shows a roof leader drain. Information with regard to the pipe material, slope, depth, etc. shall be provided. In addition, sizing information for the pipe shall be provided. The location of the proposed roof leader connection should be further reviewed. We note that same is proposed less than a foot away from an existing mailbox. **Partially addressed – the mailbox has been removed from the plan but the leader connection location is unrevised;**
36. The grading plan proposes a swale in the trash enclosure area. This should be revised as the area should be graded so the trash cans will remain upright and stable;

#### **General Comments**

37. A drainage narrative of the existing and proposed stormwater runoff should be provided. This narrative should include roof leader sizing calculations. **Not addressed;**

**Any revised plans and other documents should be accompanied by a cover letter from the respective professional responding individually to each of the comments presented in this review letter.** The cover letter should also outline those changes to the plans that were required, as well as those not readily apparent.