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Tuesday, October 25, 2022

Zoning Board of Adjustment
Township of Edison
100 Municipal Boulevard
Edison, NJ 08817

Attn: Rosemary Feterik, Chairwoman

Re: Quick Chek Corporation
Block 4A, Lots 24 & 25
425-431 Plainfield Avenue
ETZBA #Z28-2022
Second Review

Dear Chairwoman Feterik:

I have reviewed materials related to the subject application, which are listed on Appendix A. Following this review, I offer this report of my observations and recommendations for the Board's consideration.

1 Description of Property & Application

The applicant seeks use variance and preliminary & final site plan approval to demolish existing structures on the site (Stelton Diner, Edison Pepper Farm, and B&L Tire) and to construct a Quick Chek fuel station with a 5,760 square-foot convenience store.

In support of the new operation, 62 parking spaces would be constructed. Lighting, landscaping and stormwater management facility improvements are also proposed.

The 2-acres property is located within the P-B, Planned Business, Zone District.

Relief, as described in Board Planner Henry Bignell's August 31, 2022 report, is required.

2 Pedestrian and Vehicular Movement

2.1 A description of the proposed operation of the facility should be provided in testimony. As part of this the applicant should identify the proposed hours of operation and number of employees. Anticipated hours and frequency of deliveries and waste/recycling hauling should also be described.

2.2 Various Turning Plans how vehicles necessarily entering opposing lanes on Plainfield Avenue. The designer should address this.

Also, a turning plan should be provided for the AASHTO WB-67 Interstate Tractor Trailer design vehicle.

2.3 The Plan should be affixed with the design engineer's certification that the design meets the requirements set forth in the US Access Board's Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Public Rights-of-Way Accessibility Guidelines (PROWAG).

- 2.4 Pursuant to Edison §16-5.5, “Fire and Emergency Access Lanes,” §205-138 and §316; fire lanes, drive aisles and parking layouts should also be reviewed for comment by the Chief of Fire Department and the Chief of Police or their designees.
- 2.5 Sight triangle clearance, determined in accordance with the American Association of State Highway & Transportation Officials’ (AASHTO) “Policy on Geometric Design of Highways and Streets,” should be shown on the Site Layout Plan and the Landscape Plan at each egress.
- 2.6 The applicant provides a Traffic Impact Study. The applicant should provide testimony describing the findings of the Study.
- 2.7 The Study provides Comparative Level of Service (Delay) Tables. The indicate significant degradation in Levels of Service at turning movements in the area-of-interest. The applicant should provide testimony describing these findings.
- 2.8 The Study’s author should review Build Mitigation measures with the Board and identify responsible parties for implementation of these measures.
- 2.9 The designer should provide testimony relative to left turns into and out of the site.
- 2.10 The applicant should provide testimony certifying that the diesel pumps would be low-flow dispensers and, therefore, not ordinarily suitable for larger motor vehicles.
- 2.11 The Truck Turning Plan shows AASHTO WB-50 Large Semitrailers turning right into the site. This is some 1/8 -mile from Plainfield Avenue’s underpass with the Northeast Corridor line, which allows a clearance of 13’8”. The design vehicle is rated at a height of 13’6”. The designer and the traffic engineer should review this proposed arrangement.

3 Parking

- 3.1 The plan provides for 62 passenger vehicle parking spaces.
- 3.2 The applicant should provide testimony that an adequate number of accessible parking spaces are proposed.
- 3.3 Electric vehicle charging (EVC-ready) stations are provided in accordance with Edison §14-7, “Electric Vehicle Charging Stations in New and Modified Developments Required.”
- 3.4 The applicant should consider provision of additional security measures, like cameras, in the parking & loading areas.
- 3.5 The designer should consider the provision of over-sized parking spaces to accommodate contractors’/landscapers’ trucks/trailers. The designer should also consider the presence of tractor trailers on the property during overnight houses.

4 Lighting

- 4.1 The Lighting Plan (Sheet C-703) proposal requires relief from the standards promulgated by Edison §37-61, “Lighting Regulations.” Among these variances are:
- a) Maximum average illumination within parking areas: 2.5 footcandles permitted, 4.5 footcandles proposed

The applicant should provide testimony in support of the necessary relief.

- 4.2 All outdoor lighting not for security purposes should be activated by motion sensor devices during non-operating hours in accordance with Edison §37-61.5.
- 4.3 The designer should provide testimony, certifying that proposed lighting is Dark-Sky compliant.
- 4.4 If LED lamps are used, low color-temperature LEDs (“warm” with a color temperature of no more than 3000 Kelvins) should be specified. Lighting with lower color temperatures has less blue in its spectrum and is referred to as being “warm.” Higher color temperature sources of light are rich in blue light and have been shown to be harmful.

5 Stormwater Management

- 5.1 A Stormwater Management Report is provided. The project will be disturbing more than one acre, it is characterized as a ‘major development’ by the NJAC 7:8, the Stormwater Management Rule.

Total impervious surfaces would be reduced by 0.5-acre by the proposal.

- 5.2 Per NJAC 7:8-5.8, a Stormwater Operations & Maintenance Manual is provided. Because the entity responsible for maintenance is not a public entity, the plan should be recorded upon the deed of title for the property. I refer the applicant to https://www.nj.gov/dep/stormwater/maintenance_guidance.htm for guidance.
- 5.3 The plans should note that the applicant will inspect the tract’s existing stormwater management system under the supervision of the Township Engineer at the time of construction. The applicant should then clean, repair or replace elements of the collection system as directed by the Township Engineer.
- 5.4 The design should not include the groundwater recharge provisions. The NJ Stormwater Best Management Practices Manual discourages incorporation of infiltration features into facilities that distribute petroleum products. Further, Melick-Tully’s February 01, 2022 report shows that site soils are not suitable for infiltration.

In-situ soils were found to be fractured shale bedrock.

- 5.5 The designer should certify that the proposed underground detention system is rated to support AASHTO HS-25 Highway Loading, as such vehicles are likely to travel over the basin.
- 5.6 The Stormwater Management Report should provide conclusory remarks, reporting that the proposed design meets the requirements of the Edison’s stormwater ordinance, the NJ Stormwater Management Rule (NJAC 7:8 et seq), NJDEP’s Best Management Practices Manual, and the Standards for Soil Erosion & Sediment Control in New Jersey.
- 5.7 The Stormwater Management Report should demonstrate that water quality requirements, as required by NJAC 7:8-5.5, area met.

- 5.10 Stormwater pipe profiles should be provided.
- 5.11 The Storm Sewer Tabulation shows that proposed conduits often do not possess adequate design capacity to convey anticipated flows for the 10-year design storm. Further, such tables typically characterize flows for the 25-year storm event. The designer should address these issues.
- 5.12 The completed and executed NJDEP Checklist for Stormwater Management and the Major Development Stormwater Summary should be appended to the Stormwater Management Report.
- 5.13 The Conclusions to the Stormwater Management Report should also certify that the designer has inspected and characterized downstream features and that he has found that these are in adequate condition and possess capacity to convey flows discharged from this property. If the design engineer ascertains those existing improvements require cleaning, repair, or removal/replacement he should specify same on the plan.
- 5.16 The Report should indicate that stormwater management measures have been designed to reduce the nutrient load in the runoff from the post-developed site by the maximum extent practicable (see NJAC 7:8-5.5(e)).
- 5.17 The Report should demonstrate that low impact stormwater design standards, found at NJAC 7:8-5.3, have been considered and implemented where feasible.

6 Sanitary Waste Disposal, Water Supply, and Other Utilities

- 6.1 The applicant should provide a sanitary sewer design report that demonstrates that the proposed sanitary service meets applicable standards, including Edison Township §27, 'Water and Sewer.'
- 6.2 A closed-circuit video inspection should be performed on the existing sanitary sewer main to verify its condition prior to construction. Results of the inspection should be submitted to the Township Engineer for review. If such inspection reveals poor internal condition or leakage (as determined by the Township Engineer) the applicant shall be responsible for cleaning, repairing, or replacing the main under the direction of the Township Engineer.
- 6.3 The applicant should provide a potable water supply analysis to demonstrate compliance with Edison Township §27, 'Water and Sewer.'
- 6.4 The applicant should consider providing fire suppression within the proposed building.
- 6.5 Copies of letters acknowledging availability of service for water, electric, gas, and all other utilities should be submitted.
- 6.6 If the serving utility requires a water hotbox, such feature should be landscaped to the satisfaction of the Board and its Planner, Hank Bignell.
- 6.7 The Plan should note that, if existing sanitary sewer service and/or potable water supply lines are to be abandoned, they shall be removed to their respective mains.
- 6.8 If a ground-mounted transformer pad is required from the serving electric utility it should be shown on the plan.
- 6.9 Typically, uses such as these are equipped with plug-stations for temporary emergency generators. The location of such should be shown on the site plan. All emergency generators should comply with Edison Township Chapter XII, "Health Regulations & Licensing" and Edison Township XXII, "Environmental Regulations."

7 Solid Waste Management

- 7.1 The design engineer should provide testimony that illustrates compliance with Edison Township §21 “Solid Waste Management,” Edison Township §36-9.6, and state & county recycling mandates. This should include description of anticipated litter at the site and methods of cleaning litter from surrounding natural areas.

8 Environmental

- 8.1 The plan should be affixed with a cut / fill estimate, providing volumes in cubic yards and truck loads. The builder should submit proof to the Township Engineer that, for any soil imported onto the property, no contaminants exist in the soil, including but not limited to results of tests for permissible effluent contaminant levels, permissible soil/sediment contaminant levels and NJDEP’s Priority Pollutant +40 scans.
- 8.2 According to NJDEP’s GeoWeb, the site is partly encumbered by areas classified as Freshwater Wetlands. A copy of the NJDEP DLUR Freshwater Wetlands Letter of Interpretation should be provided.
- 8.3 According to NJDEP’s GeoWeb, the site is listed in that agency’s Environmental Monitoring System database. The applicant should provide testimony describing such regulatory activity.
- 8.4 According to FEMA’s NFIP FIRM Panel 34023-C0043F (07/06/2010) the property is entirely situate in Zone X – Areas of Minimal Flooding (No Shading).
- 8.5 The applicant should provide testimony outlining intended remedial activities related to historic fill on the site, which is described by the Melick-Tully report as containing “metal, wood, glass, tires, etc.
- 8.6 The application should comply with Edison §36-5.1, “Fiscal Impact Statement / Staging Requirement.”

9 Miscellaneous

- 9.1 A signed and sealed as-built survey, prepared by a NJ-licensed land surveyor, depicting the as-built improvements should be provided to the Township Engineer upon the completion of construction and prior to release of the required performance guarantee.
- 9.2 The applicant shall obtain all necessary permits and pay applicable water and sewer connection fees before obtaining a construction permit.
- 9.3 The project will require extensive demolition work. The applicant should provide a Demolition Plan, which would minimally indicate:
- a. Location and specification of proposed construction safety fences;
 - b. Description of dust control methods;
 - c. If asbestos is encountered in the existing structures, appropriate permits should be acquired for that part of the demolition work;
 - d. Utilities disconnect / termination documentation;
 - e. Rodent abatement provisions;
 - f. Location & staging of demolition debris containers;
 - g. Location / Relocation of monitor wells;
 - h. Location of soil stockpiles;
 - i. Location of spoils piles;
 - j. Proposed routing of haul trucks to/from the site, to be approved by the Township Engineer.

- 9.4 The applicant should provide a Construction Logistics Plan, prepared in accordance with the FHWA's Manual on Uniform Traffic Control Devices and acceptable to the Township Engineer and emergency service providers. Some aspects of such plan are:
- a. Offsite staging or lay down yards
 - b. Interim parking lots for site workers
 - c. Location(s) of restroom facilities for site workers
 - d. Location(s) of temporary generator(s)
 - e. Location(s) of crane(s) (include location with dimensioned swing limits)
 - f. Road closures or restrictions
 - g. Construction-sequence traffic control devices, particularly for work within the public rights-of-way
 - h. Construction or excavation adjacent to right-of-way or neighboring properties
 - i. Any other applicable construction related activities
- 9.5 A preconstruction meeting should be held with the Township Engineer prior to the commencement of any construction. The following issues may be elements of this meeting:
- a. It is the applicant's responsibility to regularly inspect and maintain safety of vehicular traffic across the site. All signs, temporary striping, safety-related devices, etc. should be continuously maintained throughout the duration of the project.
 - b. It is the applicant's responsibility to have representatives from each applicable utility company present at the meeting. If a representative is unable to attend, it is the applicant's responsibility to contact the absent utility company and to coordinate all necessary aspects of the project.
 - c. Cut sheets are to be prepared in a format agreeable to the Engineering Division. Cut sheets are to be provided by the contractor to the Township Engineer.
 - d. A progress schedule should be presented by the applicant. The schedule is to clearly show the anticipated time frame for each phase of construction.
 - e. The applicant should provide all necessary information for each subcontractor on the job site, including emergency phone numbers.
 - f. The applicant should provide a list of major material suppliers and shall provide NJDEP PP+40 scans for any soils materials to be imported to the site. All earthwork should be conducted in accordance with Edison §32, 'Soil.'
- 9.6 The applicant shall provide copies of the following permits, documents, reviews, or letters-of-no interest, from the following agencies:
- a. New Jersey Department of Transportation
 - i. Street Intersection Access Permit
 - b. New Jersey Department of Environmental Protection
 - i. NJDEP Construction Activity Stormwater General Permit (5G3)
 - ii. DLUR Freshwater Wetlands Letter of Interpretation
 - c. Freehold Soil Conservation District Certification
 - d. Middlesex County Planning Board
 - e. Edison Township Chief of Fire and Chief of Police Departments – Approval of Fire & Emergency Access Lanes
 - f. Edison Township Department of Public Works – Street Opening Permit
 - g. Edison Township Engineering Department - Soil Importation Permit
 - h. Edison Township Engineering Department - Performance & Maintenance Guarantee
 - i. Edison Township Planning Board Engineer's Letter of Resolution Compliance
 - j. A copy of any proposed or existing covenants or easements applying to the property – or certification that none exist or are planned – should be submitted.
 - k. All other permits as required by any other agencies having jurisdiction.

If you have any questions in this regard, please do not hesitate to contact me.

Very truly yours,

DELAWARE – RARITAN ENGINEERING, INC.



Charles Carley, PE, PP, CME

cc: Zoning Board
Henry Bignell, PP; Administrative Officer / Planner
Brian Picirillo, PE; Office of the Township Engineer
Bhavini Shah, Esq; Planning Board Attorney
Henry Kent-Smith, Esq; Applicant's Attorney
Tung-To Lam, PE; Applicant's Engineer
Quick Chek Corporation, Applicant

APPENDIX A
LIST OF REVIEWED MATERIALS

- A. Preliminary and Final Major Site Plan prepared by Bohler Engineering, dated June 30, 2022 and revised to September 30, 2022
- B. ALTA Land Title Survey prepared by Control Point Associates, dated November 30, 2021 and revised December 3, 2021
- C. Stormwater Management Report prepared by Bohler Engineering, dated June 2022 and revised to September 2022
- D. Operation and Maintenance Manual prepared by Bohler Engineering, dated June 2022 and revised to September 2022
- E. Traffic Impact Study prepared by Stonefield, dated June 21, 2022
- F. Architectural Plans prepared by GK+A Architects, dated June 22, 2022
- G. Deed and Descriptions for Lot 24 and Lot 25, last revised September 1, 2019
- H. Sanitary Sewer Submission Letter addressed to Edison Township, dated June 30, 2022
- I. Transmittal addressed to Freehold Soil Conservation District, dated June 30, 2022
- J. Edison Township Planning Board Application for Preliminary and Final Site Plan, Variance Application and supporting documents, received by the Township July 22, 2022