City of Ann Arbor
Traffic Engineering Review

Review Memo

To: Alexis DiLeo, Planning and Development Services

From: Cynthia Redinger, PE, PTOE, Public Services Area – Project Management

cc: Via Trakit

Date: March 10, 2017

Re: SP17-009: 1140 Broadway

This application is **not** recommended for approval. The following comments are compiled comments from Luke Liu and myself.

Transportation Impact Analysis:

- The consulting team has not submitted at transportation impact analysis (TIS) to date.
- Comments regarding the trip generation for this site were provided on March 3, 2017. Responses to those comments have not been submitted prior to this review.
- The site plan shows major changes to Broadway Street. This proposal was not discussed as part of the presubmission meetings. The changes to this public street will need to be thoroughly analyzed in the TIS.
- Highway Safety Manual predictive modeling will be needed to demonstrate that the developer will not be creating a less safe scenario for the public street.
- The applicant was notified that the TIS would need to meet the requirements of Land Use Development Regulations Attachment D. Attachement D is included with this review for your use.

Plans:

- *Once Upon a Child* and *Format and Framing Gallery* are not shown on the proposed site plan. Changes to the public right of way will impact these properties and their access points. The applicant's plan to accommodate these parcels must be shown on the plans.
- New sidewalks are shown being placed on the intersection of Plymouth Road/Broadway Street/Maiden Lane/Moore. Any changes to this intersection, including sidewalk upgrades or additional turn lanes, will require the entire intersection, including traffic signal components, to be upgraded to meet current ADA requirements and best practices.
- Public sidewalk on Broadway Street appears to be placed on private property.

- All inftrastructure in the direct vicinity of the project must be shown on the plans. This includes the full intersection of Plymouth Road/Broadway Street/Maiden Lane/Moore and all non-motorized infrastructure in between intersections. It is expected that gaps in infrastructure, such as sidewalk gaps, in the direct vicinity of the project will be filled to promote access to the site by all modes of transportation.

- The site plan is proposing to completely reconstruct Broadway Street. Access management improvements must be proposed as part of the proposed design effort.

- Broaday Street is a local street with traffic calming devices that were installed through the City's traffic calming program. Any changes to the street must continue to be context sensitive and be consistent with the traffic calming program.

- The driveway approach to Broadway Street has been presented to appear as a public street; however, many features are inconsistent with a public street. Many of the features are consistent with a parking lot. The current design leads to concerns about public safety. Specific items include:

    - Removing pull-in parking and using back-in angle parking instead

    - Removing parking from intersection areas

    - Creating complete non-motorized networks on private streets

- It is anticipated that the proposed site design will promote cut-through traffic.

- Sidewalks shall be maintained across all driveways.

- Intersection sight distance triangles shall be shown on the landscaping plan to assure clear sight lines.

- Comments regarding the shown public intersections are incomplete until the full TIS is provided.

In situations where there are existing street trees meeting City standards, the front foot base figure will be reduced by 45 feet for every existing acceptable tree. This is the average space required for one tree.

1:3 Provisions for Request for Larger Trees.

Property owners and developers who prefer to provide larger trees have an option which is a front foot charge proportional to the size of tree requested. For example, 3 - 3 1/2" diameter balled and burlapped (B & B) trees would require $4 foot to cover the cost. This charge will be per foot depending on the size of the tree. The basis formula for computing the front foot charge for any given tree size is as follows:

$1.30 x trunk diameter in inches = per front foot escrow charge.

The formula was determined by dividing the City's cost of planting a three-inch diameter tree ($175.50) by 45 feet spacing for each tree. This figure of $3.90 per front foot was divided by the tree size (three inches) which equals $1.30 charge per inch of trunk diameter. For example, the charge for large tree planting would be as follows:

- 2" B & B x $1.30/" = $2.60/' front x 45'/tree = $117/tree

- 2.5" B & B tree x $1.30/" = $3.25/' front x 45'/tree = $146.25/tree

- 3" B & B tree x $1.30/" =$3.90/' front x 45'/tree = $175.50/tree

This will vary from year to year to account for inflationary increases.

1:4 Method and Timetable for Payment and Planting.

The escrow is to be paid by the owner or the individuals submitting the site plan or plat. The escrow amount is to be deposited with the Parks Department. The deposit for site plans must be made in full prior to issuance of a building permit. In the case of a plat, the escrow payment will be charged according to the provisions of the subdivision agreement.

1:5 Developer Provided Street Trees.

Developer may choose to provide the required street trees. In this case, the appropriate escrow amount shall be deposited prior to development, however, it will be refunded after the Forestry Division has approved the street tree plantings. The Department's planting specifications are available on request.

Another option is the incorporation of private landscaping into a streetscape setting. This may be done with introduced landscape materials or existing on-site plant material. The general requirements of the Department are that quality planting materials be used. Each plan of this type will be reviewed and judged on its individual characteristics by the City Forester.

1:6 Street Trees for Unique Sites.

There are a few right-of-way situations in the City where normal grass extensions do not exist, but the possibility of planting street trees should be considered. The most common of these situations is the CBD (Central Business District) where the right-of-way is entirely made up of concrete or asphalt sidewalk. Although not all these areas can be planted because of other restrictions, many are feasible street tree planting locations. Each site will be examined and analyzed individually. Since the number of trees that can be planted in these types of areas will vary greatly from site to site, the escrow charge will be based on a portion of the cost per tree that can be installed. The developer will be charged for all excavation (concrete removal or planter box construction) costs and the cost of a tree guard which shall not exceed $300/tree. The Forestry Division and the Dean Fund Committee will make arrangements to cover the cost of purchasing and planting a 3" - 3 1/2" B & B (minimum) tree. The charge of the developer will be determined when the site plan or plat is approved.

Another unique situation would be where normal extension planting is totally restricted, however, it is feasible to plant outside the right-of-way. In this case, the property owner would have to agree to such planting. If all parties can agree on a plan, the normal escrow, or in the case of concrete sites, a per tree charge would be applied.

ATTACHMENT D OF LAND DEVELOPMENT REGULATIONS

Traffic Impact Analysis

1:1 The petitioner shall secure and present to the Planning Department, as part of any area plan, site plan or plat submission, a written analysis of the impact of any automobile-related development proposal on the existing public street; vehicular, bicycle, or pedestrian traffic; and/or existing public street parking. Exceptions to this requirement will be site plans or plats that will generate less than three vehicle trips per unit per peak hour or 50 vehicle trips per peak

hour. The generation of trips shall conform to the methods specified in the current edition of the Trip Generation Manual, a publication by the Institute of Transportation Engineers.

1:2 Such analysis shall include the following:

(1) Existing traffic volumes passing on all streets abutting the proposed development during the peak hour. Traffic from other new and proposed developments in the area should be considered.

(2) Existing peak hour turning movements of vehicular traffic at all public street intersections within 200 feet of the proposed development, or those intersections that may be impacted by the proposed development.

(3) Projected peak hour generation rate and peak hours of generation for the proposed development.

(4) Projected peak hour traffic movements as a result of the establishment of the proposed facility.

(5) A capacity analysis for impacted intersections.

(6) A statement of the total impact the projected generations will have on the existing level of service as determined and certified by a registered engineer.

(7) A sketch plan showing all existing driveways to public streets within 200 feet of the proposed development and all on-street parking or loading areas.

(8) Proposed site access driveways with a determination if a deceleration lane or taper is necessary based on current City warrant analysis standards, a determination if a left-turn by-pass lane is necessary based on a warrant analysis, and a sight distance study at the site access driveway.

(9) A pedestrian circulation plan showing all possible points of conflict between motorized traffic and pedestrian/bicycle traffic on public streets and sidewalks within 200 feet of the proposed development, or those intersections that may be impacted by the proposed development.

(10) A gap study for pedestrian or vehicular traffic may be required at non-signalized locations that may be impacted by the proposed development.

1:3 The traffic and/or parking impact analysis shall be reviewed by the Department of Transportation for completeness and accuracy. The analysis shall include a determination of the service volume and capacity of adjacent streets including the traffic from the new development. The methodology to be employed in determining street capacities shall conform to the 1985 edition of the Highway Capacity Manual, Special Report Number 209, or the latest revision thereof. Proposals that will contribute traffic to streets or intersections that are or will be as a result of this proposal at a level of Service D, E, or F as defined in the Highway Capacity Manual may be denied by Commission and Council until such time as necessary street or traffic improvements are scheduled for construction.