### **MEMORANDUM**

TO: Town Plan and Zoning Commission

FROM: Rebecca Augur, Director of Planning and Land Use Services

DATE: June 17, 2022

RE: 400 Hebron Ave. SPDR Application

Enclosed are all of the supplemental materials provided by the applicant on June 9, 2022. These include revised site plans that add a pedestrian connection from Linden Street to the building entrance, remove the gate along the Hebron Ave. entrance, add hardscaping at driveway entrances, and revise the landscaping plan. The supplemental materials packet addresses staff comments, as well as questions and concerns raised during the May 17, 2022 public hearing, including building design/entrances, operations, deliveries, and abutting property owner concerns.

Also enclosed are additional staff memos from May 31, 2022 and June 16, 2022. Note that the June 16<sup>th</sup> memos respond to the revised civil plans and Updated Traffic Impact Statement included in the supplemental materials outlined above, and were provided to the applicant on June 17, 2022.

Staff draws your attention to three remaining outstanding issues highlighted in the latest memo from the Town Engineer and Police Chief:

- Verification of the parking analysis is needed
- The design, constructability and impacts of the proposed lane widening of Sycamore Street needs further analysis, site plan details and traffic simulation
- The Town Engineer and Police Chief remain concerned about the potential for accident rate increases as a result of peak period traffic impacts at the unsignalized Sycamore Street/New London Turnpike intersection.

We will forward any additional public comments as one packet on Tuesday, along with a revised summary sheet.

## MEMORANDUM .

To: Town Plan and Zoning Commission

Rebecca Augur, Director of Planning and Land Use Services

From: Daniel A. Pennington, Town Engineer/Manager of Physical Services (

Marshall Porter, Chief of Police

Re: 400 Hebron Avenue; Traffic Impact Study Review

The following represents Engineering Division and Police Department review of the Traffic Impact Statement submitted in conjunction with the above referenced special permit application. An initial report compiled by Fuss and O'Neill dated April 12, 2022 was submitted with other application materials. Following Town staff review, informal comments were provided and the report was revised. The comments below were issued in a memorandum dated May 31, 2022 and are based upon the revised document dated May 13, 2022 with references to the prior version as necessary. The applicant subsequently provided revisions and responses to that memorandum within a submittal dated June 9,2022. Comments *in bold italics* below constitute Town staff's evaluation of these responses.

## TRIP GENERATION

The initial study utilized industry standard trip generation rates that assumed tenant space occupied by a 13,154 square foot grocery store and a 4600 square foot retail furniture store. Town staff concerns that said rates could understate actual trip generation by a significant degree were addressed by obtaining actual trip counts from existing like specialty grocery store locations elsewhere in New England. Results of this effort revealed trip generation rates which are almost exactly double the industry standard rates previously used. These rates were then used to assess capacity and queuing at intersections at both ends of Sycamore Street during the Friday PM and Saturday midday peak periods. The prior study had only analyzed the signalized intersection which includes Sycamore Street, Hebron Avenue and the Route 2 East bound Exit 8 off ramp and did not include Saturday midday peak period analysis. It is noted that the revised analysis assumes a "pass by" trip generation credit of 20% for the development proposed. Town staff sees this assumption as being reasonable and acceptable. The Applicant also assumes a 10% trip generation reduction credit for internal capture and multi modal trips. Town staff disagrees with inclusion of this credit and believes it should be eliminated to ensure a conservative analysis. Town staff also has concerns regarding the very low trip generation assumption for the retail furniture space. While these rates may be accurate for this use, this space could transition to other types of retail space in the future without the need for a Town Plan Zoning Commission special permit. Other types of retail will likely have higher trip generation rates as compared to a furniture store. Town staff believes that it is reasonable to assume higher rates for this space to, again, ensure a conservative analysis.

Given the extraordinary trip generation associated with the intended specialty grocery use, it would be prudent to analyze the peak period parking demand with respect to the available parking on site. The proposal includes addition of 15 employee parking spaces on the west side of the building structure, however, staff has concerns regarding the site's ability to accommodate the expected site generated traffic. The applicant has not demonstrated that the site has sufficient parking capacity given the proposed retail space utilization.

The Applicant's June 9, 2022 submittal incorporates reasonable trip generation rates for the 4600 square foot retail space and has eliminated the 10% trip generation reduction credit for internal capture and multi modal trips as requested. Town staff notes that the 20% maximum pass by credit is a CT Department of Transportation standard that is also utilized by the Town of Glastonbury. Given the large discrepancy between trip generation associated with the specialty grocer and other site uses, elimination of the 10% internal capture credit is seen as prudent. Town staff sees these traffic impact study provisions as appropriately conservative and not overly conservative as suggested in the document.

The Applicant's parking analysis requires verification. It is suggested that the applicant incorporate real data from like specialty grocer locations into said analysis.

### TRIP DISTRIBUTION

The May 13, 2022 Traffic impact statement does include revised trip distribution percentages following Town staff expressed inquiry. However, the applicant has only provided a general statement explaining the reasoning for distribution assumptions utilized. The Applicant is again asked to provide detail to support these assumptions. Trip distribution utilized in the analysis can have a significant impact on projected intersection capacity and queuing. Thus, a well-reasoned roadway network trip distribution plan is essential for producing an accurate traffic model.

The Applicant's June 9 submittal includes satisfactory explanations and reasoning concerning trip distribution assumptions.

## INTERSECTION CAPACITY AND QUEUE ANALYSIS

The following comments and concerns are based on the Synchro Professional Software version 10.0 analysis included in the revised May 13, 2022 report. It is noted that prior paragraph comments may very well exacerbate concerns listed below if/when those comments are addressed:

• The traffic signal located at the Sycamore Street/Hebron Avenue/Rt 2 Exit 8 off ramp is owned and maintained by the State Department of Transportation (CONNDOT). Sycamore St. and Hebron Avenue west of the intersection are Town owned roadways while Hebron Avenue east of the intersection and the Rt 2 off ramp are owned by CONNDOT. The applicant indicates that CONNDOT is in the progress of evaluating phase timings on State-owned signals and has offered analysis that assumes some level of signal optimization. State DOT has also indicated a willingness

to evaluate the potential for establishing a dedicated left turn lane on the Hebron Ave westbound approach per long standing Town preference. The Town is pleased to hear of these initiatives. However, for purposes of the subject application, signal phase timing modifications cannot be considered. The timeframes associated with these evaluations are uncertain and the results of the analysis are unknown at this time. Thus, the Traffic Impact report sections which provide assumed modifications have not been reviewed by Town staff and no additional comment is offered with respect to this item.

• Eastbound approach queues at the Hebron Avenue/off ramp/Sycamore Street signal as depicted in the Traffic Impact Study are not consistent with peak hour observations in the existing condition. Lane utilization factors should be adjusted to more accurately reflect usage. Consequently, queue lengths, level of service delay and available vehicle storage lengths are questioned in both the existing and build conditions. This concern relates to operational efficiency of the Town roundabout to the west. Eastbound approach queues to the signal could adversely affect the roundabout.

Lane utilization factors have been adjusted as requested. The resulting analysis indicates that development induced peak hour increases to eastbound queues are minimal. Police Department staff have verified that existing conditions in the peak periods do not present a concern. Thus the minor queue length and delay increases are not seen as problematic.

• The Applicant is proposing construction of an additional turn lane on the northbound Sycamore Street approach to the signalized intersection in order to mitigate build condition impacts to queue lengths and level of service delays. No preliminary plan depicting such an improvement has been provided in the application materials. Town staff observation of field conditions coupled with road Right-of-Way research raises serious questions concerning the physical and legal ability to implement this solution. Right-of-Way width beyond the curb line on the east side of Sycamore Street is only about 8'. Several heavily laden overhead utility poles and a sidewalk exist within the east side snow shelf and there are minor grade issues. The developed site on the west side of the road would seem to offer limited ability for road widening. The ability to implement this suggested turn lane addition in accordance with Town standards for proper lane width, shoulder width and pedestrian accommodation is questioned. It is further noted that the Synchro model results for the existing Sycamore Street approach are deemed questionable and inconsistent with field observations.

The applicant has provided a conceptual plan depicting the proposed additional turn lane on the Sycamore St approach. The plan is schematic in nature and dimensions are uncertain, however staff continues to have concerns regarding the ability to implement as proposed. It appears as if the proposed widening will result in elimination of the landscaping along the Sycamore St. frontage and would impact the adjacent stormwater quality basins. These features were installed per original Special Permit approval. There would also likely be a significant grade drop from the back side of the sidewalk in this area. A portion of the public sidewalk would most likely be located on private property, although a sidewalk easement would be an acceptable solution. Grade issues would be created closer to the Hebron Avenue

intersection with landscaping impacts and likely need for a retaining wall. Underground utility impacts are also possible and impervious surface coverage percentage will be altered. The lane configuration proposed at the Hebron Avenue intersection calls for 2 turn lanes on the northbound approach with no shoulder width. The ability of large vehicles to track within lane assignments when dual right turns occur is questioned. Lastly, the traffic model results for queue length and delay for this approach in the improved scenario are not consistent with one another given the small amount of green time allocated to this phase. Additional model simulation is suggested.

• The initial Traffic Impact Study did not analyze the unsignalized Sycamore Street/New London Turnpike intersection. The revised May 13, 2022 report does evaluate this intersection in the existing and build conditions per Town request. The report is correct in stating that left turn movements from Sycamore Street in the Saturday midday peak period experience level of Service F in the existing condition and would continue to do so in the build condition. Study of the traffic model results, however, indicate that delay for this movement would increase from 88 seconds to 233 seconds and 95th percentile queue lengths would increase from 170' to 335'. This projected situation raises concerns for increased motor vehicle accident rates as motorists grow impatient with the delay and may potentially attempt left turns onto New London Turnpike without sufficient gaps to safely accomplish the maneuver. The Traffic Impact report does not document existing accident history at relevant locations adjacent to the development as is typical for such reports.

The applicant has provided area crash data as requested. Adjustments to the trip generation as previously discussed exacerbate the delays and 95 th percentile queue lengths in the Saturday midday peak period. Projected delay for left turning vehicles is now projected at 271 seconds with queue lengths at 375'. Town staff continues to have concerns regarding accident rate increases at this location for reasons previously articulated. In addition, the development driven queue length and associated increase in delay projected are unlikely to be deemed acceptable by the motoring public. Probable subsequent demands for remedial actions would be directed towards the Town of Glastonbury. The Applicant indicates that motorists are likely to modify departure routes in order to avoid the situation described. This circumstance however may only serve to create issues at the signalized Sycamore St./Hebron Avenue/Rt 2 off ramp intersection .

• The applicant has also provided revised delivery and service truck turning movement plans showing access via Hebron Avenue and departure via Linden Street to Hebron Avenue. While the access and truck movements within the site are considered less than ideal, the scheme does not create undue safety concerns. It is noted that few, if any Town roads outside of the Corporate Park can fully accommodate tractor trailer type trucks without opposing or adjacent lane encroachment. Similarly, few, if any, commercial sites can fully accommodate these vehicle types without similar on-site encroachments.

June 16, 2022

## **MEMORANDUM**

To: Town Plan and Zoning Commission

Rebecca Augur, Director of Planning and Land Use Services

From: Daniel A. Pennington, Town Engineer/ Manager of Physical Services

Re: 400 Hebron Avenue – Expansion for Specialty Grocer

Incorporating 7 Linden and 366 Hebron Avenue

The Engineering Division has reviewed the plans for the proposed expansion of 400 Hebron Avenue to incorporate properties at 7 Linden Street and 366 Hebron Avenue prepared by Megson Heagle and Friend Civil Engineers and Land Surveyors, LLC last revised June 8, 2022 as well as the Planting Plan prepared by Thomas Graceffa Landscape Architect LLC dated May 12, 2022 and offers the following comments:

- 1. Previous site plan comments from this office included in a memorandum dated May 31, 2022 have been satisfactorily addressed unless otherwise noted below.
- 2. Additional notes should be added to the site plan indicating that private hardscape and landscaping improvements installed within the Town rightof-way are subject to a maintenance agreement with the Town of Glastonbury and shall be maintained by the property owner. A draft agreement should be provided by the applicant for review and approval by the Town Engineer.
- 3. A detail for the proposed hardscape in the Linden Street right-of-way should be provided by the applicant for review and approval by the Town Engineer.
- 4. Proposed plantings in the snow shelf of Linden Street directly adjacent to the curb are subject to heavy snow load during winter months and are not recommended in this location.



# Memo

June 16, 2022

To: Jonathan E. Mullen, AICP, Planner

Fr: Wendy S. Mis, Director of Health  $\it WSM$ 

Re: 400 Hebron Avenue

Section 12 Special Permit w/ Design Review

This office has received a package of documents for the above referenced property, including a document by Hinckley Allen dated 6/9/22 and a plan set by Megson, Heagle and Friends dated 3/30/22, last revised 6/8/22.

Demolition of existing buildings as part of this project will require an environmental hazard assessment report to be submitted to the Health Department prior to application for the demolition permits.

View of the proposed delivery area may be visible to travelers going east on Hebron Avenue. Equipment located outside and associated with operation of the establishment is to be kept to a minimum, cleaning equipment is to be maintained inside the facility, and loose debris from deliveries and the adjacent trash storage area must be monitored and removed on a regular basis.

Pending Commission satisfaction with the concerns listed above, approval with respect to CT Public Health Code is forwarded for Commission consideration.

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Re: 400 Hebron Avenue – Expansion for Specialty Grocer

Incorporating 7 Linden and 366 Hebron Avenue

The Engineering Division has reviewed the plans for the proposed expansion of 400 Hebron Avenue to incorporate properties at 7 Linden Street and 366 Hebron Avenue, dated March 30, 2022, revised May 10,2022, as well as the related Hydrology and Hydraulics Engineering Report dated April 12, 2022 as prepared by Megson Heagle and Friend Civil Engineers and Land Surveyors, LLC.

- 1. Comments concerning the Traffic Impact study submitted with the application are provided via separate memorandum exclusive to that topic.
- Project plans indicate installation of hardscape type treatments within the Town road Right of Way to facilitate truck turning movements. If approved as proposed, an agreement for requiring abutting property owner maintenance of same is recommended.
- 3. The landscaping plan depicts various proposed plantings being installed on Town property within the Linden Street right-of-way. These plantings should be eliminated from the proposal since they would be subject to damage from Town snow removal operations and future public utility excavations within the right-of-way. As proposed, these plantings would need to be maintained by the Town unless a maintenance agreement is executed.
- 4. The town right-of-way line for Hebron Avenue and Linden Street should be labeled on all plan sheets for clarity.
- 5. After review of the Hydrology and Hydraulics report the Engineering Division finds that the proposed storm water management system was appropriately sized to support the development and is consistent with Town standards for stormwater management.

- 6. The long-term stormwater maintenance schedule for the proposed stormwater management system should be moved to the Site Plan Sheet 4 for ease of reference. The narrative should also be revised to indicate that the property owner is responsible for this maintenance.
- 7. Existing and proposed catch basins should be depicted with different symbols on the plans for clarity.
- 8. Existing contours should be labeled on the site plan to clarify grading intent.
- 9. Existing improvements on the residential property to the south near the property line should be depicted on the plans, including the residential structure, fence, and any vegetation that would function as screening. A note regarding protection of the existing fence along the southerly property line should also be added.
- 10. The Engineering Division standard inspection note should be added Sheet 4 of the plans.
- 11. Town of Glastonbury Concrete Sidewalk Detail on Sheet 8 should be replaced with the latest version found on the town website.
- 12. Existing buildings at 7 Linden Street and 366 Hebron are connected to the Town sanitary sewer. Approximate locations of the existing sewer laterals should be shown on the Demolition Plan Sheet 3 with notes regarding disconnection of the sewer laterals at the street line. Sewer Permits are required for disconnection of these structures from the Engineering Division office.
- 13.A supplemental sewer assessment may be required as part of this development which will be determined at the time that Building Permit Application is submitted.
- 14. Applicant shall provide a copy of final stamped and signed plans, stormwater management report, and traffic report in PDF form to the Town Engineer.