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City Planner

CITY OF CONCORD

New Hampshire's Main Street™
Community Development Department

Planning Board

March 16, 2022

Project Summary – Major Site Plan

Project: Grappone Mazda (2022-04)
Property Owner: HLF East, LLC
Address: 134 Manchester Street
Map/Block/Lot: 782Z / 40

Determination of Completeness:

The application was determined complete at the January 19, 2022 Planning Board meeting.

Project Description:

The applicant is proposing to demolish the existing building and construct a new 22,880 sf Mazda dealership with service bay areas, a 2,250 sf self-serve carwash facility, associated parking, and vehicle display areas at 134 Manchester Street in the Highway Commercial (CH) District.

Project Details:

Zoning: Highway Commercial (CH) District and Aquifer Protection Overlay District (AFP)

Existing Use: Vacant
Propose Uses: Car dealership with self-service carwash

Minimum Lot Area: 40,000 SF
Existing Lot Area: 173,152 SF (may change to 166,302 SF pending subdivision, See Comment 1.4 below)

Maximum Lot Coverage: 80%
Existing Lot Coverage: 63% (109,463 sf)
Proposed Lot Coverage: 80% (133,050 sf)

Required Parking: 90, including 4 ADA spaces
Proposed Parking: 101, including 5 ADA spaces, plus 147 outdoor vehicular display spaces

Required Internal Landscaping: 5%
Provided Internal Landscaping: 5.6%

Total Trees Required: 55
Total Trees Provided: 55

1. General Comments

- 1.1 The following comments pertain to the 25-sheet site development plan set titled “Grappone Mazda, 134 Manchester Street, Concord, New Hampshire” prepared by Nobis Group, dated December 15, 2021, revised March 3, 2022; and, revised Landscape Plans and Architectural Elevations plans prepared by WarrenStreet Architects dated March 1, 2022.
- 1.2 The Applicant went before Architectural Design Review (ADR) Committee at their February 1, 2022, meeting. The Committee recommended approval of the building and site plans, with the condition that the Applicant review the lighting plan for compliance with City lighting requirements to reduce foot candles along the property lines and reduce foot candles within the site boundaries; and, to add trees within the parking lot. A revised lighting plan was submitted on March 3, 2022, which complies with the regulations.
- 1.3 See traffic study review comments from Karen Hill, P.E. in the attached separate memo. Additional comments related to the site will be forthcoming from the Engineering Services Division.
- 1.4 The Applicant is proposing to annex and convey a portion of the property to the adjacent property. The Applicant shall submit a Subdivision Application for the lot line adjustment. **Prior to final approval of the Site Plan, the subdivision plan shall be approved and recorded.** The final Site Plans shall include the new lot lines as approved in the subdivision plan.
- 1.5 The Applicant is requesting the following waivers to the Site Plan Regulations:
- Section 18.07 *Parking Lot Aisles*, to allow for parking lot aisle widths that range from 24 ft to 56 ft, where the maximum aisle widths shall not exceed 125% of the minimum aisle width 30 ft). *Staff supports this request, with the condition that the Applicant reduce drive aisles in the vehicular storage area on the west side of the site, and increase the landscaped buffer along the property line to reduce the total amount of impervious surface area.*
 - Section 18.10 *Driveway Widths*, to allow a 35 ft driveway radius where a maximum of 25 ft is allowed. The Applicant asserts that the 35 ft radius is required to accommodate the turning radius of 80-ft car carrier trucks that will be exclusively entering the site from the west. *Staff supports this request.*
 - Section 19.05 *Interconnected Parking lots*, to not provide interconnections to the abutting properties. The Applicant asserts that due to the need for protection of property and inventory, interconnection driveways are not feasible. *Staff supports this request.*
- 1.6 Per Section 21.02 *Sidewalks Required*, the applicant is required to construct a sidewalk along the frontage on Manchester Street. However, given that the City is proposing to reconstruct Manchester Street in the near future; staff is recommending that the Applicant set aside equivalent funds to be placed in a City escrow account to allow for the future construction of the sidewalk. The Applicant has agreed to set aside the funds. **The financial guarantee shall be provided prior to issuance of the Certificate of Occupancy.**

2. Conditional Use Permit(s)

2.1 The Applicant is requesting a Conditional Use Permit (CUP) in accordance with Section 28-7-7(f) of the Zoning Ordinance (ZO) to allow for the construction of a 40 ft wide driveway entrance where 28 ft is the maximum width.

- Please see the attached narrative provided by the applicant describing how the criteria of the applicable sections of the Ordinance are met, including Section 28-9-4(b) (4) (ZO), which states the criteria for the Planning Board decision. Based on the findings of the traffic study, it is recommended that the driveway have two exit lanes.

2.2 The Applicant is also requesting a CUP in accordance with Section 28-3-6(d)(4) *CUP Required for Certain Uses in the AP District* (ZO) for the construction of additional impervious surface area in the AP District and storage of regulated substances over 100 gallons.

- Please see the attached narrative provided by the applicant describing how the criteria of the applicable sections of the Ordinance are met, including Section 28-9-4(b) (4) (ZO), which states the criteria for the Planning Board decision.
- The Pembroke Planning Board reviewed the proposal at their January 25, 2022 meeting. Please see the attached memo, below is a summary of their comments:
 - The Board shared concerns regarding the amount of impervious surface, the type and amount of landscaping, and driveway alignment
 - The Board had concerns regarding how waste water will be discharged from the car wash, and recommends that best management practices be followed for capturing and disposing of any car wash waste, and,
 - The Board recommends secondary containment on the new transformer
- The Conservation Commission reviewed the application at their February 9, 2022 meeting, and provided the following comments:
 - The applicant shall demonstrate compliance with the performance standards;
 - Environmental report be provided for review (*Applicant submitted*)
 - Maximize the retention of the forested vegetation at the rear of the lot;
 - Monitoring wells be decommissioned in accordance with State regulations.

- The proposed application is increasing the amount of impervious area to over 133,050 sf (3.05 acres), or 80% of the site. The NH Stormwater Manual, Volume 1, Chapter 5 indicates that effective impervious cover values exceeding 25% are associated with significant impairment to receiving waters. The Applicant is providing more parking spaces than is required, and is requesting relief to create a wider driveway and drive aisles that exceed the maximum width. In order to support the CUP for increased impervious area in the AP District, Staff recommends that the Applicant reduce the amount of pavement on site by eliminating parking, reducing drive aisles, and providing additional landscape islands.

The Applicant responded that the project is designed to maximize benefit to the Grappone Mazda customers, and reducing spaces designated for vehicular storage would require storage off-site. Further, the Applicant states that the proposed conditions results in treated infiltration of up to 95% of the runoff from a 100 year storm event, where currently the site has no stormwater runoff controls.

Staff understands that the stormwater treatment will be greatly improved; however, we still feel there is opportunity to reduce the amount of pavement that is proposed on the site

without impacting the amount of vehicle storage: the Applicant is proposing 101 designated customer/employee parking spaces where only 90 are required; there are eight striped islands within the parking areas, some or all of these could be landscaped islands that, ideally, could be planted with deciduous shade trees or have rain gardens or other impervious alternatives; the drive aisles within the vehicular storage areas could be reduced, etc.

3. Site Layout Comments

- 3.1 In a memo from Stephen E. Pernaw, P.E., PTOE, dated February 4, 2022, (included under the Supplemental files) Mr. Pernaw provided a solution to address future left turn conflicts on Manchester Street, which entails shifting the driveway 55 feet to the west of the current proposal. City staff supports this solution (see attached memo from the City's Transportation Engineer, Karen Hill, P.E.). The current iteration of the site plan does not reflect this design and poses safety concerns for current and future traffic conditions. A bypass lane is proposed, which will mitigate a portion of the conflicts. ***Staff supports the proposal of the bypass lane but also recommends revising plans to shift the driveway further west to provide the minimum appropriate amount of separation, as indicated in the 2/4/22 memo from Mr. Pernaw.***
- 3.2 Please provide additional information on how the required customer and employee parking will be differentiated from vehicular display. Staff has concerns that vehicle display may take over required parking spaces. ***Repeat Comment. Applicant has stated that the inventory spaces will be differentiated so that customers do not park there; please confirm that employee and customer parking spaces will not be taken over by inventory.***

4. Landscape Comments

- 4.1 Revise the Planting Schedule as follows:
- *Prunus virginiana* is an ornamental tree, not a large deciduous tree. While staff appreciates that this tree provides high wildlife value, the fruit and resulting feces from feeding birds and the weak wooded branches may create a maintenance issue for a car dealership. Staff recommends the Landscape Architect reconsider this choice. ***Repeat comments.***
 - *Baptisia australis* is a perennial, not shrub
 - *Quercus acutissima*, Sawtooth Oak, has been shown to have invasive tendencies and is not longer recommended for planting in the United States because of its potential impact on native ecosystems. In addition, these trees produce large amounts of acorns, which may not be ideal for a car dealership. Staff recommends that the Landscape Architect replace with a native or adapted street tree.
- 4.2 Revise Landscape Specifications Section 3.3 on Sheet LA105 to match City standard details. ***Repeat Comment. Sheet LA105 was missing from the revised submission.***

5. Recommendations

- 5.1 **Grant Architectural Design Review approval** for the site plan and building elevations, with the condition that the Applicant provide additional trees within the interior portions of the parking lot.
- 5.2 **Grant the following waivers to the Site Plan Regulations.** Per RSA 674:44, IIIe, specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations:
- Section 18.07 *Parking Lot Aisles*, to allow for parking lot aisle widths that range from 24 ft to 56 ft, where the maximum aisle widths shall not exceed 125% of the minimum aisle width 30

ft) with the condition that the Applicant reduce drive aisles in the vehicular storage area on the west side of the site, and increase the landscaped buffer along the property line to reduce the total amount of impervious surface area.

- Section 18.10 *Driveway Widths*, to allow a 35 ft driveway radius where a maximum of 25 ft is allowed. The Applicant asserts that the 35 ft radius is required to accommodate the turning radius of 80-ft car carrier trucks that will be exclusively entering the site from the west.
- Section 19.05 *Interconnected Parking lots*, to not provide interconnections to the abutting properties. The Applicant asserts that due to the need for protection of property and inventory, interconnection driveways are not feasible.

5.3 **Grant the following Conditional Use Permits:**

- CUP in accordance with Section 28-7-7(f) of the Zoning Ordinance to allow for the construction of a 40 ft wide driveway entrance where 28 ft is the maximum width.
- CUP in accordance with Section 28-3-6(d)(4) *CUP Required for Certain Uses in the AP District (ZO)* for the construction of additional impervious surface area in the AP District and storage of regulated substances over 100 gallons, with the condition that the Applicant reduce the amount of impervious surface area by converting striped landscape islands into planted landscape islands, reduce the drive aisles within the vehicular storage area and shift those parking spaces on the western perimeter to provide additional pervious/grasses area along the western perimeter.

5.4 **Grant Major Site Plan** approval for the construction of a 22,880 sf Mazda dealership with service bay areas, a 2,250 sf self-serve carwash facility, associated parking, and vehicle display areas, subject to the following precedent and subsequent conditions noted below:

- (a) **Precedent Conditions** – to be fulfilled within one (1) year and prior to sign off by the Clerk and Chair of the Planning Board and issuance of any building permits, or the commencement of site construction, unless otherwise specified:
- (1) Address all review comments to the satisfaction of the Planning and Engineering Divisions. For all subsequent submissions, applicant shall provide a response memo addressing/acknowledging all comments.
 - (2) The Applicant shall submit a Subdivision Application for the lot line adjustment to annex and convey a portion of the property to the adjacent property. Prior to final approval of the Site Plan, the subdivision plan shall be approved and recorded.
 - (3) Conditional Use Permit(s) granted are to be noted and fully described on the plan including date granted and applicable Section number(s) of the Zoning Ordinance. Should the Board vote to deny the Conditional Use Permit(s), applicant shall comply with said submission requirement(s).
 - (4) Waiver(s) granted are to be noted and fully described on the plan including date granted and applicable Section number(s) of the Site Plan Regulations. Should the Board vote to deny the waiver(s), applicant shall comply with said submission requirement(s).
 - (5) Final plans shall be signed and sealed by the NH Registered Land Surveyor, Landscape Architect, and Professional Engineer.
 - (6) Submit three (3) copies of fully revised plans for sign off by the Clerk and Chair of the Planning Board.

(b) Subsequent Conditions – to be fulfilled as specified:

- (1) Prior to commencement of construction activity, payment of inspection fees in an amount approved by the City Engineer shall be made.
- (2) A pre-construction meeting shall be required prior to the start of any construction activities onsite. The applicant shall pick up one (1) set of signed plans at the Planning Office to make copies for the pre-construction meeting. A total of five (5) copies of the signed plan set shall be provided by the applicant at the pre-construction meeting.
- (3) The amount and form of financial guarantee shall be proposed by the Applicant and approved by the Clerk of the Board and City Engineer. The guarantee shall be provided prior to the issuance of the Certificate of Occupancy.
- (4) Prior to issuance of the final Certificate of Occupancy or final construction sign-off, as-built drawings shall be provided to the City Engineer in accordance with Section 12.09 of the Site Plan Regulations. The as-built drawings shall be surveyed on NH State Plane coordinates and NAVD 88 Datum.
- (5) The Applicant or their successors shall be responsible for the regular maintenance of all plantings and other landscape features. Plant materials shall be maintained alive, healthy and free from pests and disease.

Prepared by: BAF

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CITY OF CONCORD
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Community Development Department

David Cedarholm, PE
City Engineer

MEMORANDUM

TO: Beth Fenstermacher, Assistant City Planner
FROM: Karen Hill, P.E., Transportation Engineer
DATE: February 17, 2022
SUBJECT: Engineering Services Transportation Review
Traffic Impact Assessment
Major Site Plan/Grappone Mazda, 134 Manchester Street;
Map 782, Block Z, Lot 40; Project 2022-004

This memorandum summarizes staff comments on the following documents prepared by Stephen G. Pernaw & Company, Inc. (SGP) for the proposed automobile dealership at 134 Manchester Street:

- Traffic Impact Assessment¹ (TIA) dated November 29, 2021
- Addendum One of the TIA dated January 24, 2022
- Driveway Separation Memorandum dated February 4, 2022
- Follow-up thoughts for consideration in email dated February 10, 2022

Development Summary

The proposed redevelopment at 134 Manchester Street is located in the Highway Commercial Zoning District (CH). The existing site is used by the Grappone Automotive Group as an inventory storage lot. The parcel totals 172,627 square feet (sf), with an existing building to be demolished. The proposed site redevelopment includes 25,300 sf of building space including a Mazda dealership with service bay areas and a separate 1,250 sf private self-serve car wash facility. Two existing accesses to Manchester Street will be merged into a single, full-access driveway. The proposed Opening Year is 2023, with a 2033 Horizon Year.

¹ Stephen G. Pernaw & Company, Inc., *Traffic Impact Assessment, Grappone Mazda Dealership, 134 Manchester Street, Concord, New Hampshire*, November 29, 2021.

Overview

1. Section 32.01 of the City of Concord's Site Plan Regulations (SPR) states that site plans that are expected to generate greater than 200 vehicle trip ends per day or greater than twenty (20) peak hour trip ends shall be required to prepare a traffic study. **The proposed development exceeds these thresholds; therefore, a traffic study is warranted.**
2. Section 32.04 of the SPR states that where a Capital Improvement Project (CIP) indicates plans for realignment or widening a road that would require use of some of the land within the site plan, the Board may require the applicant to dedicate such areas for widening or realignment of such roads. **Engineering recommends ROW be dedicated for future widening of Manchester Street with CIP #36.**
3. Section 32.07 of the SPR states that prior to the start of the traffic study or the submittal of a site plan application, the applicant shall participate in a scoping session to identify the street and driveway intersections to be studied and the street corridors to be evaluated in the traffic study. **No scoping meeting was held prior to submittal of the TIA.**
4. Based on the trip-generation estimates provided in Table 1-R of the January 24, 2022 Traffic Impact Assessment – Addendum One, the proposed development is not anticipated to generate peak hour trips equal to or greater than the 100 vehicles per hour threshold on any adjacent roadway, which is used as general guidance by NHDOT² and the Institute of Transportation Engineers (ITE)³ to study a development's impacts along the adjacent roadway system. **Engineering concludes that the study area is reasonable due the size and type of development being proposed.**
5. Section 32.08 of the City of Concord's Site Plan Regulations states the elements that shall be considered in the development of the traffic study. Most elements were considered; the traffic study omitted the following:
 - Section 32.08(6): a field survey or description of existing conditions of the roadway width, lane widths, signing, lighting, road conditions, and adjacent uses with driveway locations including those across the street from the proposed development site.
 - Section 32.08(15): due to the volume of traffic along Manchester Street adjacent to the site, a gap analysis may be helpful in documenting the number of sufficient gaps in the mainline traffic stream (the elapsed time between the rear bumper of the leading vehicle and the front bumper of the trailing vehicle) for vehicles to turn to and from the proposed development. This gap study would assist in determining the scale/need for access location, restrictions, and mitigation on Manchester Street.
 - Sections 32.08(6) and 32.08(16): Available sight lines at the proposed site driveway are depicted on photographs provided in Appendix I of the November 2021 Traffic Impact Assessment. **The applicant should provide a comparison of the available sight lines with AASHTO⁴ guidelines to determine if the available sight lines for a**

² Bollinger, Robert E. Inter-Department Communication. New Hampshire Department of Transportation, Bureau of Traffic. 17 Feb. 2010.

³ Institute of Transportation Engineers, *Transportation Impact Analyses for Site Development: An ITE Proposed Recommended Practice*, (Washington D.C., 2010).

⁴ A Policy on Geometric Design of Highways and Streets, 6th Edition, 2011.

vehicle exiting the site meet or exceed minimum requirements based on vehicle speeds along Manchester Street. In addition, the applicant should confirm that the required sight lines do not cross into abutting parcels in which a sight line easement would be needed.

Traffic Volumes and Projections

1. The traffic impacts of the proposed development were evaluated during the weekday AM and weekday PM peak hours. As such, turning movement counts were conducted at the two existing site driveways in October 2021 during the weekday AM peak period (7-9 AM) and weekday PM peak period (3-6 PM). The intersection counts revealed that the existing site generated 3-7 (AM) and 2-10 (PM) vehicle-trips during the weekday peak hour periods. Although not provided, ITE trip-generation estimates for the proposed development are higher during the Saturday peak hour of generator (53 entering + 53 exiting = 106 total) than during the weekday AM peak hour (36 entering + 13 exiting = 49 total) and the weekday PM peak hour (28 entering + 41 exiting = 69 total). **Therefore, the applicant should either provide justification for why the impacts of the proposed development should not also be evaluated during the Saturday peak hour or provide an analysis of the traffic impacts of the project during the Saturday peak hour (Section 32.08(3) of the City's Site Plan Regulations).**
2. Base traffic volumes were also developed using the New Hampshire Department of Transportation (NHDOT) short-term automatic traffic recorder (ATR) counts in September 2020 on Manchester Street (west of Airport Road) and in July 2021 (east of Old Turnpike Road). These traffic counts were then adjusted based on seasonal and pandemic factors. **The applicant should obtain or collect Saturday daily traffic counts along Manchester Street in the vicinity of the site to confirm whether the traffic impacts of the proposed development should be evaluated on a Saturday basis (i.e., as per ITE methodologies, the combination of proposed site trips and existing traffic volumes along Manchester Street would help to determine if the Saturday midday peak hour is a critical traffic time period for the proposed development).**
3. The traffic volumes were adjusted upward by 6% based on an average of October peak-month traffic factor from NHDOT Group 4 (Urban Highways) factors between 2017-2019. **The methodology used in developing the seasonal adjustment factor, shown in Appendix E of the traffic study, is reasonable.**
4. Due to the COVID-19 pandemic, traffic volumes appeared to be approximately 20% lower than normal travel conditions on New Hampshire roadways. Therefore, the seasonally adjusted traffic volumes were further adjusted to reflect pre-pandemic traffic volumes by comparing traffic counts at nearby NHDOT Count Stations in November 2017 and June 2018 to September 2020 and July 2021. **The methodology used in developing the pandemic adjustment factor, shown in Appendix E, is reasonable.**
5. Site generated traffic volumes were estimated using industry-standard trip generation rates published by the Institute of Transportation Engineers (ITE).⁵ The most applicable Land Use Code (LUC) 840 for Automobile Sales (New) was used. The proposed development is estimated to generate site trips as follows:

⁵ Institute of Transportation Engineers, *Trip Generation*, 11th Edition, (Washington D.C., 2021).

- Weekday Daily: 740 total trips (370 entering + 370 exiting)
- Weekday AM Peak Hour: 49 total trips (36 entering + 13 exiting)
- Weekday PM Peak Hour: 69 total trips (28 entering + 41 exiting)

Based on the same ITE trip-generation methodologies, the proposed development would generate the following during a Saturday:

- Saturday Daily: 1,388 total trips (694 entering + 694 exiting)
- Saturday Peak Hour: 106 total trips (53 entering + 53 exiting)

The proposed development is projected to generate more site trips on a Saturday than during a weekday, and more site trips during the Saturday peak hour than during the weekday AM or weekday PM peak hours. **Consistent with other comments in this memorandum, the applicant should provide justification that the Saturday peak hour should not be included within the traffic study or conduct an analysis of the traffic impacts of the proposed development during the Saturday peak hour. In either case, it should be confirmed that the queuing analysis in the Driveway Separation Memorandum dated February 4, 2022 is valid for the critical time periods such that the Manchester Street eastbound and westbound left turn vehicles do not queue back beyond their striped storage, deceleration, and taper areas.**

6. Proposed trip distribution was derived based on the travel patterns observed at the existing site driveway intersections, shown in Appendix F with 80% of site trips to and from the west along Manchester Street and 20% to and from the east. **The existing site is used as an inventory storage lot and likely does not reflect the proposed condition distribution.** Based on a review of the February 4, 2022 Proposed Grappone Mazda Dealership memorandum, driveway counts were obtained for the Banks Chevrolet driveway that show a trip distribution of approximately 67% to and from the west along Manchester Street west and 33% to and from the east along Manchester Street during the weekday AM peak hour. In addition, the trip distribution patterns for the weekday PM peak hour show approximately 63% to and from the west along Manchester Street west and 37% to and from the east along Manchester Street. **If the distribution is updated, it should be confirmed that the queuing analysis in the Driveway Separation Memorandum dated February 4, 2022 is still valid.**
7. A level of service (LOS) analysis was provided for weekday AM and PM peak hour traffic operations at the Manchester Street/proposed site driveway intersection. Analysis indicates low delays for all movements except the left-turn exit which has long delays at LOS F during the weekday AM and PM peak hours. While this delay is typical of that experienced at all driveways along this section of Manchester Street, the following items are notable for this site:
 - The 2033 weekday PM peak hour delays for the left-turns exiting the site are shown to operate over capacity (i.e., volume-to-capacity [v/c] ratio >1.00). This operation indicates that the vehicle demand exceeds the capacity of the movement that results in long delays (LOS F) and could lead to safety problems. The expected weekday PM peak hour 95th percentile queue for future year 2033 from the traffic study is 5 vehicles, see Table 3-R in Addendum One. The proposed driveway has approximately 100 feet of length to accommodate a 4-vehicle queue before impacting on-site circulation.

- The delay and queue length appeared to have decreased in Addendum One for NB LT Departures in the 2023 Build. **The applicant should explain this change in operations.**

Site Access and On-Site Circulation

Sheet C-2 in the December 15, 2021 Site Plans depicts the latest proposed site circulation plan.

1. The elimination of one additional existing driveway opening on Manchester Street is a positive improvement for access management along the Manchester Street corridor.
2. The updated auxiliary turn lane warrants analyses, in Addendum One, show a need for left-turn treatment along Manchester Street at the site driveway in the 2023 opening year. The study concludes that this is best accomplished by a corridor-wide roadway widening project to provide a continuous two-way left-turn lane (TWLTL) on Manchester Street. This roadway project is currently slated to be completed in 2029; however, the City is concerned that this measure will not provide a safe left turn area into the site due to the proposed driveway being negatively offset with the Banks Chevrolet driveway across Manchester Street. With the future TWLTL, the left turns into these driveways may conflict as the Manchester Street eastbound and westbound left turning vehicles may queue back into each other.

The memorandum dated February 4, 2022, studied and presented an option to shift the proposed driveway a minimum of 175-feet from the Banks Chevrolet driveway across the street to address concerns with the negatively offset driveways and the future TWLTL. The City has a few concerns with the presented option:

- **This option may not be feasible if larger vehicles are making left turns into either site. Applicant may wish to contact Banks Chevrolet to determine if they currently restrict large vehicle left turns from Manchester Street. Applicant should also be cognizant that the applicant's proposed queue at peak hour will not be able to accommodate large vehicles and, as such, the applicant should consider implementing restrictions on time and/or direction of incoming deliveries.**
- **The memorandum did not address the lack of deceleration length provided with this option.**

Additionally, in the opening year prior to the City's roadway project, vehicles waiting to make left turns into the Banks or Grappone driveways will prevent through vehicles behind them from advancing along Manchester Street, thereby potentially backing up past each other's driveways. **Ideally, the proposed driveway would be aligned across from the opposite (Banks) driveway to form a standard four-way intersection, or with a positive offset such that the mainline or driveway left turns would not conflict. If either of these site driveway designs cannot be accomplished, the applicant shall present a solution, for review and approval by the City's Traffic Engineer and Planning Board, to address the need for left turn treatment for the 2023 opening year and 2033 horizon year, to mitigate the project's impacts to Manchester Street and neighboring driveways.**

3. The study indicates that the installation of a right turn lane or widened shoulder along the eastbound side of Manchester Street is suggested in the 2023 opening year. Existing utility poles

preclude widening at this time. **It is anticipated that the proposed 3-lane section of Manchester Street in the future will generally better accommodate turning traffic along the corridor. There are no other right turn pockets proposed as a part of the future widening at specific driveways, therefore, staff accepts the omission of this turn lane.**

4. Turn lanes are not necessary on the proposed site driveway approach to Manchester Street until 2033 and only in the weekday PM peak hour, but appear necessary to accommodate the large turning movement of the vehicle carrier. This driveway configuration and width is consistent with the automobile dealership driveway across Manchester Street as well as other Grappone dealerships. **It appears the additional driveway width is justified.**
5. It should be confirmed that the large vehicle carrier trucks will not be entering the site during the peak hours of the Manchester Street corridor (i.e., peak hour of adjacent street traffic) or of the development (i.e., peak hours of generator). As shown, the turning vehicle would conflict with queuing vehicles exiting the site drive. **City staff has concerns that if the vehicle carrier is unable to make the right turn when a vehicle is exiting the driveway, then the truck would back up traffic on Manchester Street until that exiting vehicle leaves.**
6. The service bay area on the northside of the building creates conflict with the driveway and lane use with vehicles entering and exiting the site as well as the service bays.
7. The lanes should be striped and clearly marked with left and right turn arrows at the driveway approach to Manchester Street.
8. The proposed stop bar should be moved up closer to Manchester Street to reflect conditions in the opening year.