

MEMORANDUM

TO: E. Jean Krack, Manager
Phoenixville Borough

FROM: John J. Yurick, P.E., PTOE, PTP

SUBJECT: 785A Starr Street Retail Expansion
Preliminary Transportation Impact Study Findings

DATE: December 14, 2023

As requested, McMahon, a Bowman Company, has prepared this project status memorandum to summarize the preliminary findings of our ongoing transportation impact assessment for the proposed shopping center expansion located on the northeast corner of the Nutt Road (S.R. 0023)/Starr Street intersection in Phoenixville Borough, Chester County. The purpose of the memorandum will be to provide an update to the Borough to date, since the start of the study was delayed because of the intersection improvement project at Nutt Road/Starr Street, which was just recently completed.

Based on the site plan, the proposed expansion will consist of a new retail outparcel adjacent to the shopping center driveway, with an expanded parking area accessing the southeast main driveway aisle. Existing sidewalk and crosswalks are generally proposed be maintained as is, however, additional sidewalk connections are proposed internal to the site.

The full scope of the transportation impact study will ultimately satisfy the requirements of Phoenixville Borough (SALDO Section 22-602).

Site Trip Generation

Traffic volumes to be generated by the proposed retail development were prepared based on trip generation data compiled from numerous studies contained in the Institute of Transportation Engineers (ITE) publication, *Trip Generation, 11th Edition*. **Table 1** presents the anticipated vehicular trip generation for the proposed development based on our evaluation.

Table 1. Preliminary Vehicular Trip Generation⁽¹⁾

Land Use	Size	Daily	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Proposed Site With Expansion ⁽²⁾	94,616 s.f.	8,940	207	127	334	410	444	854	447	429	876
Existing Site ⁽²⁾	85,816 s.f.	8,108	188	115	303	373	404	777	405	390	795
Additional Trips - Pass-By Trips⁽³⁾ New Trips	8,800 s.f.	832 <u>-175</u> 657	19 <u>-4</u> 15	12 <u>-3</u> 9	31 <u>-7</u> 24	37 <u>-15</u> 22	40 <u>-16</u> 24	77 <u>-31</u> 46	42 <u>-13</u> 29	39 <u>-12</u> 27	81 <u>-25</u> 56

(1) Based on the ITE publication, *Trip Generation Manual, 11th Edition*.

(2) ITE Land Use Code 821 Shopping Plaza, with Supermarket.

(3) 40% during the weekday afternoon peak hour and 31% during the Saturday midday peak hour. Also, assumed to be 21% (or 10% less than the Saturday midday peak hour) during the weekday morning peak hour and on a daily basis.

Existing Traffic Conditions

Manual turning movement traffic counts were conducted during the weekday morning (6:00 AM to 10:00 AM), weekday afternoon (3:00 PM to 7:00 PM), and Saturday midday (12:00 PM to 3:00 PM) peak periods at the following intersections:

- Nutt Road (S.R. 0023) and Starr Street
- Nutt Road (S.R. 0023) and Valley Road
- Starr Street and Main Shopping Center Access
- Valley Road and Rear Shopping Center Access
- Main Shopping Center Access and First Internal Intersection

It is noted that the traffic counts were conducted after completion of the recent intersection improvements at Nutt Road/Starr Street. Based on coordination with PennDOT and the Borough, a left-turn traffic signal phase will be implanted in the near future for traffic turning from eastbound Nutt Road to Starr Street. Also, the left-turn movement from eastbound Nutt Road to Valley Road will be prohibited. These conditions were assumed in the existing traffic count summarization and analysis of the traffic operations due to their imminent implementation.

The results of these traffic counts are tabulated by 15-minute intervals. The four highest consecutive 15-minute peak intervals during these traffic count periods constitute the peak hours that are the basis of this traffic analysis. The resultant weekday morning, weekday afternoon, and Saturday midday peak hour traffic volumes are shown in Figure 3A. The capacity/level-of-service results are shown in Figure 3B.

As shown, most of the study intersection function at acceptable levels of service during the weekday commuter peak hours and Saturday midday peak hour. The only exception is the unsignalized Valley Road approach to Nutt Road that functions with LOS E conditions during all peak hours, which is not uncommon for stop-controlled approaches along heavily travelled corridors.

Future Traffic Conditions with Redevelopment (Preliminary Results)

Based on a preliminary evaluation of future traffic conditions, which includes existing traffic volumes, a regional growth, and the trip generation associated with the proposed retail expansion, the study area intersections are expected to continue to function at acceptable levels of service, as under current conditions. The only exception again, is the Valley Road approach to Nutt Road which will continue to operate with side street delays. Preliminary analysis indicates that the increases on this approach due to the proposed expansion will be minimal.

Conclusion

The results of the preliminary analysis indicates that the proposed retail expansion will not have a significant impact on the surrounding area roadways or site access intersections. The full transportation impact assessment will be complete in the near future and will highlight any further operational issues or provide recommendations, as appropriate.

Please do not hesitate to contact me if you have any questions.

cc: Owen Hyne, P.E., CEA, Remington & Vernick
David Boelker, Director of Planning and Code Enforcement/Zoning Officer
Scott Denlinger, Esquire, Wisler Pearlstine

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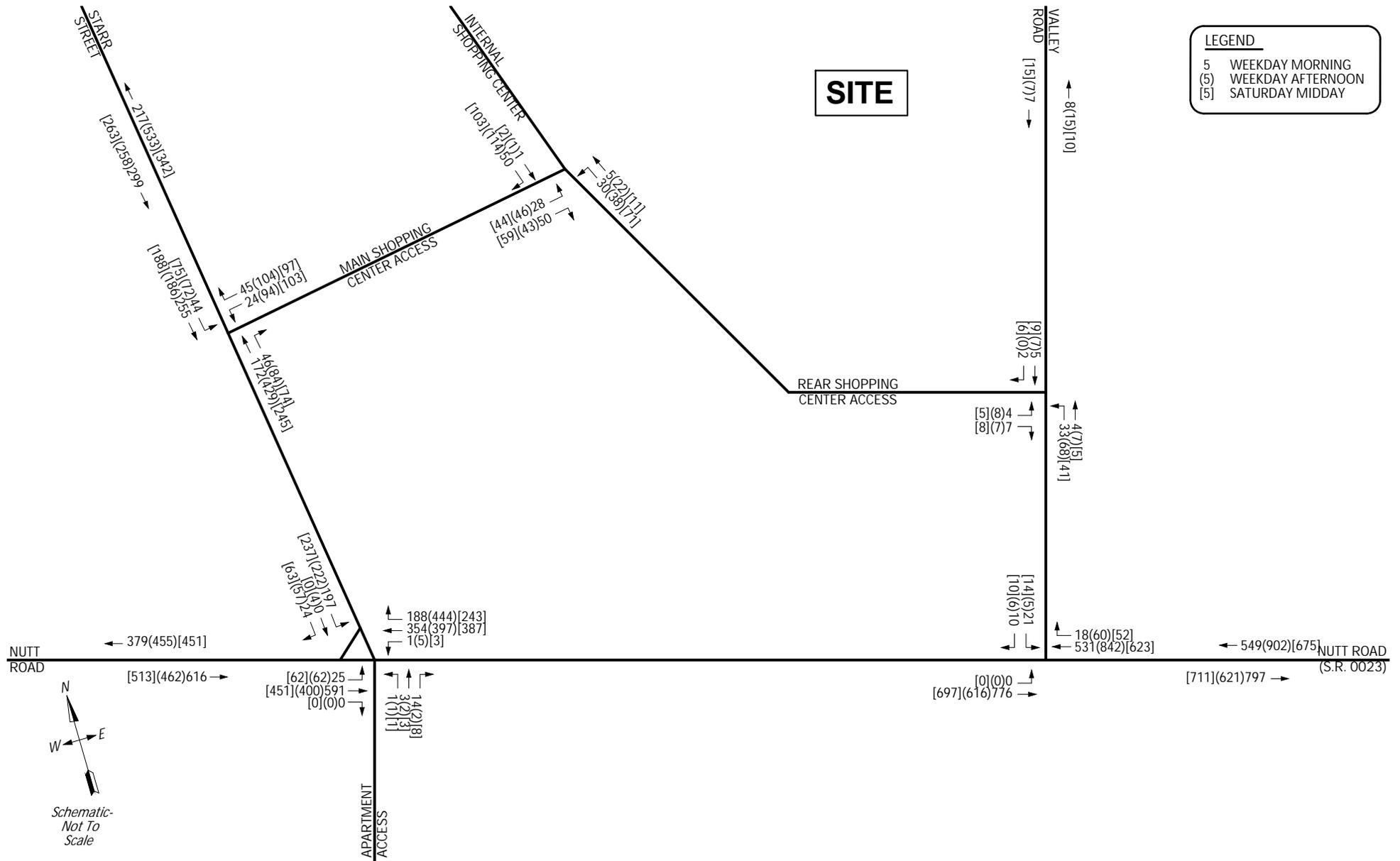


FIGURE 3A
 2023 Existing Peak Hour Traffic Volumes
785A STARR STREET
 PHOENIXVILLE BOROUGH, CHESTER COUNTY, PA



