TRAFFIC IMPACT REPORT

EBERLY PLACE
COMMERCE CITY, COLORADO

April 22, 2021

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I. INTRODUCTION

A. Project Overview

United Development Companies, LLC is proposing to develop a parcel of land containing approximately 33.5 acres of mostly undeveloped land. The property is within the jurisdictional boundaries of Commerce City, Colorado. The project site is bounded by Potomac St. to the west, undeveloped land to the south, Blackhawk St. to the east, and a private lot along with undeveloped land to the north that is adjacent to E. 104th Ave. Upon build-out the development will contain 154 single-family detached homes. The proposed development will be known as Eberly Place. Figure 1 graphically illustrates the location of the project site and Figure 2 provides a conceptual site plan for the project.

The proposed development will be served by three access points. The primary access will be on the west side of the sight and be an extension of E. 101st Ave. that will intersect with Potomac St., and be constructed concurrently with the development as a full movement intersection. The intersections of E. 100th Pl. and E. 101st Ave. with Blackhawk St. will each have a west leg added to provide secondary access into the site from Blackhawk St. Figure 2 provides a graphical representation of the proposed access points for the development.

B. Purpose of Study

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by the proposed Eberly Place development on the study area intersections and roadway system. The study includes 2021 (existing), 2023 (year of anticipated build-out), and 2040 (long term) analysis horizons.

C. Study Area

The study area encompasses the existing roadway system in the vicinity of the project site. Specifically, the following existing intersections were evaluated:

- E. 104th Ave./Potomac St.
- E. 104th Ave./Blackhawk St.
- E. 101st Ave./Blackhawk St.
- E. 100th Pl./Blackhawk St.
- E. 96th Ave./Potomac St.

Figure 1 graphically illustrates the location of the study area intersections.

II. EXISTING CONDITIONS

A. Existing Traffic Volumes

Existing (2021) peak hour intersection turning movement traffic volume counts were collected for this study at the following intersections in February, 2021:

- E. 104th Ave./Potomac St.
- E. 104th Ave./Blackhawk St.
- E. 101st Ave./Blackhawk St.

- E. 100th Pl./Blackhawk St.
- E. 96th Ave./Potomac St.

Existing (2021) 24-hour directional traffic volumes were collected for this study at the following locations in February 2021:

- E. 104th Ave. west of Potomac St.
- E. 96th Ave. west of Potomac St.
- Potomac St. south of E. 104th Ave.

In order to account for the ongoing COVID-19 pandemic and its impact on current traffic volumes, the 2021 existing traffic volume counts collected for this study were adjusted based on the following methodology.

- Determine Average Annual Traffic Volume Growth Rate for Study Area Roadways - The Denver Regional Council of Governments (DRCOG) travel models for 2015 and 2040 daily traffic volumes were utilized to forecast the average annual traffic volume growth rate (AGR) for the study area roadways. Based on this data it was found that the average forecast AGR for the study area roadways is 3.0%. In comparison with other traffic studies done in the area, it was ultimately determined that an AGR of 3.0% would be utilized to forecast future background traffic volumes for this study.
- Determine COVID Adjustment Factor – In order to determine the COVID Adjustment Factor for the 2021 (existing) traffic volumes collected, the AGR determined for the study area roadways was applied to available pre-COVID traffic volume count data for one or more of the study area roadways and/or intersections to forecast the equivalent 2021 traffic volumes. This forecast 2021 traffic volume using available pre-COVID count data is then compared to the actual 2021 existing traffic volumes collected for the same location(s). The ratio of these two volumes establishes the COVID Adjustment Factor for the study. For the purposes of this study the a.m. and p.m. peak hour entering volumes at the E. 104th Ave./Potomac St. intersection were taken directly from the study entitled *Traffic Impact Report, Turnberry Parcels P, Q, R, S, & T, Commerce City, Colorado, July 13, 2020*, by Harris Kocher Smith and adjusted utilizing the 3.0% AGR to project their equivalent 2021 volumes. These adjusted peak hour volumes were then compared to the actual 2021 peak hour volumes collected at this intersection to determine the COVID Adjustment Factor. The resultant COVID Adjustment Factor was determined to be 1.24 for the a.m. peak hour and 1.16 for the p.m. peak hour. The average of these values was determined to be 1.20 and ultimately used as the COVID Adjustment Factor for this study. This factor was applied to the actual 2021 traffic volumes collected for this study to project their equivalent non-COVID 2021 values.

A summary of the 2021 (existing) COVID adjusted peak hour intersection turning movement traffic volume counts and 24-hour directional traffic volume counts collected for this study are illustrated in Figure 3. Detailed traffic volume count data collected for this study is provided in Appendix “A”.

B. Existing Roadway System

The existing transportation network in the vicinity of the proposed development is graphically illustrated in Figure 1. The study area roadways include the following:

Study Area Roadways:

- **E. 104th Ave.** – E. 104th Ave., east of SH 2, is 4-lane divided Principal Arterial under the jurisdiction of Commerce City. The roadway section consists of two travel lanes in each direction with a raised center median. There is curb and gutter and detached sidewalks on both sides of the roadway. The posted speed limit is 45 mph within the study area.
- **E. 96th Ave.** – E. 96th Ave. is classified as a Minor Arterial under the jurisdiction of Commerce City. Currently, the roadway section is paved and consists of one travel lane in each direction with unpaved shoulders and no sidewalks. The posted speed limit is 45 mph within the study area.
- **Potomac St.** – Potomac St., between 104th Ave. and 96th Ave., is currently a 2-lane gravel roadway with a posted speed limit of 40 mph under the jurisdiction of Commerce City. Based on the *City of Commerce City, C3 Vision, Transportation Plan*, dated July 2010, this segment of Potomac St. is planned to become a Multimodal Arterial roadway. North of 104th Ave. the roadway section has been constructed to the Multimodal Arterial section with a posted speed limit of 40mph.
- **Blackhawk St.** – Blackhawk St. is classified as a Minor Collector under the jurisdiction of Commerce City. Currently, the roadway section is paved and consists of one travel lane in each direction. There is curb and gutter and detached sidewalk along the east side of the roadway. The posted speed limit is 35 mph within the study area.
- **E. 101st Ave.** – E. 101st Ave. is classified as a local roadway under the jurisdiction of Commerce City. Currently, the roadway section is paved and consists of one travel lane in each direction with curb and gutter and detached sidewalks along both sides of the roadway. The posted speed limit is 25 mph within the study area.
- **E. 100th Pl.** – E. 100th Pl. is classified as a local roadway under the jurisdiction of Commerce City. Currently, the roadway section is paved and consists of one travel lane in each direction with curb and gutter and detached sidewalks along both sides of the roadway. The posted speed limit is 25 mph within the study area.

Study Area Intersections:

- **E. 104th Ave./Potomac St.** – The E. 104th Ave./Potomac St. intersection is an actuated/coordinated signalized four-legged intersection with protected/permissive left turn phasing on all four approaches. The east leg of the intersection has one left turn lane with approximately 475 feet of storage, one through lane, and one shared through/right turn lane on the westbound approach and two eastbound departure lanes. The west leg of the intersection has one left turn lane with approximately 600 feet of storage, one through lane, and one shared through/right turn lane on the eastbound approach and two westbound departure lanes. The north leg of the intersection has one left turn lane with approximately 225 feet of storage and one shared through/right turn lane on the southbound approach and one northbound departure lane. The south leg of the intersection has one left turn lane with approximately 250 feet of storage and one shared through/right turn lane on the northbound approach and one southbound departure lane.
- **E. 104th Ave./Blackhawk St.** – The E. 104th Ave./Blackhawk St. intersection is a three-quarter movement four-legged intersection with stop-sign control on the northbound and southbound approaches. The east leg of the intersection has one left turn lane with approximately 225 feet of storage, one through lane, and one shared through/right turn lane on the westbound approach and two eastbound departure lanes. The west leg of the intersection has one left turn lane with approximately 250 feet of storage, one through lane, and one shared through/right turn lane on the eastbound approach and two westbound departure lanes. The north leg of the intersection has one right turn lane

on the southbound approach and one northbound departure lane. The south leg of the intersection has one right turn lane on the northbound approach and one southbound departure lane.

- **E. 101st Ave./Blackhawk St.** – The E. 101st Ave./Blackhawk St. intersection is a "T" intersection with stop-sign control on the westbound approach. The east leg of the intersection has one shared left/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection has one shared left turn/through lane on the southbound approach and one northbound departure lane. The south leg of the intersection has one shared through/right turn lane on the northbound approach and one southbound departure lane.
- **E. 100th Pl./Blackhawk St.** – The E. 100th Pl./Blackhawk St. intersection is a "T" intersection with stop-sign control on the westbound approach. The east leg of the intersection has one shared left/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection has one shared left turn/through lane on the southbound approach and one northbound departure lane. The south leg of the intersection has one shared through/right turn lane on the northbound approach and one southbound departure lane.
- **E. 96th Ave./Potomac St.** – The E. 96th Ave./Potomac St. intersection is a "T" intersection with stop sign control on the southbound approach. The east leg of the intersection has one shared through/right turn lane on the westbound approach and one eastbound departure lane. The west leg of the intersection has one shared left turn/through lane on the eastbound approach and one westbound departure lane. The north leg of the intersection has one shared left/right turn lane on the southbound approach and one northbound departure lane.

III. BACKGROUND TRAFFIC

A. Background Traffic Volumes

Background traffic volume forecasts for the 2023 (build-out) and 2040 (long term) analysis horizons were developed for this study utilizing the following strategy:

- It is assumed that the Eberly Place development will be built out by 2023 and contain 154 single-family detached homes.
- It is assumed that peak-hour distribution of background intersection approach traffic (left-turn, through, right-turn) at the study area intersections will remain constant through the 2040 (long term) analysis horizon.
- The traffic volume growth rates for the 2023 (build-out) and 2040 (long term) analysis horizons were computed as follows:
  - Utilizing the data contained in the DRCOG 2015 and 2040 traffic volume models, it was determined that the average annual traffic volume growth rate for E. 104th Ave. within the study area is 3.0%, as described above. Therefore, an average annual traffic volume growth rate of 3.0% was selected to forecast the regional background traffic volumes for the 2023 and 2040 analysis horizons on the study area roadways and intersections. This equates to a 2-year (2021 to 2023) growth factor of 1.0609 and 19-year (2021 to 2040) growth factor of 1.75. These factors were applied to the 2021 (existing) traffic volumes to forecast the 2023 (build-out) and 2040 (long term) regional background traffic volumes for the study area roadways and intersections within the study area.
  - For 2023 (build-out) background traffic volumes, the only component is regional background traffic as it assumed that there will be no additional development in place between 104th Ave. and 96th Ave. that would utilize Potomac St. through 2023.

Therefore, the 2023 (build-out) background traffic volumes were forecast by applying the 2-year growth factor of 1.0609 to the 2021 (existing) traffic volumes. Figure 4 graphically illustrates the 2023 background traffic volumes.

- For 2040 (long term) background traffic volumes, a regional and local component had to be used in order to account for additional development along Potomac St. Figure C-1 in Appendix "C" graphically illustrates the 2040 regional background traffic volumes within the study area. In order to forecast the 2040 (long term) local background traffic volumes on Potomac St. between 104th Ave. and 96th Ave. the following procedure was utilized:
  - It was assumed that the undeveloped parcels of land to the north, south, and west of the Eberly Place development that would contribute traffic to Potomac St. would be developed by the 2040. It was also assumed that these undeveloped parcels would be developed with a similar land use (single-family detached housing with a gross density of 5 units/acre) as the Eberly Place development, and based on the *Commerce City Future Land Use Map*. The DRCOG 2040 traffic volume model projects there to be approximately 6000 vehicles per day on Potomac St in 2040. Therefore, it was determined that there are approximately 133 acres of undeveloped land in the study area that will contribute traffic to Potomac St. At 5 units/acre, this equates to 665 single-family housing units. Access point locations on Potomac St. were assumed in order to adequately distribute the proposed traffic to the future developments. Once development parameters were identified, vehicular trips were generated, distributed, and assigned to Potomac St. based on this strategy to forecast the 2040 local background traffic volumes. Trip generation projections for the surrounding undeveloped parcels are provided in Table 1. Site generated vehicle trips were computed using the *ITE Trip Generation Manual, 10th Edition*. Figures C-2 and C-3 in Appendix 'C" provide a summary of the site generated trip distribution and assignment for these surrounding parcels.

TABLE 1
BACKGROUND TRIP GENERATION

Land Use	Intensity	ITE Code	Daily (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
				Total	In	Out	Total	In	Out
Single-Family Detached Housing	665 DU	210	5942	477	119	358	626	394	232
Total			**5,942**	**477**	**119**	**358**	**626**	**394**	**232**

Figure 5 graphically illustrates the total (regional + local) projected background traffic volumes for the 2040 (long term) analysis horizon, respectively.

B. Background Traffic Operational Analysis

In order to establish a base condition in which to evaluate the impact of the traffic generated by the proposed Eberly Place development on the study area intersections, peak hour capacity analyses were performed for the 2021 (existing), 2023 (build-out), and 2040 (long term) analysis horizons background traffic conditions. These analyses utilized the methodologies contained in the *Highway Capacity Manual* 6th Edition (HCM 6th) employing *Synchro 10* software and resulted in a qualitative measure of the operational characteristics of the intersection described by a letter designation ranging from "A" to "F" known as "Level of Service" (LOS). LOS "A" represents free-flow operating conditions, whereas LOS "F" represents excessive congestion and delay. Un-signalized intersection capacity analysis reports a LOS designation for each impeded intersection movement. Signalized intersection capacity analysis reports the overall

LOS designation for the intersection as well as for each lane group and approach. LOS “D” is considered the minimum acceptable standard of operation.

The following study area intersections were analyzed:

- E. 104th Ave./Potomac St.
- E. 104th Ave./Blackhawk St.
- E. 101st Ave./Blackhawk St.
- E. 100th Pl./Blackhawk St.
- E. 96th Ave./Potomac St.

The results of these background traffic operational analyses are summarized graphically for the 2021 (existing), 2023 (build-out), and 2040 (long term) analysis horizons in Figures 6, 7, and 8, respectively. A summary of the results of the intersection capacity analyses is provided in Table 3 and detailed *Synchro 10* software intersection capacity analysis reports in Appendix “B”.

IV. PROJECT DEVELOPMENT

A. Trip Generation

Project trip generation projections for the proposed Eberly Place development were forecast utilizing the publication *Trip Generation, 10th Edition*, by the Institute of Transportation Engineers. Estimates of total daily traffic volume and AM and PM peak hour traffic volumes were calculated. Trip generation reductions due to transportation demand management, internal trips, or transit use were not considered.

For the purposes of this study, it is assumed that the subject parcel will be fully developed by 2023 containing 154 single-family detached homes. The proposed development is projected to generate 1,547 new daily vehicle trips of which 114 new trips are projected to be generated during the AM peak hour and 154 new trips are projected to be generated during the PM peak hour. Trip Generation projections are provided in Table 2.

TABLE 2
SITE TRIP GENERATION

Land Use	Intensity	ITE Code	Daily (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
				Total	In	Out	Total	In	Out
Single-Family Detached Housing	154 DU	210	1547	114	29	85	154	97	57
Total			**1,547**	**114**	**29**	**85**	**154**	**97**	**57**

B. Trip Distribution

The distribution of the projected vehicular trips generated by the Eberly Place development was established based on the current and projected future traffic patterns on the surrounding transportation system, efficiency of access to the principal transportation corridors serving the area, and the potential trip origins/destinations for the proposed land use for the subject property. Figure 9 graphically illustrates the project generated trip distribution patterns for the development.

C. Trip Assignment

The vehicular traffic volumes estimated to be generated by the proposed Eberly Place development were assigned to the study area roadways and intersections utilizing the trip distribution analysis described above. Figure 10 graphically illustrates the site generated trip assignment for the Eberly Place development.

V. TOTAL TRAFFIC

The total traffic forecasts for the 2023 (build-out), and 2040 (long term) analysis horizon scenarios were computed by combining the background traffic volumes for the respective scenario with the associated projected site generated traffic volumes. Figures 11 and 12 graphically illustrate the total traffic forecasts for the study area intersections for the 2023 (build-out) and 2040 (long term) analysis horizons, respectively.

VI. PROJECT ANALYSIS

A. Operational Analysis

In order to evaluate the traffic impacts of the proposed Eberly Place development on the study area roadway system, peak hour intersection capacity analyses for total traffic conditions were performed for the 2023 (build-out) and 2040 (long term) analysis horizons at each of the study area intersections listed below.

- E. 104th Ave./Potomac St.
- E. 104th Ave./Blackhawk St.
- E. 101st Ave./Blackhawk St.
- E. 100th Pl./Blackhawk St.
- E. 96th Ave./Potomac St.
- E. 101st Ave./Potomac St. (proposed)

A narrative of the summary of the analyses and comparison to background traffic conditions for the 2021 (existing), 2023 (build-out), and 2040 (long term) analysis horizons is provided below. The results of the total traffic operational analysis are summarized graphically for the 2023 (build-out), and 2040 (long term) analysis horizons in Figures 13 and 14, respectively. A summary of the results of the intersection capacity analysis is provided in Table 3 and detailed *Synchro 10* software intersection capacity analysis reports are provided in Appendix “B”.

Study Area Intersections – Summary of Results:

- **E. 104th Ave./Potomac St.** – The E. 104th Ave./Potomac St. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2023 (build-out) analysis horizon. Therefore, the analyses assumed that the intersection will remain under actuated/coordinated signalized control with protected/permitted left turn phasing on all four approaches and the laneage will remain the same. Based on these parameters and the existing and forecast traffic volumes, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS “D” or better) through the 2023 (build-out) analysis horizon. By 2040, it was assumed that the north leg of the intersection will be restriped to allow for a second southbound left turn lane. Due to the forecast growth in the background traffic volumes entering this intersection it is projected that the intersection, overall, as well as the

eastbound and westbound through movements will have unacceptable or failing levels of service (LOS "E" or worse) by the 2040 (long term) background analysis horizon. This is primarily due to the high forecast east/west through traffic volumes on E. 104th Ave. Adding an additional eastbound through lane and westbound through lane would mitigate these poor levels of service. This improvement is anticipated to occur in the long term build-out scenario based on the *City of Commerce City, C3 Vision, Transportation Plan*, dated July 2010. No operational modifications are recommended as a result of the proposed Eberly Place development.

- **E. 104th Ave./Blackhawk St.** – The E. 104th Ave./Blackhawk St. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long term) analysis horizon. Therefore, the analyses assumed that the intersection will remain as a three-quarter movement intersection under stop sign control on the northbound and southbound approaches and the laneage will remain the same. Based on these parameters and the existing and forecast traffic volumes, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long term) analysis horizon, with the exception of the westbound left turn lane and northbound right turn lane which are projected to have a failing level of service in the p.m. peak hour in the 2040 (long term) analysis horizon total traffic scenario. Adding an additional eastbound through lane and westbound through lane would mitigate these poor levels of service. This improvement is anticipated to occur in the long term build-out scenario based on the *City of Commerce City, C3 Vision, Transportation Plan*, dated July 2010. No operational modifications are recommended as a result of the proposed Eberly Place development.

- **E. 101st Ave./Blackhawk St.** – The E. 101st Ave./Blackhawk St. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2023 (build-out) background analysis horizon. Therefore, the analyses assumed that the intersection will remain a "T" intersection under stop sign control on the westbound approach. Based on these parameters and the existing and forecast traffic volumes, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2023 (build-out) background analysis horizon. Concurrent with construction of the proposed Eberly Place development, a west leg will be added to the intersection. The intersection will then be a four legged intersection with stop sign control on the eastbound and westbound approaches. The east leg will then have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will be constructed to have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will then have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will then have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane. Based on these parameters, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long term) analysis horizon.

- **E. 100th Pl./Blackhawk St.** – The E. 100th Pl./Blackhawk St. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2023 (build-out) background analysis horizon. Therefore, the analyses assumed that the intersection will remain a "T" intersection under stop sign control on the westbound approach. Based on these parameters and the existing and forecast traffic volumes, it is

projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2023 (build-out) background analysis horizon. Concurrent with construction of the proposed Eberly Place development, a west leg will be added to the intersection. The intersection will then be a four legged intersection with stop sign control on the eastbound and westbound approaches. The east leg will then have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will be constructed to have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will then have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will then have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane. Based on these parameters, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long term) analysis horizon.

- **E. 96th Ave./Potomac St.** – The E. 96th Ave./Potomac St. intersection is not anticipated to undergo any significant geometric or operational modifications or improvements through the 2040 (long term) analysis horizon. Therefore, the analyses assumed that the intersection will remain under stop sign control on the southbound approach and the laneage will remain the same. Based on these parameters and the existing and forecast traffic volumes, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2023 (build-out) analysis horizon. By the 2040 (long term) background analysis horizon, it is anticipated that the southbound shared left/right turn lane will have an unacceptable or failing level of service (LOS "E" or worse) in the a.m. peak hour. This is primarily due to the high forecast east/west through traffic volumes on E. 96th Ave. Adding an additional eastbound through lane and westbound through lane would mitigate this poor level of service. This improvement is anticipated to occur in the long term build-out scenario based on the *City of Commerce City, C3 Vision, Transportation Plan*, dated July 2010. No operational modifications are recommended as a result of the proposed Eberly Place development.

- **E. 101st Ave./Potomac St. (Proposed)** – Concurrently with the construction of the proposed Eberly Place development, the E. 101st Ave./Potomac St. intersection will be constructed as a full movement "T" intersection with stop sign control on the westbound approach. The east leg of the intersection will have one shared left turn/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection will have one left turn lane with 185 feet of storage plus a 15:1 entrance taper and one through lane on the southbound approach, and two northbound departure lanes with one being a westbound to northbound acceleration lane that totals 575 feet, including a 15:1 transition taper. The south leg of the intersection will have one through lane and one right turn lane with 135 feet of storage plus a 15:1 entrance taper on the northbound approach, and one southbound departure lane. Acceleration and deceleration lane requirements are from the *Commerce City Construction Standards and Specifications sections 3.04.1-3.04.2*. Based on these parameters and the forecast traffic volumes, it is projected that all impeded lane groups, as well as the intersection overall, will operate at acceptable levels of service through the 2023 (build-out) analysis horizon. By the 2040 (long term) analysis horizon, it is projected that a west leg will be added to this intersection to serve future development on the west side of Potomac St. The intersection will then be a four legged intersection with stop sign control on the

eastbound and westbound approaches. The east leg will then have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will be constructed to have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will then have one left turn lane, one through lane, and one right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will then have one left turn lane, one through lane, and one right turn lane on the northbound approach, and one southbound departure lane. Based on these parameters, it is projected that all lane groups as well as the intersection, overall, will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long term) analysis horizon.

TABLE 3
SUMMARY OF RESULTS - INTERSECTION CAPACITY ANALYSIS

INTERSECTION	INTERSECTION CONTROL	2021 EXISTING TRAFFIC		2023 BACKGROUND TRAFFIC		2023 TOTAL TRAFFIC		2040 BACKGROUND TRAFFIC		2040 TOTAL TRAFFIC	
		AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS
1. E. 104th Ave./Potomac St.	**Signal**										
a. EB L (Prot+Perm)		B	B	B	C	B	C	C	D	C	D
b. EB TR		B	C	B	C	C	C	C	F	C	F
c. WB L (Prot+Perm)		B	B	B	B	B	B	B	C	B	D
d. WB TR		C	C	C	C	C	C	F	F	F	F
e. NB L (Prot+Perm)		C	C	C	C	C	C	C	C	C	C
f. NB TR		C	C	C	C	C	C	C	C	D	C
g. SB L (Prot+Perm)		C	C	C	C	C	C	-	-	-	-
h. SB L (Prot+Perm) (Dual)		-	-	-	-	-	-	C	C	C	C
i. SB TR		C	C	C	C	C	C	D	C	D	C
j INTERSECTION		**C**	**C**	**C**	**C**	**C**	**C**	**D**	**F**	**D**	**F**
2. E. 104th Ave./Blackhawk St.	**TWSC**										
a. EB L		B	B	B	B	B	B	C	D	C	D
b. EB TR		A	A	A	A	A	A	A	A	A	A
c. WB L		A	B	A	B	A	B	B	D	B	E
d. WB TR		A	A	A	A	A	A	A	A	A	A
e. NB R	Stop	B	C	B	C	B	C	C	D	C	E
f. SB R	Stop	B	B	B	B	B	B	C	D	C	D
g. INTERSECTION		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
3. E. 101st Ave./Blackhawk St.	**TWSC**										
a. EB LTR	Stop	-	-	-	-	A	A	-	-	A	A
b. WB LR	Stop	A	A	A	A	-	-	A	A	-	-
c. WB LTR	Stop	-	-	-	-	A	A	-	-	A	A
d. NB TR		A	A	A	A	-	-	A	A	-	-
e. NB LTR		-	-	-	-	A	A	-	-	A	A
f. SB LT		A	A	A	A	-	-	A	A	-	-
g. SB LTR		-	-	-	-	A	A	-	-	A	A
h. INTERSECTION		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
4. E. 100th Pl./Blackhawk St.	**TWSC**										
a. EB LTR	Stop	-	-	-	-	A	A	-	-	A	A
b. WB LR	Stop	A	A	A	A	-	-	A	A	-	-
c. WB LTR	Stop	-	-	-	-	A	A	-	-	A	A
d. NB TR		A	A	A	A	-	-	A	A	-	-
e. NB LTR		-	-	-	-	A	A	-	-	A	A
f. SB LT		A	A	A	A	-	-	A	A	-	-
g. SB LTR		-	-	-	-	A	A	-	-	A	A
h. INTERSECTION		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
5. E. 96th Ave./Potomac St.	**TWSC**										
a. EB LT		A	A	A	A	A	A	B	B	B	B
b. WB TR		A	A	A	A	A	A	A	A	A	A
c. SB LR	Stop	B	C	B	D	B	D	F	D	F	D
d. INTERSECTION		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**C**	**A**

TABLE 3 (CONTINUED)
SUMMARY OF RESULTS - INTERSECTION CAPACITY ANALYSIS

INTERSECTION	INTERSECTION CONTROL	2021 EXISTING TRAFFIC		2023 BACKGROUND TRAFFIC		2023 TOTAL TRAFFIC		2040 BACKGROUND TRAFFIC		2040 TOTAL TRAFFIC	
		AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS
6. E. 101st Ave./Potomac St.	**TWSC**										
a. EB LTR	Stop	-	-	-	-	-	-	-	-	B	B
b. WB LR	Stop	-	-	-	-	A	A	-	-	-	-
c. WB LTR	Stop	-	-	-	-	-	-	-	-	B	B
d. NB L		-	-	-	-	-	-	-	-	A	A
e. NB T		-	-	-	-	A	A	-	-	A	A
f. NB R		-	-	-	-	A	A	-	-	A	A
g. SB L		-	-	-	-	A	A	-	-	A	A
h. SB T		-	-	-	-	A	A	-	-	A	A
i. SB R		-	-	-	-	-	-	-	-	A	A
J. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**A**	**-**	**-**	**A**	**A**

B. Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the study area intersections were calculated for the 2021 (existing), 2023 (build-out) background and total traffic, and 2040 (long term) background and total traffic scenarios utilizing the *Synchro 10* 95th percentile reported queues. The queue length calculations are based on a 25-foot vehicle length. All queue lengths are reported in total (cumulative) feet. Table 4 provides a summary of these analyses for each of the study area intersections.

A narrative of the summary of the queue length/storage requirement analysis and comparison to existing turn bay storage is provided below.

- **E. 104th Ave./Potomac St.** – Based on the results of the queuing analysis it is projected that all turn bays will have adequate capacity to serve the intersection through the 2023 (build-out) analysis horizon. If the southbound left turn bay were to remain as one lane, it would exceed its capacity by the 2040 (long term) analysis horizon. Restriping the north leg of the intersection to add a second southbound left turn lane would create adequate capacity to serve the intersection in the 2040 (long term) analysis horizon. All other turn bays are projected to have adequate capacity to serve the intersection through the 2040 (long term) analysis horizon.

- **E. 104th Ave./Blackhawk St.** – Based on the results of the queuing analysis it is projected that all turn bays will have adequate capacity to serve the intersection through the 2040 (long term) analysis horizon.

- **E. 101st Ave./Blackhawk St.** – Based on the results of the queuing analysis it is projected that there will not be any queuing impacts associated with this intersection through the 2040 (long term) analysis horizon.

- **E. 100th Pl./Blackhawk St.** – Based on the results of the queuing analysis it is projected that there will not be any queuing impacts associated with this intersection through the 2040 (long term) analysis horizon.

- **E. 96th Ave./Potomac St.** – Based on the results of the queuing analysis it is projected that there will not be any queuing impacts associated with this intersection through the 2040 (long term) analysis horizon.

- **E. 101st Ave./Potomac St.** – Based on the results of the queuing analysis it is projected that there will not be any queuing impacts associated with this intersection through the 2040 (long term) analysis horizon.

TABLE 4
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (CUMULATIVE) (FT)	2021 EXISTING TRAFFIC		2023 BACKGROUND TRAFFIC		2023 TOTAL TRAFFIC		2040 BACKGROUND TRAFFIC		2040 TOTAL TRAFFIC	
		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. E. 104th Ave./Potomac St.											
a. EB L (1)	600	21	35	22	37	22	37	28	81	28	83
b. EB TR (2)	2600	213	431	228	471	231	490	417	1165	421	1189
c. WB L (1)	475	10	9	11	10	12	13	23	56	23	65
d. WB TR (2)	2300	360	415	392	456	392	456	873	1046	873	1046
e. NB L (1)	250	14	18	15	19	38	34	111	83	132	97
f. NB TR (1)	975	15	18	17	20	28	27	69	57	84	64
g. SB L (1)	225	106	183	112	193	112	193	-	-	-	-
h. SB L (2)	450	-	-	-	-	-	-	89	149	89	149
i. SB TR (1)	225	34	37	35	38	37	45	57	91	63	108
2. E. 104th Ave./Blackhawk St.											
a. EB L (1)	250	0	5	0	5	0	5	3	20	3	20
b. EB TR (2)	2300	0	0	0	0	0	0	0	0	0	0
c. WB L (1)	225	0	0	0	0	0	5	3	18	3	30
d. WB TR (2)	2400	0	0	0	0	0	0	0	0	0	0
e. NB R (1)	900	0	3	0	3	3	5	8	18	13	25
f. SB R (1)	600	5	3	5	3	5	3	20	13	20	13
3. E. 101st Ave./Blackhawk St.											
a. EB LTR (1)	-	-	-	-	-	0	0	-	-	0	0
b. WB LR (1)	-	0	0	0	0	-	-	0	0	-	-
c. WB LTR (1)	-	-	-	-	-	0	0	-	-	0	0
d. NB TR (1)	200	0	0	0	0	-	-	0	0	-	-
e. NB LTR (1)	200	-	-	-	-	0	0	-	-	0	0
f. SB LT (1)	200	0	0	0	0	-	-	0	0	-	-
g. SB LTR (1)	200	-	-	-	-	0	0	-	-	0	0
4. E. 100th Pl./Blackhawk St.											
a. EB LTR (1)	-	-	-	-	-	0	0	-	-	0	0
b. WB LR (1)	-	0	0	0	0	-	-	0	0	-	-
c. WB LTR (1)	-	-	-	-	-	0	0	-	-	0	0
d. NB TR (1)	200	0	0	0	0	-	-	0	0	-	-
e. NB LTR (1)	200	-	-	-	-	0	0	-	-	0	0
f. SB LT (1)	200	0	0	0	0	-	-	0	0	-	-
g. SB LTR (1)	200	-	-	-	-	0	0	-	-	0	0

TABLE 4 (CONTINUED)
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (CUMULATIVE) (FT)	2021 EXISTING TRAFFIC QUEUE LENGTH (FT) 95TH%		2023 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%		2023 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%		2040 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%		2040 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
5. E. 96th Ave./Potomac St.											
a. EB LT (1)	5200	0	0	0	0	0	3	5	18	8	23
b. WB TR (1)	5100	0	0	0	0	0	0	0	0	0	0
c. SB LR (1)	2400	0	10	0	10	8	23	165	58	258	75
6. E. 101st Ave./Potomac St.											
a. EB LTR (1)	-	-	-	-	-	-	-	-	-	13	10
b. WB LR (1)	-	-	-	-	-	8	5	-	-	-	-
c. WB LTR (1)	-	-	-	-	-	-	-	-	-	10	8
d. NB L (1)	-	-	-	-	-	-	-	-	-	0	3
e. NB T (1)	-	-	-	-	-	0	0	-	-	0	0
f. NB R (1)	-	-	-	-	-	0	0	-	-	0	0
g. SB L (1)	-	-	-	-	-	0	3	-	-	0	3
h. SB T (1)	-	-	-	-	-	0	0	-	-	0	0
i. SB R (1)	-	-	-	-	-	-	-	-	-	0	0

VII. CONCLUSION

United Development Companies, LLC is proposing to develop a parcel of land containing approximately 33.5 acres of mostly undeveloped land. The property is within the jurisdictional boundaries of Commerce City, Colorado. The project site is bounded by Potomac St. to the west, undeveloped land to the south, Blackhawk St. to the east, and a private lot along with undeveloped land to the north that is adjacent to E. 104th Ave. Upon build-out the development will contain 154 single-family detached homes. The proposed development will be known as Eberly Place. The proposed development is projected to generate 1,547 daily vehicle trips of which 114 are projected to be generated during the a.m. peak hour and 154 are projected to be generated during the p.m. peak hour.

The proposed development will be served by three access points. The primary access will be on the west side of the sight and be an extension of E. 101st Ave. that will intersect with Potomac St., and be constructed concurrently with the development as a full movement intersection. The intersections of E. 100th Pl. and E. 101st Ave. with Blackhawk St. will each have a west leg added to provide secondary access into the site from Blackhawk St.

Based on the analyses contained in this traffic study it is concluded that the proposed Eberly Place development can be accommodated by the study area intersections and roadways through the 2040 (long term) analysis horizon with the modifications presented in Table 5, below.

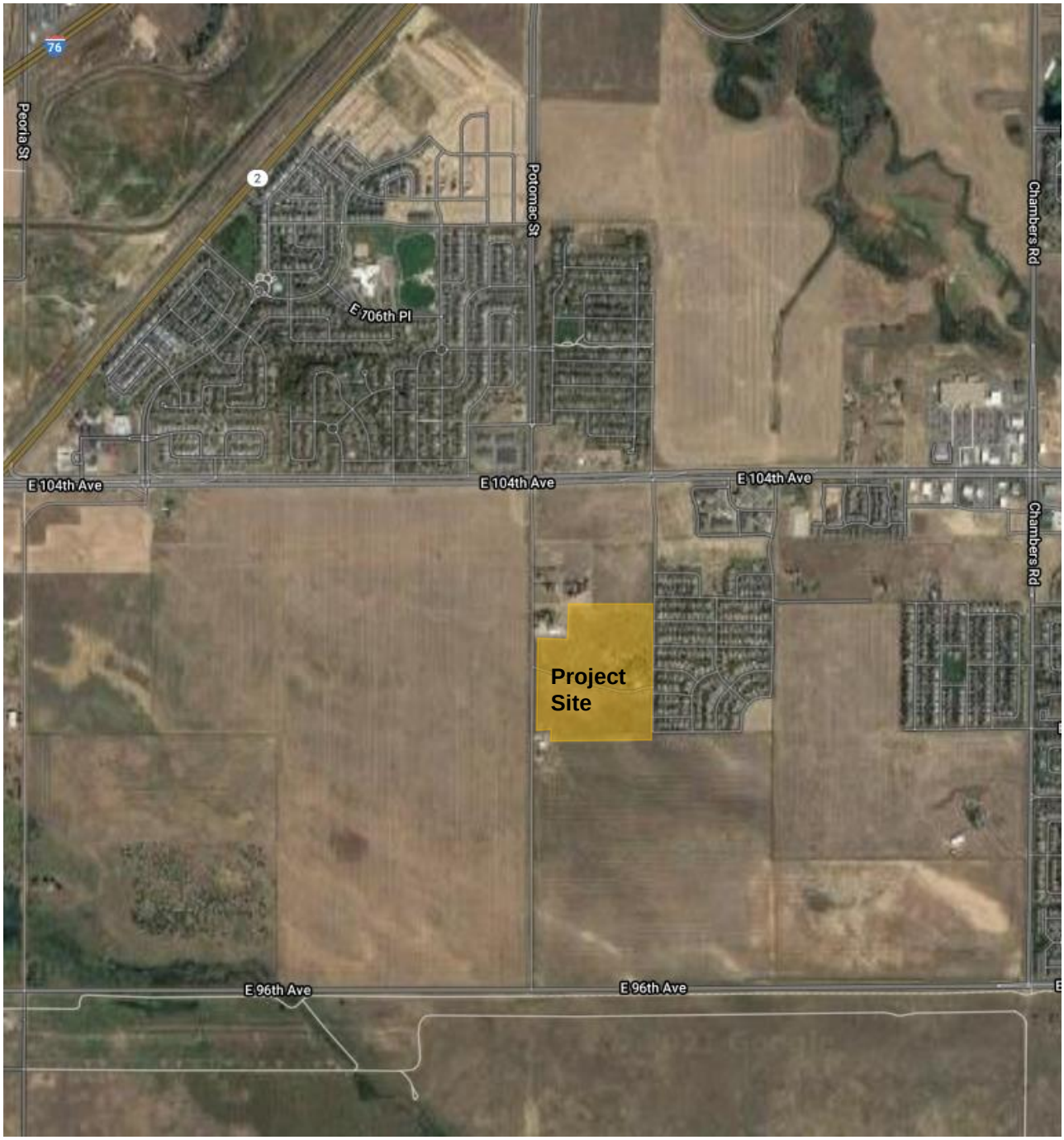
TABLE 5
SUMMARY OF RECOMMENDATIONS

Intersection	Recommendations	Responsible	Timing
E. 104th Ave./Potomac St.	No geometric or operational modifications are recommended as a result of the development of the proposed Eberly Place project.	N/A	N/A
E. 104th Ave./Blackhawk St.	No geometric or operational modifications are recommended as a result of the development of the proposed Eberly Place project.	N/A	N/A
E.101st Ave./ Blackhawk St.	Concurrent with construction of the proposed Eberly Place development, a west leg will be added to this intersection. The intersection will then be a four legged intersection with stop sign control on the eastbound and westbound approaches. The east leg will then have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will be constructed to have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will then have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will then have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.	Developer	Concurrently with Project
E.100th Pl./ Blackhawk St.	Concurrent with construction of the proposed Eberly Place development, a west leg will be added to this intersection. The intersection will then be a four legged intersection with stop sign control on the eastbound and westbound approaches. The east leg will then have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will be constructed to have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will then have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will then have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.	Developer	Concurrently with Project
E. 96th Ave./Potomac St.	No geometric or operational modifications are recommended as a result of the development of the proposed Eberly Place project.	N/A	N/A

TABLE 5 (CONTINUED)
SUMMARY OF RECOMMENDATIONS

Intersection	Recommendations	Responsible	Timing
E. 101st Ave./Potomac St.	Concurrently with the construction of the proposed Eberly Place development, the E. 101st Ave./Potomac St. intersection will be constructed as a full movement "T" intersection with stop sign control on the westbound approach. The east leg of the intersection will have one shared left turn/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection will have one left turn lane with 185 feet of storage plus a 15:1 entrance taper and one through lane on the southbound approach, and two northbound departure lanes with one being a westbound to northbound acceleration lane that totals 575 feet, including a 15:1 transition taper. The south leg of the intersection will have one through lane and one right turn lane with 135 feet of storage plus a 15:1 entrance taper on the northbound approach, and one southbound departure lane. Acceleration and deceleration lane requirements are from the *Commerce City Construction Standards and Specifications, sections 3.04.1-3.04.2*.	Developer	Concurrently with Project

N



HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

Vicinity Map

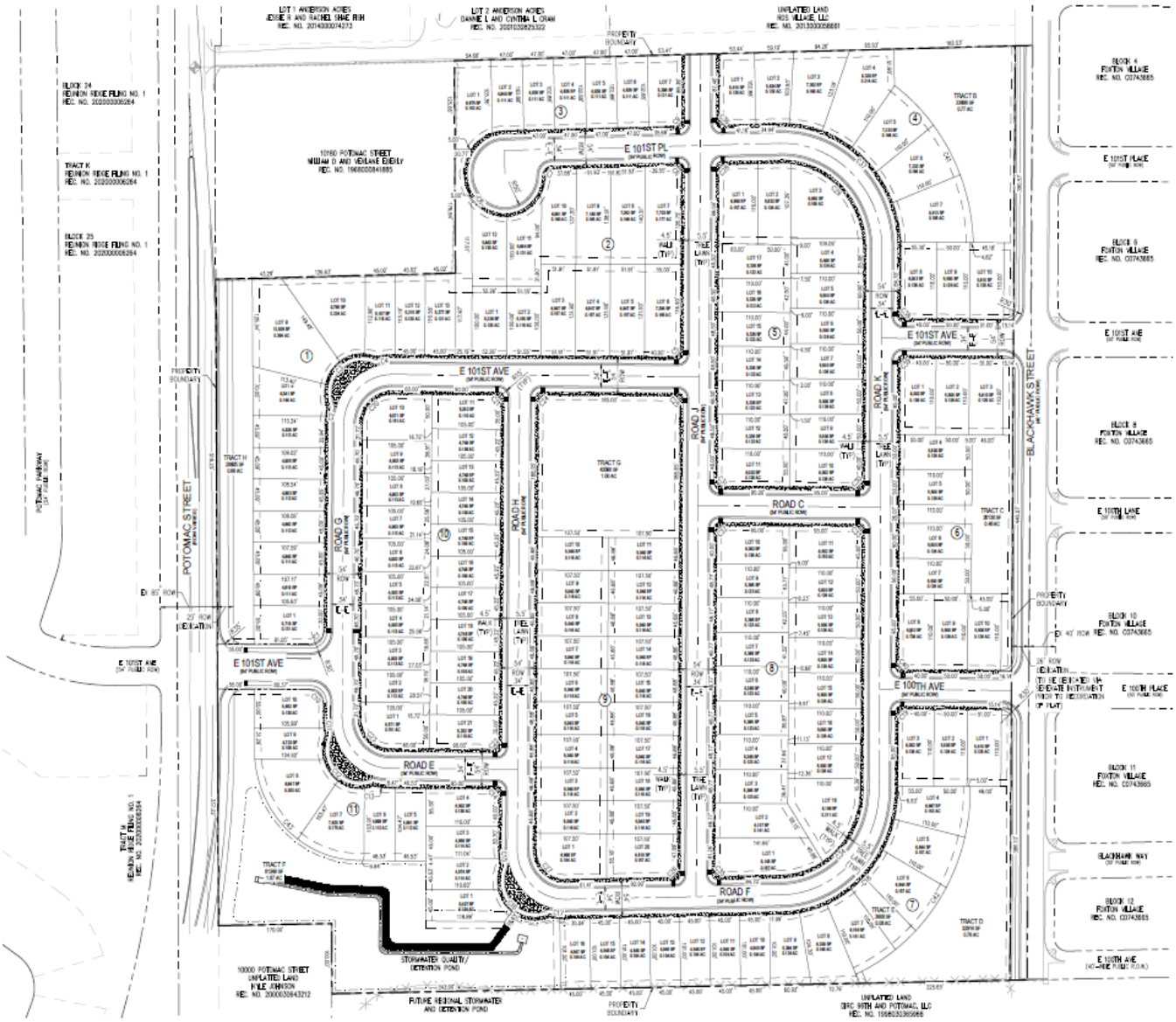
Eberly Place

United Development Companies, LLC

HKS #201237

Figure 1

N



HKS HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

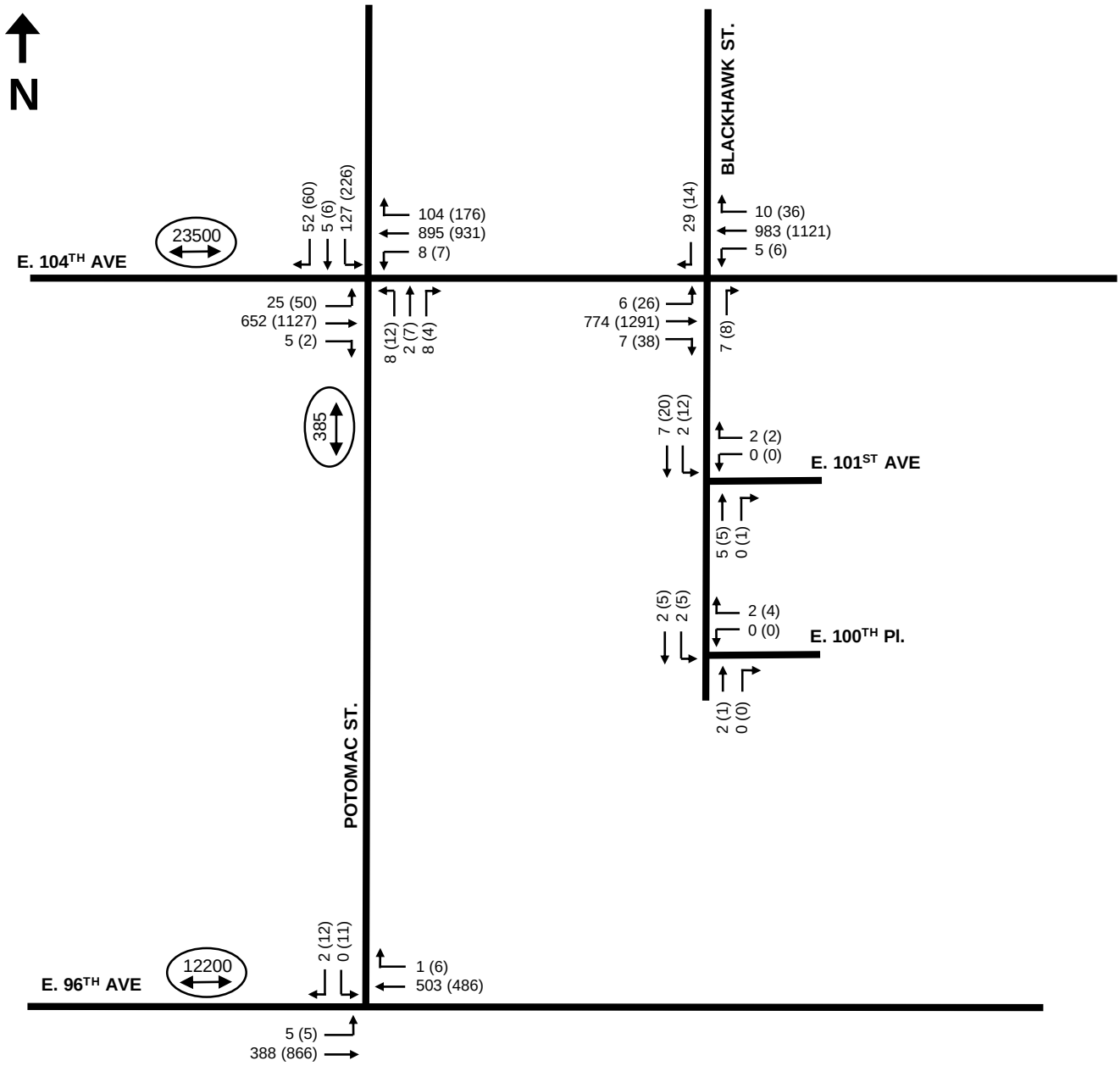
Conceptual Site Plan

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 2



Legend:

Drawing Not To Scale

3500
24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)
Weekday AM (PM) Peak Hour Traffic Volumes, vph

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DENVER • DALLAS/FORT WORTH

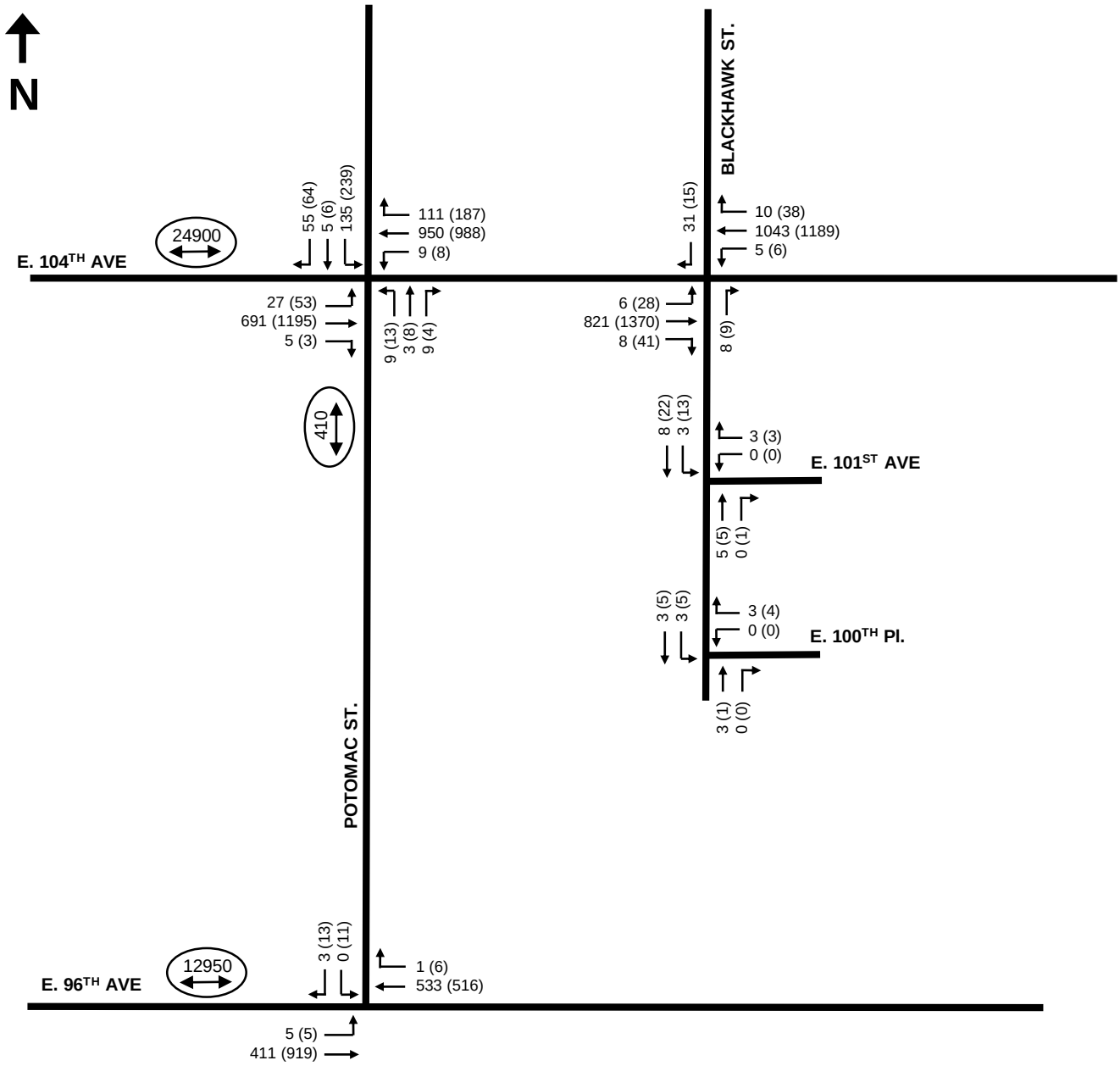
2021 (COVID-Adjusted) Existing Traffic Volumes

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 3



Legend:

Drawing Not To Scale

3500
24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)
Weekday AM (PM) Peak Hour Traffic Volumes, vph

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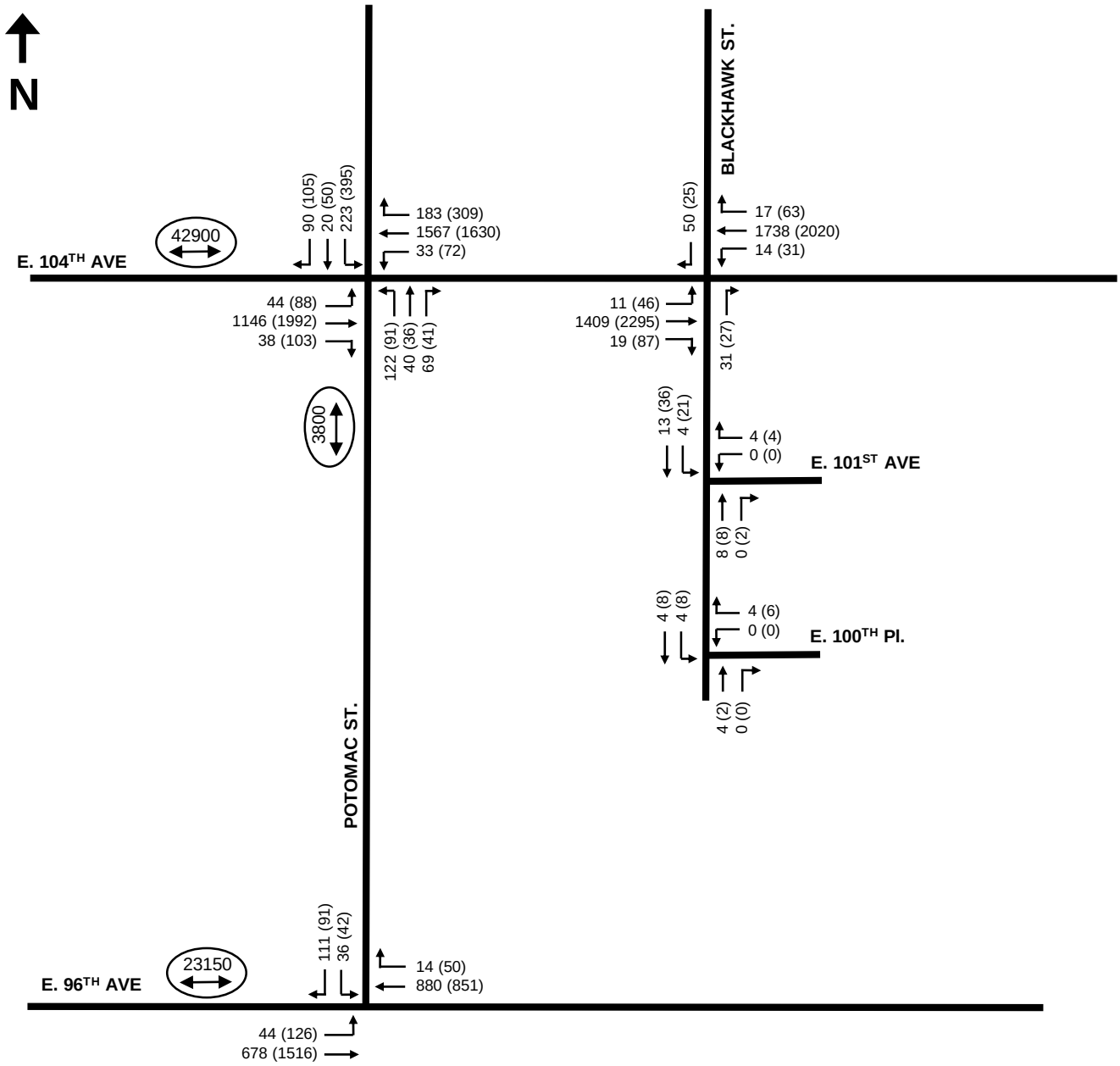
2023 Background Traffic Volumes

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 4



Legend:

Drawing Not To Scale

3500
24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)
Weekday AM (PM) Peak Hour Traffic Volumes, vph

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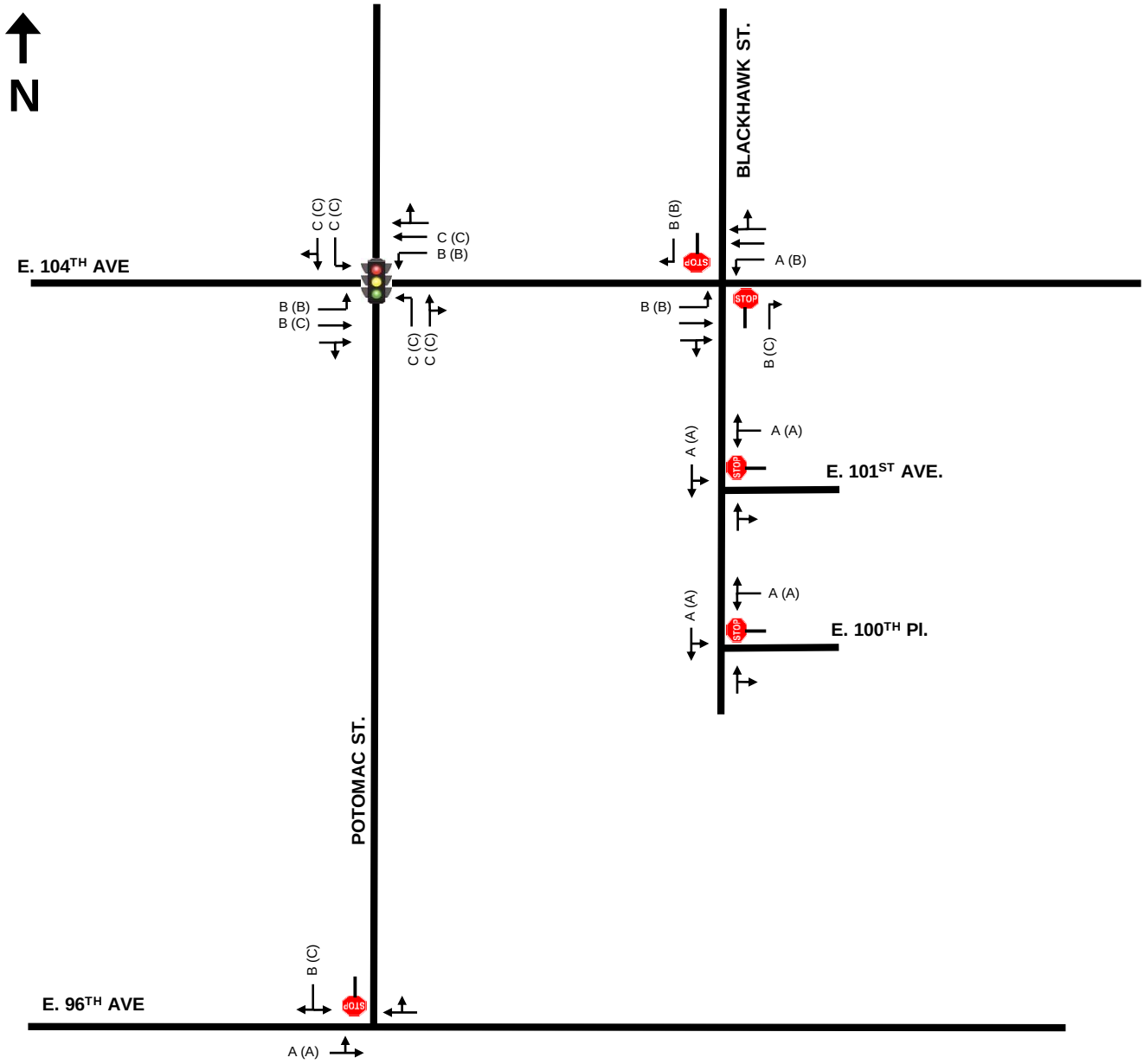
2040 Background Traffic Volumes

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 5



Legend: Drawing Not To Scale

A (B)	Weekday AM (PM)
C (A)	Peak Hour Lane Group
A (A)	Level of Service

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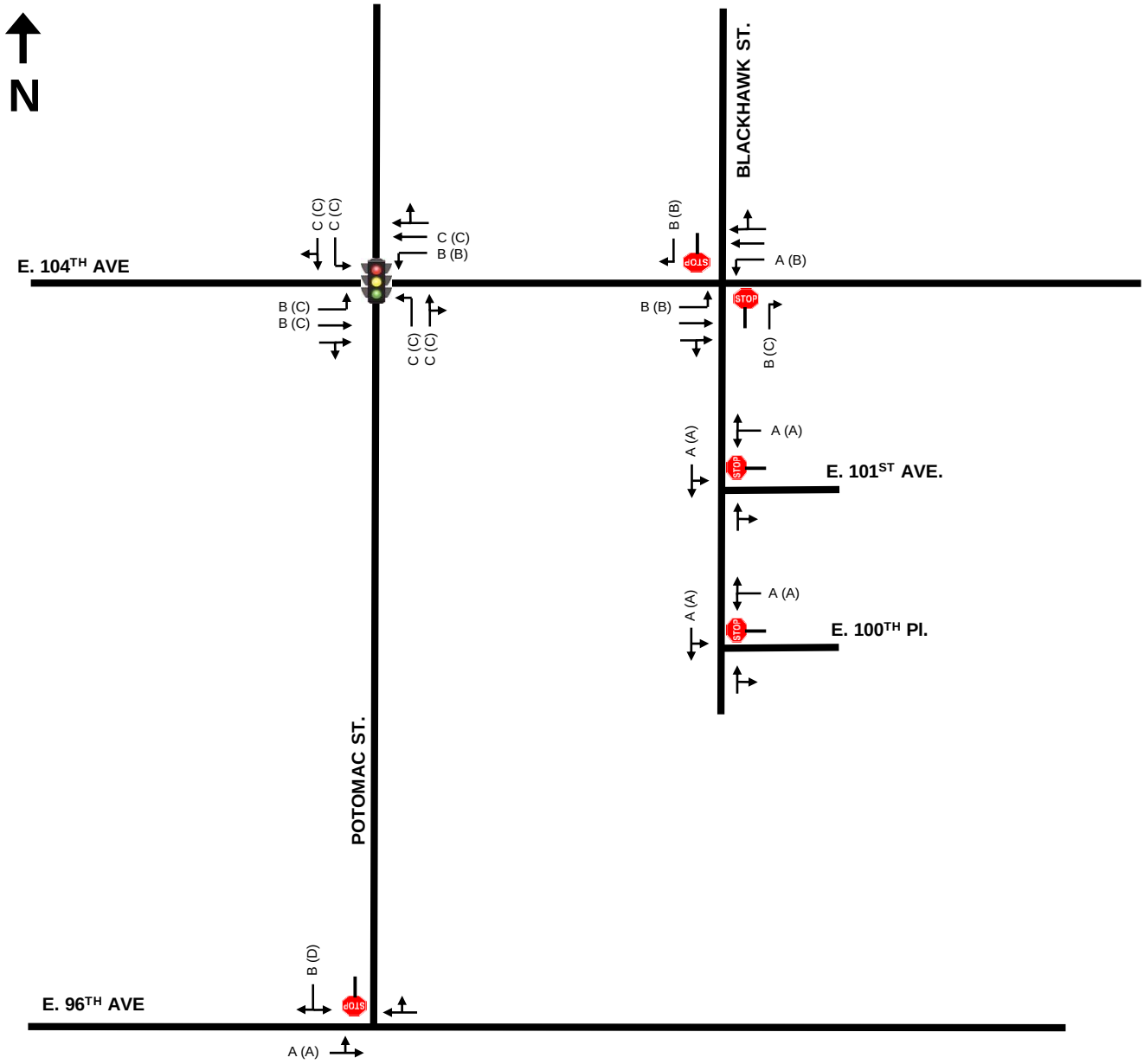
2021 Existing Traffic Operational Conditions

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 6



Legend: Drawing Not To Scale

A (B) Weekday AM (PM)
C (A) Peak Hour Lane Group
A (A) Level of Service

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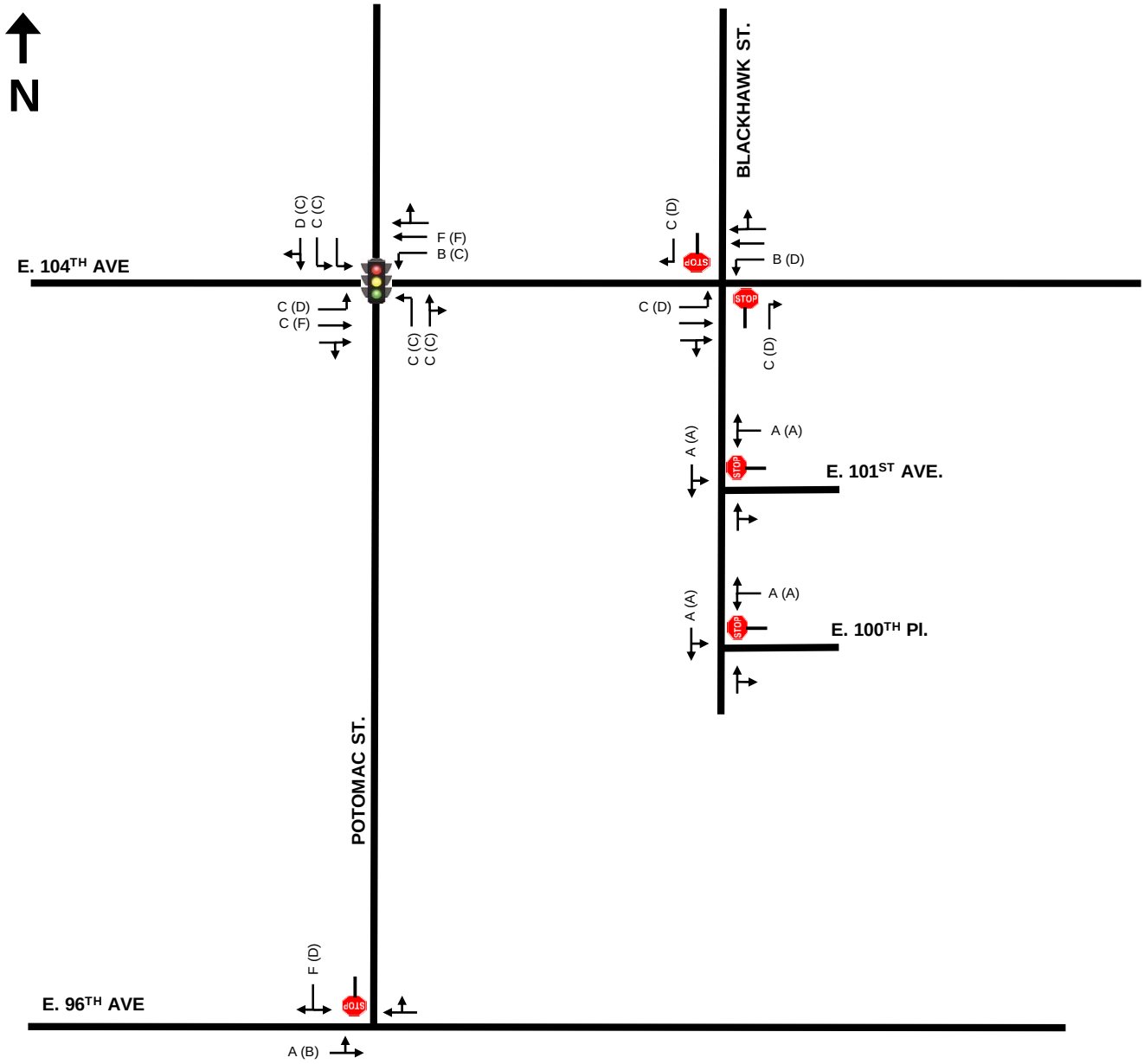
DENVER • DALLAS/FORT WORTH

2023 Background Traffic Operational Conditions

Eberly Place

United Development Companies, LLC
HKS #201237

Figure 7



Legend: Drawing Not To Scale

A (B) Weekday AM (PM)
C (A) Peak Hour Lane Group
A (A) Level of Service

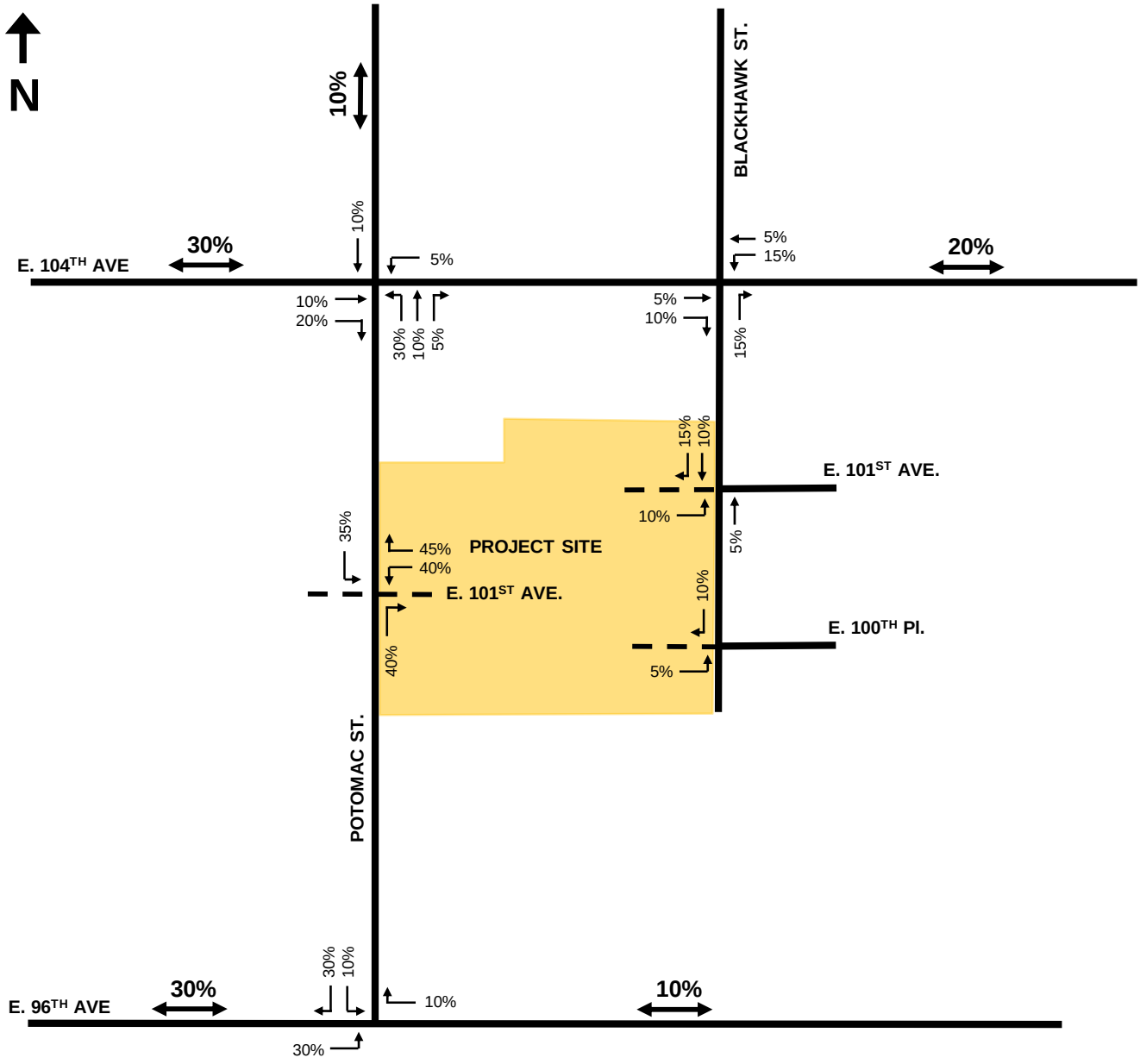
HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

2040 Background Traffic Operational Conditions

Eberly Place

United Development Companies, LLC
HKS #201237

Figure 8



Legend: Drawing Not To Scale

XX% Site Trip Distribution

Proposed Roadway

HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

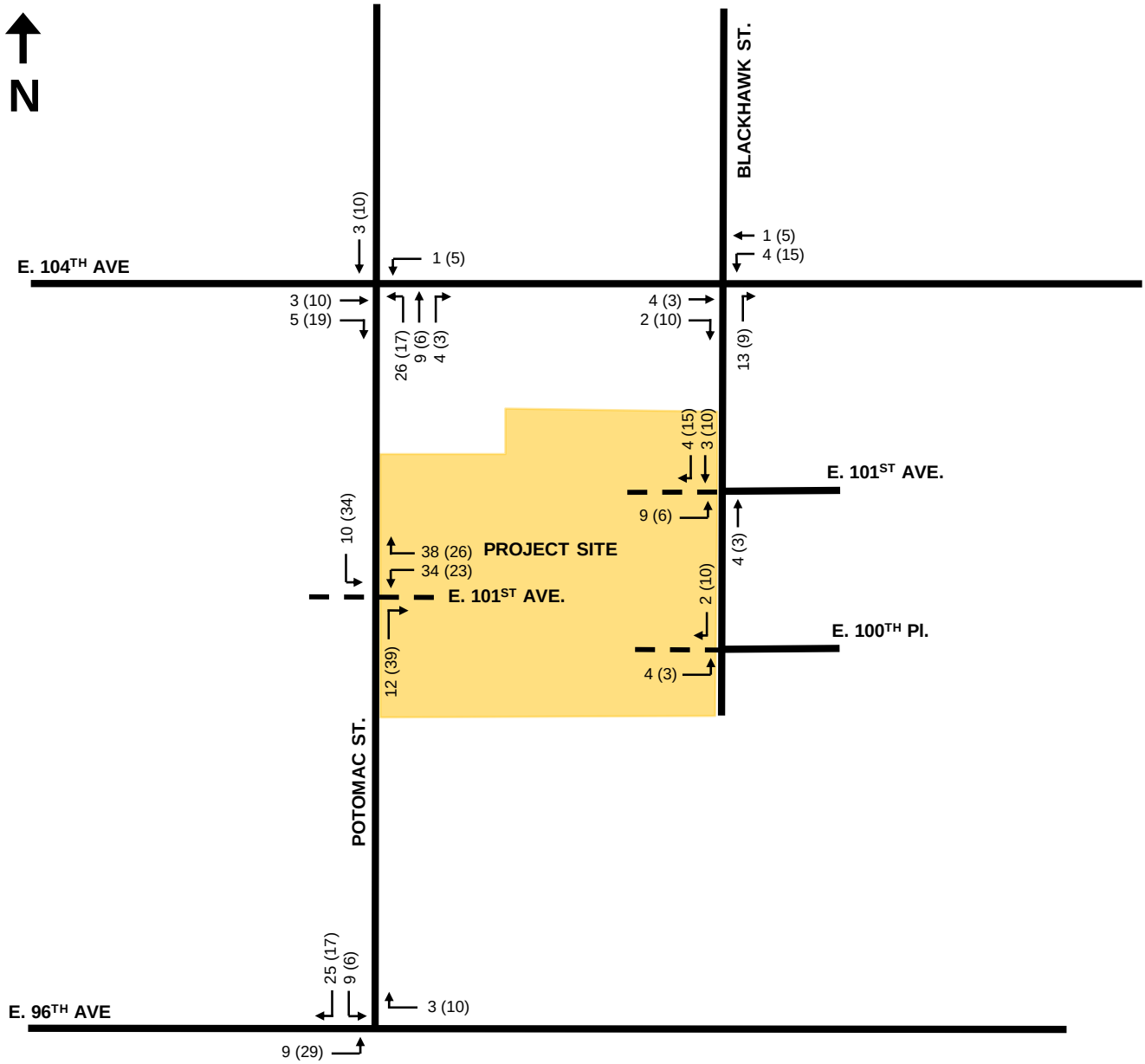
Site Generated Trip Distribution

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 9



Legend: Drawing Not To Scale

5(8) Weekday AM (PM)
64(50) Peak Hour
8(7) Traffic Volumes, vph

Proposed Roadway

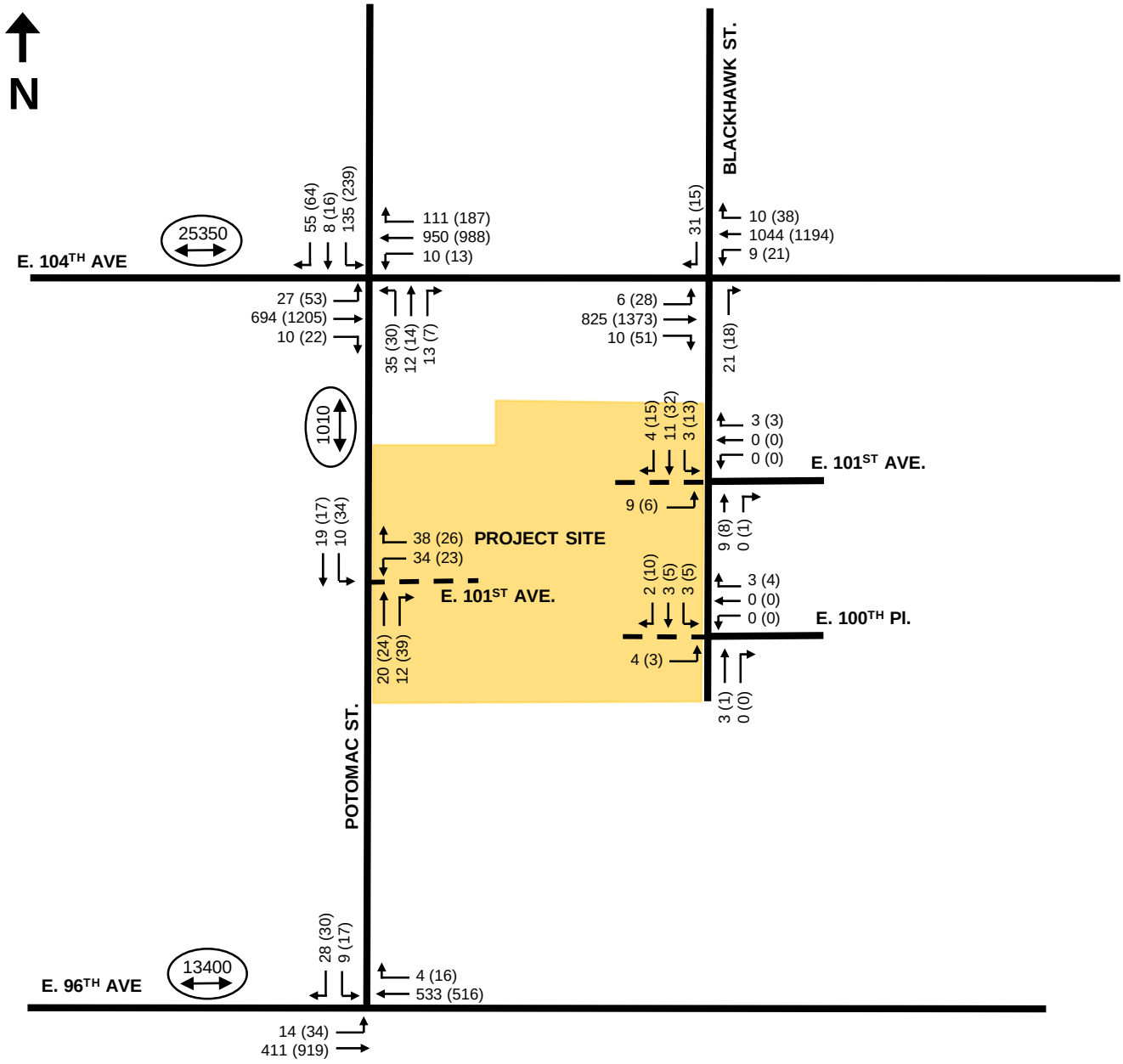
HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

Site Generated Trip Assignment

Eberly Place

United Development Companies, LLC
HKS #201237

Figure 10



Legend:

Drawing Not To Scale

3500
24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)
Weekday AM (PM) Peak Hour Traffic Volumes, vph

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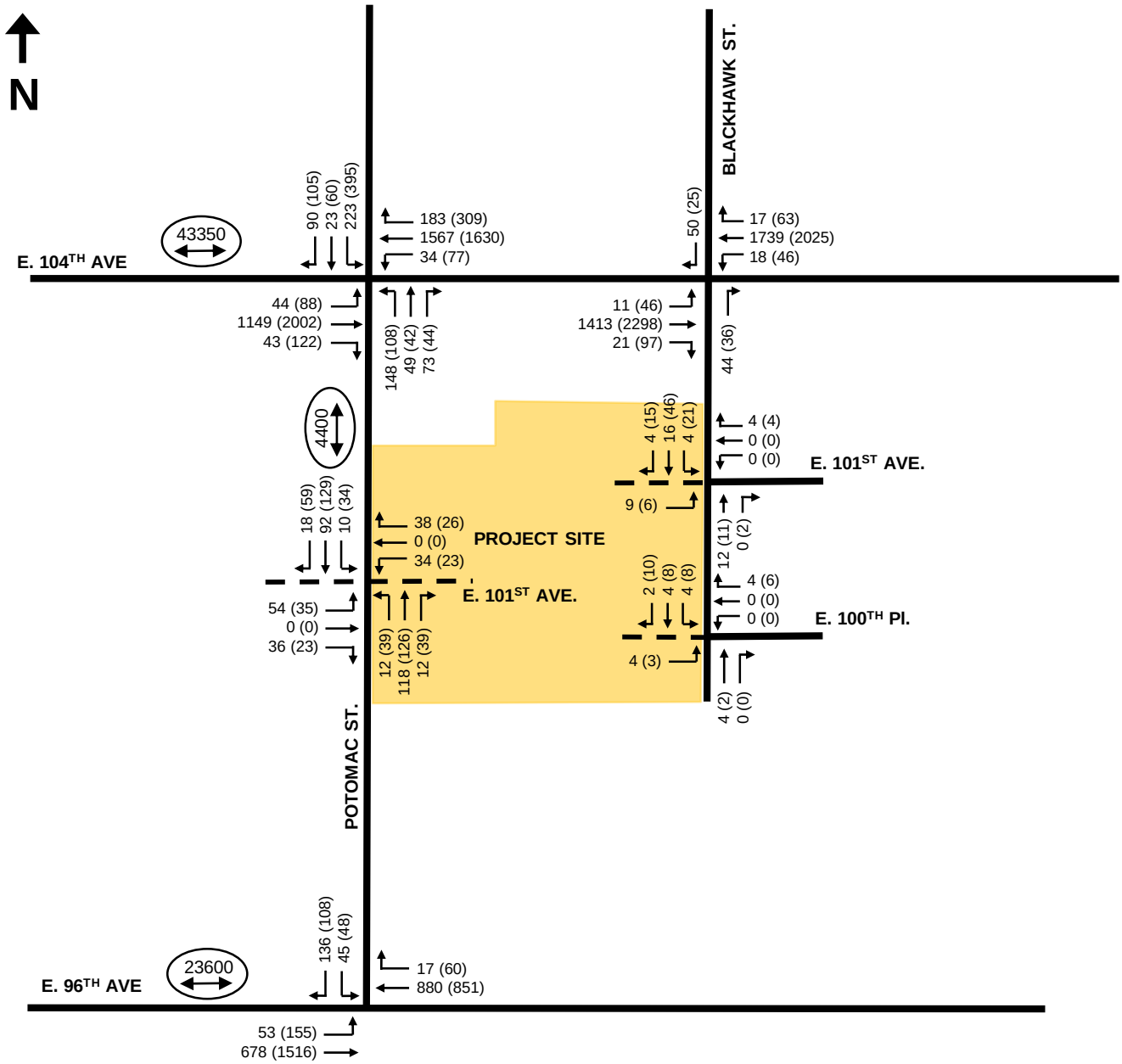
2023 Total Traffic Volumes (Background + Site Generated)

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 11



Legend: Drawing Not To Scale

3500 — 24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)

Weekday AM (PM) Peak Hour Traffic Volumes, vph

HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

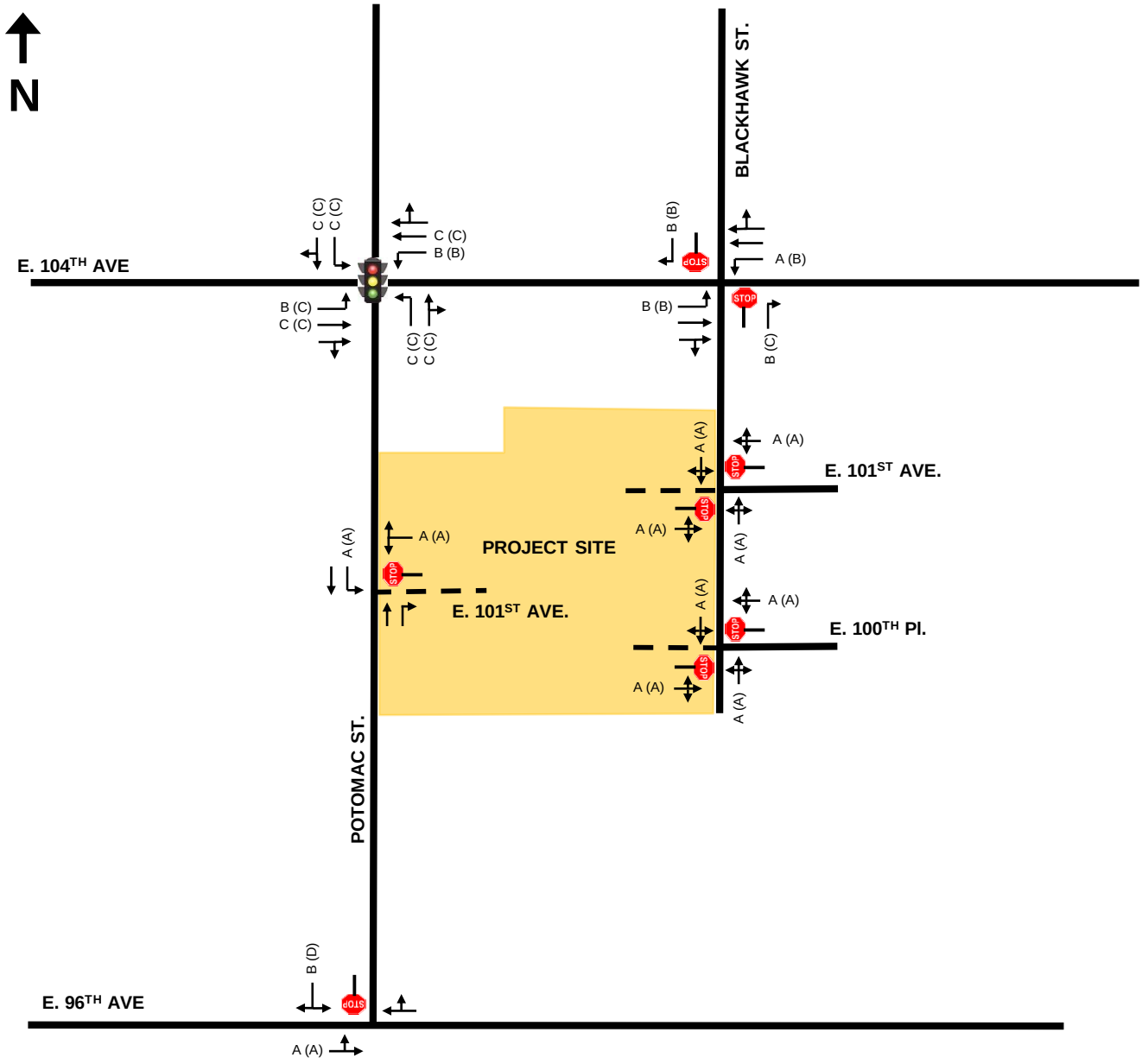
2040 Total Traffic Volumes (Background + Site Generated)

Eberly Place

United Development Companies, LLC

HKS #201237

Figure 12



Legend: Drawing Not To Scale

A (B) Weekday AM (PM)
C (A) Peak Hour Lane Group
A (A) Level of Service

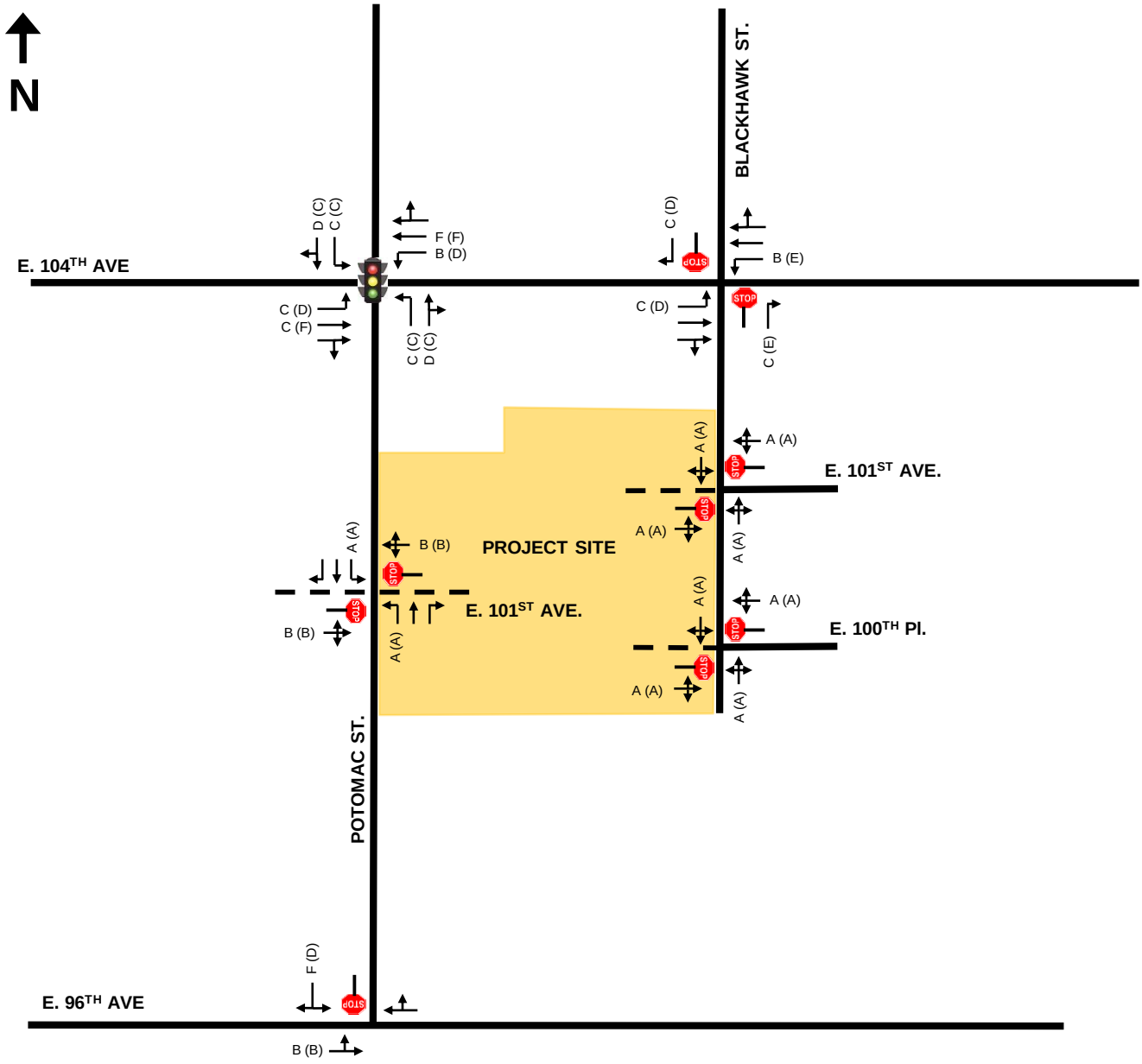
HARRIS KOCHER SMITH
DENVER • DALLAS/FORT WORTH

2023 Total Traffic Operational Conditions

Eberly Place

United Development Companies, LLC
HKS #201237

Figure 13



Legend: Drawing Not To Scale

A (B) Weekday AM (PM)
C (A) Peak Hour Lane Group
A (A) Level of Service

HARRIS KOCHER SMITH
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2040 Total Traffic Operational Conditions

Eberly Place

United Development Companies, LLC
HKS #201237

Figure 14

APPENDIX “A”

2021 EXISTING
TRAFFIC VOLUME COUNTS

All Traffic Data Services

www.alltrafficdata.net

Date Start: 03-Feb-21
Site Code: 6
Station ID: 6
POTOMAC ST S.O. 104TH AVE

Start Time	03-Feb-21 Wed	NB	SB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	0							0
04:00		0	0							0
05:00		1	2							3
06:00		2	**25**							27
07:00		10	6							16
08:00		**19**	17							**36**
09:00		12	18							30
10:00		19	13							32
11:00		19	16							35
12:00 PM		11	**14**							**25**
01:00		14	5							19
02:00		11	13							24
03:00		15	6							21
04:00		14	4							18
05:00		**17**	7							24
06:00		4	2							6
07:00		2	2							4
08:00		0	0							0
09:00		0	0							0
10:00		0	1							1
11:00		0	0							0
Total		170	151							321
Percent		53.0%	47.0%							
AM Peak	-	08:00	06:00	-	-	-	-	-	-	08:00
Vol.	-	19	25	-	-	-	-	-	-	36
PM Peak	-	17:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	17	14	-	-	-	-	-	-	25
Grand Total		170	151							321
Percent		53.0%	47.0%							
ADT		ADT 321		AADT 321						

All Traffic Data Services

www.alltrafficdata.net

Date Start: 03-Feb-21
Site Code: 7
Station ID: 7
104TH AVE W.O. POTOMAC ST

Start Time	03-Feb-21 Wed	EB	WB							Total
12:00 AM		43	32							75
01:00		37	28							65
02:00		35	23							58
03:00		38	61							99
04:00		93	111							204
05:00		211	308							519
06:00		486	607							1093
07:00		**558**	**810**							**1368**
08:00		548	605							1153
09:00		432	520							952
10:00		469	456							925
11:00		533	553							1086
12:00 PM		537	595							1132
01:00		555	561							1116
02:00		602	610							1212
03:00		852	769							1621
04:00		**1018**	**820**							**1838**
05:00		901	807							1708
06:00		676	527							1203
07:00		448	333							781
08:00		295	229							524
09:00		224	191							415
10:00		156	134							290
11:00		62	77							139
Total		9809	9767							19576
Percent		50.1%	49.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	558	810	-	-	-	-	-	-	1368
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	1018	820	-	-	-	-	-	-	1838
Grand Total		9809	9767							19576
Percent		50.1%	49.9%							
ADT		ADT 19,576		AADT 19,576						

All Traffic Data Services

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Date Start: 03-Feb-21
Site Code: 8
Station ID: 8
96TH AVE W.O. POTOMAC ST

Start Time	03-Feb-21 Wed	EB	WB							Total
12:00 AM		30	14							44
01:00		23	15							38
02:00		25	10							35
03:00		38	56							94
04:00		73	90							163
05:00		125	264							389
06:00		227	401							628
07:00		**320**	**429**							**749**
08:00		276	355							631
09:00		195	206							401
10:00		158	198							356
11:00		194	233							427
12:00 PM		215	222							437
01:00		253	280							533
02:00		308	315							623
03:00		594	**406**							1000
04:00		**730**	405							**1135**
05:00		632	344							976
06:00		301	228							529
07:00		200	121							321
08:00		139	94							233
09:00		107	89							196
10:00		84	66							150
11:00		43	32							75
Total		5290	4873							10163
Percent		52.1%	47.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	320	429	-	-	-	-	-	-	749
PM Peak	-	16:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	730	406	-	-	-	-	-	-	1135
Grand Total		5290	4873							10163
Percent		52.1%	47.9%							
ADT		ADT 10,163		AADT 10,163						

All Traffic Data
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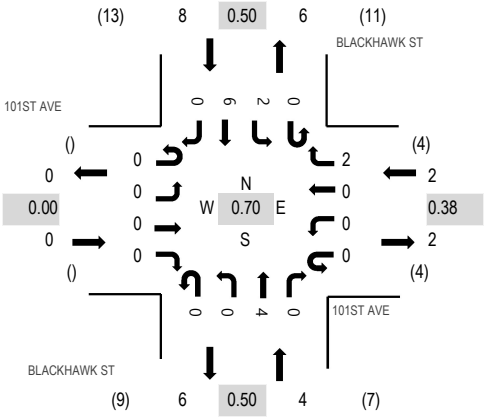
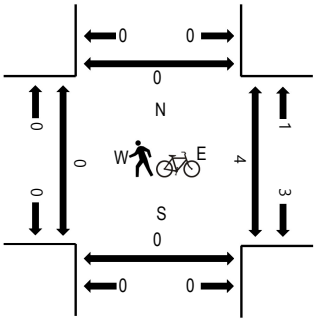
Location: 1 BLACKHAWK ST & 101ST AVE AM
Date: Thursday, March 11, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	101ST AVE Eastbound				101ST AVE Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	10	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	0	4	12	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	13	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	2	0	0	1	0	0	0	1	0	4	14	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		0	2	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	0	5		0	1	0	0
Count Total	0	0	0	0	0	0	0	4	0	0	7	0	0	4	9	0	24		0	5	0	0
Peak Hour	0	0	0	0	0	0	0	2	0	0	4	0	0	2	6	0	14		0	4	0	0

All Traffic Data Services Inc.

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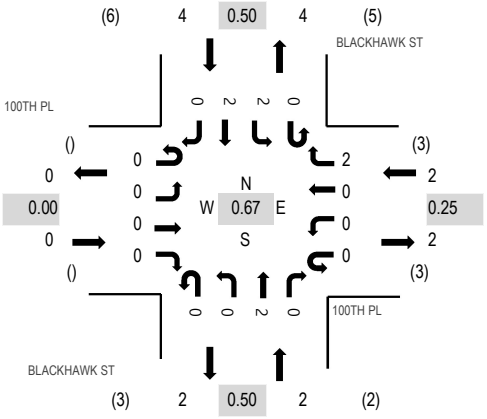
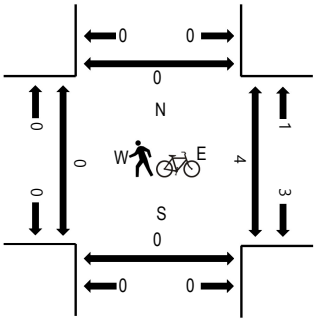
Location: 2 BLACKHAWK ST & 100TH PL AM
Date: Thursday, March 11, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	100TH PL Eastbound				100TH PL Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	7	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		0	2	0	0
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	3		0	1	0	0
Count Total	0	0	0	0	0	0	0	3	0	0	2	0	0	3	3	0	11		0	6	0	0
Peak Hour	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2	0	8		0	4	0	0

ALL TRAFFIC DATA SERVICES
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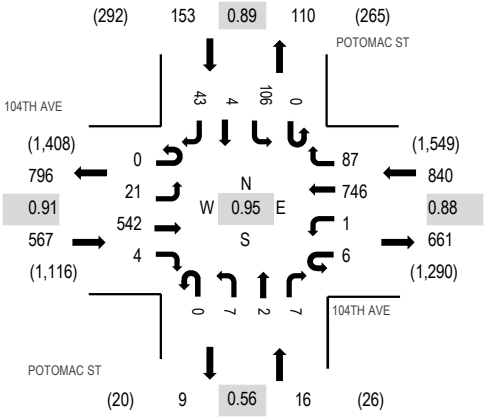
Location: 3 POTOMAC ST & 104TH AVE AM
Date: Wednesday, February 3, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour

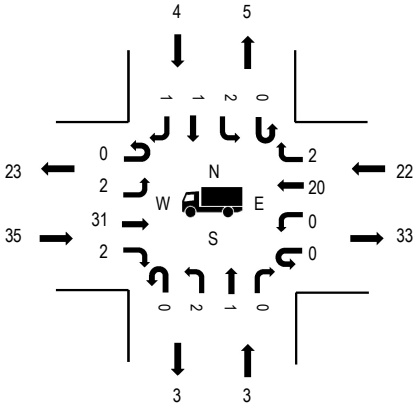
Motorized Vehicles



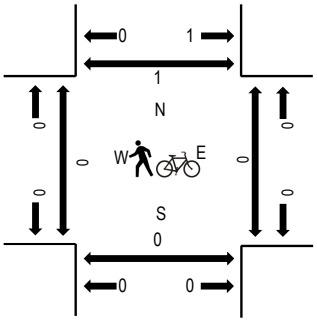
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	6.2%	0.91
WB	2.6%	0.88
NB	18.8%	0.56
SB	2.6%	0.89
All	4.1%	0.95

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	104TH AVE Eastbound				104TH AVE Westbound				POTOMAC ST Northbound				POTOMAC ST Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	4	119	1	1	0	178	22	0	0	0	0	0	19	0	10	354	1,566
7:15 AM	0	7	137	0	1	0	184	18	0	1	0	0	0	27	2	14	391	1,576
7:30 AM	0	6	131	0	2	1	219	20	0	3	1	1	0	21	0	10	415	1,535
7:45 AM	0	4	153	0	2	0	182	26	0	1	0	1	0	30	1	6	406	1,454
8:00 AM	0	4	121	4	1	0	161	23	0	2	1	5	0	28	1	13	364	1,417
8:15 AM	0	8	141	1	2	2	142	24	0	0	0	1	0	21	1	7	350	
8:30 AM	0	10	119	1	3	0	130	43	0	2	0	1	0	16	2	7	334	
8:45 AM	0	5	138	2	2	1	120	39	0	4	0	2	0	44	0	12	369	
Count Total	0	48	1,059	9	14	4	1,316	215	0	13	2	11	0	206	7	79	2,983	
Peak Hour	0	21	542	4	6	1	746	87	0	7	2	7	0	106	4	43	1,576	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	9	0	8	0	17	7:00 AM	0	0	0	0	0
7:15 AM	11	0	4	2	17	7:15 AM	0	0	0	0	0
7:30 AM	8	2	8	0	18	7:30 AM	0	0	0	0	0
7:45 AM	8	0	5	0	13	7:45 AM	0	0	0	0	0
8:00 AM	8	1	5	2	16	8:00 AM	0	0	0	1	1
8:15 AM	9	0	5	2	16	8:15 AM	0	0	0	0	0
8:30 AM	10	0	13	4	27	8:30 AM	0	0	0	0	0
8:45 AM	3	0	5	1	9	8:45 AM	1	1	0	0	2
Count Total	66	3	53	11	133	Count Total	1	1	0	1	3
Peak Hour	35	3	22	4	64	Peak Hour	0	0	0	1	1

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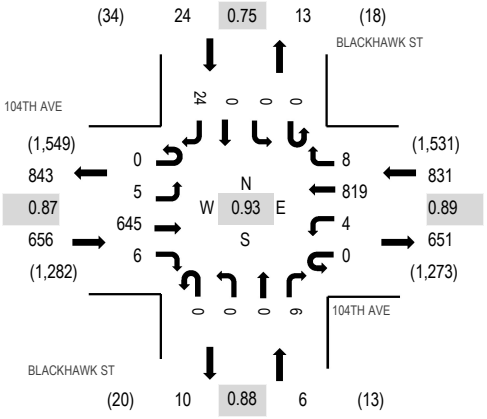
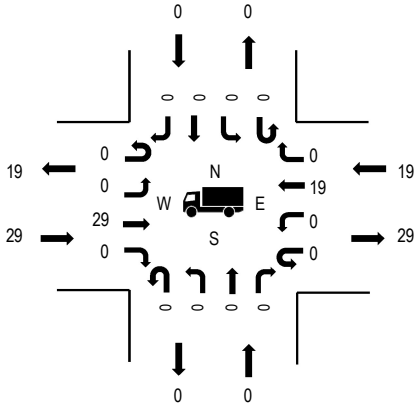
Location: 4 BLACKHAWK ST & 104TH AVE AM
Date: Wednesday, February 3, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

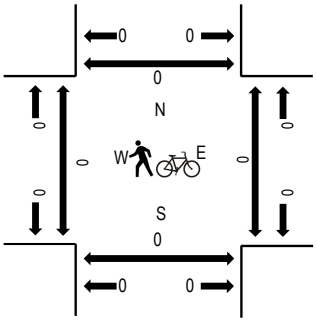
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	4.4%	0.87
WB	2.3%	0.89
NB	0.0%	0.88
SB	0.0%	0.75
All	3.2%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	104TH AVE Eastbound				104TH AVE Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	1	0	134	0	1	1	205	1	0	0	0	2	0	0	0	2	347	1,515
7:15 AM	0	2	163	1	0	0	190	1	0	0	0	2	0	0	0	4	363	1,517
7:30 AM	0	2	150	0	0	0	234	2	0	0	0	1	0	0	0	8	397	1,479
7:45 AM	0	0	186	3	0	2	207	0	0	0	0	2	0	0	0	8	408	1,400
8:00 AM	0	1	146	2	0	2	188	5	0	0	0	1	0	0	0	4	349	1,345
8:15 AM	1	1	157	3	0	0	158	0	0	0	0	2	0	0	0	3	325	
8:30 AM	0	0	141	3	0	0	170	0	0	0	0	2	0	0	0	2	318	
8:45 AM	0	2	181	2	0	1	162	1	0	0	0	1	0	1	0	2	353	
Count Total	2	8	1,258	14	1	6	1,514	10	0	0	0	13	0	1	0	33	2,860	
Peak Hour	0	5	645	6	0	4	819	8	0	0	0	6	0	0	0	24	1,517	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	11	0	4	0	15	7:00 AM	0	0	0	0	0
7:15 AM	9	0	5	0	14	7:15 AM	0	0	0	0	0
7:30 AM	8	0	5	0	13	7:30 AM	0	0	0	0	0
7:45 AM	7	0	4	0	11	7:45 AM	0	0	0	0	0
8:00 AM	5	0	5	0	10	8:00 AM	0	0	0	0	0
8:15 AM	10	0	4	0	14	8:15 AM	0	0	0	0	0
8:30 AM	10	0	12	0	22	8:30 AM	0	0	0	0	0
8:45 AM	4	0	4	0	8	8:45 AM	0	1	0	0	1
Count Total	64	0	43	0	107	Count Total	0	1	0	0	1
Peak Hour	29	0	19	0	48	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
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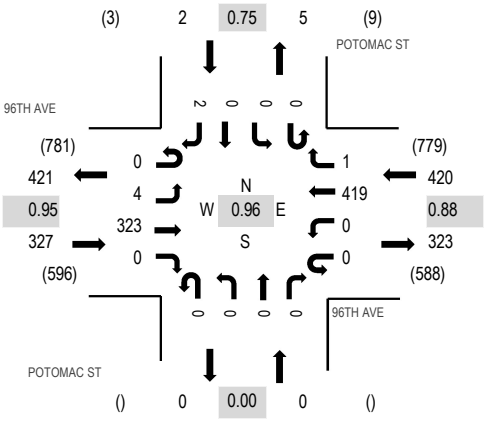
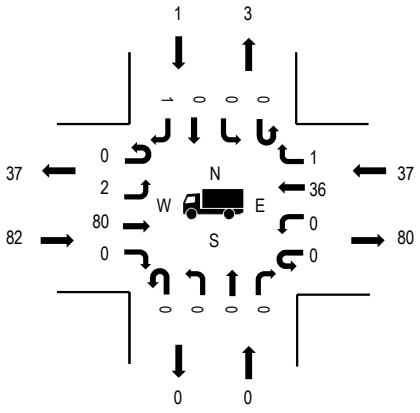
Location: 5 POTOMAC ST & 96TH AVE AM
Date: Wednesday, February 3, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour

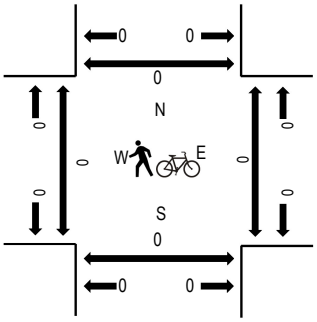
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	25.1%	0.95
WB	8.8%	0.88
NB	0.0%	0.00
SB	50.0%	0.75
All	16.0%	0.96

Traffic Counts - Motorized Vehicles

Interval Start Time	96TH AVE Eastbound				96TH AVE Westbound				POTOMAC ST Northbound				POTOMAC ST Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	1	69	0	0	0	104	1	0	0	0	0	0	0	0	0	175	747
7:15 AM	0	1	68	0	0	0	124	0	0	0	0	0	0	0	0	0	193	749
7:30 AM	0	1	87	0	0	0	107	0	0	0	0	0	0	0	0	1	196	729
7:45 AM	0	1	81	0	0	0	99	1	0	0	0	0	0	0	0	1	183	672
8:00 AM	0	1	87	0	0	0	89	0	0	0	0	0	0	0	0	0	177	631
8:15 AM	0	1	76	0	0	0	95	0	0	0	0	0	0	0	0	1	173	
8:30 AM	0	1	70	0	0	0	68	0	0	0	0	0	0	0	0	0	139	
8:45 AM	1	0	50	0	0	0	91	0	0	0	0	0	0	0	0	0	142	
Count Total	1	7	588	0	0	0	777	2	0	0	0	0	0	0	0	3	1,378	
Peak Hour	0	4	323	0	0	0	419	1	0	0	0	0	0	0	0	2	749	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	27	0	2	0	29	7:00 AM	0	0	0	0	0
7:15 AM	12	0	9	0	21	7:15 AM	0	0	0	0	0
7:30 AM	19	0	10	1	30	7:30 AM	0	0	0	0	0
7:45 AM	20	0	8	0	28	7:45 AM	0	0	0	0	0
8:00 AM	31	0	10	0	41	8:00 AM	0	0	0	0	0
8:15 AM	21	0	9	1	31	8:15 AM	0	0	0	0	0
8:30 AM	19	0	13	0	32	8:30 AM	0	0	0	0	0
8:45 AM	12	0	11	0	23	8:45 AM	0	0	0	0	0
Count Total	161	0	72	2	235	Count Total	0	0	0	0	0
Peak Hour	82	0	37	1	120	Peak Hour	0	0	0	0	0

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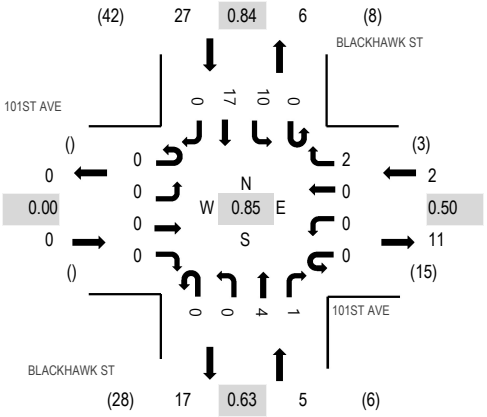
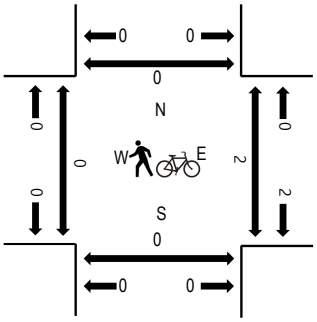
Location: 1 BLACKHAWK ST & 101ST AVE PM
Date: Thursday, March 11, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	101ST AVE Eastbound				101ST AVE Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	7	0	10	17	0	1	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	16	0	2	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	20	0	3	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	26	0	1	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	6	0	9	34	0	2	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	6		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	5	3	0	9		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	4	4	0	10		0	0	0	0
Count Total	0	0	0	0	0	0	0	3	0	0	5	1	0	14	28	0	51		0	9	0	0
Peak Hour	0	0	0	0	0	0	0	2	0	0	4	1	0	10	17	0	34		0	2	0	0

All Traffic Data Services Inc.

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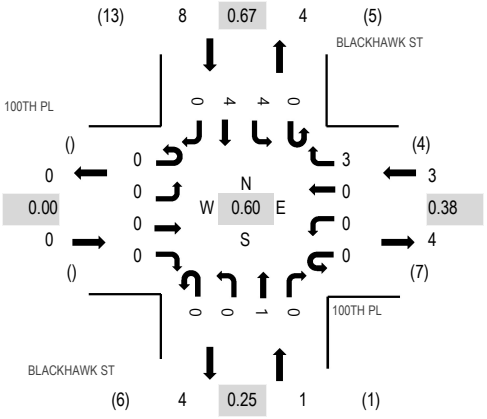
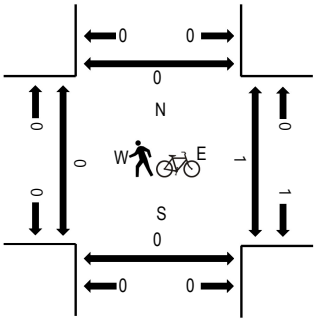
Location: 2 BLACKHAWK ST & 100TH PL PM
Date: Thursday, March 11, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	100TH PL Eastbound				100TH PL Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1	0	4	6	0	1	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	10	0	1	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	2	1	0	5	12	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3		0	0	0	0
Count Total	0	0	0	0	0	0	0	4	0	0	1	0	0	7	6	0	18		0	6	0	0
Peak Hour	0	0	0	0	0	0	0	3	0	0	1	0	0	4	4	0	12		0	1	0	0

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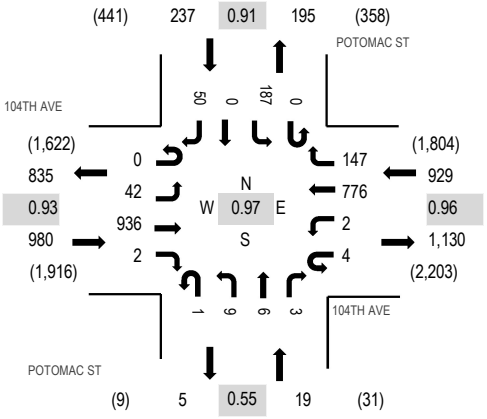
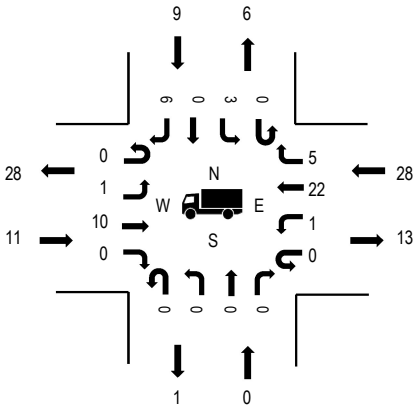
Location: 3 POTOMAC ST & 104TH AVE PM
Date: Wednesday, February 3, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

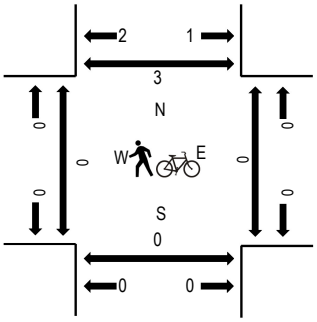
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.1%	0.93
WB	3.0%	0.96
NB	0.0%	0.55
SB	3.8%	0.91
All	2.2%	0.97

Traffic Counts - Motorized Vehicles

Interval Start Time	104TH AVE Eastbound				104TH AVE Westbound				POTOMAC ST Northbound				POTOMAC ST Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	5	237	0	1	0	195	32	0	2	1	3	0	43	0	5	524	2,144
4:15 PM	0	12	244	1	2	0	189	29	0	0	1	1	0	33	0	7	519	2,157
4:30 PM	0	8	238	0	2	1	190	37	0	0	0	1	0	54	0	11	542	2,165
4:45 PM	0	18	257	0	1	1	187	35	0	1	2	1	0	43	0	13	559	2,145
5:00 PM	0	5	215	2	0	0	201	41	1	6	2	1	0	49	0	14	537	2,048
5:15 PM	0	11	226	0	1	0	198	34	0	2	2	0	0	41	0	12	527	
5:30 PM	0	16	209	1	1	1	200	32	0	3	0	1	0	46	0	12	522	
5:45 PM	0	5	206	0	1	1	161	30	0	0	0	0	0	45	0	13	462	
Count Total	0	80	1,832	4	9	4	1,521	270	1	14	8	8	0	354	0	87	4,192	
Peak Hour	0	42	936	2	4	2	776	147	1	9	6	3	0	187	0	50	2,165	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	8	0	9	1	18	4:00 PM	0	0	0	1	1
4:15 PM	7	0	12	0	19	4:15 PM	0	0	0	1	1
4:30 PM	3	0	5	3	11	4:30 PM	0	0	0	0	0
4:45 PM	4	0	10	2	16	4:45 PM	0	0	0	1	1
5:00 PM	2	0	7	4	13	5:00 PM	0	0	0	2	2
5:15 PM	2	0	6	0	8	5:15 PM	0	0	0	0	0
5:30 PM	0	0	7	1	8	5:30 PM	0	0	0	0	0
5:45 PM	1	0	5	1	7	5:45 PM	0	0	0	0	0
Count Total	27	0	61	12	100	Count Total	0	0	0	5	5
Peak Hour	11	0	28	9	48	Peak Hour	0	0	0	3	3

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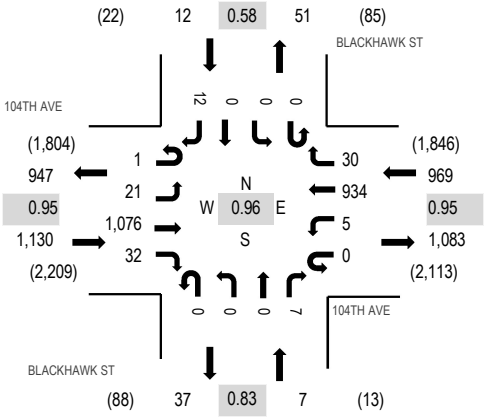
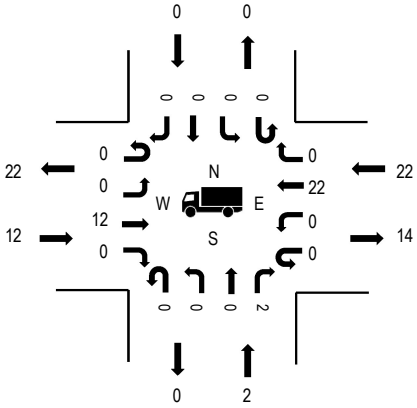
Location: 4 BLACKHAWK ST & 104TH AVE PM
Date: Wednesday, February 3, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

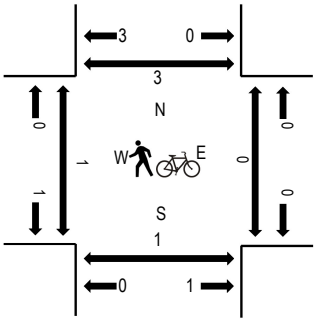
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.1%	0.95
WB	2.3%	0.95
NB	28.6%	0.83
SB	0.0%	0.58
All	1.7%	0.96

Traffic Counts - Motorized Vehicles

Interval Start Time	104TH AVE Eastbound				104TH AVE Westbound				BLACKHAWK ST Northbound				BLACKHAWK ST Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	2	278	7	0	4	221	4	0	0	0	1	0	0	0	3	520	2,112
4:15 PM	1	2	264	12	0	3	216	5	0	0	0	3	0	0	0	1	507	2,113
4:30 PM	0	5	278	9	0	3	222	7	0	0	0	1	0	0	0	6	531	2,118
4:45 PM	1	6	287	11	0	1	233	8	0	0	0	3	0	0	0	4	554	2,079
5:00 PM	0	4	255	4	0	1	246	8	0	0	0	3	0	0	0	0	521	1,978
5:15 PM	0	6	256	8	0	0	233	7	0	0	0	0	0	0	0	2	512	
5:30 PM	1	4	240	12	1	0	222	8	0	0	0	0	0	0	0	4	492	
5:45 PM	1	5	241	9	0	4	185	4	0	0	0	2	0	0	0	2	453	
Count Total	4	34	2,099	72	1	16	1,778	51	0	0	0	13	0	0	0	22	4,090	
Peak Hour	1	21	1,076	32	0	5	934	30	0	0	0	7	0	0	0	12	2,118	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	7	0	5	0	12	4:00 PM	0	1	0	0	1
4:15 PM	6	0	13	0	19	4:15 PM	0	0	0	4	4
4:30 PM	1	0	3	0	4	4:30 PM	0	0	0	0	0
4:45 PM	4	1	8	0	13	4:45 PM	0	0	0	0	0
5:00 PM	5	1	5	0	11	5:00 PM	1	1	0	0	2
5:15 PM	2	0	6	0	8	5:15 PM	0	0	0	3	3
5:30 PM	0	0	3	0	3	5:30 PM	0	0	0	0	0
5:45 PM	2	0	4	0	6	5:45 PM	0	0	0	0	0
Count Total	27	2	47	0	76	Count Total	1	2	0	7	10
Peak Hour	12	2	22	0	36	Peak Hour	1	1	0	3	5

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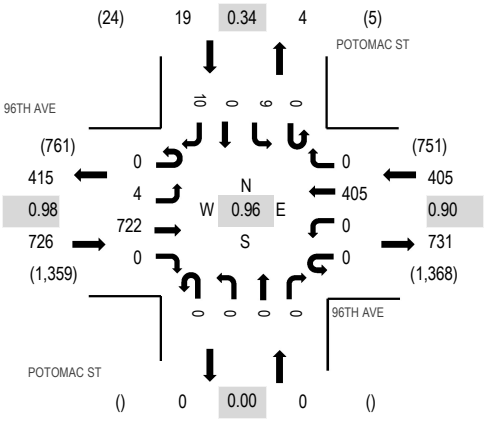
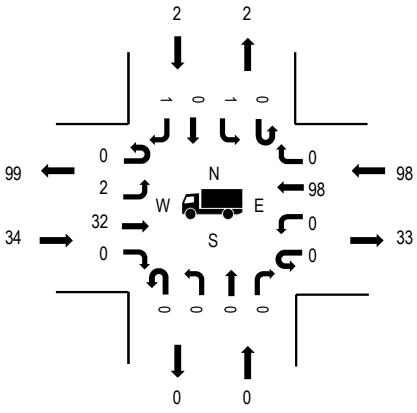
Location: 5 POTOMAC ST & 96TH AVE PM
Date: Wednesday, February 3, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

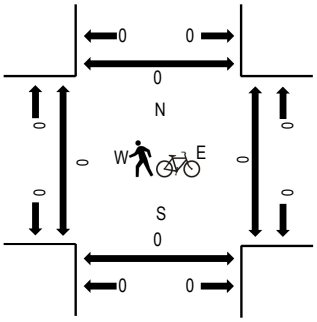
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	4.7%	0.98
WB	24.2%	0.90
NB	0.0%	0.00
SB	10.5%	0.34
All	11.7%	0.96

Traffic Counts - Motorized Vehicles

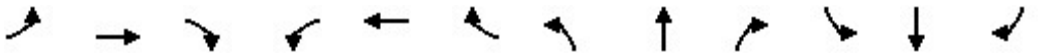
Interval Start Time	96TH AVE Eastbound				96TH AVE Westbound				POTOMAC ST Northbound				POTOMAC ST Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	186	0	0	0	91	0	0	0	0	0	0	1	0	1	279	1,129
4:15 PM	0	0	180	0	0	0	95	0	0	0	0	0	0	0	0	0	275	1,150
4:30 PM	0	1	183	0	0	0	98	0	0	0	0	0	0	0	0	0	282	1,147
4:45 PM	0	2	175	0	0	0	113	0	0	0	0	0	0	1	0	2	293	1,106
5:00 PM	0	1	184	0	0	0	99	0	0	0	0	0	0	8	0	8	300	1,005
5:15 PM	0	0	177	0	0	0	92	1	0	0	0	0	0	2	0	0	272	
5:30 PM	0	0	162	0	0	0	78	0	0	0	0	0	0	1	0	0	241	
5:45 PM	0	0	108	0	0	0	84	0	0	0	0	0	0	0	0	0	192	
Count Total	0	4	1,355	0	0	0	750	1	0	0	0	0	0	13	0	11	2,134	
Peak Hour	0	4	722	0	0	0	405	0	0	0	0	0	0	9	0	10	1,150	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	13	0	22	1	36	4:00 PM	0	0	0	0	0
4:15 PM	9	0	22	0	31	4:15 PM	0	0	0	0	0
4:30 PM	12	0	20	0	32	4:30 PM	0	0	0	0	0
4:45 PM	6	0	35	1	42	4:45 PM	0	0	0	0	0
5:00 PM	7	0	21	1	29	5:00 PM	0	0	0	0	0
5:15 PM	5	0	26	0	31	5:15 PM	0	0	0	0	0
5:30 PM	4	0	7	0	11	5:30 PM	0	0	0	0	0
5:45 PM	2	0	23	0	25	5:45 PM	0	0	0	0	0
Count Total	58	0	176	3	237	Count Total	0	0	0	0	0
Peak Hour	34	0	98	2	134	Peak Hour	0	0	0	0	0

APPENDIX “B”

INTERSECTION CAPACITY ANALYSIS WORKSHEETS



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.984			0.877			0.862	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3536	0	1770	3483	0	1770	1634	0	1770	1606	0
Flt Permitted	0.123			0.306			0.717			0.640		
Satd. Flow (perm)	229	3536	0	570	3483	0	1336	1634	0	1192	1606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			16			9			57	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

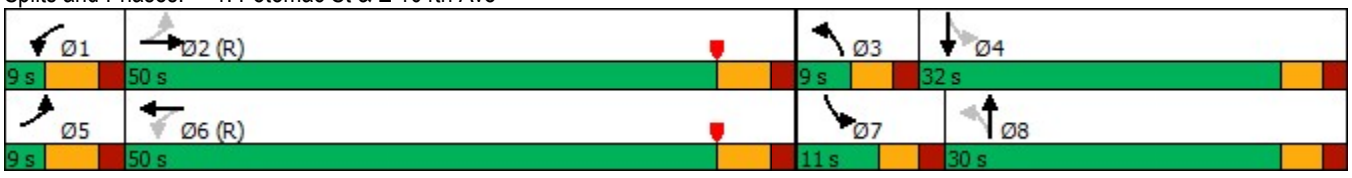
Intersection Summary	
Area Type:	Other

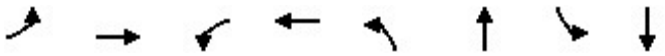
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	652	8	895	8	2	127	5
Future Volume (vph)	25	652	8	895	8	2	127	5
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.8	51.2	49.4	47.6	29.0	25.0	35.4	34.2
Actuated g/C Ratio	0.52	0.51	0.49	0.48	0.29	0.25	0.35	0.34
v/c Ratio	0.16	0.39	0.03	0.65	0.02	0.03	0.30	0.11
Control Delay	13.6	16.2	11.5	22.7	21.1	17.2	24.7	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	16.2	11.5	22.7	21.1	17.2	24.7	8.6
LOS	B	B	B	C	C	B	C	A
Approach Delay		16.1		22.6		19.0		19.7
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 19.9 — Intersection LOS: B
Intersection Capacity Utilization 50.9% — ICU Level of Service A
Analysis Period (min) 15

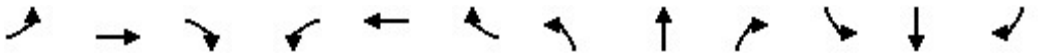
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	27	714	9	1086	9	11	138	62
v/c Ratio	0.16	0.39	0.03	0.65	0.02	0.03	0.30	0.11
Control Delay	13.6	16.2	11.5	22.7	21.1	17.2	24.7	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	16.2	11.5	22.7	21.1	17.2	24.7	8.6
Queue Length 50th (ft)	8	133	3	283	4	1	60	2
Queue Length 95th (ft)	21	213	10	360	14	15	106	34
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	164	1810	317	1666	404	415	456	586
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.39	0.03	0.65	0.02	0.03	0.30	0.11

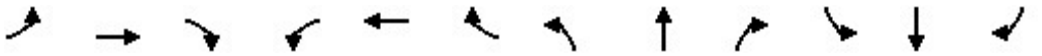
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	652	5	8	895	104	8	2	8	127	5	52
Future Volume (veh/h)	25	652	5	8	895	104	8	2	8	127	5	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	709	5	9	973	113	9	2	9	138	5	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1676	12	329	1457	169	419	74	333	523	39	448
Arrive On Green	0.02	0.46	0.46	0.01	0.45	0.45	0.01	0.25	0.25	0.06	0.30	0.30
Sat Flow, veh/h	1781	3617	26	1781	3208	372	1781	296	1334	1781	129	1475
Grp Volume(v), veh/h	27	348	366	9	539	547	9	0	11	138	0	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	1781	1777	1803	1781	0	1630	1781	0	1605
Q Serve(g_s), s	0.8	13.1	13.1	0.3	23.8	23.8	0.4	0.0	0.5	5.6	0.0	2.8
Cycle Q Clear(g_c), s	0.8	13.1	13.1	0.3	23.8	23.8	0.4	0.0	0.5	5.6	0.0	2.8
Prop In Lane	1.00		0.01	1.00		0.21	1.00		0.82	1.00		0.92
Lane Grp Cap(c), veh/h	213	823	865	329	807	819	419	0	408	523	0	487
V/C Ratio(X)	0.13	0.42	0.42	0.03	0.67	0.67	0.02	0.00	0.03	0.26	0.00	0.13
Avail Cap(c_a), veh/h	238	823	865	370	807	819	478	0	408	523	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.2	17.9	17.9	15.4	21.4	21.4	27.8	0.0	28.3	24.4	0.0	25.2
Incr Delay (d2), s/veh	0.3	1.6	1.5	0.0	4.4	4.3	0.0	0.0	0.1	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	9.0	9.4	0.2	15.1	15.3	0.3	0.0	0.4	4.2	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	19.5	19.4	15.4	25.7	25.7	27.8	0.0	28.4	24.6	0.0	25.8
LnGrp LOS	B	B	B	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		741			1095			20			200	
Approach Delay, s/veh		19.4			25.6			28.1			25.0	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	52.3	5.7	35.3	7.6	51.4	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.3	15.1	2.4	4.8	2.8	25.8	7.6	2.5
Green Ext Time (p_c), s	0.0	4.2	0.0	0.2	0.0	6.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.998				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3536	0	1770	3532	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3536	0	1770	3532	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	774	7	5	983	10	0	0	7	0	0	29
Future Vol, veh/h	6	774	7	5	983	10	0	0	7	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	841	8	5	1068	11	0	0	8	0	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1079	0	0	849	0	0	-	-	425	-	-	540
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	642	-	-	785	-	-	0	0	578	0	0	486
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	642	-	-	785	-	-	-	-	578	-	-	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.3	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	578	642	-	-	785	-	-	486
HCM Lane V/C Ratio	0.013	0.01	-	-	0.007	-	-	0.065
HCM Control Delay (s)	11.3	10.7	-	-	9.6	-	-	12.9
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.990
Satd. Flow (prot)	1611	0	1863	0	0	1844
Flt Permitted						0.990
Satd. Flow (perm)	1611	0	1863	0	0	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

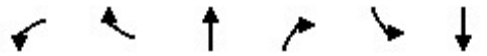
Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	5	0	2	7
Future Vol, veh/h	0	2	5	0	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	5	0	2	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	17	5	0	0	5	0
Stage 1	5	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1001	1078	-	-	1616	-
Stage 1	1018	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1000	1078	-	-	1616	-
Mov Cap-2 Maneuver	1000	-	-	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	1010	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	1.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1078	1616	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

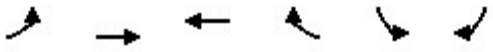
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2	0	2	2
Future Vol, veh/h	0	2	2	0	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	2	0	2	2

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	2	0	0	2	0
Stage 1	2	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1013	1082	-	-	1620	-
Stage 1	1021	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1012	1082	-	-	1620	-
Mov Cap-2 Maneuver	1012	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1016	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1082	1620	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	1861	1863	0	1611	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1861	1863	0	1611	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

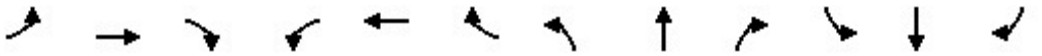
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	388	503	1	0	2
Future Vol, veh/h	5	388	503	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	422	547	1	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	548	0	-	0	980	548
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	432	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1021	-	-	-	277	536
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1021	-	-	-	275	536
Mov Cap-2 Maneuver	-	-	-	-	275	-
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	655	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1021	-	-	-	536
HCM Lane V/C Ratio	0.005	-	-	-	0.004
HCM Control Delay (s)	8.5	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



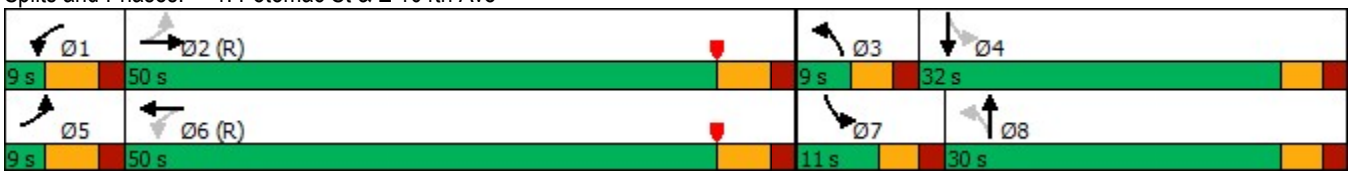
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.976			0.950			0.865	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	0	1770	3454	0	1770	1770	0	1770	1611	0
Flt Permitted	0.094			0.099			0.710			0.639		
Satd. Flow (perm)	175	3539	0	184	3454	0	1323	1770	0	1190	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28			4			65	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

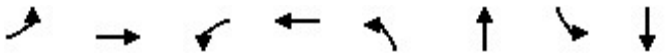
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	1127	7	931	12	7	226	6
Future Volume (vph)	50	1127	7	931	12	7	226	6
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.8	51.2	48.2	45.8	29.0	25.0	35.4	34.2
Actuated g/C Ratio	0.52	0.51	0.48	0.46	0.29	0.25	0.35	0.34
v/c Ratio	0.39	0.68	0.06	0.75	0.03	0.03	0.54	0.12
Control Delay	20.1	21.2	12.1	26.1	21.2	23.7	30.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	21.2	12.1	26.1	21.2	23.7	30.1	8.4
LOS	C	C	B	C	C	C	C	A
Approach Delay		21.2		26.0		22.4		25.2
Approach LOS		C		C		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 23.7	Intersection LOS: C
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

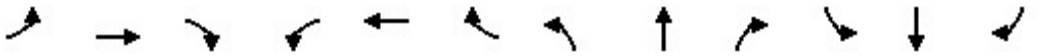
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	54	1227	8	1203	13	12	246	72
v/c Ratio	0.39	0.68	0.06	0.75	0.03	0.03	0.54	0.12
Control Delay	20.1	21.2	12.1	26.1	21.2	23.7	30.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	21.2	12.1	26.1	21.2	23.7	30.1	8.4
Queue Length 50th (ft)	16	281	2	328	5	4	115	3
Queue Length 95th (ft)	35	431	9	415	18	18	183	37
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	138	1811	136	1597	401	445	456	593
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.68	0.06	0.75	0.03	0.03	0.54	0.12

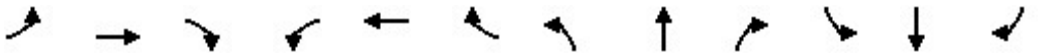
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1127	2	7	931	176	12	7	4	226	6	60
Future Volume (veh/h)	50	1127	2	7	931	176	12	7	4	226	6	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1225	2	8	1012	191	13	8	4	246	7	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1689	3	170	1318	248	420	294	147	522	47	437
Arrive On Green	0.03	0.46	0.46	0.01	0.44	0.44	0.01	0.25	0.25	0.06	0.30	0.30
Sat Flow, veh/h	1781	3640	6	1781	2984	562	1781	1176	588	1781	156	1452
Grp Volume(v), veh/h	54	598	629	8	602	601	13	0	12	246	0	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1869	1781	1777	1769	1781	0	1764	1781	0	1609
Q Serve(g_s), s	1.7	27.2	27.2	0.2	28.6	28.7	0.5	0.0	0.5	6.0	0.0	3.3
Cycle Q Clear(g_c), s	1.7	27.2	27.2	0.2	28.6	28.7	0.5	0.0	0.5	6.0	0.0	3.3
Prop In Lane	1.00		0.00	1.00		0.32	1.00		0.33	1.00		0.90
Lane Grp Cap(c), veh/h	194	824	867	170	785	781	420	0	441	522	0	484
V/C Ratio(X)	0.28	0.73	0.73	0.05	0.77	0.77	0.03	0.00	0.03	0.47	0.00	0.15
Avail Cap(c_a), veh/h	197	824	867	213	785	781	475	0	441	522	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	21.6	21.6	18.5	23.6	23.6	27.6	0.0	28.3	27.2	0.0	25.6
Incr Delay (d2), s/veh	0.8	5.5	5.3	0.1	7.1	7.2	0.0	0.0	0.1	0.7	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	17.0	17.7	0.2	18.2	18.2	0.4	0.0	0.4	3.2	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	27.2	26.9	18.6	30.7	30.8	27.7	0.0	28.4	27.9	0.0	26.2
LnGrp LOS	B	C	C	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		1281			1211			25			318	
Approach Delay, s/veh		26.7			30.6			28.0			27.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	52.4	5.9	35.1	8.8	50.2	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.2	29.2	2.5	5.3	3.7	30.7	8.0	2.5
Green Ext Time (p_c), s	0.0	6.5	0.0	0.3	0.0	6.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.995				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3525	0	1770	3522	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3525	0	1770	3522	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1291	38	6	1121	36	0	0	8	0	0	14
Future Vol, veh/h	26	1291	38	6	1121	36	0	0	8	0	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1403	41	7	1218	39	0	0	9	0	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1257	0	0	1444	0	0	-	-	722	-	-	629
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	549	-	-	465	-	-	0	0	369	0	0	425
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	549	-	-	465	-	-	-	-	369	-	-	425
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	15	13.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	369	549	-	-	465	-	-	425
HCM Lane V/C Ratio	0.024	0.051	-	-	0.014	-	-	0.036
HCM Control Delay (s)	15	11.9	-	-	12.9	-	-	13.8
HCM Lane LOS	C	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865		0.977			
Flt Protected						0.982
Satd. Flow (prot)	1611	0	1820	0	0	1829
Flt Permitted						0.982
Satd. Flow (perm)	1611	0	1820	0	0	1829
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

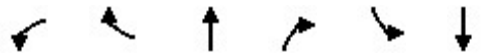
Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	5	1	12	20
Future Vol, veh/h	0	2	5	1	12	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	5	1	13	22

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	54	6	0	0	6	0
Stage 1	6	-	-	-	-	-
Stage 2	48	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	954	1077	-	-	1615	-
Stage 1	1017	-	-	-	-	-
Stage 2	974	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	946	1077	-	-	1615	-
Mov Cap-2 Maneuver	946	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1077	1615	-
HCM Lane V/C Ratio	-	-	0.002	0.008	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

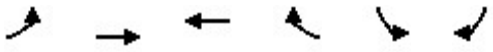
Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1	0	5	5
Future Vol, veh/h	0	4	1	0	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	0	5	5

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	16	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1002	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	999	1084	-	-	1622	-
Mov Cap-2 Maneuver	999	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1005	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.004	0.003	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.930	
Flt Protected					0.977	
Satd. Flow (prot)	0	1863	1859	0	1693	0
Flt Permitted					0.977	
Satd. Flow (perm)	0	1863	1859	0	1693	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

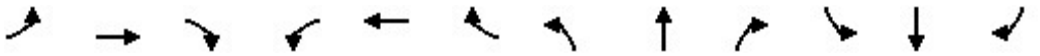
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	866	486	6	11	12
Future Vol, veh/h	5	866	486	6	11	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	941	528	7	12	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	535	0	-	0	1483	532
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	951	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1033	-	-	-	138	547
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	375	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1033	-	-	-	137	547
Mov Cap-2 Maneuver	-	-	-	-	137	-
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	375	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1033	-	-	-	225
HCM Lane V/C Ratio	0.005	-	-	-	0.111
HCM Control Delay (s)	8.5	0	-	-	23
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.984			0.885			0.862	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3536	0	1770	3483	0	1770	1649	0	1770	1606	0
Flt Permitted	0.100			0.284			0.715			0.639		
Satd. Flow (perm)	186	3536	0	529	3483	0	1332	1649	0	1190	1606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			16			10			60	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

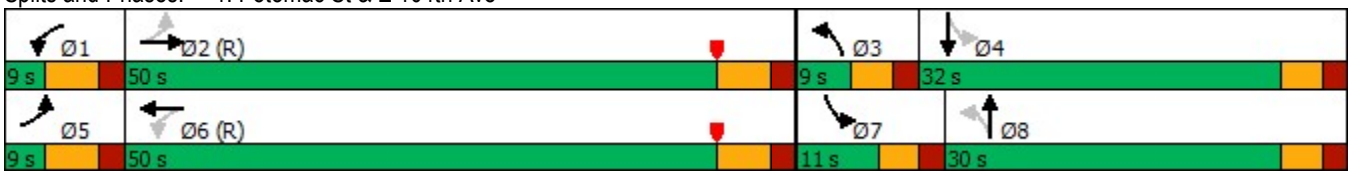
Intersection Summary	
Area Type:	Other

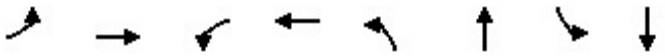
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	691	9	950	9	3	135	5
Future Volume (vph)	27	691	9	950	9	3	135	5
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.8	51.2	49.4	47.6	29.0	25.0	35.4	34.2
Actuated g/C Ratio	0.52	0.51	0.49	0.48	0.29	0.25	0.35	0.34
v/c Ratio	0.20	0.42	0.03	0.69	0.02	0.03	0.32	0.11
Control Delay	14.6	16.5	11.6	23.7	21.1	17.2	25.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	16.5	11.6	23.7	21.1	17.2	25.1	8.4
LOS	B	B	B	C	C	B	C	A
Approach Delay		16.5		23.6		18.9		19.9
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 20.6 — Intersection LOS: C
Intersection Capacity Utilization 53.1% — ICU Level of Service A
Analysis Period (min) 15

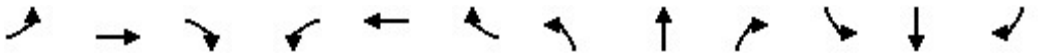
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	756	10	1154	10	13	147	65
v/c Ratio	0.20	0.42	0.03	0.69	0.02	0.03	0.32	0.11
Control Delay	14.6	16.5	11.6	23.7	21.1	17.2	25.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	16.5	11.6	23.7	21.1	17.2	25.1	8.4
Queue Length 50th (ft)	8	144	3	310	4	2	65	2
Queue Length 95th (ft)	22	228	11	392	15	17	112	35
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	144	1810	298	1666	403	419	456	588
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.42	0.03	0.69	0.02	0.03	0.32	0.11

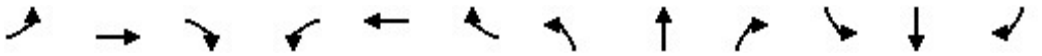
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	691	5	9	950	111	9	3	9	135	5	55
Future Volume (veh/h)	27	691	5	9	950	111	9	3	9	135	5	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	751	5	10	1033	121	10	3	10	147	5	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	1674	11	313	1453	170	419	95	316	521	37	448
Arrive On Green	0.02	0.46	0.46	0.01	0.45	0.45	0.01	0.25	0.25	0.06	0.30	0.30
Sat Flow, veh/h	1781	3619	24	1781	3205	375	1781	379	1264	1781	123	1480
Grp Volume(v), veh/h	29	369	387	10	572	582	10	0	13	147	0	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	1781	1777	1803	1781	0	1643	1781	0	1604
Q Serve(g_s), s	0.9	14.1	14.1	0.3	26.0	26.0	0.4	0.0	0.6	6.0	0.0	2.9
Cycle Q Clear(g_c), s	0.9	14.1	14.1	0.3	26.0	26.0	0.4	0.0	0.6	6.0	0.0	2.9
Prop In Lane	1.00		0.01	1.00		0.21	1.00		0.77	1.00		0.92
Lane Grp Cap(c), veh/h	196	822	863	313	806	817	419	0	411	521	0	486
V/C Ratio(X)	0.15	0.45	0.45	0.03	0.71	0.71	0.02	0.00	0.03	0.28	0.00	0.13
Avail Cap(c_a), veh/h	219	822	863	353	806	817	477	0	411	521	0	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	18.2	18.2	15.5	22.0	22.1	27.7	0.0	28.4	24.5	0.0	25.3
Incr Delay (d2), s/veh	0.3	1.8	1.7	0.0	5.3	5.2	0.0	0.0	0.1	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	9.6	10.0	0.2	16.4	16.6	0.3	0.0	0.4	4.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	20.0	19.9	15.5	27.3	27.3	27.8	0.0	28.5	24.8	0.0	25.9
LnGrp LOS	B	B	B	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		785			1164			23			212	
Approach Delay, s/veh		19.9			27.2			28.2			25.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	52.3	5.7	35.3	7.7	51.3	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.3	16.1	2.4	4.9	2.9	28.0	8.0	2.6
Green Ext Time (p_c), s	0.0	4.5	0.0	0.3	0.0	6.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.999				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3536	0	1770	3536	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3536	0	1770	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	821	8	5	1043	10	0	0	8	0	0	31
Future Vol, veh/h	6	821	8	5	1043	10	0	0	8	0	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	892	9	5	1134	11	0	0	9	0	0	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1145	0	0	901	0	0	-	-	451	-	-	573
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	606	-	-	750	-	-	0	0	556	0	0	463
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	606	-	-	750	-	-	-	-	556	-	-	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.6	13.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	556	606	-	-	750	-	-	463
HCM Lane V/C Ratio	0.016	0.011	-	-	0.007	-	-	0.073
HCM Control Delay (s)	11.6	11	-	-	9.8	-	-	13.4
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.988
Satd. Flow (prot)	1611	0	1863	0	0	1840
Flt Permitted						0.988
Satd. Flow (perm)	1611	0	1863	0	0	1840
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	5	0	3	8
Future Vol, veh/h	0	3	5	0	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	5	0	3	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	20	5	0	0	5	0
Stage 1	5	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	997	1078	-	-	1616	-
Stage 1	1018	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	995	1078	-	-	1616	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1078	1616	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

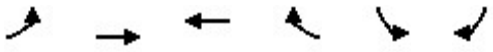
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	3	0	3	3
Future Vol, veh/h	0	3	3	0	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	3	0	3	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	12	3	0	0	3	0
Stage 1	3	-	-	-	-	-
Stage 2	9	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1008	1081	-	-	1619	-
Stage 1	1020	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1006	1081	-	-	1619	-
Mov Cap-2 Maneuver	1006	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1012	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1081	1619	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	1861	1863	0	1611	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1861	1863	0	1611	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

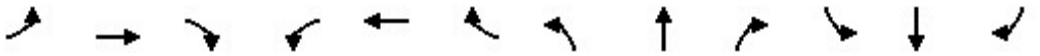
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	411	533	1	0	3
Future Vol, veh/h	5	411	533	1	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	447	579	1	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	580	0	-	0	1037	580
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	457	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	994	-	-	-	256	514
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	994	-	-	-	254	514
Mov Cap-2 Maneuver	-	-	-	-	254	-
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	994	-	-	-	514
HCM Lane V/C Ratio	0.005	-	-	-	0.006
HCM Control Delay (s)	8.6	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.976			0.954			0.864	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	0	1770	3454	0	1770	1777	0	1770	1609	0
Flt Permitted	0.092			0.096			0.707			0.647		
Satd. Flow (perm)	171	3539	0	179	3454	0	1317	1777	0	1205	1609	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28			4			70	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

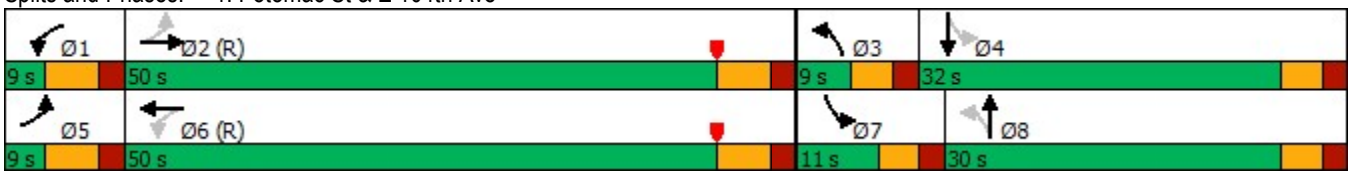
Intersection Summary	
Area Type:	Other

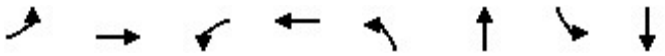
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	53	1195	8	988	13	8	239	6
Future Volume (vph)	53	1195	8	988	13	8	239	6
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.8	51.2	48.2	45.8	29.0	25.0	34.8	32.4
Actuated g/C Ratio	0.52	0.51	0.48	0.46	0.29	0.25	0.35	0.32
v/c Ratio	0.43	0.72	0.07	0.80	0.04	0.03	0.57	0.14
Control Delay	21.8	22.4	12.4	28.0	21.2	23.7	31.5	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	22.4	12.4	28.0	21.2	23.7	31.5	8.7
LOS	C	C	B	C	C	C	C	A
Approach Delay		22.3		27.8		22.4		26.3
Approach LOS		C		C		C		C

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 25.1 — Intersection LOS: C
Intersection Capacity Utilization 70.7% — ICU Level of Service C
Analysis Period (min) 15

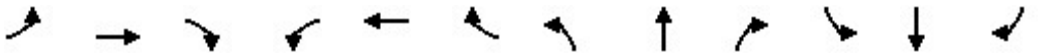
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	1302	9	1277	14	13	260	77
v/c Ratio	0.43	0.72	0.07	0.80	0.04	0.03	0.57	0.14
Control Delay	21.8	22.4	12.4	28.0	21.2	23.7	31.5	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	22.4	12.4	28.0	21.2	23.7	31.5	8.7
Queue Length 50th (ft)	17	308	3	361	6	4	123	3
Queue Length 95th (ft)	37	471	10	456	19	20	193	38
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	136	1811	133	1597	400	447	453	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.72	0.07	0.80	0.04	0.03	0.57	0.14

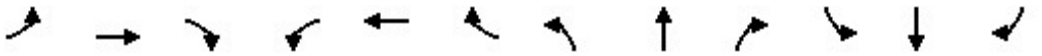
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	1195	3	8	988	187	13	8	4	239	6	64
Future Volume (veh/h)	53	1195	3	8	988	187	13	8	4	239	6	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	1299	3	9	1074	203	14	9	4	260	7	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1685	4	154	1313	247	420	307	136	521	44	439
Arrive On Green	0.03	0.46	0.46	0.01	0.44	0.44	0.01	0.25	0.25	0.06	0.30	0.30
Sat Flow, veh/h	1781	3637	8	1781	2984	562	1781	1227	545	1781	146	1461
Grp Volume(v), veh/h	58	635	667	9	638	639	14	0	13	260	0	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1869	1781	1777	1769	1781	0	1772	1781	0	1607
Q Serve(g_s), s	1.8	29.8	29.8	0.3	31.4	31.6	0.6	0.0	0.6	6.0	0.0	3.5
Cycle Q Clear(g_c), s	1.8	29.8	29.8	0.3	31.4	31.6	0.6	0.0	0.6	6.0	0.0	3.5
Prop In Lane	1.00		0.00	1.00		0.32	1.00		0.31	1.00		0.91
Lane Grp Cap(c), veh/h	179	823	866	154	782	778	420	0	443	521	0	483
V/C Ratio(X)	0.32	0.77	0.77	0.06	0.82	0.82	0.03	0.00	0.03	0.50	0.00	0.16
Avail Cap(c_a), veh/h	179	823	866	195	782	778	474	0	443	521	0	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.3	22.4	22.4	19.2	24.5	24.5	27.6	0.0	28.3	27.6	0.0	25.7
Incr Delay (d2), s/veh	1.0	6.9	6.6	0.2	9.2	9.5	0.0	0.0	0.1	0.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	18.6	19.4	0.2	20.1	20.2	0.4	0.0	0.4	3.8	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	29.3	29.0	19.4	33.7	34.0	27.7	0.0	28.5	28.4	0.0	26.4
LnGrp LOS	C	C	C	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		1360			1286			27			337	
Approach Delay, s/veh		28.8			33.7			28.0			27.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	52.3	6.0	35.0	9.0	50.0	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.3	31.8	2.6	5.5	3.8	33.6	8.0	2.6
Green Ext Time (p_c), s	0.0	6.2	0.0	0.3	0.0	5.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.995				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3525	0	1770	3522	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3525	0	1770	3522	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	1370	41	6	1189	38	0	0	9	0	0	15
Future Vol, veh/h	28	1370	41	6	1189	38	0	0	9	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	1489	45	7	1292	41	0	0	10	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1333	0	0	1534	0	0	-	-	767	-	-	667
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	513	-	-	430	-	-	0	0	345	0	0	401
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	513	-	-	430	-	-	-	-	345	-	-	401
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	15.7	14.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	345	513	-	-	430	-	-	401
HCM Lane V/C Ratio	0.028	0.059	-	-	0.015	-	-	0.041
HCM Control Delay (s)	15.7	12.5	-	-	13.5	-	-	14.4
HCM Lane LOS	C	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865		0.977			
Flt Protected						0.982
Satd. Flow (prot)	1611	0	1820	0	0	1829
Flt Permitted						0.982
Satd. Flow (perm)	1611	0	1820	0	0	1829
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	5	1	13	22
Future Vol, veh/h	0	3	5	1	13	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	5	1	14	24

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	58	6	0	0	6	0
Stage 1	6	-	-	-	-	-
Stage 2	52	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	949	1077	-	-	1615	-
Stage 1	1017	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	940	1077	-	-	1615	-
Mov Cap-2 Maneuver	940	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	961	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1077	1615	-
HCM Lane V/C Ratio	-	-	0.003	0.009	-
HCM Control Delay (s)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

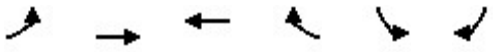
Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1	0	5	5
Future Vol, veh/h	0	4	1	0	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	0	5	5

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	16	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1002	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	999	1084	-	-	1622	-
Mov Cap-2 Maneuver	999	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1005	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.004	0.003	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected					0.977	
Satd. Flow (prot)	0	1863	1859	0	1687	0
Flt Permitted					0.977	
Satd. Flow (perm)	0	1863	1859	0	1687	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

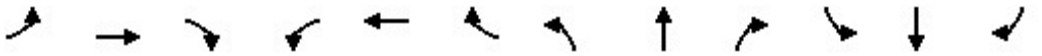
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	919	516	6	11	13
Future Vol, veh/h	5	919	516	6	11	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	999	561	7	12	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	568	0	-	0	1574	565
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	1009	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1004	-	-	-	121	524
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1004	-	-	-	120	524
Mov Cap-2 Maneuver	-	-	-	-	120	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	352	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	25
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1004	-	-	-	206
HCM Lane V/C Ratio	0.005	-	-	-	0.127
HCM Control Delay (s)	8.6	0	-	-	25
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.984			0.922			0.870	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3532	0	1770	3483	0	1770	1717	0	1770	1621	0
Flt Permitted	0.112			0.288			0.712			0.653		
Satd. Flow (perm)	209	3532	0	536	3483	0	1326	1717	0	1216	1621	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			16			14			60	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			1979			1374	
Travel Time (s)		42.1			18.3			33.7			23.4	

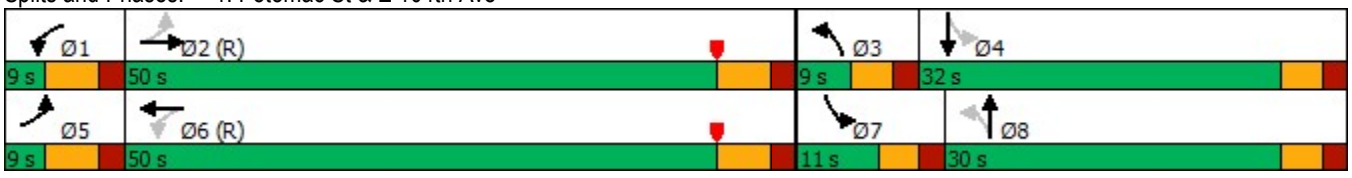
Intersection Summary	
Area Type:	Other

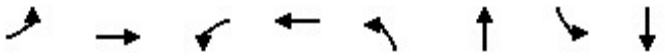
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	694	10	950	35	12	135	8
Future Volume (vph)	27	694	10	950	35	12	135	8
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.8	51.2	49.4	47.6	29.0	25.0	34.2	30.6
Actuated g/C Ratio	0.52	0.51	0.49	0.48	0.29	0.25	0.34	0.31
v/c Ratio	0.19	0.42	0.04	0.69	0.09	0.06	0.33	0.13
Control Delay	14.1	16.6	11.6	23.7	21.9	18.8	25.3	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	16.6	11.6	23.7	21.9	18.8	25.3	9.9
LOS	B	B	B	C	C	B	C	A
Approach Delay		16.5		23.6		20.6		20.3
Approach LOS		B		C		C		C

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 20.7 — Intersection LOS: C
Intersection Capacity Utilization 53.1% — ICU Level of Service A
Analysis Period (min) 15

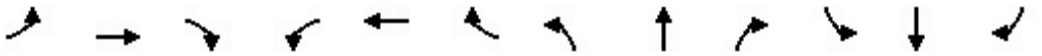
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	765	11	1154	38	27	147	69
v/c Ratio	0.19	0.42	0.04	0.69	0.09	0.06	0.33	0.13
Control Delay	14.1	16.6	11.6	23.7	21.9	18.8	25.3	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	16.6	11.6	23.7	21.9	18.8	25.3	9.9
Queue Length 50th (ft)	8	145	3	310	16	6	65	4
Queue Length 95th (ft)	22	231	12	392	38	28	112	37
Internal Link Dist (ft)		2699		1130		1899		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	155	1809	301	1666	402	439	449	537
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.42	0.04	0.69	0.09	0.06	0.33	0.13

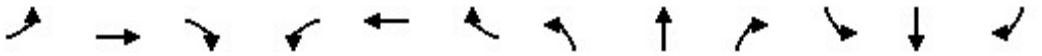
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	694	10	10	950	111	35	12	13	135	8	55
Future Volume (veh/h)	27	694	10	10	950	111	35	12	13	135	8	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	754	11	11	1033	121	38	13	14	147	9	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	1657	24	310	1453	170	447	206	222	508	60	403
Arrive On Green	0.02	0.46	0.46	0.01	0.45	0.45	0.02	0.25	0.25	0.06	0.29	0.29
Sat Flow, veh/h	1781	3585	52	1781	3205	375	1781	824	887	1781	211	1406
Grp Volume(v), veh/h	29	374	391	11	572	582	38	0	27	147	0	69
Grp Sat Flow(s),veh/h/ln	1781	1777	1861	1781	1777	1803	1781	0	1711	1781	0	1617
Q Serve(g_s), s	0.9	14.3	14.3	0.3	26.0	26.0	1.6	0.0	1.2	6.0	0.0	3.2
Cycle Q Clear(g_c), s	0.9	14.3	14.3	0.3	26.0	26.0	1.6	0.0	1.2	6.0	0.0	3.2
Prop In Lane	1.00		0.03	1.00		0.21	1.00		0.52	1.00		0.87
Lane Grp Cap(c), veh/h	196	821	860	310	806	817	447	0	428	508	0	464
V/C Ratio(X)	0.15	0.46	0.46	0.04	0.71	0.71	0.09	0.00	0.06	0.29	0.00	0.15
Avail Cap(c_a), veh/h	219	821	860	349	806	817	476	0	428	508	0	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	18.3	18.3	15.5	22.0	22.1	27.0	0.0	28.6	25.5	0.0	26.6
Incr Delay (d2), s/veh	0.3	1.8	1.7	0.0	5.3	5.2	0.1	0.0	0.3	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	9.8	10.1	0.2	16.4	16.6	1.2	0.0	0.9	4.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	20.1	20.1	15.6	27.3	27.3	27.1	0.0	28.9	25.8	0.0	27.3
LnGrp LOS	B	C	C	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		794			1165			65			216	
Approach Delay, s/veh		20.0			27.2			27.8			26.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	52.2	7.3	33.7	7.7	51.3	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.3	16.3	3.6	5.2	2.9	28.0	8.0	3.2
Green Ext Time (p_c), s	0.0	4.5	0.0	0.3	0.0	6.4	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.999				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

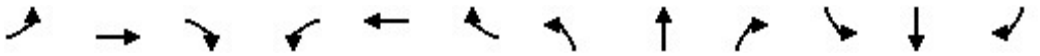
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	825	10	9	1044	10	0	0	21	0	0	31
Future Vol, veh/h	6	825	10	9	1044	10	0	0	21	0	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	897	11	10	1135	11	0	0	23	0	0	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1146	0	0	908	0	0	-	-	454	-	-	573
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	605	-	-	745	-	-	0	0	553	0	0	463
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	605	-	-	745	-	-	-	-	553	-	-	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	11.8	13.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	553	605	-	-	745	-	-	463
HCM Lane V/C Ratio	0.041	0.011	-	-	0.013	-	-	0.073
HCM Control Delay (s)	11.8	11	-	-	9.9	-	-	13.4
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.972	
Flt Protected		0.950									0.992	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1796	0
Flt Permitted		0.950									0.992	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1796	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		389			503			755			1387	
Travel Time (s)		8.8			11.4			17.2			31.5	

Intersection Summary	
Area Type:	Other

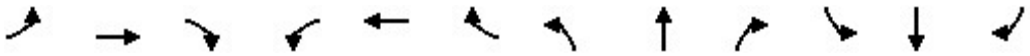
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	9	0	0	0	0	3	0	9	0	3	11	4
Future Vol, veh/h	9	0	0	0	0	3	0	9	0	3	11	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	3	0	10	0	3	12	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	32	30	14	30	32	10	16	0	0	10	0	0
Stage 1	20	20	-	10	10	-	-	-	-	-	-	-
Stage 2	12	10	-	20	22	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	976	863	1066	979	861	1071	1602	-	-	1610	-	-
Stage 1	999	879	-	1011	887	-	-	-	-	-	-	-
Stage 2	1009	887	-	999	877	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	971	861	1066	977	859	1071	1602	-	-	1610	-	-
Mov Cap-2 Maneuver	971	861	-	977	859	-	-	-	-	-	-	-
Stage 1	999	877	-	1011	887	-	-	-	-	-	-	-
Stage 2	1006	887	-	997	875	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.4	0	1.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	971	1071	1610	-	-
HCM Lane V/C Ratio	-	-	-	0.01	0.003	0.002	-	-
HCM Control Delay (s)	0	-	-	8.7	8.4	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.966	
Flt Protected		0.950									0.982	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1767	0
Flt Permitted		0.950									0.982	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1767	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		333			597			322			755	
Travel Time (s)		7.6			13.6			7.3			17.2	

Intersection Summary	
Area Type:	Other

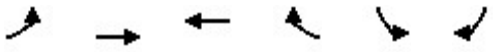
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	0	0	0	3	0	3	0	3	3	2
Future Vol, veh/h	4	0	0	0	0	3	0	3	0	3	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	3	0	3	0	3	3	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	15	13	4	13	14	3	5	0	0	3	0	0
Stage 1	10	10	-	3	3	-	-	-	-	-	-	-
Stage 2	5	3	-	10	11	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1001	881	1080	1004	880	1081	1616	-	-	1619	-	-
Stage 1	1011	887	-	1020	893	-	-	-	-	-	-	-
Stage 2	1017	893	-	1011	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	996	879	1080	1002	878	1081	1616	-	-	1619	-	-
Mov Cap-2 Maneuver	996	879	-	1002	878	-	-	-	-	-	-	-
Stage 1	1011	885	-	1020	893	-	-	-	-	-	-	-
Stage 2	1014	893	-	1009	884	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	8.3	0	2.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1616	-	-	996	1081	1619	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.003	0.002	-	-
HCM Control Delay (s)	0	-	-	8.6	8.3	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.899	
Flt Protected		0.998			0.988	
Satd. Flow (prot)	0	1859	1861	0	1655	0
Flt Permitted		0.998			0.988	
Satd. Flow (perm)	0	1859	1861	0	1655	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		3190	
Travel Time (s)		69.1	9.4		72.5	

Intersection Summary	
Area Type:	Other

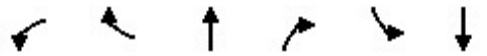
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	411	533	4	9	28
Future Vol, veh/h	14	411	533	4	9	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	447	579	4	10	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	583	0	-	0	1058	581
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	991	-	-	-	249	514
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	991	-	-	-	244	514
Mov Cap-2 Maneuver	-	-	-	-	244	-
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	991	-	-	-	405
HCM Lane V/C Ratio	0.015	-	-	-	0.099
HCM Control Delay (s)	8.7	0	-	-	14.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		200	150	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.929			0.850		
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1691	0	1863	1583	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1691	0	1863	1583	1770	1863
Link Speed (mph)	30		40			30
Link Distance (ft)	577		3190			1979
Travel Time (s)	13.1		54.4			45.0

Intersection Summary	
Area Type:	Other

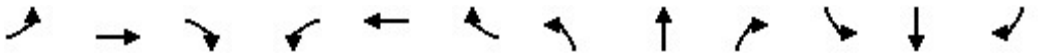
Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	38	20	12	10	19
Future Vol, veh/h	34	38	20	12	10	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	41	22	13	11	21

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	65	22	0	0	35	0
Stage 1	22	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	941	1055	-	-	1576	-
Stage 1	1001	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	934	1055	-	-	1576	-
Mov Cap-2 Maneuver	934	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	994	1576	-
HCM Lane V/C Ratio	-	-	0.079	0.007	-
HCM Control Delay (s)	-	-	8.9	7.3	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.997			0.976			0.948			0.879	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3529	0	1770	3454	0	1770	1766	0	1770	1637	0
Flt Permitted	0.091			0.094			0.701			0.655		
Satd. Flow (perm)	170	3529	0	175	3454	0	1306	1766	0	1220	1637	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			28			8			70	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			1859			1374	
Travel Time (s)		42.1			18.3			31.7			23.4	

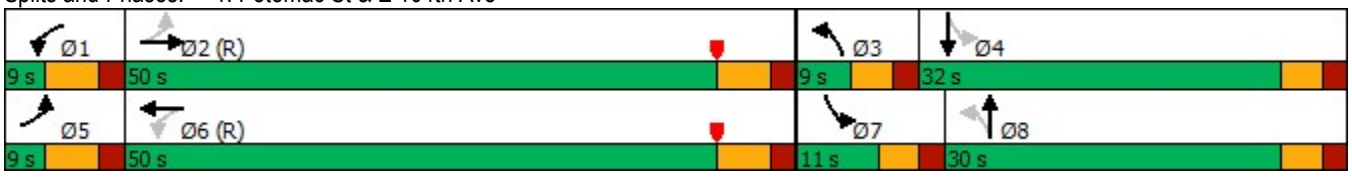
Intersection Summary	
Area Type:	Other

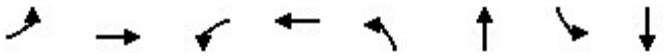
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	53	1205	13	988	30	14	239	16
Future Volume (vph)	53	1205	13	988	30	14	239	16
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	50.0	9.0	50.0	9.0	30.0	11.0	32.0
Total Split (%)	9.0%	50.0%	9.0%	50.0%	9.0%	30.0%	11.0%	32.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	50.6	49.4	48.2	45.8	29.0	25.0	34.2	30.6
Actuated g/C Ratio	0.51	0.49	0.48	0.46	0.29	0.25	0.34	0.31
v/c Ratio	0.43	0.76	0.11	0.80	0.08	0.05	0.58	0.16
Control Delay	22.3	25.2	13.1	28.0	21.8	21.8	31.8	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	25.2	13.1	28.0	21.8	21.8	31.8	10.3
LOS	C	C	B	C	C	C	C	B
Approach Delay		25.1		27.8		21.8		26.4
Approach LOS		C		C		C		C

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 26.3 — Intersection LOS: C
Intersection Capacity Utilization 71.4% — ICU Level of Service C
Analysis Period (min) 15

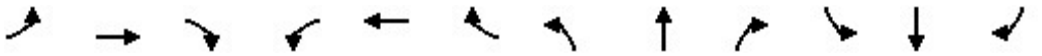
Splits and Phases: 1: Potomac St & E 104th Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	1334	14	1277	33	23	260	87
v/c Ratio	0.43	0.76	0.11	0.80	0.08	0.05	0.58	0.16
Control Delay	22.3	25.2	13.1	28.0	21.8	21.8	31.8	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	25.2	13.1	28.0	21.8	21.8	31.8	10.3
Queue Length 50th (ft)	17	321	4	361	14	7	123	8
Queue Length 95th (ft)	37	490	13	456	34	27	193	45
Internal Link Dist (ft)		2699		1130		1779		1294
Turn Bay Length (ft)	575		450		200			
Base Capacity (vph)	134	1744	132	1597	397	447	450	549
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.76	0.11	0.80	0.08	0.05	0.58	0.16

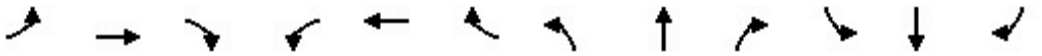
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	1205	22	13	988	187	30	14	7	239	16	64
Future Volume (veh/h)	53	1205	22	13	988	187	30	14	7	239	16	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	1310	24	14	1074	203	33	15	8	260	17	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1643	30	150	1313	247	435	287	153	512	92	381
Arrive On Green	0.03	0.46	0.46	0.01	0.44	0.44	0.02	0.25	0.25	0.06	0.29	0.29
Sat Flow, veh/h	1781	3570	65	1781	2984	562	1781	1148	612	1781	319	1315
Grp Volume(v), veh/h	58	652	682	14	638	639	33	0	23	260	0	87
Grp Sat Flow(s),veh/h/ln	1781	1777	1859	1781	1777	1769	1781	0	1760	1781	0	1634
Q Serve(g_s), s	1.8	31.3	31.3	0.4	31.4	31.6	1.4	0.0	1.0	6.0	0.0	4.0
Cycle Q Clear(g_c), s	1.8	31.3	31.3	0.4	31.4	31.6	1.4	0.0	1.0	6.0	0.0	4.0
Prop In Lane	1.00		0.04	1.00		0.32	1.00		0.35	1.00		0.80
Lane Grp Cap(c), veh/h	179	818	856	150	782	778	435	0	440	512	0	473
V/C Ratio(X)	0.32	0.80	0.80	0.09	0.82	0.82	0.08	0.00	0.05	0.51	0.00	0.18
Avail Cap(c_a), veh/h	179	818	856	186	782	778	471	0	440	512	0	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.3	23.0	23.0	19.7	24.5	24.5	27.1	0.0	28.5	28.2	0.0	26.6
Incr Delay (d2), s/veh	1.0	7.9	7.6	0.3	9.2	9.5	0.1	0.0	0.2	0.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	19.6	20.3	0.3	20.1	20.2	1.0	0.0	0.8	3.9	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	30.9	30.7	20.0	33.7	34.0	27.2	0.0	28.7	29.1	0.0	27.5
LnGrp LOS	C	C	C	B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		1392			1291			56			347	
Approach Delay, s/veh		30.4			33.7			27.8			28.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	52.0	7.0	34.0	9.0	50.0	11.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	44.0	4.0	27.0	3.0	44.0	6.0	25.0
Max Q Clear Time (g_c+I1), s	2.4	33.3	3.4	6.0	3.8	33.6	8.0	3.0
Green Ext Time (p_c), s	0.0	5.9	0.0	0.4	0.0	5.6	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.995				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3522	0	1770	3522	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3522	0	1770	3522	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

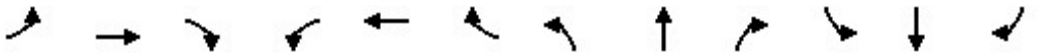
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	1373	51	21	1194	38	0	0	18	0	0	15
Future Vol, veh/h	28	1373	51	21	1194	38	0	0	18	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	1492	55	23	1298	41	0	0	20	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1339	0	0	1547	0	0	-	-	774	-	-	670
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	511	-	-	425	-	-	0	0	341	0	0	399
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	511	-	-	425	-	-	-	-	341	-	-	399
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	16.2	14.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	341	511	-	-	425	-	-	399
HCM Lane V/C Ratio	0.057	0.06	-	-	0.054	-	-	0.041
HCM Control Delay (s)	16.2	12.5	-	-	14	-	-	14.4
HCM Lane LOS	C	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.2	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865			0.986			0.967	
Flt Protected		0.950									0.989	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1837	0	0	1781	0
Flt Permitted		0.950									0.989	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1837	0	0	1781	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		410			503			755			1387	
Travel Time (s)		9.3			11.4			17.2			31.5	

Intersection Summary	
Area Type:	Other

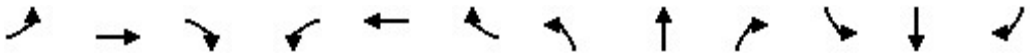
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	0	0	0	3	0	8	1	13	32	15
Future Vol, veh/h	6	0	0	0	0	3	0	8	1	13	32	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	0	0	0	3	0	9	1	14	35	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	82	81	43	81	89	10	51	0	0	10	0	0
Stage 1	71	71	-	10	10	-	-	-	-	-	-	-
Stage 2	11	10	-	71	79	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	905	809	1027	907	801	1071	1555	-	-	1610	-	-
Stage 1	939	836	-	1011	887	-	-	-	-	-	-	-
Stage 2	1010	887	-	939	829	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	896	802	1027	901	794	1071	1555	-	-	1610	-	-
Mov Cap-2 Maneuver	896	802	-	901	794	-	-	-	-	-	-	-
Stage 1	939	828	-	1011	887	-	-	-	-	-	-	-
Stage 2	1007	887	-	931	822	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	8.4	0	1.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1555	-	-	896	1071	1610	-	-
HCM Lane V/C Ratio	-	-	-	0.007	0.003	0.009	-	-
HCM Control Delay (s)	0	-	-	9	8.4	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.929	
Flt Protected		0.950									0.988	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1710	0
Flt Permitted		0.950									0.988	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1710	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		405			597			322			755	
Travel Time (s)		9.2			13.6			7.3			17.2	

Intersection Summary	
Area Type:	Other

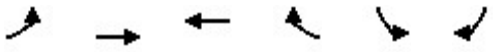
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	0	0	0	0	4	0	1	0	5	5	10
Future Vol, veh/h	3	0	0	0	0	4	0	1	0	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	0	0	0	4	0	1	0	5	5	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	24	22	11	22	27	1	16	0	0	1	0	0
Stage 1	21	21	-	1	1	-	-	-	-	-	-	-
Stage 2	3	1	-	21	26	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	987	872	1070	990	866	1084	1602	-	-	1622	-	-
Stage 1	998	878	-	1022	895	-	-	-	-	-	-	-
Stage 2	1020	895	-	998	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	981	869	1070	988	863	1084	1602	-	-	1622	-	-
Mov Cap-2 Maneuver	981	869	-	988	863	-	-	-	-	-	-	-
Stage 1	998	875	-	1022	895	-	-	-	-	-	-	-
Stage 2	1016	895	-	995	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.3	0	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	981	1084	1622	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.004	0.003	-	-
HCM Control Delay (s)	0	-	-	8.7	8.3	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.996		0.913	
Flt Protected		0.998			0.983	
Satd. Flow (prot)	0	1859	1855	0	1672	0
Flt Permitted		0.998			0.983	
Satd. Flow (perm)	0	1859	1855	0	1672	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		3310	
Travel Time (s)		69.1	9.4		75.2	

Intersection Summary	
Area Type:	Other

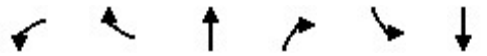
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	919	516	16	17	30
Future Vol, veh/h	34	919	516	16	17	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	999	561	17	18	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	578	0	-	0	1643	570
Stage 1	-	-	-	-	570	-
Stage 2	-	-	-	-	1073	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	996	-	-	-	110	521
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	328	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	996	-	-	-	101	521
Mov Cap-2 Maneuver	-	-	-	-	101	-
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	328	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	996	-	-	-	208
HCM Lane V/C Ratio	0.037	-	-	-	0.246
HCM Control Delay (s)	8.8	0	-	-	27.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		200	150	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.929			0.850		
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1691	0	1863	1583	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1691	0	1863	1583	1770	1863
Link Speed (mph)	30		40			30
Link Distance (ft)	662		3310			1859
Travel Time (s)	15.0		56.4			42.3

Intersection Summary	
Area Type:	Other

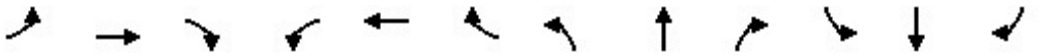
Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	26	24	39	34	17
Future Vol, veh/h	23	26	24	39	34	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	28	26	42	37	18

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	118	26	0	0	68	0
Stage 1	26	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	878	1050	-	-	1533	-
Stage 1	997	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	857	1050	-	-	1533	-
Mov Cap-2 Maneuver	857	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	4.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	950	1533	-
HCM Lane V/C Ratio	-	-	0.056	0.024	-
HCM Control Delay (s)	-	-	9	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-



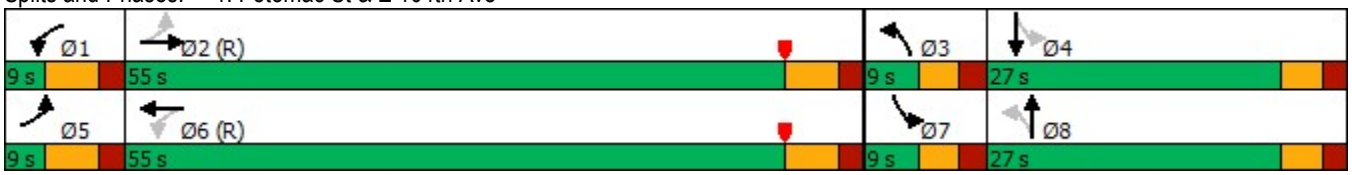
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	250		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.984			0.905			0.877	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3522	0	1770	3483	0	1770	1686	0	3433	1634	0
Flt Permitted	0.080			0.113			0.662			0.667		
Satd. Flow (perm)	149	3522	0	210	3483	0	1233	1686	0	2410	1634	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			18			75			98	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

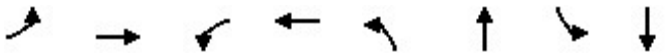
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	44	1146	33	1567	122	40	223	20
Future Volume (vph)	44	1146	33	1567	122	40	223	20
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	27.0	8.0	27.0
Total Split (s)	9.0	55.0	9.0	55.0	9.0	27.0	9.0	27.0
Total Split (%)	9.0%	55.0%	9.0%	55.0%	9.0%	27.0%	9.0%	27.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	54.4	52.6	53.2	50.8	26.0	22.0	26.0	22.0
Actuated g/C Ratio	0.54	0.53	0.53	0.51	0.26	0.22	0.26	0.22
v/c Ratio	0.37	0.69	0.23	1.07	0.39	0.28	0.36	0.28
Control Delay	17.5	20.9	12.7	68.7	31.5	15.6	28.8	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	20.9	12.7	68.7	31.5	15.6	28.8	11.5
LOS	B	C	B	E	C	B	C	B
Approach Delay		20.8		67.7		24.0		23.1
Approach LOS		C		E		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 44.6	Intersection LOS: D
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Potomac St & E 104th Ave



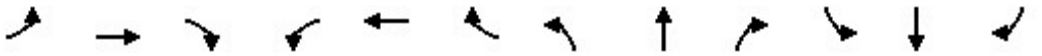


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	48	1287	36	1902	133	118	242	120
v/c Ratio	0.37	0.69	0.23	1.07	0.39	0.28	0.36	0.28
Control Delay	17.5	20.9	12.7	68.7	31.5	15.6	28.8	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	20.9	12.7	68.7	31.5	15.6	28.8	11.5
Queue Length 50th (ft)	12	332	9	~732	63	22	58	11
Queue Length 95th (ft)	28	417	23	#873	111	69	89	57
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200		250	
Base Capacity (vph)	130	1854	158	1777	342	429	667	435
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.69	0.23	1.07	0.39	0.28	0.36	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



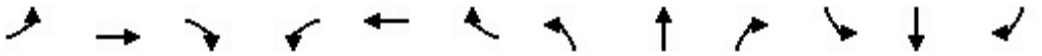
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1146	38	33	1567	183	122	40	69	223	20	90
Future Volume (veh/h)	44	1146	38	33	1567	183	122	40	69	223	20	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	1246	41	36	1703	199	133	43	75	242	22	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1759	58	203	1592	183	344	135	235	680	66	293
Arrive On Green	0.02	0.50	0.50	0.02	0.50	0.50	0.04	0.22	0.22	0.04	0.22	0.22
Sat Flow, veh/h	1781	3511	115	1781	3212	369	1781	612	1067	3456	299	1332
Grp Volume(v), veh/h	48	630	657	36	928	974	133	0	118	242	0	120
Grp Sat Flow(s),veh/h/ln	1781	1777	1850	1781	1777	1804	1781	0	1678	1728	0	1631
Q Serve(g_s), s	1.3	27.4	27.5	1.0	49.5	49.5	4.0	0.0	5.9	4.0	0.0	6.2
Cycle Q Clear(g_c), s	1.3	27.4	27.5	1.0	49.5	49.5	4.0	0.0	5.9	4.0	0.0	6.2
Prop In Lane	1.00		0.06	1.00		0.20	1.00		0.64	1.00		0.82
Lane Grp Cap(c), veh/h	116	890	927	203	880	894	344	0	369	680	0	359
V/C Ratio(X)	0.41	0.71	0.71	0.18	1.05	1.09	0.39	0.00	0.32	0.36	0.00	0.33
Avail Cap(c_a), veh/h	125	890	927	223	880	894	344	0	369	680	0	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.1	19.3	19.3	16.0	25.2	25.2	31.6	0.0	32.7	31.1	0.0	32.8
Incr Delay (d2), s/veh	2.4	4.7	4.6	0.4	45.7	57.5	0.7	0.0	2.3	0.3	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	16.7	17.2	0.7	40.0	45.1	1.5	0.0	4.6	1.0	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	24.0	23.9	16.4	70.9	82.7	32.3	0.0	35.0	31.4	0.0	35.3
LnGrp LOS	C	C	C	B	F	F	C	A	C	C	A	D
Approach Vol, veh/h		1335			1938			251			362	
Approach Delay, s/veh		24.0			75.8			33.6			32.7	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	56.1	9.0	27.0	8.5	55.5	9.0	27.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	49.0	4.0	22.0	3.0	49.0	4.0	22.0
Max Q Clear Time (g_c+I1), s	3.0	29.5	6.0	8.2	3.3	51.5	6.0	7.9
Green Ext Time (p_c), s	0.0	8.0	0.0	0.4	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.999				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	1409	19	14	1738	17	0	0	31	0	0	50
Future Vol, veh/h	11	1409	19	14	1738	17	0	0	31	0	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	1532	21	15	1889	18	0	0	34	0	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1907	0	0	1553	0	0	-	-	777	-	-	954
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	308	-	-	422	-	-	0	0	340	0	0	259
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	308	-	-	422	-	-	-	-	340	-	-	259
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	16.8	22.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	340	308	-	-	422	-	-	259
HCM Lane V/C Ratio	0.099	0.039	-	-	0.036	-	-	0.21
HCM Control Delay (s)	16.8	17.2	-	-	13.8	-	-	22.6
HCM Lane LOS	C	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.1	-	-	0.8

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.989
Satd. Flow (prot)	1611	0	1863	0	0	1842
Flt Permitted						0.989
Satd. Flow (perm)	1611	0	1863	0	0	1842
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	8	0	4	13
Future Vol, veh/h	0	4	8	0	4	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	9	0	4	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	31	9	0	0	9	0
Stage 1	9	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	983	1073	-	-	1611	-
Stage 1	1014	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1073	-	-	1611	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	1611	-
HCM Lane V/C Ratio	-	-	0.004	0.003	-
HCM Control Delay (s)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

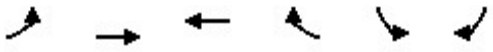
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	4	0	4	4
Future Vol, veh/h	0	4	4	0	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	4	0	4	4

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	16	4	0	0	4	0
Stage 1	4	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1002	1080	-	-	1618	-
Stage 1	1019	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1000	1080	-	-	1618	-
Mov Cap-2 Maneuver	1000	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	1009	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1080	1618	-
HCM Lane V/C Ratio	-	-	0.004	0.003	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.898	
Flt Protected		0.997			0.988	
Satd. Flow (prot)	0	1857	1859	0	1653	0
Flt Permitted		0.997			0.988	
Satd. Flow (perm)	0	1857	1859	0	1653	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

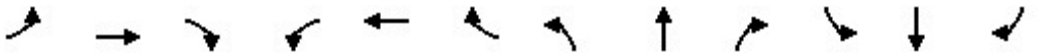
Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	678	880	14	36	111
Future Vol, veh/h	44	678	880	14	36	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	737	957	15	39	121

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	972	0	-	0	1798	965
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	833	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	709	-	-	-	88	309
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	709	-	-	-	78	309
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	427	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	94
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	709	-	-	-	179
HCM Lane V/C Ratio	0.067	-	-	-	0.893
HCM Control Delay (s)	10.4	0	-	-	94
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	6.6



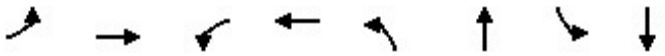
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	250		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor												
Frt		0.993			0.976			0.920			0.898	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3454	0	1770	1714	0	3433	1673	0
Flt Permitted	0.086			0.087			0.602			0.687		
Satd. Flow (perm)	160	3514	0	162	3454	0	1121	1714	0	2483	1673	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			30			45			98	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			5169			1374	
Travel Time (s)		42.1			18.3			88.1			23.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	88	1992	72	1630	91	36	395	50
Future Volume (vph)	88	1992	72	1630	91	36	395	50
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	53.0	9.0	53.0	8.0	30.0	8.0	30.0
Total Split (%)	9.0%	53.0%	9.0%	53.0%	8.0%	30.0%	8.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.2	48.8	50.0	47.0	28.0	25.0	29.0	26.6
Actuated g/C Ratio	0.51	0.49	0.50	0.47	0.28	0.25	0.29	0.27
v/c Ratio	0.74	1.33	0.60	1.29	0.30	0.18	0.57	0.33
Control Delay	47.6	176.2	33.0	159.6	28.3	16.8	32.7	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	176.2	33.0	159.6	28.3	16.8	32.7	15.5
LOS	D	F	C	F	C	B	C	B
Approach Delay		171.0		155.1		23.0		27.9
Approach LOS		F		F		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 143.4	Intersection LOS: F
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Potomac St & E 104th Ave

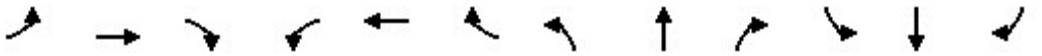


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	96	2277	78	2108	99	84	429	168
v/c Ratio	0.74	1.33	0.60	1.29	0.30	0.18	0.57	0.33
Control Delay	47.6	176.2	33.0	159.6	28.3	16.8	32.7	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	176.2	33.0	159.6	28.3	16.8	32.7	15.5
Queue Length 50th (ft)	27	~1025	22	~905	45	19	107	35
Queue Length 95th (ft)	#81	#1165	#56	#1046	83	57	149	91
Internal Link Dist (ft)		2699		1130		5089		1294
Turn Bay Length (ft)	575		450		200		250	
Base Capacity (vph)	130	1718	129	1639	333	462	748	516
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.33	0.60	1.29	0.30	0.18	0.57	0.33

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

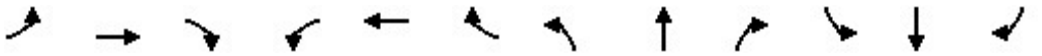
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1992	103	72	1630	309	91	36	41	395	50	105
Future Volume (veh/h)	88	1992	103	72	1630	309	91	36	41	395	50	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	2165	112	78	1772	336	99	39	45	429	54	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	1616	83	125	1409	259	327	198	228	786	134	283
Arrive On Green	0.03	0.47	0.47	0.03	0.47	0.47	0.03	0.25	0.25	0.03	0.25	0.25
Sat Flow, veh/h	1781	3439	176	1781	2998	551	1781	792	914	3456	536	1131
Grp Volume(v), veh/h	96	1109	1168	78	1027	1081	99	0	84	429	0	168
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	1771	1781	0	1706	1728	0	1667
Q Serve(g_s), s	2.8	47.0	47.0	2.3	47.0	47.0	3.0	0.0	3.9	3.0	0.0	8.4
Cycle Q Clear(g_c), s	2.8	47.0	47.0	2.3	47.0	47.0	3.0	0.0	3.9	3.0	0.0	8.4
Prop In Lane	1.00		0.10	1.00		0.31	1.00		0.54	1.00		0.68
Lane Grp Cap(c), veh/h	125	835	864	125	835	832	327	0	426	786	0	417
V/C Ratio(X)	0.77	1.33	1.35	0.62	1.23	1.30	0.30	0.00	0.20	0.55	0.00	0.40
Avail Cap(c_a), veh/h	125	835	864	125	835	832	327	0	426	786	0	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	26.5	26.5	24.1	26.5	26.5	29.8	0.0	29.6	32.8	0.0	31.3
Incr Delay (d2), s/veh	24.1	156.0	165.7	9.1	113.9	143.2	0.5	0.0	1.0	0.8	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	79.4	85.8	2.1	63.4	74.3	1.0	0.0	3.0	5.7	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	182.5	192.2	33.2	140.4	169.7	30.3	0.0	30.6	33.6	0.0	34.2
LnGrp LOS	D	F	F	C	F	F	C	A	C	C	A	C
Approach Vol, veh/h		2373			2186			183			597	
Approach Delay, s/veh		181.9			151.0			30.5			33.8	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.0	8.0	30.0	9.0	53.0	8.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	47.0	3.0	25.0	3.0	47.0	3.0	25.0
Max Q Clear Time (g_c+I1), s	4.3	49.0	5.0	10.4	4.8	49.0	5.0	5.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	147.5
HCM 6th LOS	F



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.995				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3518	0	1770	3522	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3518	0	1770	3522	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	2295	87	31	2020	63	0	0	27	0	0	25
Future Vol, veh/h	46	2295	87	31	2020	63	0	0	27	0	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	2495	95	34	2196	68	0	0	29	0	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2264	0	0	2590	0	0	-	-	1295	-	-	1132
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	223	-	-	165	-	-	0	0	153	0	0	197
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	223	-	-	165	-	-	-	-	153	-	-	197
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.5	34	26.2
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	153	223	-	-	165	-	-	197
HCM Lane V/C Ratio	0.192	0.224	-	-	0.204	-	-	0.138
HCM Control Delay (s)	34	25.7	-	-	32.3	-	-	26.2
HCM Lane LOS	D	D	-	-	D	-	-	D
HCM 95th %tile Q(veh)	0.7	0.8	-	-	0.7	-	-	0.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865		0.975			
Flt Protected						0.982
Satd. Flow (prot)	1611	0	1816	0	0	1829
Flt Permitted						0.982
Satd. Flow (perm)	1611	0	1816	0	0	1829
Link Speed (mph)	30		30			30
Link Distance (ft)	503		755			1387
Travel Time (s)	11.4		17.2			31.5

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	8	2	21	36
Future Vol, veh/h	0	4	8	2	21	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	9	2	23	39

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	10	0	0	11	0
Stage 1	10	-	-	-	-	-
Stage 2	85	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	905	1071	-	-	1608	-
Stage 1	1013	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	891	1071	-	-	1608	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1071	1608	-
HCM Lane V/C Ratio	-	-	0.004	0.014	-
HCM Control Delay (s)	-	-	8.4	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.976
Satd. Flow (prot)	1611	0	1863	0	0	1818
Flt Permitted						0.976
Satd. Flow (perm)	1611	0	1863	0	0	1818
Link Speed (mph)	30		30			30
Link Distance (ft)	597		322			755
Travel Time (s)	13.6		7.3			17.2

Intersection Summary	
Area Type:	Other

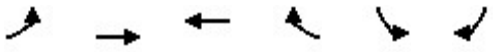
Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	2	0	8	8
Future Vol, veh/h	0	6	2	0	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	0	9	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	29	2	0	0	2	0
Stage 1	2	-	-	-	-	-
Stage 2	27	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	986	1082	-	-	1620	-
Stage 1	1021	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1082	-	-	1620	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	990	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1082	1620	-
HCM Lane V/C Ratio	-	-	0.006	0.005	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.908	
Flt Protected		0.996			0.984	
Satd. Flow (prot)	0	1855	1850	0	1664	0
Flt Permitted		0.996			0.984	
Satd. Flow (perm)	0	1855	1850	0	1664	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		5169	
Travel Time (s)		69.1	9.4		117.5	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.8

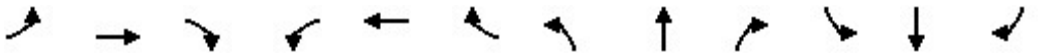
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	126	1516	851	50	42	91
Future Vol, veh/h	126	1516	851	50	42	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	1648	925	54	46	99

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	979	0	-	0	2874	952
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	1922	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	705	-	-	-	~ 18	315
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	126	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	705	-	-	-	0	315
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	126	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	705	-	-	-	315
HCM Lane V/C Ratio	0.194	-	-	-	0.459
HCM Control Delay (s)	11.3	0	-	-	25.8
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0.7	-	-	-	2.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



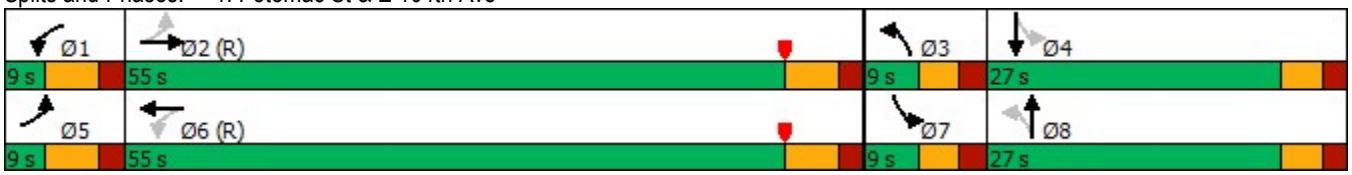
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	250		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.984			0.910			0.880	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3522	0	1770	3483	0	1770	1695	0	3433	1639	0
Flt Permitted	0.080			0.111			0.656			0.637		
Satd. Flow (perm)	149	3522	0	207	3483	0	1222	1695	0	2302	1639	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			18			69			93	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			1845			1374	
Travel Time (s)		42.1			18.3			31.4			23.4	

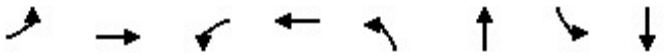
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	44	1149	34	1567	148	49	223	23
Future Volume (vph)	44	1149	34	1567	148	49	223	23
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	27.0	8.0	27.0
Total Split (s)	9.0	55.0	9.0	55.0	9.0	27.0	9.0	27.0
Total Split (%)	9.0%	55.0%	9.0%	55.0%	9.0%	27.0%	9.0%	27.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	54.4	52.6	53.2	50.8	26.0	22.0	26.0	22.0
Actuated g/C Ratio	0.54	0.53	0.53	0.51	0.26	0.22	0.26	0.22
v/c Ratio	0.37	0.70	0.24	1.07	0.47	0.31	0.38	0.28
Control Delay	17.5	21.0	12.9	68.7	34.0	18.7	29.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	21.0	12.9	68.7	34.0	18.7	29.0	12.6
LOS	B	C	B	E	C	B	C	B
Approach Delay		20.9		67.6		27.1		23.5
Approach LOS		C		E		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 44.6	Intersection LOS: D
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Potomac St & E 104th Ave



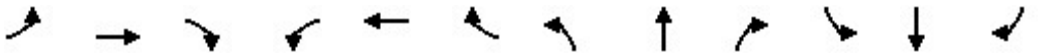


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	48	1296	37	1902	161	132	242	123
v/c Ratio	0.37	0.70	0.24	1.07	0.47	0.31	0.38	0.28
Control Delay	17.5	21.0	12.9	68.7	34.0	18.7	29.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	21.0	12.9	68.7	34.0	18.7	29.0	12.6
Queue Length 50th (ft)	12	335	9	~732	78	33	58	15
Queue Length 95th (ft)	28	421	23	#873	132	84	89	63
Internal Link Dist (ft)		2699		1130		1765		1294
Turn Bay Length (ft)	575		450		200		250	
Base Capacity (vph)	130	1854	156	1777	339	426	643	433
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.70	0.24	1.07	0.47	0.31	0.38	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



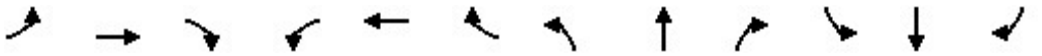
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1149	43	34	1567	183	148	49	73	223	23	90
Future Volume (veh/h)	44	1149	43	34	1567	183	148	49	73	223	23	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	1249	47	37	1703	199	161	53	79	242	25	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1748	66	201	1592	183	342	149	222	658	73	287
Arrive On Green	0.02	0.50	0.50	0.02	0.50	0.50	0.04	0.22	0.22	0.04	0.22	0.22
Sat Flow, veh/h	1781	3492	131	1781	3212	369	1781	678	1011	3456	332	1303
Grp Volume(v), veh/h	48	635	661	37	928	974	161	0	132	242	0	123
Grp Sat Flow(s),veh/h/ln	1781	1777	1847	1781	1777	1804	1781	0	1688	1728	0	1636
Q Serve(g_s), s	1.3	27.8	27.8	1.0	49.5	49.5	4.0	0.0	6.6	4.0	0.0	6.3
Cycle Q Clear(g_c), s	1.3	27.8	27.8	1.0	49.5	49.5	4.0	0.0	6.6	4.0	0.0	6.3
Prop In Lane	1.00		0.07	1.00		0.20	1.00		0.60	1.00		0.80
Lane Grp Cap(c), veh/h	116	889	924	201	880	894	342	0	371	658	0	360
V/C Ratio(X)	0.41	0.71	0.72	0.18	1.05	1.09	0.47	0.00	0.36	0.37	0.00	0.34
Avail Cap(c_a), veh/h	125	889	924	220	880	894	342	0	371	658	0	360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.1	19.4	19.4	16.1	25.2	25.2	33.0	0.0	33.0	31.3	0.0	32.9
Incr Delay (d2), s/veh	2.4	4.9	4.7	0.4	45.7	57.5	1.0	0.0	2.6	0.3	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	16.9	17.5	0.7	40.0	45.1	2.8	0.0	5.2	1.1	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	24.3	24.1	16.5	70.9	82.7	34.1	0.0	35.6	31.6	0.0	35.5
LnGrp LOS	C	C	C	B	F	F	C	A	D	C	A	D
Approach Vol, veh/h		1344			1939			293			365	
Approach Delay, s/veh		24.3			75.8			34.8			32.9	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	56.1	9.0	27.0	8.5	55.5	9.0	27.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	49.0	4.0	22.0	3.0	49.0	4.0	22.0
Max Q Clear Time (g_c+I1), s	3.0	29.8	6.0	8.3	3.3	51.5	6.0	8.6
Green Ext Time (p_c), s	0.0	8.0	0.0	0.5	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	51.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.999				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3532	0	1770	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

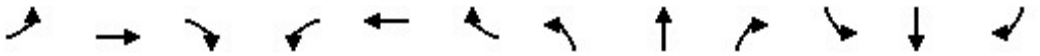
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	1413	21	18	1739	17	0	0	44	0	0	50
Future Vol, veh/h	11	1413	21	18	1739	17	0	0	44	0	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	1536	23	20	1890	18	0	0	48	0	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1908	0	0	1559	0	0	-	-	780	-	-	954
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	307	-	-	420	-	-	0	0	338	0	0	259
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	307	-	-	420	-	-	-	-	338	-	-	259
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	17.4	22.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	307	-	-	420	-	-	259
HCM Lane V/C Ratio	0.141	0.039	-	-	0.047	-	-	0.21
HCM Control Delay (s)	17.4	17.2	-	-	14	-	-	22.6
HCM Lane LOS	C	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.978	
Flt Protected		0.950									0.992	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1807	0
Flt Permitted		0.950									0.992	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1807	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		455			503			755			1387	
Travel Time (s)		10.3			11.4			17.2			31.5	

Intersection Summary	
Area Type:	Other

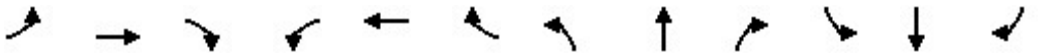
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	0	0	0	0	4	0	12	0	4	16	4
Future Vol, veh/h	9	0	0	0	0	4	0	12	0	4	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	4	0	13	0	4	17	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	42	40	19	40	42	13	21	0	0	13	0	0
Stage 1	27	27	-	13	13	-	-	-	-	-	-	-
Stage 2	15	13	-	27	29	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	961	852	1059	964	850	1067	1595	-	-	1606	-	-
Stage 1	990	873	-	1007	885	-	-	-	-	-	-	-
Stage 2	1005	885	-	990	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	955	849	1059	962	847	1067	1595	-	-	1606	-	-
Mov Cap-2 Maneuver	955	849	-	962	847	-	-	-	-	-	-	-
Stage 1	990	870	-	1007	885	-	-	-	-	-	-	-
Stage 2	1001	885	-	987	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	8.4	0	1.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1595	-	-	955	1067	1606	-	-
HCM Lane V/C Ratio	-	-	-	0.01	0.004	0.003	-	-
HCM Control Delay (s)	0	-	-	8.8	8.4	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.973	
Flt Protected		0.950									0.980	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1776	0
Flt Permitted		0.950									0.980	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1776	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		494			597			322			755	
Travel Time (s)		11.2			13.6			7.3			17.2	

Intersection Summary	
Area Type:	Other

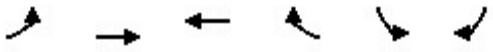
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	0	0	0	0	4	0	4	0	4	4	2
Future Vol, veh/h	4	0	0	0	0	4	0	4	0	4	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	4	0	4	0	4	4	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	19	17	5	17	18	4	6	0	0	4	0	0
Stage 1	13	13	-	4	4	-	-	-	-	-	-	-
Stage 2	6	4	-	13	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	995	877	1078	998	876	1080	1615	-	-	1618	-	-
Stage 1	1007	885	-	1018	892	-	-	-	-	-	-	-
Stage 2	1016	892	-	1007	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	989	875	1078	996	874	1080	1615	-	-	1618	-	-
Mov Cap-2 Maneuver	989	875	-	996	874	-	-	-	-	-	-	-
Stage 1	1007	883	-	1018	892	-	-	-	-	-	-	-
Stage 2	1012	892	-	1005	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.3	0	2.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	989	1080	1618	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.004	0.003	-	-
HCM Control Delay (s)	0	-	-	8.7	8.3	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.899	
Flt Protected		0.996			0.988	
Satd. Flow (prot)	0	1855	1859	0	1655	0
Flt Permitted		0.996			0.988	
Satd. Flow (perm)	0	1855	1859	0	1655	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		3324	
Travel Time (s)		69.1	9.4		75.5	

Intersection Summary	
Area Type:	Other

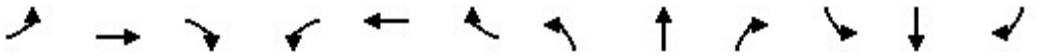
Intersection	
Int Delay, s/veh	17.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	678	880	17	45	136
Future Vol, veh/h	53	678	880	17	45	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	737	957	18	49	148

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	975	0	-	0	1819	966
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	853	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	707	-	-	-	85	309
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	418	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	707	-	-	-	73	309
Mov Cap-2 Maneuver	-	-	-	-	73	-
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	418	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	169.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	707	-	-	-	171
HCM Lane V/C Ratio	0.081	-	-	-	1.151
HCM Control Delay (s)	10.5	0	-	-	169.7
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	10.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	150		200	150		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.946			0.929				0.850			0.850
Flt Protected		0.971			0.977		0.950			0.950		
Satd. Flow (prot)	0	1711	0	0	1691	0	1770	1863	1583	1770	1863	1583
Flt Permitted		0.971			0.977		0.950			0.950		
Satd. Flow (perm)	0	1711	0	0	1691	0	1770	1863	1583	1770	1863	1583
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		614			747			3324			1845	
Travel Time (s)		14.0			17.0			56.7			41.9	

Intersection Summary	
Area Type:	Other

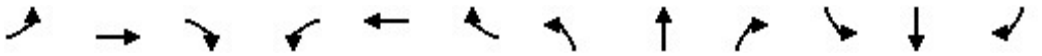
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	0	36	34	0	38	12	118	12	10	92	18
Future Vol, veh/h	54	0	36	34	0	38	12	118	12	10	92	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	200	150	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	0	39	37	0	41	13	128	13	11	100	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	303	289	100	306	296	128	120	0	0	141	0	0
Stage 1	122	122	-	154	154	-	-	-	-	-	-	-
Stage 2	181	167	-	152	142	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	649	621	956	646	616	922	1468	-	-	1442	-	-
Stage 1	882	795	-	848	770	-	-	-	-	-	-	-
Stage 2	821	760	-	850	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	612	610	956	612	606	922	1468	-	-	1442	-	-
Mov Cap-2 Maneuver	612	610	-	612	606	-	-	-	-	-	-	-
Stage 1	874	789	-	840	763	-	-	-	-	-	-	-
Stage 2	777	753	-	809	773	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	10.4	0.6	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1468	-	-	715	744	1442	-	-
HCM Lane V/C Ratio	0.009	-	-	0.137	0.105	0.008	-	-
HCM Control Delay (s)	7.5	-	-	10.8	10.4	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.4	0	-	-



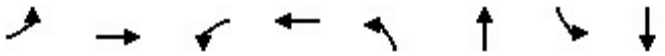
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	575		0	450		0	200		0	250		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor												
Frt		0.991			0.976			0.923			0.904	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3507	0	1770	3454	0	1770	1719	0	3433	1684	0
Flt Permitted	0.084			0.085			0.560			0.696		
Satd. Flow (perm)	156	3507	0	158	3454	0	1043	1719	0	2515	1684	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			30			48			84	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		2779			1210			1832			1374	
Travel Time (s)		42.1			18.3			31.2			23.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	88	2002	77	1630	108	42	395	60
Future Volume (vph)	88	2002	77	1630	108	42	395	60
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	3.0	10.0	3.0	10.0	3.0	5.0	3.0	5.0
Minimum Split (s)	9.0	40.0	9.0	28.0	8.0	30.0	8.0	30.0
Total Split (s)	9.0	53.0	9.0	53.0	8.0	30.0	8.0	30.0
Total Split (%)	9.0%	53.0%	9.0%	53.0%	8.0%	30.0%	8.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max
Act Effct Green (s)	51.2	48.8	50.0	47.0	28.0	25.0	28.0	25.0
Actuated g/C Ratio	0.51	0.49	0.50	0.47	0.28	0.25	0.28	0.25
v/c Ratio	0.75	1.35	0.66	1.29	0.37	0.20	0.59	0.37
Control Delay	49.6	185.3	38.6	159.6	30.3	17.3	33.1	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	185.3	38.6	159.6	30.3	17.3	33.1	18.9
LOS	D	F	D	F	C	B	C	B
Approach Delay		179.9		155.0		24.5		28.9
Approach LOS		F		F		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 67 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.35	
Intersection Signal Delay: 146.8	Intersection LOS: F
Intersection Capacity Utilization 98.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Potomac St & E 104th Ave

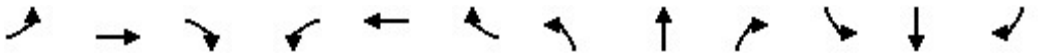


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	96	2309	84	2108	117	94	429	179
v/c Ratio	0.75	1.35	0.66	1.29	0.37	0.20	0.59	0.37
Control Delay	49.6	185.3	38.6	159.6	30.3	17.3	33.1	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	185.3	38.6	159.6	30.3	17.3	33.1	18.9
Queue Length 50th (ft)	27	~1048	23	~905	53	23	107	48
Queue Length 95th (ft)	#83	#1189	#65	#1046	97	64	149	108
Internal Link Dist (ft)		2699		1130		1752		1294
Turn Bay Length (ft)	575		450		200		250	
Base Capacity (vph)	128	1715	127	1639	313	465	731	484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	1.35	0.66	1.29	0.37	0.20	0.59	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

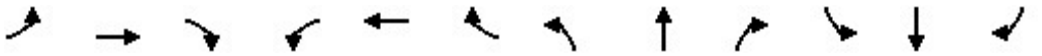
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	2002	122	77	1630	309	108	42	44	395	60	105
Future Volume (veh/h)	88	2002	122	77	1630	309	108	42	44	395	60	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	2176	133	84	1772	336	117	46	48	429	65	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	1600	97	125	1409	259	319	210	219	769	152	267
Arrive On Green	0.03	0.47	0.47	0.03	0.47	0.47	0.03	0.25	0.25	0.03	0.25	0.25
Sat Flow, veh/h	1781	3404	206	1781	2998	551	1781	838	875	3456	609	1069
Grp Volume(v), veh/h	96	1125	1184	84	1027	1081	117	0	94	429	0	179
Grp Sat Flow(s),veh/h/ln	1781	1777	1833	1781	1777	1771	1781	0	1713	1728	0	1678
Q Serve(g_s), s	2.8	47.0	47.0	2.5	47.0	47.0	3.0	0.0	4.4	3.0	0.0	9.0
Cycle Q Clear(g_c), s	2.8	47.0	47.0	2.5	47.0	47.0	3.0	0.0	4.4	3.0	0.0	9.0
Prop In Lane	1.00		0.11	1.00		0.31	1.00		0.51	1.00		0.64
Lane Grp Cap(c), veh/h	125	835	862	125	835	832	319	0	428	769	0	419
V/C Ratio(X)	0.77	1.35	1.37	0.67	1.23	1.30	0.37	0.00	0.22	0.56	0.00	0.43
Avail Cap(c_a), veh/h	125	835	862	125	835	832	319	0	428	769	0	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	26.5	26.5	24.2	26.5	26.5	31.3	0.0	29.8	33.2	0.0	31.5
Incr Delay (d2), s/veh	24.1	164.1	175.8	12.9	113.9	143.2	0.7	0.0	1.2	0.9	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	82.6	89.6	2.4	63.4	74.3	1.8	0.0	3.4	5.8	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	190.6	202.3	37.1	140.4	169.7	32.0	0.0	30.9	34.1	0.0	34.6
LnGrp LOS	D	F	F	D	F	F	C	A	C	C	A	C
Approach Vol, veh/h		2405			2192			211			608	
Approach Delay, s/veh		190.7			150.9			31.5			34.2	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.0	8.0	30.0	9.0	53.0	8.0	30.0
Change Period (Y+Rc), s	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	3.0	47.0	3.0	25.0	3.0	47.0	3.0	25.0
Max Q Clear Time (g_c+I1), s	4.5	49.0	5.0	11.0	4.8	49.0	5.0	6.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	150.8
HCM 6th LOS	F



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.996				0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3518	0	1770	3525	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3518	0	1770	3525	0	0	0	1611	0	0	1611
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1210			519			1387			654	
Travel Time (s)		18.3			7.9			31.5			14.9	

Intersection Summary	
Area Type:	Other

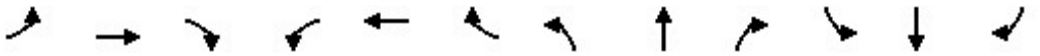
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	2298	97	46	2025	63	0	0	36	0	0	25
Future Vol, veh/h	46	2298	97	46	2025	63	0	0	36	0	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	2498	105	50	2201	68	0	0	39	0	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2269	0	0	2603	0	0	-	-	1302	-	-	1135
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	222	-	-	163	-	-	0	0	151	0	0	196
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	222	-	-	163	-	-	-	-	151	-	-	196
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.8	37	26.3
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	151	222	-	-	163	-	-	196
HCM Lane V/C Ratio	0.259	0.225	-	-	0.307	-	-	0.139
HCM Control Delay (s)	37	25.9	-	-	36.6	-	-	26.3
HCM Lane LOS	E	D	-	-	E	-	-	D
HCM 95th %tile Q(veh)	1	0.8	-	-	1.2	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865			0.981			0.976	
Flt Protected		0.950									0.987	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1827	0	0	1794	0
Flt Permitted		0.950									0.987	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1827	0	0	1794	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		427			503			755			1387	
Travel Time (s)		9.7			11.4			17.2			31.5	

Intersection Summary	
Area Type:	Other

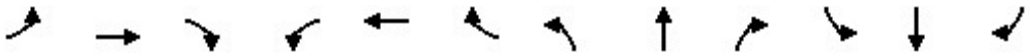
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	0	0	0	0	4	0	11	2	21	46	15
Future Vol, veh/h	6	0	0	0	0	4	0	11	2	21	46	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	0	0	0	4	0	12	2	23	50	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	118	58	117	125	13	66	0	0	14	0	0
Stage 1	104	104	-	13	13	-	-	-	-	-	-	-
Stage 2	15	14	-	104	112	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	857	772	1008	859	765	1067	1536	-	-	1604	-	-
Stage 1	902	809	-	1007	885	-	-	-	-	-	-	-
Stage 2	1005	884	-	902	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	844	760	1008	850	754	1067	1536	-	-	1604	-	-
Mov Cap-2 Maneuver	844	760	-	850	754	-	-	-	-	-	-	-
Stage 1	902	797	-	1007	885	-	-	-	-	-	-	-
Stage 2	1001	884	-	888	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	8.4	0	1.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1536	-	-	844	1067	1604	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.004	0.014	-	-
HCM Control Delay (s)	0	-	-	9.3	8.4	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865						0.949	
Flt Protected		0.950									0.985	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1863	0	0	1741	0
Flt Permitted		0.950									0.985	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1863	0	0	1741	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		432			597			322			755	
Travel Time (s)		9.8			13.6			7.3			17.2	

Intersection Summary	
Area Type:	Other

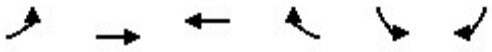
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	0	0	0	6	0	2	0	8	8	10
Future Vol, veh/h	3	0	0	0	0	6	0	2	0	8	8	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	0	0	0	7	0	2	0	9	9	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	39	35	15	35	40	2	20	0	0	2	0	0
Stage 1	33	33	-	2	2	-	-	-	-	-	-	-
Stage 2	6	2	-	33	38	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	966	857	1065	971	852	1082	1596	-	-	1620	-	-
Stage 1	983	868	-	1021	894	-	-	-	-	-	-	-
Stage 2	1016	894	-	983	863	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	955	852	1065	966	847	1082	1596	-	-	1620	-	-
Mov Cap-2 Maneuver	955	852	-	966	847	-	-	-	-	-	-	-
Stage 1	983	863	-	1021	894	-	-	-	-	-	-	-
Stage 2	1010	894	-	977	858	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	8.3	0	2.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1596	-	-	955	1082	1620	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.006	0.005	-	-
HCM Control Delay (s)	0	-	-	8.8	8.3	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991		0.907	
Flt Protected		0.995			0.985	
Satd. Flow (prot)	0	1853	1846	0	1664	0
Flt Permitted		0.995			0.985	
Satd. Flow (perm)	0	1853	1846	0	1664	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		4561	618		3337	
Travel Time (s)		69.1	9.4		75.8	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.4

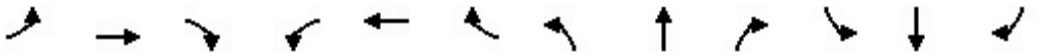
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	155	1516	851	60	48	108
Future Vol, veh/h	155	1516	851	60	48	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	1648	925	65	52	117

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	990	0	-	0	2942	958
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	1984	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	698	-	-	-	~ 16	312
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	117	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	698	-	-	-	0	312
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	117	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	29.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	698	-	-	-	312
HCM Lane V/C Ratio	0.241	-	-	-	0.543
HCM Control Delay (s)	11.8	0	-	-	29.5
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0.9	-	-	-	3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	150		200	150		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.946			0.929				0.850			0.850
Flt Protected		0.971			0.977		0.950			0.950		
Satd. Flow (prot)	0	1711	0	0	1691	0	1770	1863	1583	1770	1863	1583
Flt Permitted		0.971			0.977		0.950			0.950		
Satd. Flow (perm)	0	1711	0	0	1691	0	1770	1863	1583	1770	1863	1583
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		492			564			3337			1832	
Travel Time (s)		11.2			12.8			56.9			41.6	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	23	23	0	26	39	126	39	34	129	59
Future Vol, veh/h	35	0	23	23	0	26	39	126	39	34	129	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	200	150	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	0	25	25	0	28	42	137	42	37	140	64

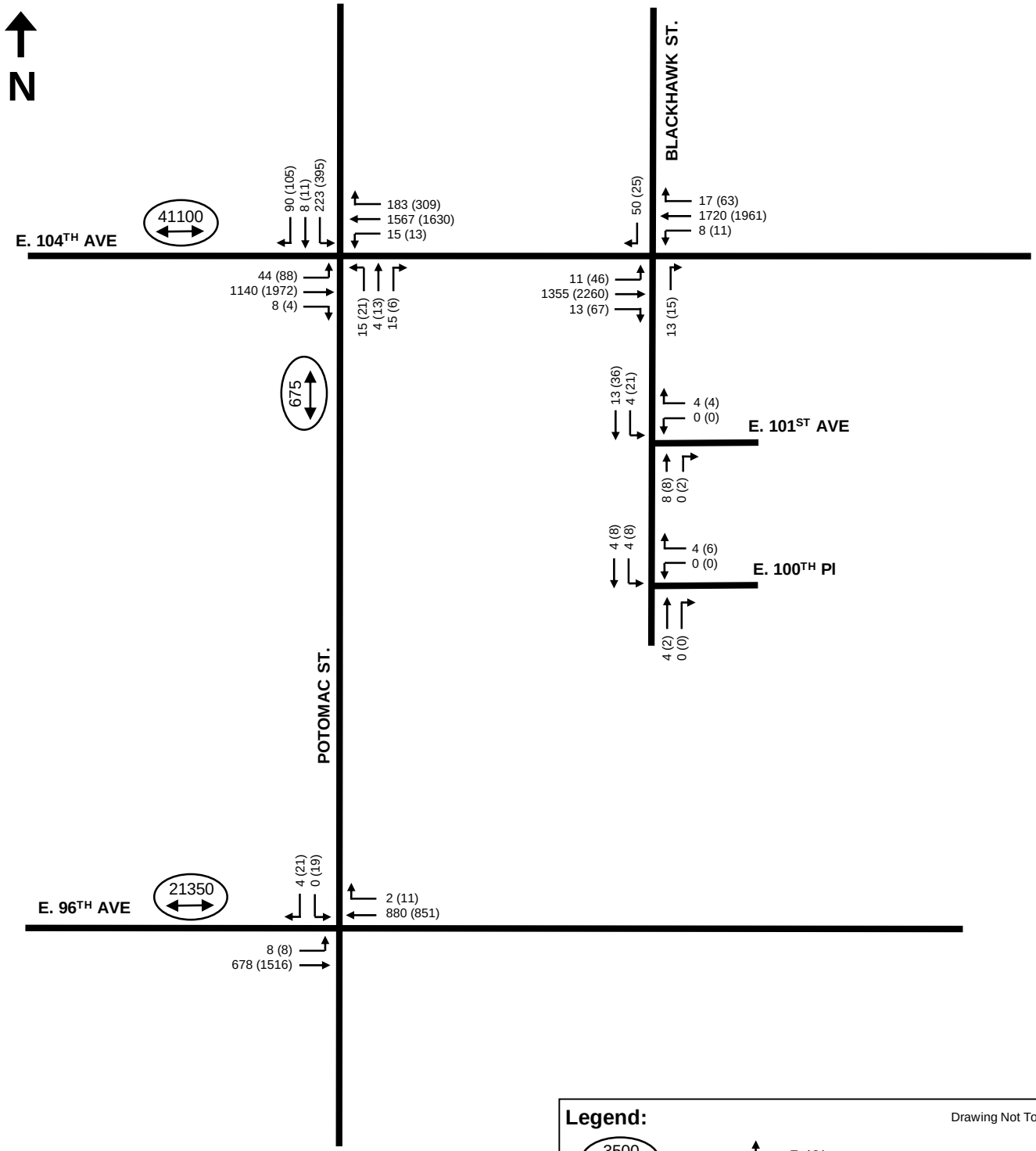
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	470	477	140	480	499	137	204	0	0	179	0	0
Stage 1	214	214	-	221	221	-	-	-	-	-	-	-
Stage 2	256	263	-	259	278	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	504	487	908	496	473	911	1368	-	-	1397	-	-
Stage 1	788	725	-	781	720	-	-	-	-	-	-	-
Stage 2	749	691	-	746	680	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	467	460	908	462	447	911	1368	-	-	1397	-	-
Mov Cap-2 Maneuver	467	460	-	462	447	-	-	-	-	-	-	-
Stage 1	764	706	-	757	698	-	-	-	-	-	-	-
Stage 2	703	670	-	706	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	11.3	1.5	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1368	-	-	578	626	1397	-	-
HCM Lane V/C Ratio	0.031	-	-	0.109	0.085	0.026	-	-
HCM Control Delay (s)	7.7	-	-	12	11.3	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.3	0.1	-	-

APPENDIX “C”

2040 BACKGROUND TRAFFIC VOLUME DEVELOPMENT FIGURES



Legend:

Drawing Not To Scale

3500
24-Hour Directional Volume, vpd

5 (8)
64 (50)
8 (7)
Weekday AM (PM) Peak Hour Traffic Volumes, vph

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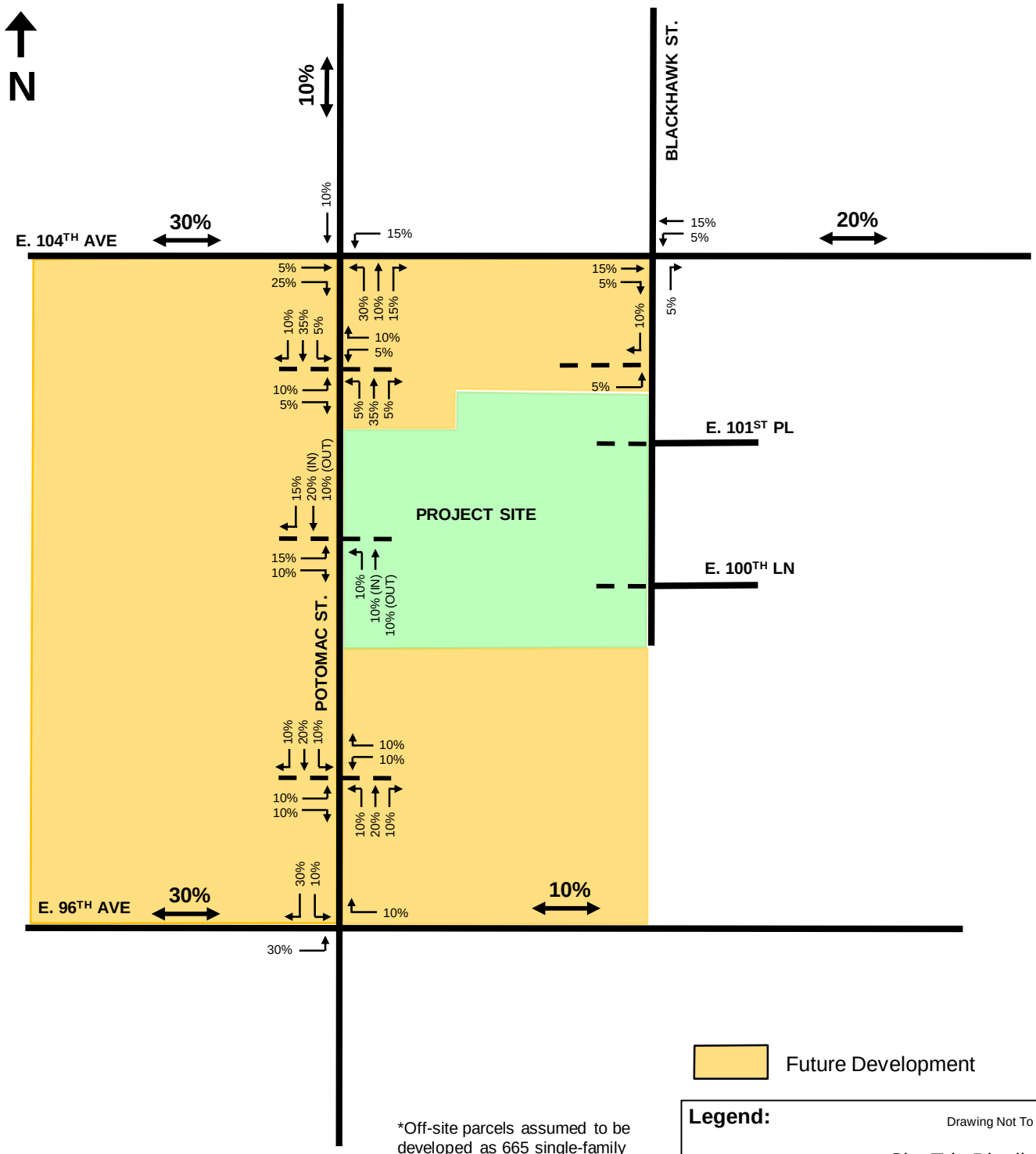
2040 Regional Background Traffic Volumes

Eberly Place

United Development Companies, LLC

HKS #201237

Figure C-1



*Off-site parcels assumed to be developed as 665 single-family housing units that will contribute background traffic to Potomac St.

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DENVER • DALLAS/FORT WORTH

Off-Site Parcels
Site Generated Trip Distribution

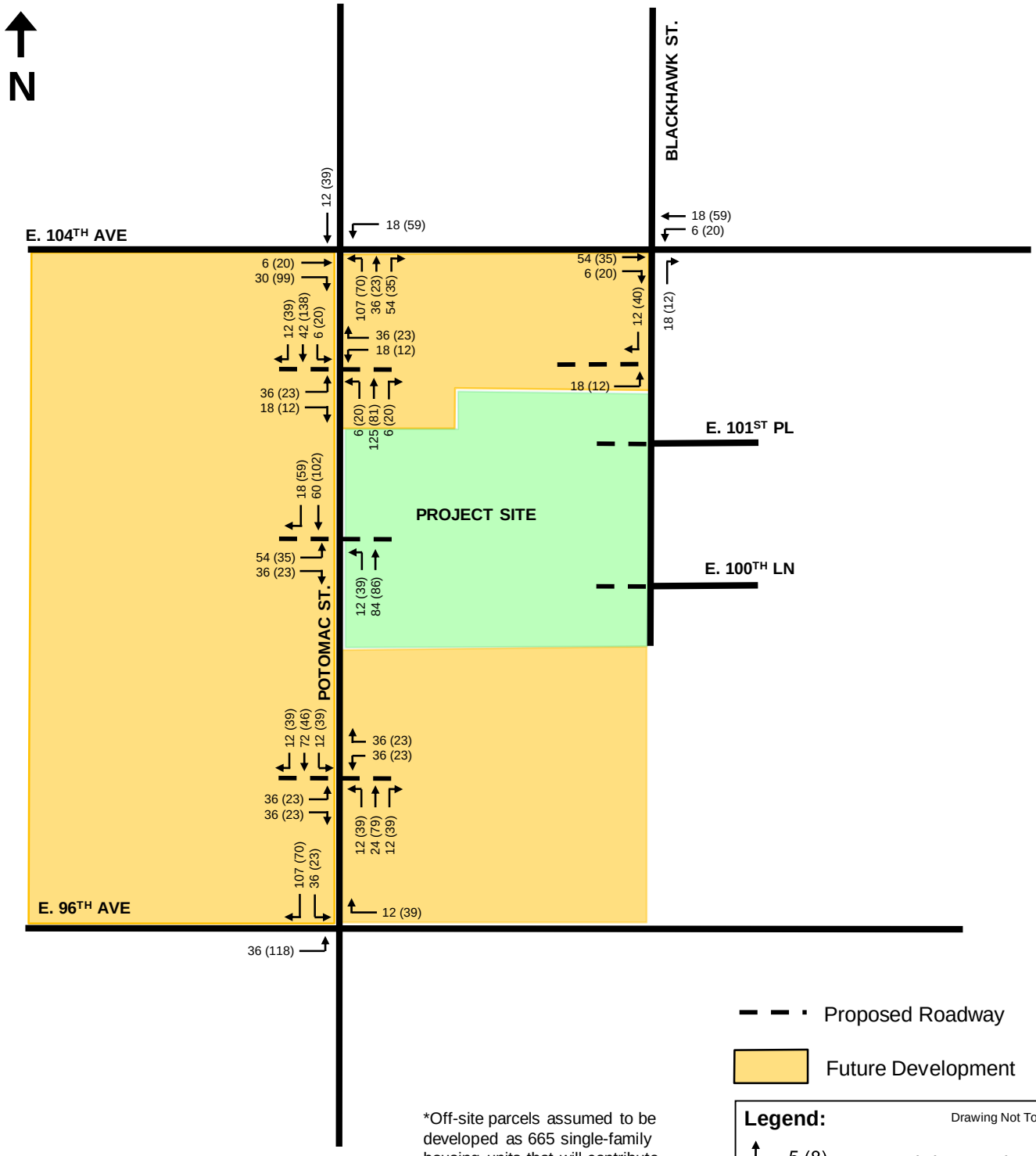
(For development of 2040 Background Traffic Volumes)

Eberly Place

United Development Companies, LLC

HKS #201237

Figure C-2



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Eberly Place

United Development Companies, LLC

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Off-Site Parcels
Site Generated Trip Assignment

(For development of 2040 Background Traffic Volumes)

Figure C-3