

## **M**EMORANDUM

TO: North Castle Planning Board

CC: Adam Kaufman, AICP

Thomas D'Agostino, Esq.

Eliot Senor, P.E. John Magnotta

FROM: Joseph M. Cermele, P.E., CFM

Kellard Sessions Consulting Consulting Town Engineers

DATE: April 9, 2021

RE: Sir John's Plaza

909 & 913 North Broadway Section 122.14, Block 4, Lot 53

As requested, Kellard Sessions Consulting has reviewed the site plans submitted in conjunction with the above-referenced project. The applicant is proposing an amendment to the prior Site Plan Approval to include modifications to the previously approved parking lot layout and associated retaining walls and stormwater management system. The prior plan provided a total of 137 off street parking spaces. The current plan has been revised to provide 133 off-street parking spaces and an alternate location for the proposed trash compactor. The plan has also been revised to modify and/or eliminate sections of the previously approved retaining wall systems and modify the stormwater mitigation system based on soil testing performed by the owner and witnessed by this office. The property is ±1.07 acres in size and located in the Central Business (CB) Zoning District.

Our comments are outlined below.

## **GENERAL COMMENTS**

1. As indicted by the applicant, the plans have been revised to eliminate proposed parking at the rear of the site, to avoid additional cut into the existing rock slope. The revision required relocation of the trash compactor. The plans include a vehicle turning analysis that appears to provide adequate circulation. No other modifications to the previously approved parking lot layout appear to be proposed.

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North Castle Planning Board Sir John's Plaza – 909 & 913 North Broadway April 9, 2021 Page 2 of 3

- 2. It appears that the applicant is proposing modifications and or elimination of a previously approved retaining wall systems along the north and west property boundary. The plans appear to have been updated with existing topography in the areas of the rock cut and excavation at the perimeter of the parking lot. The plans also illustrate a proposed retaining wall along the northern lot line; however, a Geotechnical Report has been provided indicating that portions of the wall are not required. The plan should be updated to clarify the limits of all proposed retaining walls and limits of proposed grading and backfill above the walls on the adjoining residential properties.
- 3. The owner retained the services of Geotechnical Engineering Services, P.C. to evaluate the condition of the exposed rock and soil at the perimeter of the parking lot. The Report indicates that retaining walls would not be required at two sections: (1) approximately 60 feet along the north side and, (2) the entire length of the west side of the lot. The Report also notes that a site visit was conducted on January 7, 2021, at which time it was recommended that additional cleaning and removal of loose rock and soil be performed, so that a subsequent inspection and evaluation could be done. The applicant should confirm whether this second visit took place and update the Board on their findings. Any amendment to the report should also be provided.
- 4. The Geotechnical Report recommends two (2) options to consider for slope stability along the north property line; the first is to continue with segmental retaining walls, as originally proposed, along the entire north property line and second, provide retaining walls only at certain sections where rock and/or soil was of poor quality. In the case of the second option, this office has reservations regarding elimination of sections of walls. Based on a site visit, the exposed rock appears to be severely weathered and decomposed and likely to continue to erode over time. Given the proximity of the rock slope to the proposed parking lot and the existing residences above, we would recommend the applicant pursue Option No. 1 and provide retaining walls along the entire north property line. This will also maintain a usable rear yard for the residences above.
- 5. The Geotechnical Report indicates that the rock along the western border of the parking lot appears to be of good quality and that no rock stabilization would be required. The Report, however, also states that a return inspection should be performed after additional cleaning and chipping of loose rock and soil was completed. The Report also recommends that steel netting or fencing along this section of the rockface be considered to retain any materials that may slide over time. Based on a site visit, the rock face in this section of the parking lot appears to be approximately 30 feet high with areas of loose rock and soil. Existing trees are also immediately adjacent to the top of the cut rock face. This office is concerned with the potential for loose debris and/or rock to fall into the parking lot, as well as the potential damage that could occur with fallen trees, on the slope, immediately above the rock cut. The applicant will need to provide additional detail regarding how this cut face will provide a safe and stable slope which may include, netting, additional tree removal, additional cleaning of the rock face, a short wall and fence at the toe of the slope, or combination thereof. We would recommend the Planning Board visit the site to get a better understanding of the current conditions and proposed retaining wall layout.

North Castle Planning Board Sir John's Plaza – 909 & 913 North Broadway April 9, 2021 Page 3 of 3

- 6. The applicant has provided a revised Landscaping Plan for the Planning Board's consideration, which appears to be similar to what was previously approved.
- 7. This office witnessed deep and soil percolation testing to demonstrate that suitable soils are present for the proposed infiltration system. The plan and revised stormwater calculations, however, require coordination. The plan illustrates a total of 25 infiltration units are required to mitigate increased stormwater runoff from the parking lot expansion. However, the plan and the hydrologic analysis indicate a total of 20 units. The plan and hydrologic calculations should be updated and coordinated as needed for further review. In addition, the pre- and post-developed drainage summaries and hydrographs provided on the plan should be reviewed and coordinated. It appears that the post-developed hydrograph for the 100-year storm event was inadvertently duplicated or incorrectly included.
- 8. As shown on the Stormwater and Erosion Control Plan, it appears that the previous limits of disturbance will be expanded slightly for additional grading in the rear of the parking lot. We would assume that the majority of this parking lot will be resurfaced. The limit of disturbance illustrated on the plans should be updated accordingly.
- 9. The plan should indicate where the Safety Post Detail is to be applied.
- 10. Foundation requirements for the proposed fence should be incorporated into the retaining wall detail.
- 11. The plans shall include a note indicating the source of the survey and topographic data, including the referenced datum, utilized for the development of the plan.

As additional information becomes available, we will continue our review. It is noted that an itemized response to all comments will facilitate completeness and efficiency of review.

## PLANS REVIEWED, PREPARED BY GABRIEL E. SENOR, P.C., DATED MARCH 12, 2021:

- Commercial Parking (P-1)
- Proposed Conditions (SP-1)
- Stormwater and Erosion Control (SP-2)
- Details (D-1 and D-2)

## JMC/dc