7733 N. Wallace Avenue | Kansas City, MO 64158 | 816.912.4720 | www.HgCons.com

Mr. Brad Cooley
City of Lee's Summit, MO
Public Works

Re: Colton's Crossing Traffic Study
Hg Consult Project Number: 21.018

Mr. Cooley,
The purpose of this memo is to document the amount of traffic generated by the Colton's Crossing development, located within Lee's Summit. The development is located on Hamblen Road and shown below in **Figure 1.**

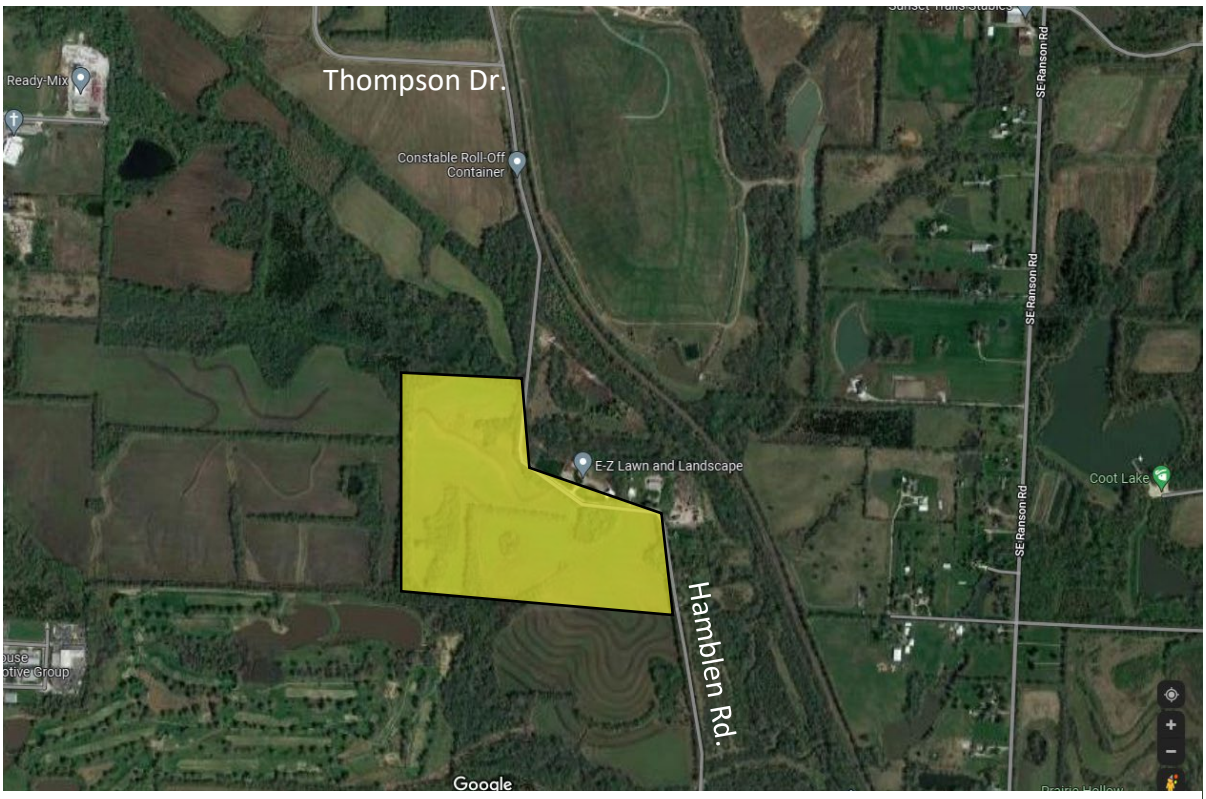

Figure 1: Project Vicinity Map

Existing Conditions
Currently, Hamblen Road is classified as a minor arterial according to Lee's Summit Functional Classification map. It is a two-lane, paved roadway with open ditches and a posted speed limit of 35mph. The existing pavement width is approximately 20-feet wide and will need to be

improved as a part of this project. Hook Road is also classified as a minor arterial roadway that will be constructed as a part of this project, while planning future Hook Road to the west by coordinating with adjacent land owners for that future roadway right-of-way. Currently, Hook Road terminates just east of Route 291. SE Thompson Drive is classified as a commercial/industrial collector roadway that has a posted speed limit of 35mph. The parcel for the proposed development is currently zoned as agricultural. The existing traffic volumes on Hamblen Road are very low and are estimated to be less than 1,000 vehicles per day. AM peak period traffic volumes were obtained on Thursday, Dec. 15th 2022, and PM peak period traffic volumes were obtained on Friday, Dec. 9th 2022. Although traffic volumes are generally obtained on Tuesdays-Thursdays, traffic volumes were obtained on Friday for the PM counts for scheduling reasons to complete the traffic study. Given the volumes and nature of the area the difference in traffic volumes for the analysis is assumed to be an insignificant difference. The AM peak hour is between 7:15-8:15 AM with 51 total vehicles (19 SB and 32 NB) while the PM peak hour is between 4:45-5:45 PM (50 SB and 28 NB). The AM peak hour has 63% of vehicles traveling northbound while the PM peak hour has 64% of vehicles traveling southbound.

Proposed Development and Trip Generation

The proposed site consists of 135 single family detached homes, and 60 single-family duplex homes. The project will improve Hamblen Road to the north to Thompson Drive, as well as construct new Hook Drive through the development. The preliminary plat also shows the intersection spacing between Hamblen Road and Hamblen Court is over 900', which is greater than the City's 660' spacing requirement. The preliminary plat is shown below.

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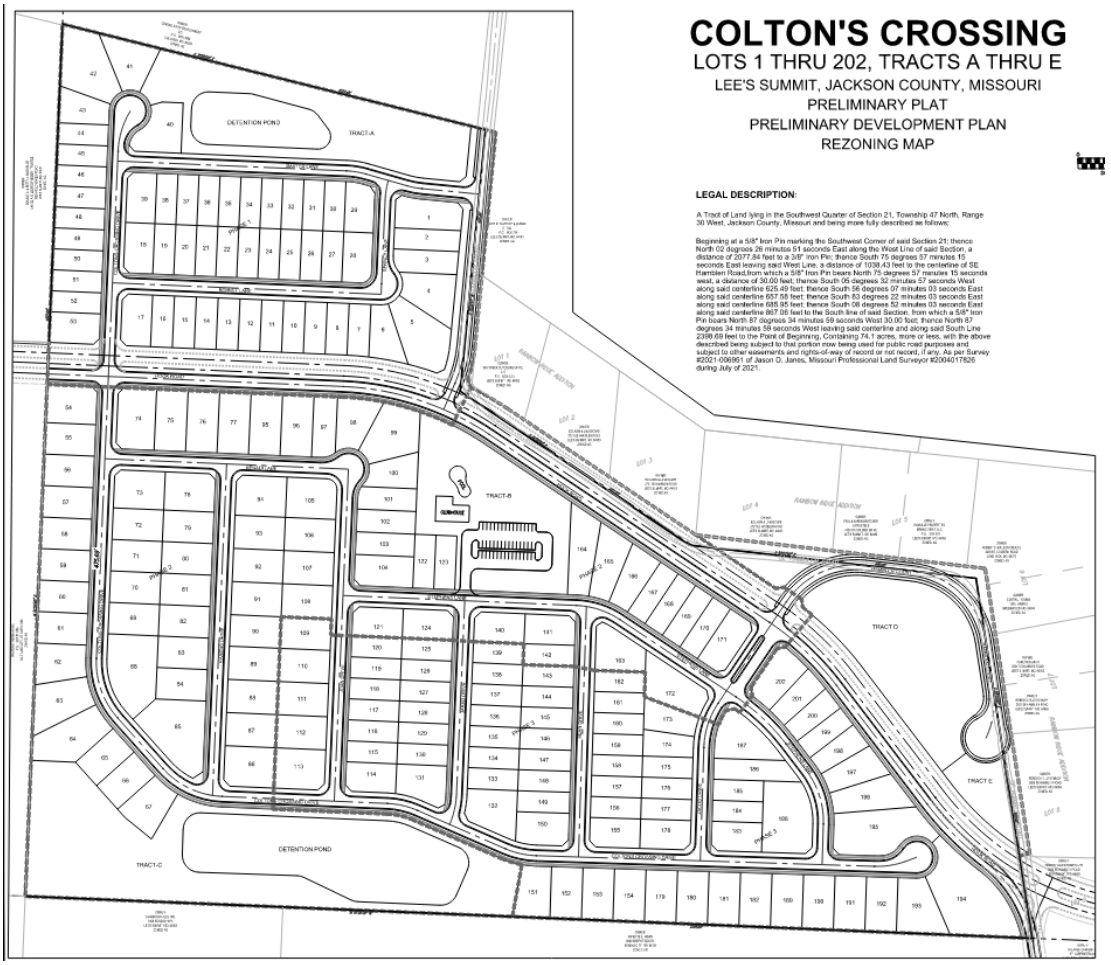

In addition to the improvements to the roadway network shown above on the preliminary plat, the project will also include sidewalks throughout the public roadway system in accordance with City regulations. The project also includes the installation of over 5,000 feet of water line to provide the site with water. Additionally, the project has coordinated with the adjacent landowner to the west and preserved 100' of right-of-way for the future extension of Hook Road from Route 291.

The amount of traffic generated by the proposed development has been calculated by the *Institute of Transportation Engineer's, Trip Generation Manual, 11th Edition.* The amount of traffic expected to be generated by the proposed site for the typical weekday, am peak hour and pm peak hour is summarized in the table shown below.

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Table 1 - Colton's Crossing Trip Generation						
Land Use	Number of Units	Weekday	AM Peak Hour		PM Peak Hour	
			Entering	Exiting	Entering	Exiting
Single Family Detached	135	1330	25	73	83	49
Single Family Attached (Duplex)	60	432	9	20	19	15
	TOTAL	1762	34	93	102	64

The table above shows that there will be approximately 127 trips generated in the AM peak hour, and 166 trips generated in the PM peak hour.

Trip distributions are assumed to estimate where traffic is coming from and going to help study the impacts to the area. The distributions attempted to replicate the existing traffic patterns, entering and exiting, for both the AM and PM peak hours. The section north of Hook Drive has 26% of the lots in the development so 26% of the entering and exiting vehicles were assumed to use these entrances with the remaining 74% using the entrances for the parcels south of Hook Drive. In the AM 63% of entering and exiting traffic comes is northbound while 64% of entering and exiting traffic comes is southbound in the PM peak hour.

Traffic Operations

Traffic was analyzed using Synchro traffic modeling software, the industry standard for intersections based on the Highway Capacity Manual. Synchro calculates several Measures of Effectiveness (MOEs) based on traffic volumes, lane configurations, and type of intersection control. Some of the more commonly used MOE's are Delay, Queue lengths, and Level of Service. Level of Service (LOS) is a qualitative measure used to relate the quality of traffic service. The HCM defines LOS for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS ranges from A (unimpeded driving, no delays) to F (highly congested roads, high delays).

The table below gives the average vehicle delay ranges for each Level of Service.

Level of Service	**Control Delay per Vehicle (sec.)**	
(LOS)	**Signalized**	**Unsignalized**
A	<= 10	<= 10
B	10-20	10-15
C	20-35	15-25
D	35-55	25-35
E	55-80	35-50
F	> 80	> 50

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The existing conditions of Hamblen Road is a two-lane road with no intersections so this condition is not analyzed in Synchro. Below are the results for the Existing plus Proposed Development traffic for the AM and PM peak hours. In all tables, Delay is the average control delay per vehicle and listed in seconds. (U) denotes an unsignalized intersection.

Existing + Build AM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	0/A	0/A	9/A	-
Colton's Dr/Hook Rd (U)	8/A	9/A	0/A	5/A
Hamblen Rd/Hook Rd (U)	-	9/A	5/A	0/A
Dustin Dr/Hook Rd (U)	9/A	0/A	7/A	1/A

Existing + Build PM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	1/A	0/A	9/A	-
Colton's Dr/Hook Rd (U)	8/A	9/A	0/A	6/A
Hamblen Rd/Hook Rd (U)	-	10/A	3/A	0/A
Dustin Dr/Hook Rd (U)	10/A	0/A	6/A	2/A

Access Management Compliance

In review of the City's access management regulations, the project will construct Hook Drive, which will provide a ½-roadway section for a future arterial roadway, and intersections will exceed the City's spacing requirement of 660'. This construction of Hook Drive also conforms to the City's Unimproved Road Policy. Additionally, the location of all site connections was previously discussed and approved by the City during the conceptual planning phase of the project. All roadway connections have adequate throat length and will comply with the City's regulations pertaining to roadway spacing and design.

Future Traffic Considerations

Most of the adjacent land parcels to this development are currently undeveloped. Knowing that they may develop in the future means that the roadway network will need to accommodate this future traffic. This development improves Hamblen Road from the intersection with Hook Road to Thompson Drive by adding four additional feet of pavement, which will provide two, 12-foot wide driving lanes, as well as a four-foot wide shoulder. Hook Drive will also be constructed to the minor arterial standards of the City. This will meet or exceed the City's Unimproved Road Policy as the proposed traffic volumes are well below the 5,000 ADT threshold to maintain the Unimproved Roads status.

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Traffic growth of existing traffic assumed to be 2% for 20 years was calculated for future conditions. Higher developed areas may experience lower growth while more undeveloped areas may experience higher growth rates. Given the nature of Hamblen Road with the tight "S" curve around the at-grade railroad crossing to the north, and the "T" intersection to the residential Gambrell Street to the south a fairly moderate growth rate was assumed. The Synchro results for this scenario are shown in the tables below.

Build 2042 AM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	0/A	0/A	9/A	-
Colton's Dr/Hook Rd (U)	8/A	9/A	0/A	5/A
Hamblen Rd/Hook Rd (U)	-	9/A	5/A	0/A
Dustin Dr/Hook Rd (U)	10/A	0/A	7/A	1/A

Build 2042 PM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	1/A	0/A	10/A	-
Colton's Dr/Hook Rd (U)	8/A	9/A	0/A	6/A
Hamblen Rd/Hook Rd (U)	-	10/B	3/A	0/A
Dustin Dr/Hook Rd (U)	10/A	0/A	6/A	2/A

Additionally, the long range plan for Hook Road is to connect from the east, cross the railroad tracks, then extend to the west to the Route 291 Outer Road which connects directionally to north Route 291. This scenario can be seen to attract more traffic long-term than Hamblen Road. Hamblen Road 2042 volumes were approximately quadrupled to assume traffic volumes for Hook Road, directional to be westbound in the AM and eastbound in the PM. The Interim conditions are for two lanes on Hook Road while the Ultimate plan is for it to be four lanes. Results of the two-lane Interim scenarios are in the tables below.

Build 2042 Interim Hook AM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	0/A	0/A	9/A	-
Colton's Dr/Hook Rd (U)	9/A	13/B	0/A	5/A
Hamblen Rd/Hook Rd (U)	-	14/B	1/A	0/A
Dustin Dr/Hook Rd (U)	18/C	0/A	9/A	0/A

Build 2042 Interim Hook PM - Avg. Delay/LOS				
	NB	SB	EB	WB
Baxter Ln/Hamblen Rd (U)	1/A	0/A	10/A	-
Colton's Dr/Hook Rd (U)	10/B	16/C	0/A	1/A
Hamblen Rd/Hook Rd (U)	-	18/C	0/A	0/A
Dustin Dr/Hook Rd (U)	22/C	0/A	9/A	1/A

The improvements made to the adjacent roadway network will occur as land is developed in the area, the roadway network constructed and improved by this project will be able to meet the needs of the future traffic demand.

Lee's Summit Thoroughfare Master Plan Review

In review of the current TFMP, Exhibit 2, it shows Doc Henry Road as a 4 lane North-South arterial extending from M-150 to the proposed alignment of an East-West arterial, Hook Road. The majority of the Doc Henry alignment is located outside of the Lee's Summit city limits in the City of Greenwood. This alignment had been discussed during the preliminary development design within a previous project, Cobey Creek, and determined to be a less than a desirable alignment due to Greenwood's building of a portion of the road with a 3-lane section of road with no consideration of width expansion and their intention of the road being built no further than Gambrell Road, due to the topography further north of Gambrell Road being in the floodway.

Per the Cobey Creek project, the future north-south arterial has been shown to be approximately 1400 feet west of Doc Henry Road with a 4-lane road through a 4 legged round-a-bout and potentially being extended north from that location. Based on this alternate arterial alignment, no consideration for the extension of Doc Henry Road into the Colton's Crossing project has been made. Additionally, with consideration of the Greenway Master Plan, a future 100' right-of-way width would be adequate to provide a four lane roadway, plus median, and a sidewalk on one side of the roadway and a shared-use path on the other.

Conclusions and Recommendations

The following conclusions and recommendations are made regarding the Colton's Crossing Development and the impacts to the local roadway system.

- Existing Hamblen Road experiences approximately 1,000 vehicles per day.
- The development will improve Hamblen Road from the intersection of Hook Drive north to the intersection of Thompson Drive, a distance of approximately 2,800 feet.

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- The development will construct Hook Drive, which will provide a ½-roadway section for a future arterial roadway, and intersections will exceed the City's spacing requirement of 660'. This construction of Hook Drive also conforms to the City's Unimproved Road Policy.
- The development will construct new sidewalk along Hook Drive and throughout the development which will provide facilities for a walkable environment.
- The proposed development will generate 127 AM peak hour trips, and 186 PM peak hour trips.
- Given the low volume of existing roadway traffic and the trips generated by this development, stop controlled intersections will operate adequately after the development is constructed and into the foreseeable future.

Please let me know if you have any questions regarding this memo.

Sincerely,

Nathan Hladky

Nathan Hladky, PE, PTOE
Hg Consult, Inc.

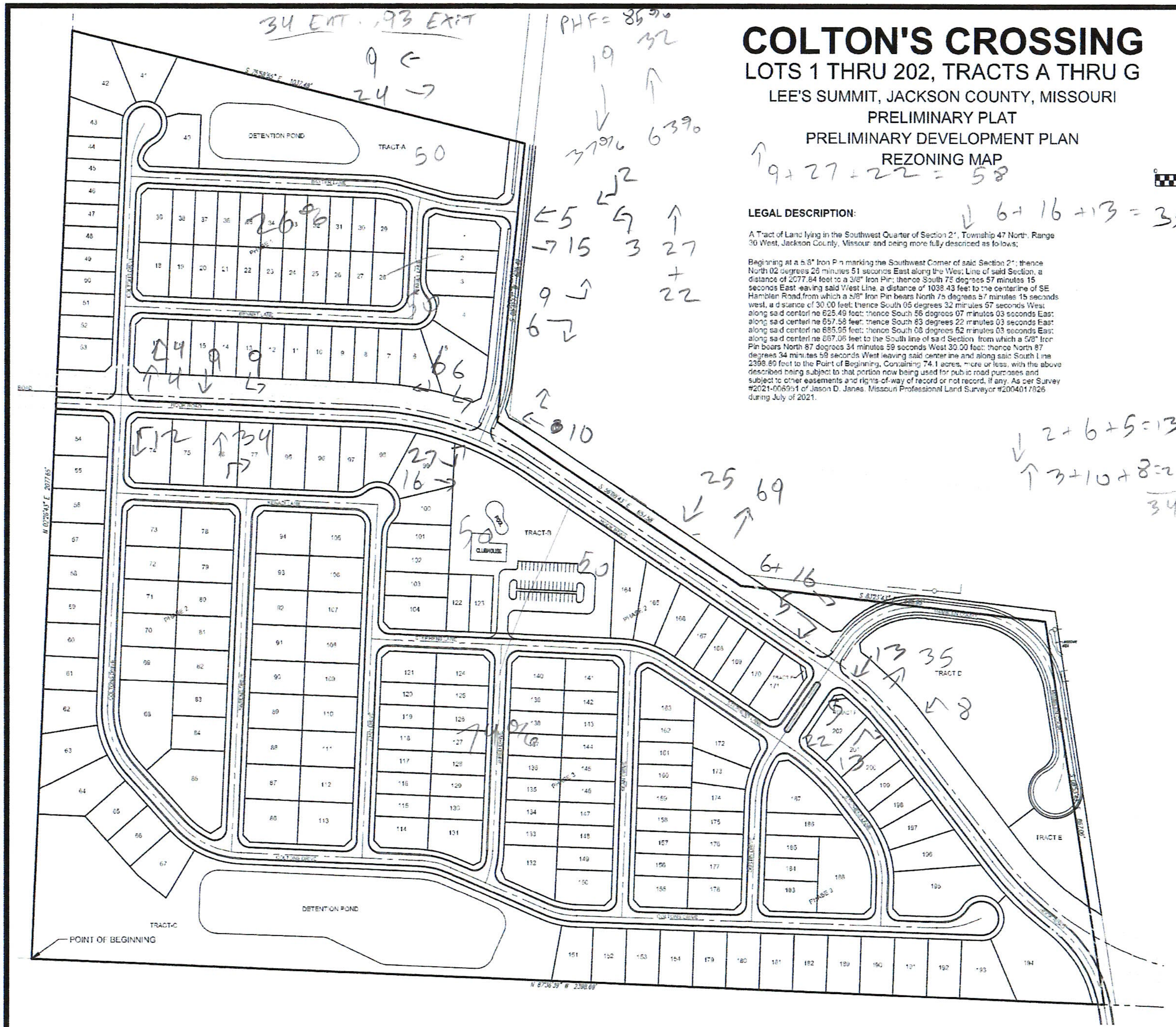
Appendix A – Trip Generation

AM Trip Distributions

COLTON'S CROSSING

LOTS 1 THRU 202, TRACTS A THRU G

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
PRELIMINARY PLAT
PRELIMINARY DEVELOPMENT PLAN
REZONING MAP



VICINITY MAP

NOT TO SCALE

LEGAL DESCRIPTION:

A Tract of Land lying in the Southwest Quarter of Section 21, Township 47 North, Range 30 West, Jackson County, Missouri and being more fully described as follows;

Beginning at a 5/8" Iron Pin marking the Southwest Corner of said Section 21; thence North 02 degrees 26 minutes 51 seconds East along the West Line of said Section, a distance of 2077.84 feet to a 3/8" Iron Pin; thence South 75 degrees 57 minutes 15 seconds East leaving said West Line, a distance of 1038.43 feet to the centerline of SE Hamblen Road,from which a 5/8" Iron Pin bears North 75 degrees 57 minutes 15 seconds west, a distance of 30.00 feet; thence South 05 degrees 32 minutes 57 seconds West along said centerline 625.49 feet; thence South 56 degrees 07 minutes 03 seconds East along said centerline 657.58 feet; thence South 83 degrees 22 minutes 03 seconds East along said centerline 685.95 feet; thence South 08 degrees 52 minutes 03 seconds East along said centerline 867.06 feet to the South line of said Section from which a 5/8" Iron Pin bears North 87 degrees 34 minutes 59 seconds West 30.00 feet; thence North 87 degrees 34 minutes 59 seconds West leaving said centerline and along said South Line 2398.69 feet to the Point of Beginning, Containing 74.1 acres, more or less, with the above described being subject to that portion now being used for public road purposes and subject to other easements and rights-of-way of record or not record, if any. As per Survey #2021-006951 of Jason D. Janes, Missouri Professional Land Surveyor #2004017826 during July of 2021.

NOTES:

1. Tracts "A thru G" are intended for open space and shall be owned and maintained by the Colton's Crossing Owners' Association.
2. A minimum 5 ft. ADA compliant sidewalk is required along one side of Hook Road. A minimum 5 ft. ADA compliant sidewalk is required along one side of all other proposed streets.
3. According to the F.E.MA. Flood Insurance Rate Map Number 29095C0434G, Revised January 20, 2017, this tract graphically lies in OTHER AREAS, ZONE X, defined as areas determined to be outside the 0.2% annual chance floodplain and ZONE X (Future Base Flood), defined as areas of 1% annual chance flood based on future conditions hydrology. No base flood elevations determined.
4. No construction or disturbance of any type, including clearing, grubbing, stripping, fill, excavation, linear grading, paving, or building is allowed in the stream buffer zone except by permission of the City Engineer.
5. All lots with frontage along SW Hook Road shall not be allowed driveway access onto said street.
6. Lots 127 and 128 will need a Geotechnical Report at the time of building permit submittal due to the the presence of the pond that is being filled in.
7. There are no Oil and Gas Wells located on property per MoDNR Geological Survey as of October 19, 2022.

LOT PHASES:
PHASE 1: LOTS 1-53, TRACT-A
PHASE 2: LOTS 54-108, 121-124, 140-142, 163-172, TRACTS B, C & G
PHASE 3: LOTS 109-120, 125-139, 143-162, 173-202, TRACTS D, E & F

SANITARY SEWER ACREAGE:
SEWER SYSTEM TO NORTH (18" PVC) - 16.30 AC
SEWER SYSTEM TO SOUTH (24" PVC) - 52.00 AC.

LOTS:
SINGLE FAMILY LOTS: 134
DUPLEX LOTS: 68
TOTAL DWELLINGS: 270

PROJECT SUMMARY:

EXISTING ZONING: AG
PROPOSED ZONING: RP-3 (10 UNITS/ACRE)
TOTAL BOUNDARY AREA: 74.1 ACRES
STREET TYPE: LOCAL - NEIGHBORHOOD STREET
BUILDING TYPES: SINGLE/MULTI FAMILY HOUSE
MINIMUM LOT SIZE AND WIDTH: 4,000 sq. ft. & 50-ft. WIDE (SF), 70-ft. WIDE (MF)
MINIMUM LIVABLE FLOOR AREA CLASSIFICATION: I
MINIMUM LIVABLE FLOOR AREA: 1,100 SQUARE FEET
AREA - LOTS: 202 (54.58 ACRES)
AREA - OPEN SPACE: 5 TRACTS (14.61 ACRES)

MINIMUM BUILDING SETBACKS:

SINGLE FAMILY LOTS:
FRONT YARD - 25 FEET
SIDE YARD - 5 FEET
REAR YARD - 20 FEET

DUPLEX LOTS:
FRONT YARD - 25 FEET
SIDE YARD - 10 FEET
REAR YARD - 30 FEET

LOT SIZE SUMMARY	
NUMBER OF LOTS	202
MINIMUM LOT SIZE	6,000 SQ.FT.
MAXIMUM LOT SIZE	29,923 SQ.FT.
AVERAGE LOT SIZE	17,961 SQ.FT.
MINIMUM LOT WIDTH	50 FEET
MAXIMUM LOT WIDTH	96 FEET
AVERAGE LOT WIDTH	73 FEET

DEVELOPER
HAMBLEN ROAD PROJECT, LLC
705 B MELODY LANE
LEE'S SUMMIT, MISSOURI 64063
(816) 877-5086
CONTACT - DUSTIN BAXTER

ENGINEER
Hg CONSULT, INC.
1533 LOCUST STREET
KANSAS CITY, MO. 64108
(816) 703-7098
CONTACT - MATT CASTOR

Hg Consult Inc engineers planners
1533 Locust Street, Kansas City, Missouri 64108

MATT CASTOR, MO 2015035104
October 20, 2022

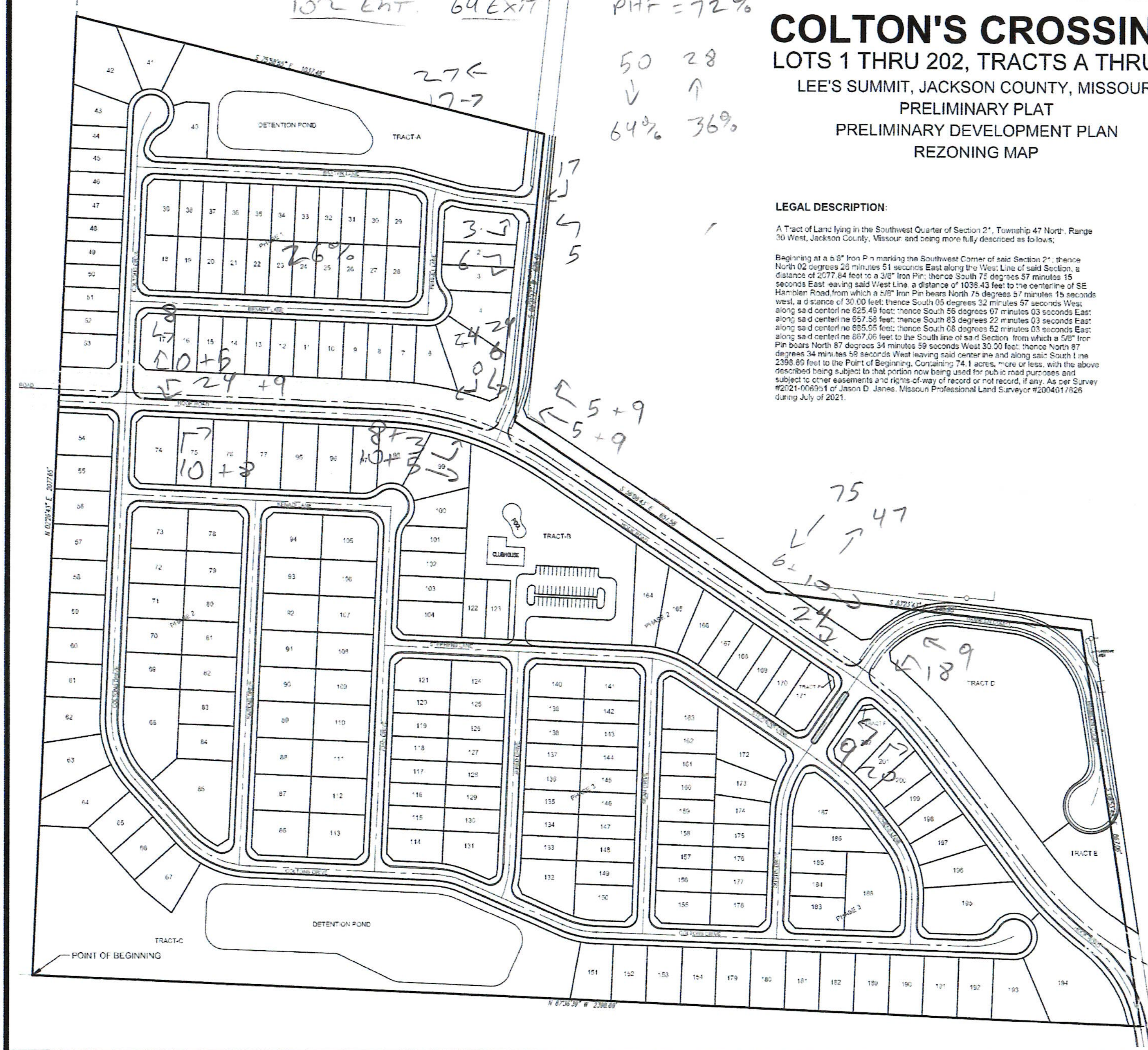
PRELIMINARY PLAT

COLTON'S CROSSING
LOTS 1 THRU 202 AND TRACTS A THRU E
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

21-018 Base
21-018 Preliminary Plat
Oct. 20, 2022
21-018

SHEET 1 OF 5

PM Trip Distributions



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LOTS 1 THRU 202 AND TRACTS A THRU E
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Hg Consult Inc engineers planners
1533 Locust Street, Kansas City, Missouri 64108
MATT CASTOR, MO 2015035109
October 20, 2022

21-018 Base
21-018 Preliminary Plat
Oct. 20, 2022
21-018

1 SHEET OF 5

Appendix B – Synchro Output

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	16	10	57	30	6
Future Vol, veh/h	27	16	10	57	30	6
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	19	12	67	35	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	79	0	-	0	129	46
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	83	-
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	1519	-	-	-	865	1023
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1519	-	-	-	847	1023
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1519	-	-	-	872
HCM Lane V/C Ratio	0.021	-	-	-	0.049
HCM Control Delay (s)	7.4	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	12	0	4	0	0	34	9	0	0
Future Vol, veh/h	0	0	0	12	0	4	0	0	34	9	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	5	0	0	40	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	1	0	0	32	34	1	52	32	3
Stage 1	-	-	-	-	-	-	1	1	-	31	31	-
Stage 2	-	-	-	-	-	-	31	33	-	21	1	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1622	-	-	976	859	1084	947	861	1081
Stage 1	-	-	-	-	-	-	1022	895	-	986	869	-
Stage 2	-	-	-	-	-	-	986	868	-	998	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1622	-	-	969	851	1084	905	853	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	969	851	-	905	853	-
Stage 1	-	-	-	-	-	-	1022	895	-	986	861	-
Stage 2	-	-	-	-	-	-	977	860	-	961	895	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.4	8.4	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1084	1616	-	-	1622	-	-	905
HCM Lane V/C Ratio	0.037	-	-	-	0.009	-	-	0.012
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	6	3	81	30	2
Future Vol, veh/h	9	6	3	81	30	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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	4	95	35	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	139	36	37	0	-	0
Stage 1	36	-	-	-	-	-
Stage 2	103	-	-	-	-	-
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	854	1037	1574	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	851	1037	1574	-	-	-
Mov Cap-2 Maneuver	851	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	921	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1574	-	917	-	-
HCM Lane V/C Ratio	0.002	-	0.019	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	15	14	42	80	24
Future Vol, veh/h	11	15	14	42	80	24
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	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	21	19	58	111	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	77	0	-	0	99	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	51	-
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	1522	-	-	-	900	1021
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1522	-	-	-	891	1021
Mov Cap-2 Maneuver	-	-	-	-	891	-
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1522	-	-	-	918
HCM Lane V/C Ratio	0.01	-	-	-	0.157
HCM Control Delay (s)	7.4	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.6

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	33	0	5	0	0	18	8	0	0
Future Vol, veh/h	0	0	0	33	0	5	0	0	18	8	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	46	0	7	0	0	25	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	7	0	0	1	0	0	97	100	1	110	97	4
Stage 1	-	-	-	-	-	-	1	1	-	96	96	-
Stage 2	-	-	-	-	-	-	96	99	-	14	1	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1622	-	-	885	790	1084	868	793	1080
Stage 1	-	-	-	-	-	-	1022	895	-	911	815	-
Stage 2	-	-	-	-	-	-	911	813	-	1006	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1614	-	-	1622	-	-	866	768	1084	830	771	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	866	768	-	830	771	-
Stage 1	-	-	-	-	-	-	1022	895	-	911	792	-
Stage 2	-	-	-	-	-	-	885	790	-	983	895	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.3	8.4	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1084	1614	-	-	1622	-	-	830
HCM Lane V/C Ratio	0.023	-	-	-	0.028	-	-	0.013
HCM Control Delay (s)	8.4	0	-	-	7.3	0	-	9.4
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	5	48	98	17
Future Vol, veh/h	3	6	5	48	98	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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	8	7	67	136	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	229	148	160	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	81	-	-	-	-	-
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	759	899	1419	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	755	899	1419	-	-	-
Mov Cap-2 Maneuver	755	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1419	-	845	-	-
HCM Lane V/C Ratio	0.005	-	0.015	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	16	10	73	39	6
Future Vol, veh/h	27	16	10	73	39	6
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	19	12	86	46	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	138	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	83	-
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	1495	-	-	-	855	1012
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1495	-	-	-	836	1012
Mov Cap-2 Maneuver	-	-	-	-	836	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1495	-	-	-	856
HCM Lane V/C Ratio	0.021	-	-	-	0.062
HCM Control Delay (s)	7.5	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	12	0	4	0	0	34	9	0	0
Future Vol, veh/h	0	0	0	12	0	4	0	0	34	9	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	5	0	0	40	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	1	0	0	32	34	1	52	32	3
Stage 1	-	-	-	-	-	-	1	1	-	31	31	-
Stage 2	-	-	-	-	-	-	31	33	-	21	1	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1622	-	-	976	859	1084	947	861	1081
Stage 1	-	-	-	-	-	-	1022	895	-	986	869	-
Stage 2	-	-	-	-	-	-	986	868	-	998	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1622	-	-	969	851	1084	905	853	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	969	851	-	905	853	-
Stage 1	-	-	-	-	-	-	1022	895	-	986	861	-
Stage 2	-	-	-	-	-	-	977	860	-	961	895	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.4	8.4	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1084	1616	-	-	1622	-	-	905
HCM Lane V/C Ratio	0.037	-	-	-	0.009	-	-	0.012
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	6	3	97	39	2
Future Vol, veh/h	9	6	3	97	39	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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	4	114	46	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	169	47	48	0	-	0
Stage 1	47	-	-	-	-	-
Stage 2	122	-	-	-	-	-
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	821	1022	1559	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	819	1022	1559	-	-	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	890	-	-
HCM Lane V/C Ratio	0.002	-	0.02	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	15	14	56	104	24
Future Vol, veh/h	11	15	14	56	104	24
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	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	21	19	78	144	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	97	0	-	0	109	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	51	-
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	1496	-	-	-	888	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1496	-	-	-	879	1008
Mov Cap-2 Maneuver	-	-	-	-	879	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1496	-	-	-	901
HCM Lane V/C Ratio	0.01	-	-	-	0.197
HCM Control Delay (s)	7.4	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	33	0	5	0	0	18	8	0	0
Future Vol, veh/h	0	0	0	33	0	5	0	0	18	8	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	46	0	7	0	0	25	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	7	0	0	1	0	0	97	100	1	110	97	4
Stage 1	-	-	-	-	-	-	1	1	-	96	96	-
Stage 2	-	-	-	-	-	-	96	99	-	14	1	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1622	-	-	885	790	1084	868	793	1080
Stage 1	-	-	-	-	-	-	1022	895	-	911	815	-
Stage 2	-	-	-	-	-	-	911	813	-	1006	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1614	-	-	1622	-	-	866	768	1084	830	771	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	866	768	-	830	771	-
Stage 1	-	-	-	-	-	-	1022	895	-	911	792	-
Stage 2	-	-	-	-	-	-	885	790	-	983	895	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.3	8.4	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1084	1614	-	-	1622	-	-	830
HCM Lane V/C Ratio	0.023	-	-	-	0.028	-	-	0.013
HCM Control Delay (s)	8.4	0	-	-	7.3	0	-	9.4
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	5	62	122	17
Future Vol, veh/h	3	6	5	62	122	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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	8	7	86	169	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	281	181	193	0	-	0
Stage 1	181	-	-	-	-	-
Stage 2	100	-	-	-	-	-
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	709	862	1380	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	862	1380	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1380	-	802	-	-
HCM Lane V/C Ratio	0.005	-	0.016	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	166	260	73	39	6
Future Vol, veh/h	27	166	260	73	39	6
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	195	306	86	46	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	392	0	-	0	608	349
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	259	-
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	1167	-	-	-	459	694
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1167	-	-	-	445	694
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1167	-	-	-	467
HCM Lane V/C Ratio	0.027	-	-	-	0.113
HCM Control Delay (s)	8.2	0	-	-	13.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

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	0	150	0	12	250	4	0	0	34	9	0	0
Future Vol, veh/h	0	150	0	12	250	4	0	0	34	9	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	176	0	14	294	5	0	0	40	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	299	0	0	176	0	0	501	503	176	521	501	297
Stage 1	-	-	-	-	-	-	176	176	-	325	325	-
Stage 2	-	-	-	-	-	-	325	327	-	196	176	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1262	-	-	1400	-	-	480	471	867	466	472	742
Stage 1	-	-	-	-	-	-	826	753	-	687	649	-
Stage 2	-	-	-	-	-	-	687	648	-	806	753	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1262	-	-	1400	-	-	476	465	867	440	466	742
Mov Cap-2 Maneuver	-	-	-	-	-	-	476	465	-	440	466	-
Stage 1	-	-	-	-	-	-	826	753	-	687	641	-
Stage 2	-	-	-	-	-	-	679	640	-	769	753	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	9.4	13.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	867	1262	-	-	1400	-	-	440
HCM Lane V/C Ratio	0.046	-	-	-	0.01	-	-	0.024
HCM Control Delay (s)	9.4	0	-	-	7.6	0	-	13.4
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	6	3	97	39	2
Future Vol, veh/h	9	6	3	97	39	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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	4	114	46	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	169	47	48	0	-	0
Stage 1	47	-	-	-	-	-
Stage 2	122	-	-	-	-	-
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	821	1022	1559	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	819	1022	1559	-	-	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	890	-	-
HCM Lane V/C Ratio	0.002	-	0.02	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	265	164	56	104	24
Future Vol, veh/h	11	265	164	56	104	24
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	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	368	228	78	144	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	306	0	-	0	665	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	398	-
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	1255	-	-	-	425	772
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	678	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1255	-	-	-	419	772
Mov Cap-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	678	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1255	-	-	-	458
HCM Lane V/C Ratio	0.012	-	-	-	0.388
HCM Control Delay (s)	7.9	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.8

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	250	0	33	150	5	0	0	18	8	0	0
Future Vol, veh/h	0	250	0	33	150	5	0	0	18	8	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	347	0	46	208	7	0	0	25	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	215	0	0	347	0	0	651	654	347	664	651	212
Stage 1	-	-	-	-	-	-	347	347	-	304	304	-
Stage 2	-	-	-	-	-	-	304	307	-	360	347	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1355	-	-	1212	-	-	382	386	696	374	388	828
Stage 1	-	-	-	-	-	-	669	635	-	705	663	-
Stage 2	-	-	-	-	-	-	705	661	-	658	635	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1355	-	-	1212	-	-	369	369	696	349	371	828
Mov Cap-2 Maneuver	-	-	-	-	-	-	369	369	-	349	371	-
Stage 1	-	-	-	-	-	-	669	635	-	705	634	-
Stage 2	-	-	-	-	-	-	675	633	-	634	635	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.4	10.4	15.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	696	1355	-	-	1212	-	-	349
HCM Lane V/C Ratio	0.036	-	-	-	0.038	-	-	0.032
HCM Control Delay (s)	10.4	0	-	-	8.1	0	-	15.7
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	5	62	122	17
Future Vol, veh/h	3	6	5	62	122	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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	8	7	86	169	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	281	181	193	0	-	0
Stage 1	181	-	-	-	-	-
Stage 2	100	-	-	-	-	-
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	709	862	1380	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	862	1380	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1380	-	802	-	-
HCM Lane V/C Ratio	0.005	-	0.016	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-