

STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

800 BAY ROAD P.O. Box 778 Dover, Delaware 19903

JENNIFER COHAN SECRETARY

February 10, 2017

Mr. J. Michael Riemann Becker Morgan Group, Inc. 309 South Governors Avenue Dover, DE 19904

Dear Mr. Riemann:

Please find the Traffic Impact Study (TIS) review letter for the **Capital Station (f.k.a. Watertower Place)** commercial development (Tax Parcel 02-05-077.06-01-02.00) enclosed with this correspondence. The TIS review has been completed under the responsible charge of a registered professional engineer whose firm is authorized to work in the State of Delaware. They have found the TIS to conform to DelDOT's <u>Development Coordination Manual</u> and other accepted practices and procedures for such studies. DelDOT accepts this review letter and concurs with the recommendations. If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2167.

Sincerely,

Troy Brestel Project Engineer

TEB:km Enclosures cc with enclosures:

Ms. Constance C. Holland, Office of State Planning Coordination Mr. Scott Koenig, City of Dover Ms. Ann Marie Townshend, City of Dover Mr. Andrew Parker, McCormick Taylor, Inc. DelDOT Distribution



DelDOT Distribution

Annie Cordo, Deputy Attorney General Robert McCleary, Director, Transportation Solutions (DOTS) Drew Boyce, Director, Planning Mark Luszcz, Chief Traffic Engineer, Traffic, DOTS Michael Simmons, Assistant Director, Project Development South, DOTS J. Marc Coté, Assistant Director, Development Coordination T. William Brockenbrough, Jr., County Coordinator, Development Coordination Peter Haag, Traffic Studies Manager, Traffic, DOTS Thomas Greve, Central District Engineer, Central District Steve McCabe, Central District Public Works Engineer, Central District Wendy Polasko, Kent Subdivision Coordinator, Development Coordination David Dooley, Service Development Planner, Delaware Transit Corporation Mark Galipo, Traffic Engineer, Traffic, DOTS Anthony Aglio, Planning Supervisor, Statewide & Regional Planning Claudy Joinville, Project Engineer, Development Coordination Jonathan Moore, Subdivision Manager, Development Coordination



January 31, 2017

Mr. Troy E. Brestel Project Engineer DelDOT Division of Planning P.O. Box 778 Dover, DE 19903

RE: Agreement No. 1655 Traffic Impact Study Services Task No. 1 Subtask 2A – Capital Station

Dear Mr. Brestel,

McCormick Taylor has completed its review of the Traffic Impact Study (TIS) for the Capital Station commercial development (formerly known as Watertower Place or Tower Commons) prepared by Karins and Associates, Inc. (KA), dated April 2014. At the time the TIS was submitted, the development was called Watertower Place. This review was assigned as Task Number 1 (Subtask 2A). KA prepared the report in a manner generally consistent with DelDOT's *Standards and Regulations for Subdivision Streets and State Highway Access*.

The TIS evaluates the impacts of the Capital Station commercial development, proposed to be located on the northwest corner of US Route 13 (DuPont Highway / Kent Road 7) and Division Street (Delaware Route 8 / Kent Road 16), bounded by Maple Parkway to the north and Kings Highway (Kent Road 66) to the west, within the City of Dover in Kent County, Delaware. The proposed development would consist of 11,251 square feet of restaurant space and 46,460 square feet of retail space on approximately 9.3 acres of land. When the TIS was submitted, four access points were proposed: one rights-in/rights-out only access point on US Route 13, two partial access points on Division Street (one rights-in only and one lefts-in/lefts-out/rights-out), and one full access point on Maple Parkway. Based on updated conversations in May and June 2014, three access points are now proposed; one on US Route 13, one on Maple Parkway, and one (instead of two) on Division Street. The Division Street access point would be a full-movement access most of the time but drivers wishing to exit the site by making a left turn from this driveway during the weekday evening peak hour would be redirected to other access points. As of April 2014, construction was anticipated to be complete by 2015. An updated anticipated completion date is not known.

The land is currently zoned as SC-1 (Neighborhood Shopping Center) within the City of Dover, and the developer does not propose to change the zoning. The property has been designated by the City of Dover as a "Redevelopment Area" by Resolution No. 2012-14. This Resolution requests that DelDOT allow for development to proceed without requiring the developer to make all of the necessary improvements (to achieve intersection Level of Service standards) but rather requiring the developer to contribute to a portion of the costs to be set aside for current and future improvements that is proportional to the traffic generated by the proposed development.



DelDOT has no relevant active roadway projects within the study area.

Based on our review, we have the following comments and recommendations:

All intersections within the study area exhibit adequate level of service (LOS), so physical roadway and/or traffic control improvements to address any such deficiencies are not necessary. However, a number of items are recommended to accommodate site entrances, satisfy requirements of DelDOT's *Standards and Regulations for Subdivision Streets and State Highway Access*, and address bicycle and pedestrian needs.

While the proposed full-movement access on Division Street would be located just east of the existing water tower, as described below in Item No. 3, there are some concerns with having the entrance that close to the US Route 13 intersection (approximately 250 feet away). These concerns are mostly due to the potential for queues on eastbound Division Street to extend from the signal at US Route 13 back to the proposed entrance at times. While locating the site entrance west of the water tower (which will remain standing) would be better in terms of the eastbound queueing situation, there are other concerns with that location such as creating an offset intersection with Bayard Avenue along with a less desirable site layout. As such, after coordination between DelDOT, the City and the developer, it was agreed that the recommendation should be to allow the entrance east of the water tower but to redirect drivers wishing to make a left turn out of the site from this driveway during the weekday evening peak hour to use other access points.

Should the City of Dover choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. All applicable agreements (i.e. letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

1. The developer should construct Site Entrance A on US Route 13. This entrance driveway should be located approximately 400 feet north of Division Street, as shown in the Site Location Map on Page 9. The proposed configuration is shown in the table below:

Approach	Current Configuration	Proposed Configuration
Eastbound Site Entrance A	Approach does not exist	One right-turn lane
Southbound US Route 13	Three through lanes	Three through lanes and one right-turn lane



Initial recommended minimum turn-lane lengths (excluding tapers) of the separate turn lanes are listed below. The developer should coordinate with DelDOT's Development Coordination Section to determine final turn-lane lengths during the site plan review process.

Approach	Left-Turn Lane	Right-Turn Lane
Eastbound Site Entrance A	N/A	N/A
Southbound US Route 13	N/A	190 feet *

* turn-lane length based on DelDOT's Auxiliary Lane Worksheet

2. The developer should construct Site Entrance B on Maple Parkway. The proposed configuration is shown in the table below:

Approach	Current Configuration	Proposed Configuration
Northbound Site Entrance B	The approach does not exist	One shared left/right-turn lane
Eastbound Maple Parkway	One through lane	One shared through/right-turn lane
Westbound Maple Parkway	One through lane	One left-turn lane and one through lane

Initial recommended minimum turn-lane lengths (excluding tapers) of the separate turn lanes are listed below. The developer should coordinate with DelDOT's Development Coordination Section to determine final turn-lane lengths during the site plan review process.

Approach	Left-Turn Lane	Right-Turn Lane
Northbound Site Entrance B	N/A	N/A
Eastbound Maple Parkway	N/A	N/A
Westbound Maple Parkway	50 feet *	N/A

* turn-lane length based on DelDOT's Auxiliary Lane Worksheet



3. The developer should construct Site Entrance C on Division Street. This entrance driveway should be located just east of the existing water tower at a point approximately 250 feet west of US Route 13 (measured from the eastbound Division Street stop bar), as shown in the Site Location Map on Page 9. This would be a full-movement access most of the time but drivers wishing to exit the site by making a left turn from this driveway during the weekday evening peak hour would be redirected to other access points. The proposed configuration is shown in the table below:

Approach	Current Configuration	Proposed Configuration
Southbound Site Entrance C	The approach does not exist	One left-turn lane and one right-turn lane (lefts out restricted during weekday evening peak only)
Eastbound Division Street	Two through lanes	Two through lanes and one left- turn lane
Westbound Division Street	Two through lanes	Two through lanes and one right-turn lane

Initial recommended minimum turn-lane lengths (excluding tapers) of the separate turn lanes are listed below.

Approach	Left-Turn Lane	Right-Turn Lane
Southbound Site Entrance C	50 feet *	50 feet *
Eastbound Division Street	100 feet **	N/A
Westbound Division Street	N/A	110 feet **

* turn-lane length based on storage length per queuing analysis, with 50-foot minimum

** turn-lane length based on DelDOT's Auxiliary Lane Worksheet

Signage must be installed to redirect drivers wishing to exit the site by making a left turn out from Site Entrance C during the weekday evening peak hour. This signage should convey the message, "Lefts Out – Use Rt. 13 or Maple Parkway between 4 PM and 6 PM" or similar language. While Site Entrance C will be a full access entrance, the developer should coordinate with DelDOT's Development Coordination Section to determine final design details during the site plan review process, including the exact location for this entrance, exact geometry of approaches and auxiliary lanes, final turnlane lengths, and weekday evening peak hour exiting left-turn restriction signage.

4. Other than the three proposed site entrances described above in Item Nos. 1-3, all other existing and/or previous site entrances for the property should be closed and removed.

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- 5. The developer should improve the intersection of US Route 13 & Division Street by adding an exclusive right-turn lane on the southbound approach of US Route 13. The southbound approach would then consist of one left-turn lane, three through lanes, and one right-turn lane (plus one bike lane). The developer should coordinate with DelDOT's Development Coordination Section to determine design details for this added right-turn lane, including the final turn-lane length, during the site plan review process.
- 6. The developer should enter into a traffic signal agreement with DelDOT for the intersection of US Route 13 & Division Street. The agreement will cover signal adjustments required by the physical improvements described in Item No. 5. The agreement should include pedestrian signals, crosswalks, interconnection, and ITS equipment such as CCTV cameras at DelDOT's discretion. One or more other developers may enter into a traffic signal agreement for this intersection as well. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the traffic signal.
- 7. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A right-turn yield to bikes sign (MUTCD R4-4) should be added at the start of the right-turn lanes added to southbound US Route 13 at Site Entrance A, to southbound US Route 13 at Division Street, and to westbound Division Street at Site Entrance C.
 - b. Adjacent to the right-turn lanes added to southbound US Route 13 at Site Entrance A, to southbound US Route 13 at Division Street, and to westbound Division Street at Site Entrance C, a minimum of a five-foot bicycle lane should be dedicated and striped with appropriate markings for bicyclists through the turn lane in order to facilitate safe and unimpeded bicycle travel.
 - c. Appropriate bicycle symbols, directional arrows, striping (including stop bars), and signing should be included along bicycle facilities and right-turn lanes within the project limits.
 - d. Utility covers should be made flush with the pavement.
 - e. Bike parking should be provided near the building entrances within this development. Where the building architecture provides for an awning or other overhang, the bike parking should be covered.
 - f. A 15-foot wide easement from the edge of the right-of-way should be dedicated to DelDOT within the site frontage along US Route 13. Within the easement along US Route 13, a minimum of a five-foot sidewalk (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards should be constructed along the site frontage. At the southern end, this sidewalk should connect to the existing sidewalk along the Division Street site frontage. At the northern end, this sidewalk should connect to the proposed sidewalk along the Maple Parkway site frontage. An ADA compliant curb ramp and crosswalk should also be provided across the east end of Maple Parkway to provide a connection to the existing sidewalk along the US Route 13 site frontage of the adjacent property to the north (Wells Fargo Bank).

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- g. Along the Division Street site frontage, the existing sidewalk should be improved as needed so that it is a minimum of a five-foot sidewalk (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards.
- h. A minimum of a five-foot sidewalk (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards should be constructed along the Maple Parkway site frontage. At the eastern end, this sidewalk should connect to the proposed sidewalk along the US Route 13 site frontage. At the western end, this sidewalk should connect to the proposed sidewalk along the Kings Highway site frontage.
- i. A minimum of a five-foot sidewalk (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards should be constructed along the Kings Highway site frontage. At the northern end, this sidewalk should connect to the proposed sidewalk along the Maple Parkway site frontage. At the southern end, this sidewalk should terminate at the property line per DelDOT's *Shared Use Path and/or Sidewalk Termination Policy* dated June 19, 2014.
- j. ADA compliant curb ramps and crosswalks should be provided at all pedestrian crossings, including all site entrances. Type 3 curb ramps are discouraged.
- k. Internal sidewalks for pedestrian safety and to promote walking as a viable transportation alternative should be constructed within the site. These sidewalks should each be a minimum of seven feet wide (with a minimum of a five-foot buffer from the roadway) and should meet current AASHTO and ADA standards. These internal sidewalks should connect the building entrances to the existing and proposed sidewalks along the site frontages.
- 1. Where internal sidewalks are located alongside of parking spaces, a buffer should be added to eliminate vehicular overhang onto the sidewalk.
- m. The proposed development project should take care not to interfere with pathway bike and pedestrian movements at Park Drive and Division Street. It should, at the very least, provide connectivity, via sidewalks, to the Capital City Pathway that forms a pathway loop around the southern part of Dover. This connectivity actually already exists by way of the sidewalk along the north side of Division Street and the crosswalks at the intersection of Division Street and Kings Highway / Park Drive.
- n. The developer should coordinate with the Delaware Transit Corporation regarding the possibility of improving the existing bus stop along the Division Street site frontage, creating a bus pull-off somewhere along the property frontage on US Route 13, and/or adding other transit services and facilities at this location. Internal sidewalks should be connected to any new or improved transit facilities, and parking facilities for bicyclists should be included.

Improvements in this TIS may be considered "significant" under DelDOT's *Work Zone Safety and Mobility Procedures and Guidelines*. These guidelines are available on DelDOT's website at <u>http://www.deldot.gov/information/pubs_forms/manuals/de_mutcd/index.shtml</u>. For any additional information regarding the work zone impact and mitigation procedures during construction please contact Mr. Adam Weiser of DelDOT's Traffic Section. Mr. Weiser can be reached at (302) 659-4073 or by email at <u>Adam.Weiser@state.de.us</u>.



Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DelDOT's subdivision review process.

Additional details on our review of this TIS are attached. Please contact me at (302) 738-0203 or through e-mail at <u>ajparker@mtmail.biz</u> if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.

Auchston J. Valler

Andrew J. Parker, P.E., PTOE Project Manager

Enclosure

General Information

Report date: April 2014 Prepared by: Karins and Associates, Inc. (KA) Prepared for: Watertower Place Holdings, LLC Tax parcel: 2-05-077.06-01-02.00 Generally consistent with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access: Yes

Project Description and Background

Description: The proposed development would consist of 11,251 square feet of restaurant space and 46,460 square feet of retail space. For the purpose of determining number of trips that would be generated by this site, it was assumed as a 60,000 square-foot shopping center.

Location: The Capital Station commercial development is proposed to be located on the northwest corner of US Route 13 (DuPont Highway / Kent Road 7) and Division Street (Delaware Route 8 / Kent Road 16), bounded by Maple Parkway to the north and Kings Highway (Kent Road 66) to the west, within the City of Dover in Kent County, Delaware. A Site Location Map is included on Page 9.

Amount of land to be developed: approximately 9.3 acres of land

Land use approval(s) needed: Subdivision approval. The land is currently zoned as SC-1 (Neighborhood Shopping Center) within the City of Dover, and the developer does not propose to change the zoning.

Proposed completion date: 2015 (as of April 2014). An updated anticipated completion date is not known.

Proposed access locations: When the TIS was submitted in April 2014, four access points were proposed: one rights-in/rights-out only access point on US Route 13, two partial access points on Division Street (one rights-in only and one lefts-in/lefts-out/rights-out), and one full access point on Maple Parkway. Based on updated conversations in May and June 2014, three access points are now proposed; one on US Route 13, one on Maple Parkway, and one (instead of two) on Division Street. The Division Street access point would be a full-movement access most of the time but drivers wishing to exit the site by making a left turn from this driveway during the weekday evening peak hour would be redirected to other access points. Site Entrance D shown on the Site Location Map on Page 9 will not be constructed.

Daily Traffic Volumes (per DelDOT Traffic Summary 2012):

- 2012 Average Annual Daily Traffic on US Route 13: 48,936 vpd
- 2012 Average Annual Daily Traffic on Division Street: 9,153 vpd
- 2012 Average Annual Daily Traffic on Kings Highway: 5,784 vpd



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Delaware Strategies for State Policies and Spending – 2010 Update

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed Capital Station is located entirely within Investment Level 1.

Investment Level 1

Investment Level 1 Areas are areas of the state that are most prepared for growth and where the state can make cost-effective infrastructure investments for schools, roads, and public safety. In these areas, state investments and policies should support and encourage a wide range of uses and densities, promote other transportation options, foster efficient use of existing public and private investments, and enhance community identity and integrity. Investment Level 1 Areas are often municipalities, towns, or urban/urbanizing places in counties. Density is generally higher than in the surrounding areas. Overall, it is the state's intent to use its spending and management tools to maintain and enhance community character, to promote well-designed and efficient new growth, and to facilitate redevelopment in Investment Level 1 Areas.

Proposed Development's Compatibility with Strategies for State Policies and Spending:

The proposed Capital Station is located within an Investment Level 1 area, and is to be developed as a mix of retail space and restaurant space. This type of development is consistent with the character of Investment Level 1 areas. The proposed development is located in downtown Dover and will be developed at the site of an abandoned factory. The *Strategies* document generally encourages efficient new growth and redevelopment in Investment Level 1 areas, and the proposed development is consistent with those goals. It is therefore concluded that the proposed development generally complies with the policies stated in the 2010 update of the "Strategies for State Policies and Spending."

Comprehensive Plans

Kent County Comprehensive Plan:

(Source: 2007 Kent County Comprehensive Plan, Adopted October 7, 2008)

The Kent County Comprehensive Plan Existing and Future Land Use Maps indicate that the proposed Capital Station development is within a municipality. The specific permitted uses and densities governing new construction within an incorporated municipality will be governed by that municipality's zoning ordinance, its public water and sewer capacities, and its comprehensive planning policies.

City of Dover Comprehensive Plan:

(Source: The Dover Plan – City of Dover, Delaware 2008 Comprehensive Plan, certified by the State of Delaware on April 24, 2009)

An official, certified version of the City of Dover's Comprehensive Plan was last updated in early 2009. Included in the Comprehensive Plan is *Map 12-1: Land Development Plan*, which was last updated in March 2012. According to *Map 12-1*, the proposed development site is planned for commercial land use. The Comprehensive Plan mentions that more intensive

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Detailed TIS Review by McCormick Taylor, Inc.

regional commercial development is directed toward the US Route 13/113 corridor close to existing highway commercial and regional shopping center establishments. The Comprehensive Plan also states that the demolition of older structures may be beneficial, and should be supported, to enable redevelopment to occur within the US Route 13/113 corridor. The demolition of the former Playtex plant is an excellent example of demolishing an old building that cannot easily be renovated to fit another type of development, and it will also enhance the overall image of the highway environment. The future land use along the Division Street corridor near the proposed development site is mixed-use, which encourages neighborhood commercial use to meet the convenience retail need of existing and future residential areas.

In the City of Dover Zoning Map Book (last updated April 11, 2013), the proposed development is shown as SC-1 (Neighborhood Shopping Center).

It is also noted that the property has been designated by the City of Dover as a "Redevelopment Area" by Resolution No. 2012-14. This Resolution requests that DelDOT allow for development to proceed without requiring the developer to make all of the necessary improvements (to achieve intersection Level of Service standards) but rather requiring the developer to contribute to a portion of the costs to be set aside for current and future improvements that is proportional to the traffic generated by the proposed development.

Proposed Development's Compatibility with Comprehensive Plans:

The proposed Capital Station Commercial Development is planned to consist of 11,251 square feet of restaurant space and 46,460 square feet of retail space. Given the site's current SC-1 zoning (neighborhood shopping center) within the City of Dover and the future land use designation of commercial, this development appears to be compatible with the Kent County and City of Dover Comprehensive Plans.

Transportation Analysis Zones (TAZ)

Transportation Analysis Zones (TAZ) where development would be located: 660



TAZ Boundaries:

Current employment estimate for TAZ: 1,426 jobs in 2005 **Future employment estimate for TAZ:** 1,503 jobs in 2035 **Current population estimate for TAZ:** 1,457 people in 2005

Future population estimate for TAZ: 1,457 people in 2005

Current household estimate for TAZ: 1,525 people in 2055

Future household estimate for TAZ: 593 houses in 2005

Relevant committed developments in TAZ: None

Would the addition of committed developments to current estimates exceed future projections: No

Would the addition of committed developments and the proposed development to current estimates exceed future projections: No for populations and households, unknown for employment

Relevant Projects in the DelDOT Capital Transportation Program (FY 2014 – FY 2019)

DelDOT has no relevant active roadway projects within the study area. The Capital City Trails project is currently under construction with Phase I complete and Phases II and III due for construction in the fall of 2014. The Capital City Trail will link Legislative Hall to the existing Silver Lake trail, tying in to the existing trail on Park Drive at the intersection with Division

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January 31, 2017 Page 12 Street. This ongoing project is part of the Governor's First State Trails and Pathways Initiative that will create a statewide network of new and enhanced trails and pathways in order to promote safer pedestrian and bicycle travel while reducing emissions and encouraging active living.

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in <u>Trip Generation</u>, Ninth Edition, published by the Institute of Transportation Engineers (ITE). The following land uses were utilized to estimate the amount of new traffic generated for this development:

• As proposed, the development would consist of 11,251 square feet of restaurant space and 46,460 square feet of retail space. For the purpose of determining number of trips that would be generated by this site, it was assumed as a 60,000 square-foot shopping center (ITE Land Use Code 820).

Land Use	PM Peak Hour			SAT Peak Hour		
	In	Out	Total	In	Out	Total
60,000 sf shopping center	204	222	426	327	301	628
Pass-by Trips	97	106	204	124	114	238
Net External Trips	107	116	222	203	187	390
TOTAL NEW TRIPS	107	116	222	203	187	390

Table 1
CAPITAL STATION PEAK HOUR TRIP GENERATION

 Table 2

 CAPITAL STATION DAILY TRIP GENERATION

Land Use	Weekday Daily			Saturday Daily		
	In	Out	Total	In	Out	Total
60,000 sf shopping center space	2437	2437	4873	3349	3349	6698
TOTAL TRIPS	2437	2437	4873	3349	3349	6698

Overview of TIS

Intersections examined:

- 1) US Route 13 & Site Entrance A
- 2) Maple Parkway & Site Entrance B
- 3) Division Street & Site Entrance C (as proposed in the TIS submitted in April 2014)
- 4) Division Street & Site Entrance D (as proposed in the TIS submitted in April 2014)
- 5) US Route 13 & Division Street
- 6) US Route 13 & Maple Parkway
- 7) US Route 13 & White Oak Road (Kent Road 66) / Kings Highway
- 8) Kings Highway & Maple Parkway
- 9) Division Street & Bayard Avenue
- 10) Division Street & Kings Highway / Park Drive
- 11) Kings Highway & Lewis Mill Drive
- 12) Northbound US Route 13 u-turn south of Maple Parkway

Conditions examined:

- 1) 2013 existing conditions (Case 1)
- 2) 2015 without Capital Station (Case 2)
- 3) 2015 with Capital Station (Case 3)

Peak hours evaluated: Weekday evening peak hour and Saturday mid-day peak hour

Committed developments considered:

- 1) 7-Eleven (2,590 square-foot convenience store with 8 fueling positions)
- 2) Hub Associates (11,230 square-foot shopping center and 92 room hotel)

Intersection Descriptions

1) US Route 13 & Site Entrance A

Type of Control: proposed two-way stop-controlled (rights-in / rights-out T-intersection) **Northbound approach:** (US Route 13) three through lanes, separated from southbound lanes by grass median

Southbound approach: (US Route 13) existing three through lanes; proposed three through lanes and one-right turn lane

Eastbound approach: (Site Entrance) proposed one right-turn-only lane, stop controlled

2) Maple Parkway & Site Entrance B

Type of Control: proposed two-way stop-controlled (T-intersection)

Northbound approach: (Site Entrance) proposed one shared left/right-turn lane, stop-controlled

Eastbound approach: (Maple Parkway) existing one through lane; proposed one shared through/right-turn lane

Westbound approach: (Maple Parkway) existing one through lane; proposed one shared through/left-turn lane

3) Division Street & Site Entrance C

Type of Control: proposed rights-in-only T-intersection

Eastbound approach: (Division Street) existing two through lanes; proposed two through lanes

Westbound approach: (Division Street) existing two through lanes; proposed two through lanes and one right-turn lane

Note: Site Entrance C is proposed as a one-way street heading away from Division Street. This intersection would consist only of eastbound/westbound through traffic and westbound right-turning traffic, and no HCS analysis is conducted for this type of intersection.

4) Division Street & Site Entrance D

Type of Control: proposed two-way stop-controlled (T-intersection) with no rights-in **Southbound approach:** (Site Entrance) proposed one shared left/right-turn lane, stop controlled

Eastbound approach: (Division Street) existing two through lanes; proposed one left-turn lane and two through lanes

Westbound approach: (Division Street) existing two through lanes; proposed two through lanes (no right turns into site)

5) US Route 13 & Division Street

Type of Control: signalized four-leg intersection

Northbound approach: (US Route 13) two left-turn lanes, two through lanes, and one shared through/right-turn lane

Southbound approach: (US Route 13) one left-turn lane, two through lanes, and one shared through/right-turn lane

Eastbound approach: (Division Street) one exclusive left-turn lane, one shared through/left-turn lane and one right-turn lane

Westbound approach: (Division Street) one exclusive left-turn lane, one shared through/left-turn lane and one right-turn lane

6) US Route 13 & Maple Parkway

Type of Control: two-way stop-controlled (T-intersection)

Southbound approach: (US Route 13) two through lanes and one shared through/right-turn lane

Eastbound approach: (Maple Parkway) one right-turn-only lane, stop-controlled

Note: this intersection also has a northbound approach and a right-turn-only westbound approach, but those are separated from the southbound and eastbound movements by a median and guardrail. The northbound and westbound movements act as separate intersection and were not included in the analysis.

- 7) US Route 13 & White Oak Road / Kings Highway Type of Control: signalized four-leg intersection Northbound approach: (US Route 13) one left-turn lane, two through lanes, and one shared through/right-turn lane Southbound approach: (US Route 13) one left-turn lane, two through lanes, and one shared through/right-turn lane Eastbound approach: (Kings Highway) one exclusive left-turn lane and one shared through/left/right-turn lane Westbound approach: (White Oak Road) one exclusive left-turn lane, one shared through/left-turn lane, and one channelized right-turn lane
- 8) Kings Highway & Maple Parkway Type of Control: two-way stop-controlled (T-intersection) Northbound approach: (Kings Highway) one shared through/right-turn lane Southbound approach: (Kings Highway) one shared through/left-turn lane Westbound approach: (Maple Parkway) one shared left/right-turn lane, stop-controlled

9) Division Street & Bayard Avenue

Type of Control: two-way stop-controlled (T-intersection) **Northbound approach:** (Bayard Avenue) one left-turn lane and one right-turn lane (not

striped as two lanes, but approach is 22' wide and operates as two lanes), stop-controlled **Eastbound approach:** (Division Street) one exclusive through lane and one shared through/right-turn lane

Westbound approach: (Division Street) one shared through/left-turn lane and one exclusive through lane

10) Division Street & Kings Highway / Park Drive

Type of Control: signalized four-leg intersection

Northbound approach: (Park Drive) one left-turn lane and one shared through/right-turn lane

Southbound approach: (Kings Highway) one shared through/left-turn lane and one channelized right turn-lane

Eastbound approach: (Division Street) one left-turn lane and one shared through/right-turn lane

Westbound approach: (Division Street) one left-turn lane, one through lane and one right-turn lane

11) Kings Highway & Lewis Mill Drive

Type of Control: two-way stop-controlled (T-intersection) Northbound approach: (Kings Highway) one shared through/left-turn lane Southbound approach: (Kings Highway) one shared through/right-turn lane Eastbound approach: (Lewis Mill Drive) one left-turn lane and one right-turn lane, stop-controlled Northbound US Route 13 U-Turn south of Maple Parkway Type of Control: yield-controlled u-turn intersection Northbound approach: (US Route 13) one u-turn lane (yield-controlled) and three through lanes Southbound approach: (US Route 13) three through lanes

Safety Evaluation

Crash Data: Crash data was obtained for January 1, 2010 through December 31, 2012 for the intersections and roadway segments within the study area. The crash data request returned a total of 49 reportable crashes at intersections within the study area, including 18 injuries and no fatalities. Most of these were rear-end collisions. The contributing circumstances were typically due to driver error via inattention, failure to yield/disregarding signal, careless driving, and following too close. The crashes at or near each intersection are as follows:

- US 13 & Division Street
 - o 6 crashes reported
- US 13 & Maple Parkway o 4 crashes reported
- US 13 & Kings Highway / White Oak Road
 36 crashes reported
- Division Street & Bayard Avenue
 - 1 crash reported
- Division Street & Kings Highway / Park Drive
 - o 1 crash reported
- Kings Highway & Lewis Mill Drive
 - o 1 crash reported

Sight Distance: With generally straight and flat roadways, and few potential visual obstructions, sight distance is adequate throughout the study area. No problematic sight distance issues have been reported or indicated by crash data, and no major problems were observed during field observations in the area. One minor sight distance issue noted in the field was looking left from the stop-controlled Bayard Avenue approach at Division Street. The curvature of the roadway and the landscaping make it difficult for motorists to see eastbound traffic if stopped completely behind the stop bar.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: The Delaware Transit Corporation (DTC) currently operates several DART bus routes in the vicinity of the proposed development. Route 108 (Towne Point) is a local DART bus route through Dover that passes by the site frontage along Division Street, with a bus stop on westbound Division Street opposite Bayard Avenue. This route currently operates 31 round trips on a daily basis between the Dover Transit Center and the Kmart at the intersection of US Route 13 and Townsend Boulevard. Route 109 (Dover Mall) is another local DART bus route through Dover that passes by the site frontage along Kings Highway, with a bus stop on southbound Kings Highway 100 feet south of Maple Avenue and another bus stop on *Capital Station January 31, 2017*

northbound Kings Highway 300 feet north of Maple Avenue. This route currently operates 20 round trips on weekdays and 9 round trips on Saturdays between the Dover Transit Center and the Sam's Club on US Route 13. DART also operates Inter County Bus Route 301, which connects Wilmington and Dover. The nearest stops are at the Dover Transit Center in central Dover and at Delaware State University. Route 301 passes by the site frontage along US Route 13. The overall goal of the service is to reduce one-way travel time for commuters between Dover and Wilmington, making the commute comparable to that of a single-occupant vehicle. The route currently operates 16 round trips on weekdays and two round trips on Saturdays.

Planned transit service: The TIS did not provide any correspondence with Ms. Lisa Collins, a Service Development Planner at the DTC, as required by the scoping letter. McCormick Taylor contacted Ms. Collins via email on May 22, 2014. No response was received from Ms. Collins, but Mr. Wayne Henderson, also a Service Development Planner at the DTC, provided comments via email on July 3, 2014. He stated that DTC would seek to improve the existing stop on Division Street and create a bus pull-off somewhere along the property frontage on US Route 13.

Existing bicycle and pedestrian facilities: According to DelDOT's Kent County Bicycle Map, US Route 13 is designated as a Connector Bicycle Route with a bikeway and Division Street is classified as a Regional Bicycle Route. US Route 13 has a 5' bike lane in the southbound direction, but no designated bike lane in the northbound direction. Division Street, Maple Parkway and Kings Highway do not have any designated bicycle lanes. According to the bicycle level of service (BLOS) calculator developed by the *League of Illinois Bicyclists*, US Route 13 operates at BLOS D/C (Northbound/Southbound), Division Street operates at BLOS C and Kings Highway operates at BLOS C. There are existing sidewalks along both sides of Division Street, along southbound Kings Highway and along the westbound direction of Maple Parkway. There are no sidewalks along the US Route 13 site frontage. The intersections of US Route 13 & Division Street, US Route 13 & Kings Highway / White Oak Road, and Division Street & Kings Highway / Park Drive feature crosswalks, pedestrian signals and ADA compliant curb ramps for pedestrian use.

Planned bicycle and pedestrian facilities: The TIS did not provide any correspondence with Mr. Marco Boyce, Planning Supervisor for DelDOT's Statewide and Regional Planning Section, regarding planned or requested bicycle and pedestrian facilities in the area of this proposed development. McCormick Taylor contacted Marco Boyce and Anthony Aglio via email on May 22, 2014. Mr. Boyce provided comments via email on May 29, 2014. If the development does occur, the following requests should be incorporated into the project to facilitate pedestrian and bicycle transportation:

- a. A well buffered sidewalk is needed along all four site frontages which should tie in to either the nearest intersection or adjacent sidewalk end point.
- b. Logical connections should be made from the external sidewalks to places of pedestrian activity on site.
- c. The proposed development project should take care not to interfere with pathway bike and pedestrian movements at Park Drive and Division Street. It should, at the very least, provide connectivity, via sidewalks, to the Capital City Pathway that forms a pathway loop around the southern part of Dover.

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Previous Comments

All comments from DelDOT's Scoping Letter, Traffic Count Review, and Preliminary TIS (PTIS) Review were addressed in the Final TIS submission, with the following exceptions:

• There were no indications that the applicant contacted DelDOT's Statewide and Regional Planning Section for bicycle and pedestrian comments. There were no indications that the applicant contacted the Delaware Transit Corporation (DTC) for transit-related comments.

General HCS Analysis Comments

(see table footnotes on the following pages for specific comments)

- 1) For unsignalized intersections, the TIS and McCormick Taylor applied heavy vehicle factors (HV) by movement using existing data. For signalized intersections, the TIS and McCormick Taylor applied HV by lane group. For future conditions, the TIS generally assumed a future HV of 3% for movements where existing HV is less than 3%. The TIS also assumed 3% HV for future movements to and from the proposed site access points. McCormick Taylor assumed future HV to be the same as existing HV at existing intersections, and assumed 3% HV for future movements to and from the proposed site access points access points on US Route 13, Division Street and Maple Parkway, per DelDOT's Subdivision Manual.
- 2) For existing conditions, the TIS and McCormick Taylor determined, for each intersection, overall intersection peak hour factors (PHF). For future conditions, the TIS and McCormick Taylor assumed future PHF equal to existing PHF.
- 3) For analyses of the two signalized intersections along US Route 13, McCormick Taylor used a base saturation flow rate of 1,900 pcphpl. For the analyses of Division Street and Kings Highway/Park Drive, McCormick Taylor used a base saturation flow rate of 1,750 pcphpl per DelDOT's Subdivision Manual. The developer did not note the base saturation flow rates used in their analysis, either in the letter or the capacity analysis appendix.
- 4) The TIS used Arrival Type 4 for all approaches at all signalized intersections. McCormick Taylor used Arrival Type 3 in all instances.
- 5) The HCS analyses included in the TIS did not always reflect the lane widths observed in the field by McCormick Taylor. McCormick Taylor's HCS analyses incorporated our field-measured lane widths.
- 6) The TIS and McCormick Taylor used different signal timings when analyzing the signalized intersections in some cases.
- 7) The TIS and McCormick Taylor conservatively input no right-turn-on-red (RTOR) volumes for existing and future conditions analyses, but did analyze right-turn movements as overlapping protected left-turn phases.

Table 3PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Unsignalized Intersection ¹ Two-Way Stop Control	LOS per TIS		LOS per McCormick Taylo	
US Route 13 &	Weekday	Saturday	Weekday	Saturday
Site Entrance A	PM	Mid-Day	PM	Mid-Day
2015 with Capital Station (Case 3)				
Eastbound Site Entrance A - Right	C (16.0)	C (15.1)	C (16.5)	C (15.5)

¹ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. *Capital Station January 31, 2017*

Table 4 PEAK HOUR LEVELS OF SERVICE (LOS) based on Traffic Impact Study for Capital Station Commercial Development Report dated April 2014 Prepared by Karins and Associates, Inc.

Unsignalized Intersection ² Two-Way Stop Control (T-intersection)	LOS per TIS		LOS McCormi	5 per ck Taylor
Maple Parkway &	Weekday Saturday		Weekday	Saturday
Site Entrance B	PM Mid-Day		PM	Mid-Day
2015 with Capital Station (Case 3)				
Northbound Site Entrance B	A (9.2)	A (10.0-)	A (9.4)	A (9.6)
Westbound Maple Parkway – Left	A (7.3)	A (7.4)	A (7.5)	A (7.5)

² For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. *Capital Station January 31, 2017*

Table 5 PEAK HOUR LEVELS OF SERVICE (LOS) based on Traffic Impact Study for Capital Station Commercial Development Report dated April 2014 Prepared by Karins and Associates, Inc.

Unsignalized Intersection ³ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
Division Street &	Weekday Saturday		Weekday	Saturday
Site Entrance D (with no rights-in) ⁴	PM	Mid-Day	PM	Mid-Day
2015 with Capital Station (Case 3)				
Southbound Site Entrance D	B (12.4)	B (11.8)	B (11.1)	B (10.7)
Eastbound Division Street – Left	A (8.0)	A (7.9)	A (7.8)	A (7.7)

³ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

⁴ As proposed in the TIS submitted in April 2014. Since then, this entrance has been combined with Site Entrance C and converted to a full-movement access with left-turns out restricted during the weekday evening peak hour. *Capital Station* January 31, 2017

Table 6PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Signalized Intersection ⁵	LOS per TIS		LOS per McCormick Taylor	
US Route 13 &	Weekday	Saturday	Weekday	Saturday
Division Street ⁶	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)	D (42.3)	C (30.1)	D (43.2)	C (34.1)
2015 without Capital Station (Case 2)	D (49.1)	D (36.1)	D (45.0)	D (35.2)
2015 with Capital Station (Case 3)	D (53.7)	D (46.9)	D (46.8)	D (37.9)

⁵ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

⁶ The HCS analysis provided in the TIS included only one left-turn lane for the northbound US Route 13 approach. As confirmed in the field, McCormick Taylor analyzed this intersection with dual left-turn lanes on the northbound approach. Other differences in the HCS analysis parameters used by the TIS and by McCormick Taylor include, but are not necessarily limited to, cycle length and other signal timings, Arrival Type, and right turns on red. *Capital Station* January 31, 2017

Table 7PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Unsignalized Intersection ⁷ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
US Route 13 &	Weekday	Saturday	Weekday	Saturday
Maple Parkway	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)				
Eastbound Maple Parkway – Right	B (13.6)	B (12.6)	B (13.5)	B (12.6)
2015 without Capital Station (Case 2)				
Eastbound Maple Parkway – Right	B (14.0)	B (13.0)	B (13.8)	B (12.9)
2015 with Capital Station (Case 3)				
Eastbound Maple Parkway – Right	B (14.5)	B (13.7)	B (14.3)	B (13.6)

⁷ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. *Capital Station January 31, 2017*

Table 8PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Signalized Intersection ⁸	LOS per TIS		LOS per McCormick Taylo	
US Route 13 &	Weekday	Saturday	Weekday	Saturday
White Oak Road / Kings Highway ⁹	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)	D (51.2)	D (36.5)	D (43.3)	D (37.1)
2015 without Capital Station (Case 2)	E (56.9)	D (42.4)	D (44.4)	D (38.1)
2015 with Capital Station (Case 3)	E (63.3)	D (50.2)	D (48.2)	D (39.4)

⁸ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

⁹ Differences in the HCS analysis parameters used by the TIS and by McCormick Taylor include, but are not necessarily limited to, cycle length and other signal timings, Arrival Type, and right turns on red. These different assumptions account for the differences in the analysis results.

Table 9 PEAK HOUR LEVELS OF SERVICE (LOS) based on Traffic Impact Study for Capital Station Commercial Development Report dated April 2014 Prepared by Karins and Associates, Inc.

Unsignalized Intersection ¹⁰ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
Kings Highway &	Weekday	Saturday	Weekday	Saturday
Maple Parkway	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)				
Westbound Maple Parkway	B (11.7)	B (10.5)	B (11.7)	B (10.5)
Southbound Kings Highway - Left	A (7.8)	A (7.7)	A (7.8)	A (7.7)
2015 without Capital Station (Case 2)				
Westbound Maple Parkway	B (11.9)	B (10.5)	B (11.8)	B (10.5)
Southbound Kings Highway - Left	A (7.9)	A (7.8)	A (7.8)	A (7.7)
2015 with Capital Station (Case 3)				
Westbound Maple Parkway	B (11.3)	B (10.7)	B (11.2)	B (10.7)
Southbound Kings Highway - Left	A (7.9)	A (7.8)	A (7.9)	A (7.7)

¹⁰ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. *Capital Station January 31, 2017*

Table 10PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Unsignalized Intersection ¹¹ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
Division Street &	Weekday	Saturday	Weekday	Saturday
Bayard Avenue	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)				
Northbound Bayard Avenue	B (13.1)	A (8.9)	B (13.3)	A (8.9)
Westbound Division Street - Left	A (8.4)	A (7.7)	A (8.3)	A (7.7)
2015 without Capital Station (Case 2)				
Northbound Bayard Avenue	B (13.4)	A (9.0)	B (13.5)	A (8.9)
Westbound Division Street - Left	A (8.4)	A (7.7)	A (8.4)	A (7.7)
2015 with Capital Station (Case 3)				
Northbound Bayard Avenue	B (12.9)	A (9.2)	B (13.0)	A (9.1)
Westbound Division Street - Left	A (8.5)	A (7.9)	A (8.5)	A (7.8)

¹¹ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. *Capital Station January 31, 2017*

Table 11PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Signalized Intersection ¹²	LOS per TIS		LOS per McCormick Taylor	
Division Street &	Weekday	Saturday	Weekday	Saturday
Kings Highway / Park Drive ¹³	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)	C (26.8)	C (22.3)	B (13.2)	B (12.3)
2015 without Capital Station (Case 2)	C (28.0)	C (22.6)	B (13.3)	B (12.3)
2015 with Capital Station (Case 3)	C (29.1)	C (23.2)	B (13.4)	B (12.4)

¹² For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

¹³ The HCS analysis provided in the TIS included split phasing for the northbound Park Drive and southbound Kings Highway approaches. As indicated in the timings provided by DelDOT and confirmed in the field, McCormick Taylor analyzed this intersection with concurrent phasing on the northbound and southbound approaches. Other differences in the HCS analysis parameters used by the TIS and by McCormick Taylor include, but are not necessarily limited to, cycle length and other signal timings, Arrival Type, and right turns on red. *Capital Station* January 31, 2017

Table 12PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Unsignalized Intersection ¹⁴ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
Kings Highway &	Weekday	Saturday	Weekday	Saturday
Lewis Mill Drive	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)				
Eastbound Lewis Mill Drive	B (10.6)	B (10.3)	B (10.4)	B (10.2)
Northbound Kings Highway - Left	A (7.8)	A (7.6)	A (7.7)	A (7.6)
2015 without Capital Station (Case 2)				
Eastbound Lewis Mill Drive	B (10.7)	B (10.4)	B (10.5)	B (10.2)
Northbound Kings Highway - Left	A (7.8)	A (7.7)	A (7.7)	A (7.6)
2015 with Capital Station (Case 3)				
Eastbound Lewis Mill Drive	B (10.8)	B (10.4)	B (10.6)	B (10.3)
Northbound Kings Highway - Left	A (7.8)	A (7.7)	A (7.7)	A (7.6)

¹⁴ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. Capital Station January 31, 2017

Table 13PEAK HOUR LEVELS OF SERVICE (LOS)based on Traffic Impact Study for Capital Station Commercial DevelopmentReport dated April 2014Prepared by Karins and Associates, Inc.

Unsignalized Intersection ¹⁵ Two-Way Stop Control (T-intersection)	LOS per TIS		LOS per McCormick Taylor	
Northbound US Route 13	Weekday	Saturday	Weekday	Saturday
U-Turn south of Maple Parkway	PM	Mid-Day	PM	Mid-Day
2013 Existing (Case 1)				
Northbound US Route 13 – U-Turn	B (14.2)	B (13.1)	B (14.2)	B (12.9)
2015 without Capital Station (Case 2)				
Northbound US Route 13 – U-Turn	B (14.6)	B (13.3)	B (14.6)	B (13.2)
2015 with Capital Station (Case 3)				
Northbound US Route 13 – U-Turn	C (15.6)	B (14.5)	C (15.6)	B (14.4)

¹⁵ For both unsignalized and signalized intersection analyses, the numbers in parentheses following levels of service (LOS) are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay. Capital Station January 31, 2017