Extra Space Traffic Impact Study

650 SE Oldham Parkway
Lee's Summit, Missouri

Prepared for:

E & A Consulting Group, Inc.

Prepared by TranSystems

March 2019

TranSystems

EXPERIENCE | Transportation

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March 4, 2019

Mr. David R. Harnisch, Jr, PE
E & A Consulting Group, Inc.
10909 Mill Valley Road, Suite 100
Omaha, NE 68154

RE: Extra Space Traffic Impact Study
650 SE Oldham Parkway
Lee's Summit, Missouri

Dear Mr. Harnisch:

In response to your request and authorization, TranSystems has completed a traffic impact study for the proposed self-storage facility to be located at 850 SE Oldham Parkway in Lee's Summit, Missouri. The purpose of this study was to assess the impact of the proposed development on the surrounding transportation system.

Included in this study is a discussion of the anticipated impacts of the proposed development on the adjacent street network for the following analysis scenarios:

- Existing Conditions
- Existing plus Development Conditions

We trust that the enclosed information proves beneficial to you and the City of Lee's Summit in this phase of the development process. We appreciate the opportunity to be of service to you and will be available to review this study at your convenience.

Sincerely,
TRANSYSTEMS

By: _____ By: _____

Addison Miller, EIT Jeffrey J. Wilke., PE, PTOE

JJW/ARM:arm:P101190016

Introduction

TranSystems has completed this traffic impact study for the proposed self-storage facility to be located at 650 SE Oldham Parkway in Lee's Summit, Missouri. The purpose of this study was to assess the impact of the proposed development on the surrounding transportation system. The location of the project relative to the major streets in the area is shown on ***Figure A-1*** in ***Appendix A***.

In addition to a description of the proposed development and the surrounding transportation infrastructure, this study includes trip generation estimates, capacity analyses, and a summary of findings.

Proposed Development Plan

The development site is currently vacant land surrounded by commercial land uses. The proposed development is a three-story self-storage mini-warehouse with a basement. This building will have 121,000 square feet of storage space with a 3,750 square foot of covered drive-thru for loading and unloading activities. As part of the development, there will also be a paved parking lot on the south side of the building.

The site will be accessed from a single driveway on the west side of the development, connecting to a private access road. The site driveway will be aligned with a parking aisle in the parking lot of the neighboring grocery store. A copy of the proposed site plan for the development is included on ***Figure A-2*** for reference.

Study Area

To assess the impacts of the proposed development, the intersections listed below were identified for study during the Saturday mid-day and P.M. peak hours of a typical weekday.

- SE Hamblen Road and Access Road
- SE Oldham Parkway and Access Road
- Site Driveway and Access Road

Surrounding Street Network and Land Uses

The development site is bounded by Oldham Parkway on the south, a roller skating rink on the east, U.S. 50 Highway on the north and an access road on the west. To the south of the site, across Oldham Parkway there is a Home Depot store. An Aldi grocery store, Perkin's restaurant and Super 8 motel are three existing business located to the west of the site, which have parking lots accessible from the access road.

The access road is a two-lane private street that runs north/south along the west side of the development site, then curves toward the west. The access road is contained within an ingress-egress easement. The street has curbs and gutters along each side. At the southwest corner of the development site, the access road intersects Oldham Parkway, aligning with a driveway to Home Depot on the south side of the intersection. After curving to the west, the access road intersects with Hamblen Road. The intersection with Hamblen Road is slightly offset from an intersection with a different segment of Oldham Parkway.

Oldham Parkway is a four-lane street along the south edge of the development site. There are two lanes in the eastbound direction, a center left-turn lane and one lane in the westbound direction. Both sides of the street have curbs and gutters, and there is sidewalk along the north side of the street to the west of the access road. The posted speed limit on Oldham Parkway is 40 mph.

Hamblen Road is a four-lane roadway north of Oldham Parkway and a three-lane roadway to the south. There are curbs and gutters along both sides of the street, and there are no sidewalks. The posted speed limit is 35 mph. A raised median on Hamblen Road restricts southbound and westbound left-turns at the intersection with the access road. North of the development site on Hamblen Road, there is an interchange with U.S. Highway 50. North of the interchange Hamblen Road becomes Missouri 291 Highway.

Traffic Counts

Turning-movement traffic volume counts were collected at the study intersections on Saturday, February 9, 2019, from 11:00 A.M. to 1:00 P.M. and on Tuesday February 12, 2019 from 4:00 to 6:00 P.M. Based on the data, the Saturday peak hour generally occurs between 11:30 A.M. and 12:30 P.M., and the weekday P.M. peak hour occurs between 4:30 and 5:30 P.M. The existing lane configurations, traffic control devices, and peak hour traffic volumes have been illustrated on ***Figure A-3***.

Analysis

The scope of analysis for the assessment of the proposed development's impact on the surrounding transportation system is based in large part on the recommended practices of the Institute of Transportation Engineers (ITE), as outlined in their Traffic Engineering Handbook. ITE is a nationally-recognized organization of transportation professionals with members from both private and public sectors. The analysis of the proposed development's impact included development of trip generation and trip distribution estimates as well as a traffic operations assessment for each study scenario. Each of the analysis methodologies and findings are described in the subsequent sections.

Trip Generation

Trip generation estimates were prepared using the Institute of Transportation Engineer's Trip Generation, 10th Edition. ***Table 1*** shows the expected trips to be generated by the proposed development. Additional information related to trip generation is included in ***Appendix B***.

Table 1
Proposed Development Trip Generation

Land Use	Intensity	ITE Code	Average Weekday	Saturday Peak Hour			P.M. Peak Hour		
				Total	In	Out	Total	In	Out
Mini-Warehouse	121,000 sf	151	183	38	22	16	21	10	11
Total Development Trips			**183**	**38**	**22**	**16**	**21**	**10**	**11**

Trip Distribution

The estimated trips generated by the proposed development were distributed onto the street system based on the trip distributions summarized on the next page in ***Table 2***. These distributions are based on existing travel patterns in the area and engineering judgment. The detailed distribution patterns through the study intersections are shown in ***Appendix B***.

Table 2
Trip Distribution

Direction To/From	Percentage
North on Hamblen Road	50%
South on Hamblen Road	25%
East on Oldham Parkway	25%
Total	**100%**

Traffic Operation Assessment

An assessment of traffic operations was made for the scenarios listed below.

- Existing Conditions
- Existing plus Development Conditions

The study intersections were evaluated using the Synchro traffic analysis software package. Calculations were performed based on the methodologies outlined in the Highway Capacity Manual (HCM), 6th Edition, which is published by the Transportation Research Board. The operating conditions at an intersection are graded by the "level of service" experienced by drivers. Level of service (LOS) describes the quality of traffic operating conditions and is rated from "A" to "F". LOS A represents the least congested condition with free-flow movement of traffic and minimal delays. LOS F generally indicates severely congested conditions with excessive delays to motorists. Intermediate grades of B, C, D, and E reflect incremental increases in the average delay per stopped vehicle. Delay is measured in seconds per vehicle. ***Table 3*** shows the upper limit of delay associated with each level of service for unsignalized intersections.

Table 3
Intersection Level of Service Delay Thresholds

Level of Service (LOS)	Unsignalized
A	≤ 10 Seconds
B	≤ 15 Seconds
C	≤ 25 Seconds
D	≤ 35 Seconds
E	≤ 50 Seconds
F	> 50 Seconds

Unsignalized intersections are evaluated based on the movement groupings which are required to yield to other traffic. Typically, these are the left turns off of the major street and the side-street approaches for two-way stop-controlled intersections. At unsignalized intersections lower LOS ratings (D, E and F) do not, in themselves, indicate the need for additional improvements. Many times there are convenient alternative routes to avoid the longer delays. Other times the volumes on the unsignalized approaches are relatively minor when compared to the major street traffic, and improvements such as traffic signal installation may increase the average delay to all users of the intersection.

The decision to install a traffic signal, which is often considered when lower LOS ratings are projected, should be based on engineering studies and the warrants for traffic signal installation as outlined in the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). Signals are typically not recommended in locations where there are convenient alternative paths, or if the installation of a traffic signal would have negative impacts on the surrounding transportation system.

The LOS rating deemed acceptable varies by community, facility type and traffic control device. The City of Lee's Summit has identified LOS C as the minimum desirable goal for unsignalized intersections. However, at unsignalized intersections LOS D or E are often considered acceptable for low to moderate traffic volumes where the installation of a traffic signal is not warranted by the conditions at the intersection, or the location has been deemed undesirable for signalization.

Existing Conditions

The results of the Existing Conditions intersection analyses are summarized in ***Table 3***. The study intersections were evaluated with the lane configurations, traffic volumes, and traffic control devices shown on ***Figure A-3***. The Synchro output files are included in ***Appendix C***.

Table 4
Intersection Operational Analysis
Existing Conditions

Intersection	Saturday Peak Hour		P.M. Peak Hour	
Movement	LOS[1]	Delay[2]	LOS[1]	Delay[2]
Hamblen Road and Access Road				
Northbound Left-Turn	*A*	*9.5*	*A*	*10.0*
Eastbound Left-Turn	***E***	***41.8***	***F***	***87.2***
Eastbound Right-Turn	*B*	*11.4*	*B*	*13.0*
Westbound Right-Turn	*B*	*11.2*	*B*	*11.6*
Access Road and Parking Aisle				
Northbound Left-Turn	*A*	*7.5*	*A*	*7.5*
Eastbound	*A*	*9.6*	*A*	*9.0*
Oldham Parkway and Access Road				
Northbound	***D***	***30.0***	***D***	***27.1***
Southbound	*B*	*13.5*	*C*	*15.3*
Eastbound Left-Turn	*A*	*8.2*	*A*	*8.4*
Westbound Left-Turn	*A*	*8.1*	*A*	*8.0*

1 – Level of Service
2 – Delay in seconds per vehicle

The results in ***Table 4*** indicate that all movements currently operate at acceptable levels of service during the peak hours, except for two movements. The eastbound left-turn movement at the Hamblen Road and access road intersection which operates at LOS E and LOS F during the Saturday Mid-day and P.M. peak hours, respectively. This lower level of service is at the eastbound Oldham Parkway approach. The volume of traffic for this movement is less than the minimum thresholds for traffic signal installation. Additionally, the intersection is only 200 feet south of the interchange, which is undesirable for signalization given the close proximity between intersections. Therefore, no improvements are identified to increase the level of service for this movement.

The northbound left turn movement exiting the Home Depot driveway at Oldham Parkway operates at a LOS D during both peak hours. The volume of traffic for this movement is less than the minimum thresholds for traffic signal installation. Alternate routes are available if delay are unacceptable to drivers. As such, no improvements are identified to increase the level of service for this movement.

Existing plus Development Conditions

The results of the Existing plus Proposed Development Conditions intersection analyses are summarized in ***Table 5***. This study scenario considered the addition of traffic from the proposed development. The study intersections were evaluated with the lane configurations, traffic volumes, and traffic control devices shown on ***Figures A-4*** and ***A-5***. The Synchro output files are included in ***Appendix C***.

Table 5
Intersection Operational Analysis
Existing plus Development Conditions

Intersection / *Movement*	Saturday Peak Hour		P.M. Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]
Hamblen Road and Access Road				
Northbound Left-Turn	*A*	*9.5*	*A*	*10.0*
Eastbound Left-Turn	***E***	***43.3***	***F***	***88.8***
Eastbound Right-Turn	*B*	*11.4*	*B*	*13.0*
Westbound Right-Turn	*B*	*11.4*	*B*	*11.7*
Access Road and Parking Aisle/Site Driveway				
Northbound Left-Turn	*A*	*7.5*	*A*	*7.5*
Southbound Left-Turn	*A*	*7.5*	*A*	*7.4*
Eastbound	*A*	*9.8*	*A*	*9.1*
Westbound	*B*	*11.0*	*B*	*10.2*
Oldham Parkway and Access Road				
Northbound	***D***	***34.1***	***D***	***28.3***
Southbound	*B*	*14.3*	*C*	*15.7*
Eastbound Left-Turn	*A*	*8.3*	*A*	*8.4*
Westbound Left-Turn	*A*	*8.1*	*A*	*8.0*

1 – Level of Service
2 – Delay in seconds per vehicle

As shown in the table, all movement at the intersections are projected to operate at the same levels of service as in the Existing Conditions scenario. With the addition of development traffic, the increase in

intersection delay is projected to be negligible, generally less than a second. The site driveway is projected to operate at an acceptable level of service during both peak hours.

As in the Existing Conditions scenario, the eastbound left-turn movement at the Hamblen Road and access road intersection as well as the northbound movement at the Oldham Parkway and access road intersection both operate at lower levels of service. The addition of development traffic is not projected to increase the volume for either of these movements. Similar to the Existing Conditions scenario, no improvements are identified to increase the levels of service for these movements.

Summary

TranSystems has completed this traffic impact study for the proposed self-storage development to be located at 650 SE Oldham Parkway in Lee's Summit, Missouri. The purpose of this study was to assess the impact of the proposed development on the surrounding transportation system.

The existing conditions show that most movements at the study intersections currently operate at acceptable levels of service. Two movements operate at lower levels of service, however, the traffic volumes for these movements does not minimum thresholds for traffic signal installation. As such, no improvements were identified to increase the level of service for these movements.

The proposed development is projected to generate 34 trips during the Saturday peak hour and 21 trips during the Weekday P.M. peak hour. The traffic generated by the development is relatively low and is projected to have a nominal effect on existing traffic operations. Delays are generally projected to increase by less than one second. As such, all study intersections will continue to operate at the same levels of service as they currently do.

Appendix A - Figures

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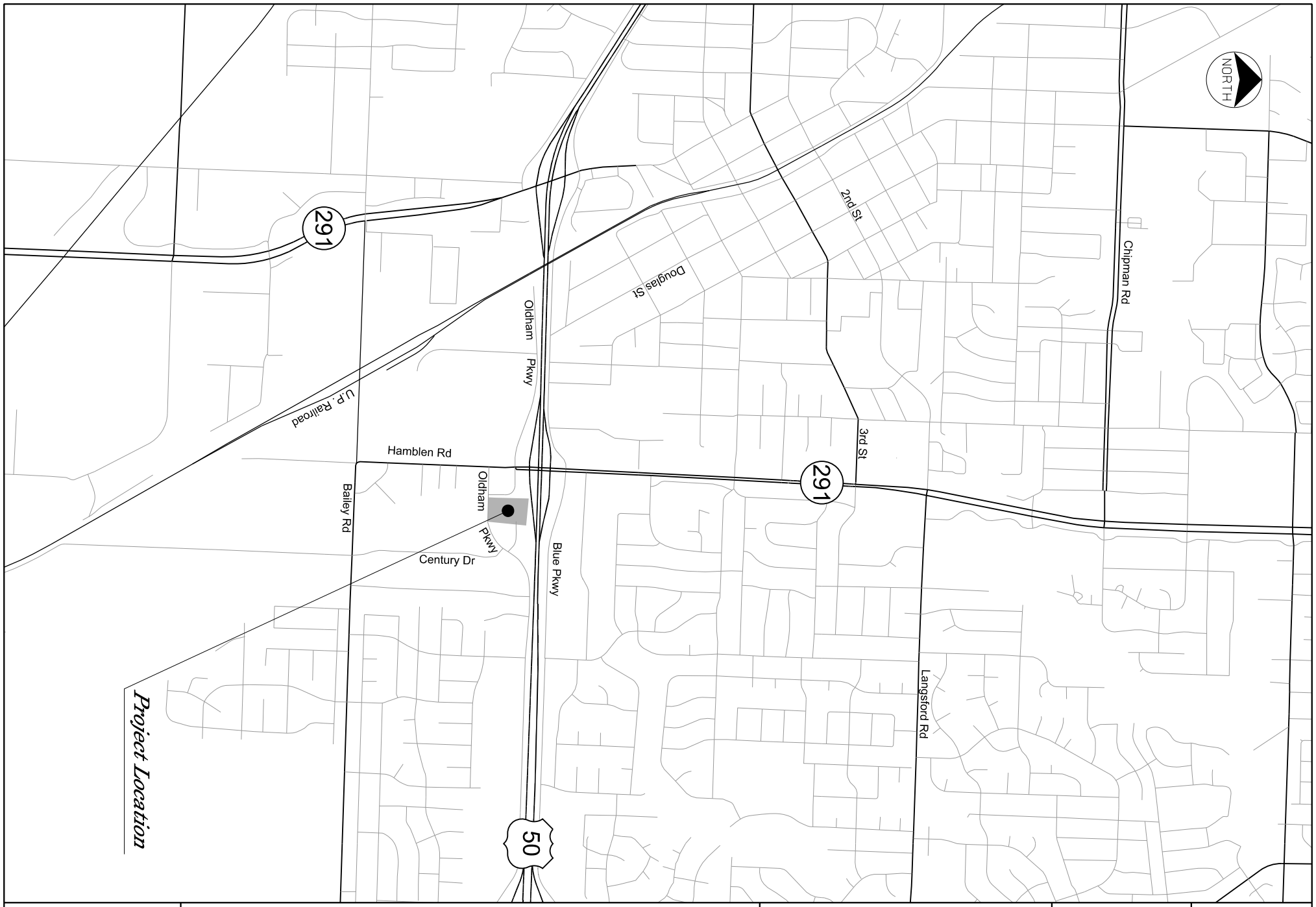
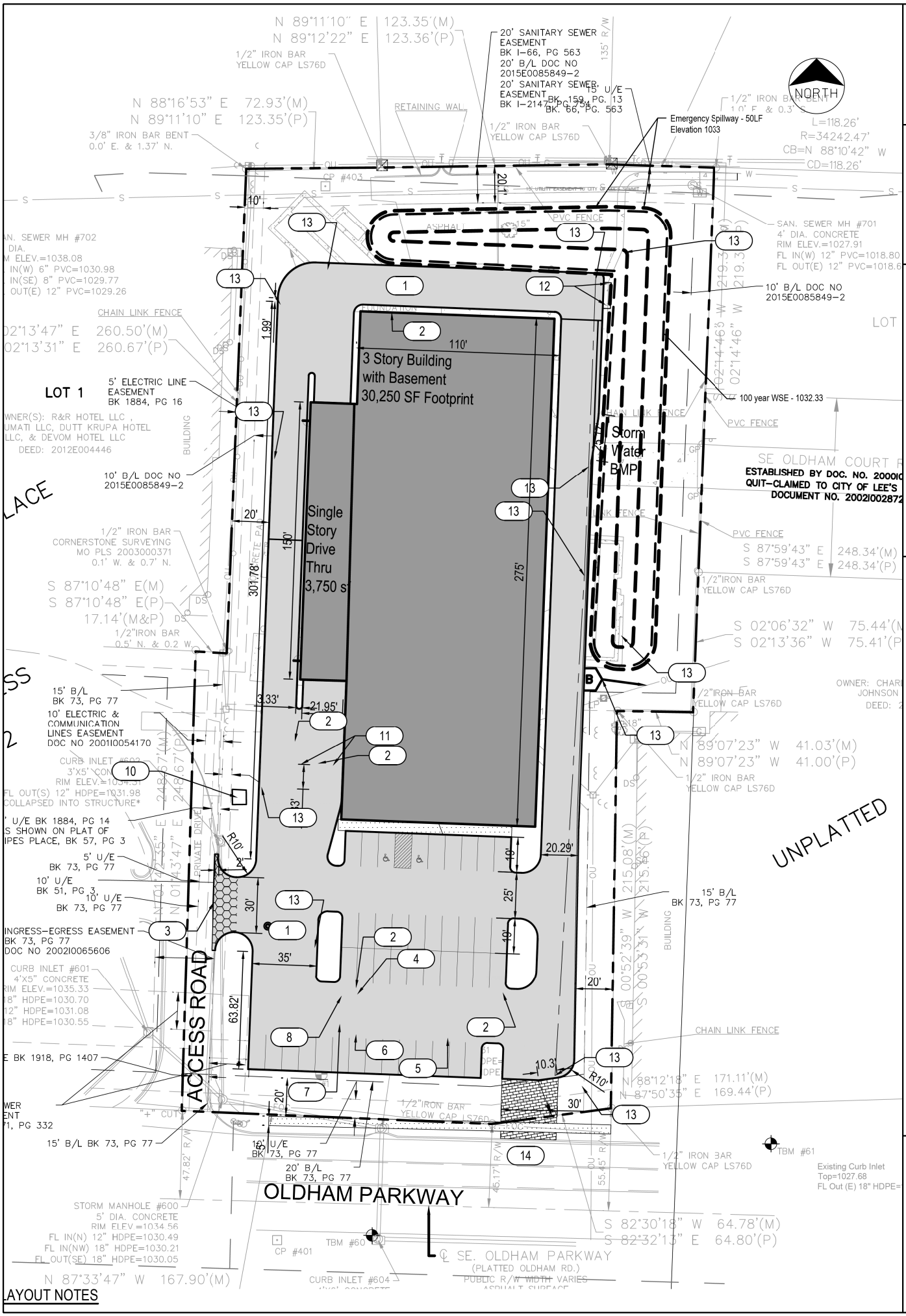


TranSystems	LOCATION MAP	Extra Space Traffic Impact Study Lee's Summit, Missouri	March 2019 No Scale	Figure A-1



LAYOUT NOTES

Figure A-2

March 2019

No Scale

Extra Space
Traffic Impact Study
Lee's Summit, Missouri

SITE PLAN

TranSystems

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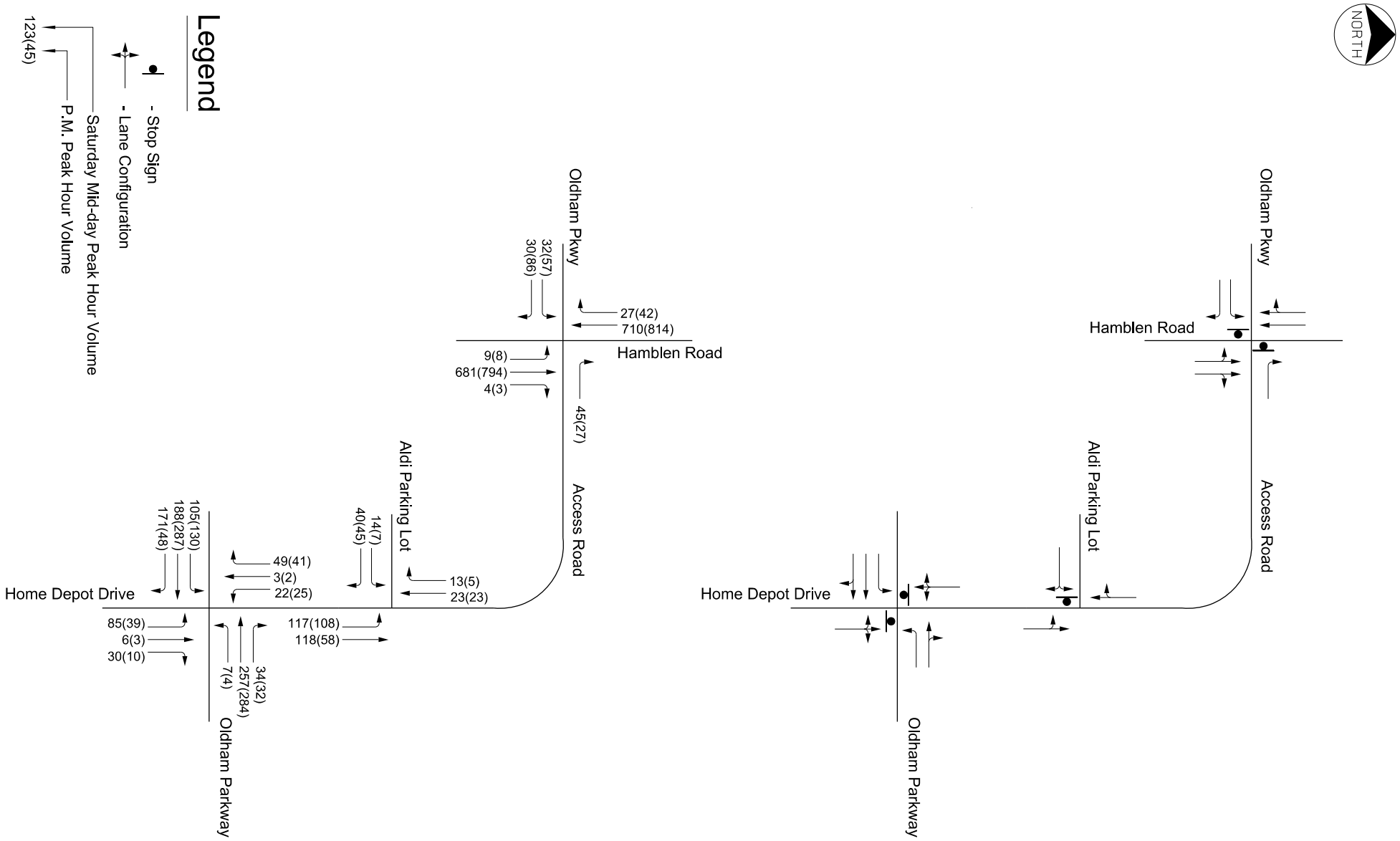
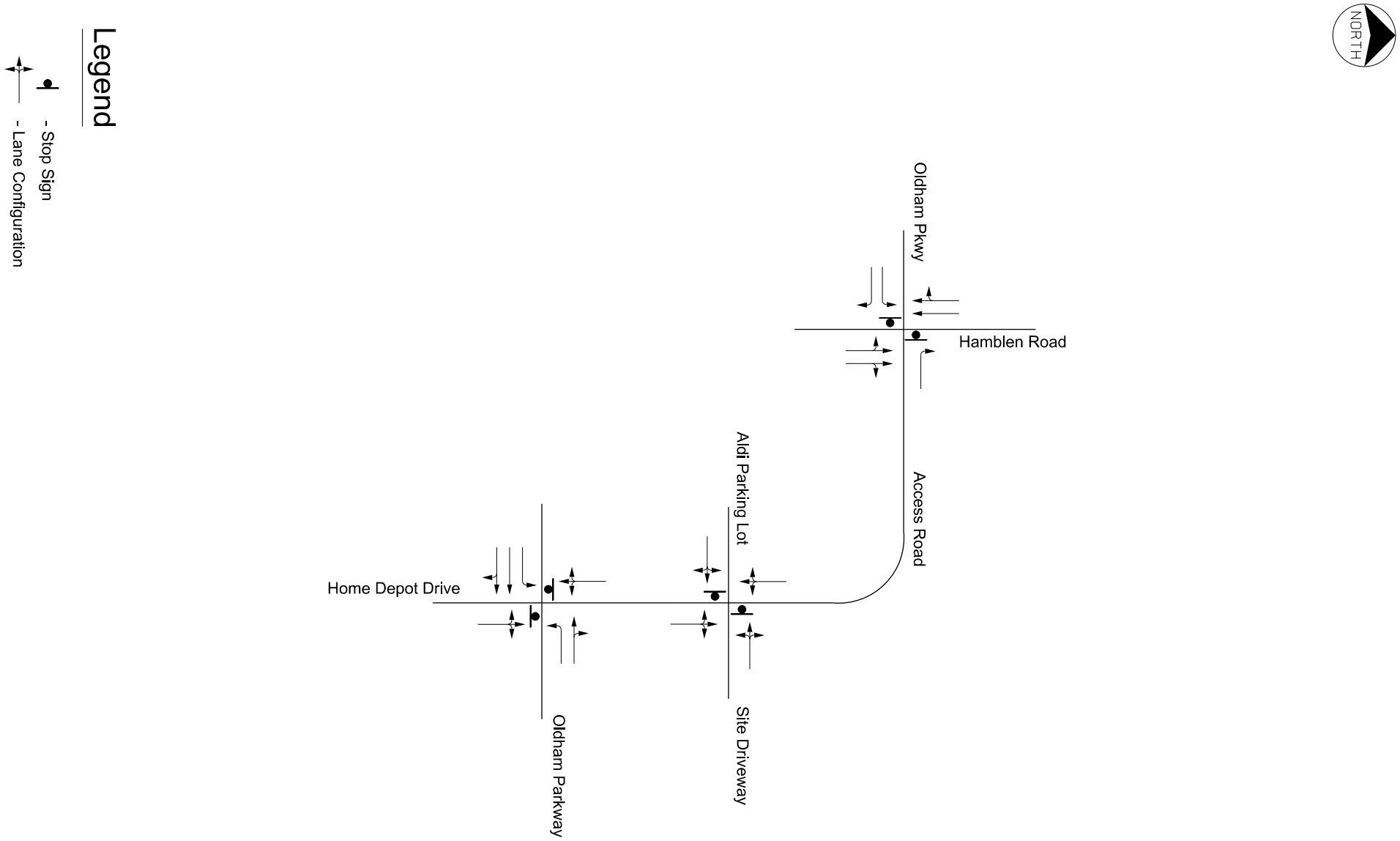
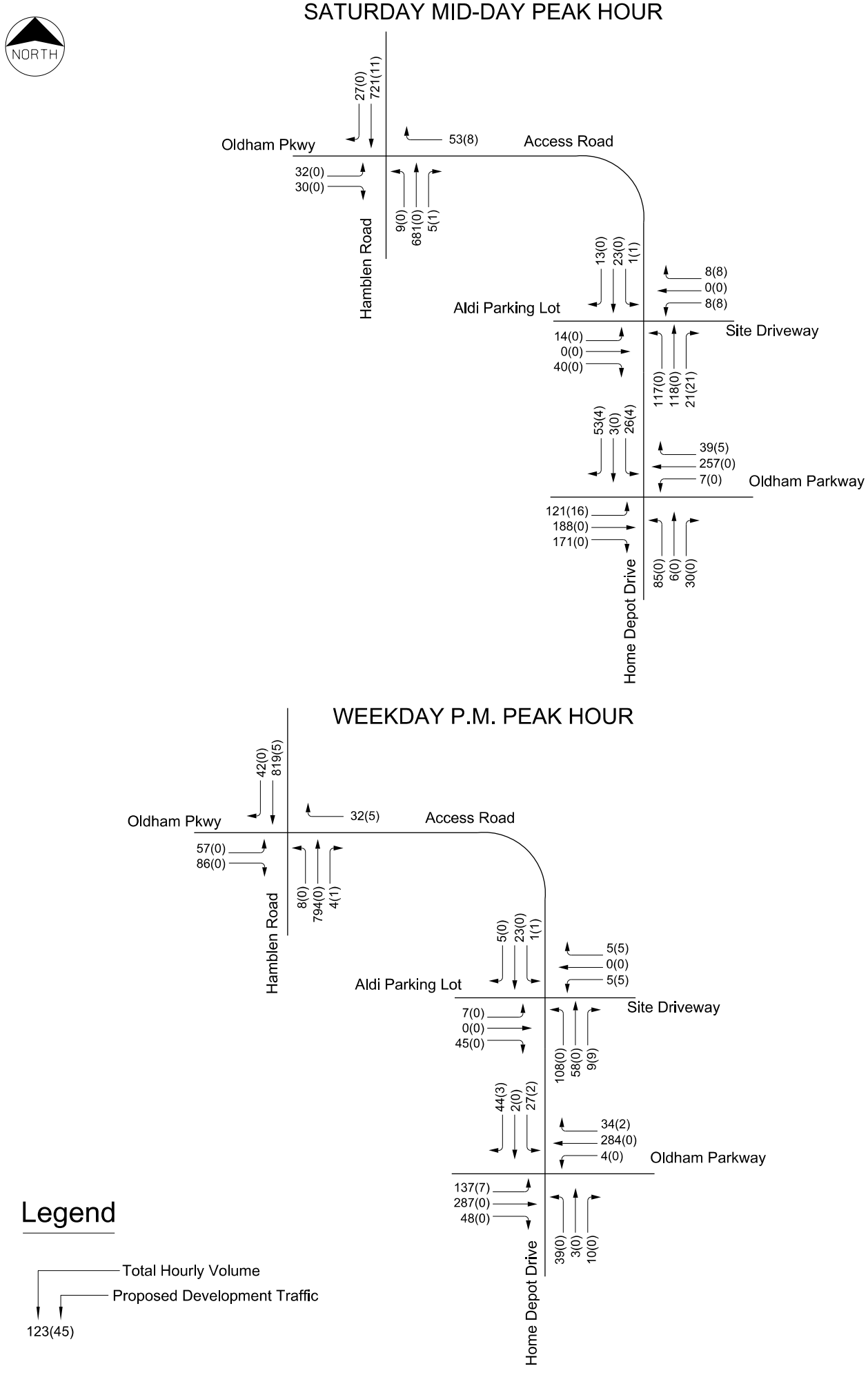


TranSystems	EXISTING CONDITIONS LANE CONFIGURATIONS AND PEAK HOUR VOLUMES	Extra Space Traffic Impact Study Lee's Summit, Missouri	March 2019 No Scale	Figure A-3



TranSystems	EXISTING PLUS DEVELOPMENT CONDITIONS LANE CONFIGURATIONS	Extra Space Traffic Impact Study Lee's Summit, Missouri	March 2019 No Scale	Figure A-4



EXISTING PLUS DEVELOPMENT CONDITIONS
PEAK HOUR VOLUMES

Extra Space
Traffic Impact Study
Lee's Summit, Missouri

March 2019

No Scale

Figure A-5

Trans Systems

Appendix B – Trip Generation and Distribution

See attached worksheets.

Extra Space Traffic Impact Study

Lee's Summit, Missouri

Trip Generation

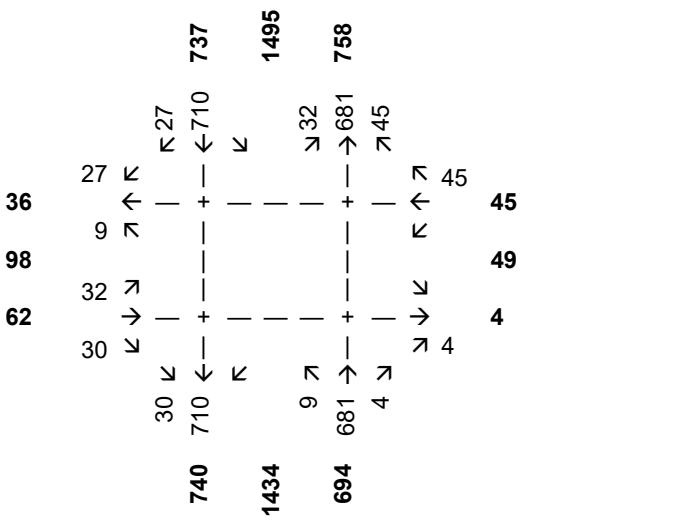
Proposed Land Use	Intensity	ITE Code	Daily	Saturday Mid-day Peak Hour					P.M. Peak Hour				
				Total	% In	% Out	In	Out	Total	% In	% Out	In	Out
Mini-Warehouse	121,000 sf	151	183	38	59%	41%	22	16	21	47%	53%	10	11
Total Development Trips			***183***	***38***			***22***	***16***	***21***			***10***	***11***

Notes:
Trip generation estimates based on 10th Edition
General Urban/Suburban location

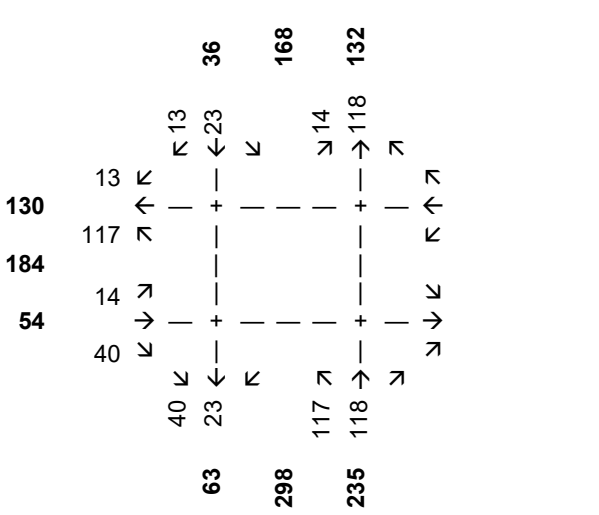
Extra Space Traffic Impact Study
Lee's Summit, Missouri

Existing Traffic Volumes
Saturday Mid-day Peak Hour

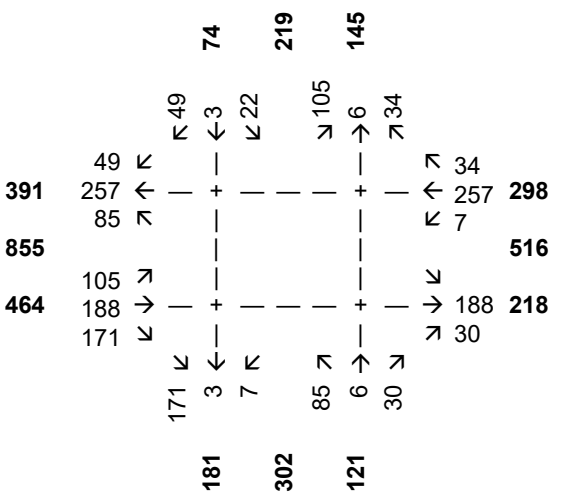
Hamblen Road and Access Drive



Access Drive and Aldi Parking Aisle/Site Drivewa



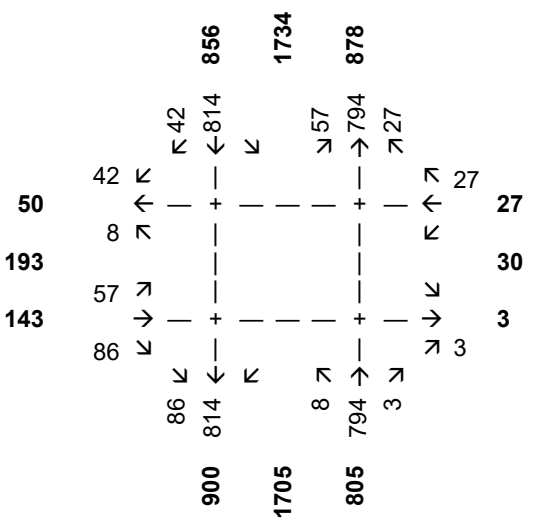
Access Drive/Home Depot Drive and Oldham Parkway



Extra Space Traffic Impact Study
Lee's Summit, Missouri

Existing Traffic Volumes
P.M. Peak Hour

Hamblen Road and Access Drive



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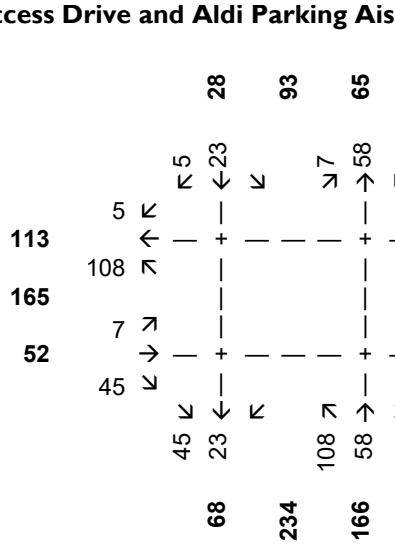
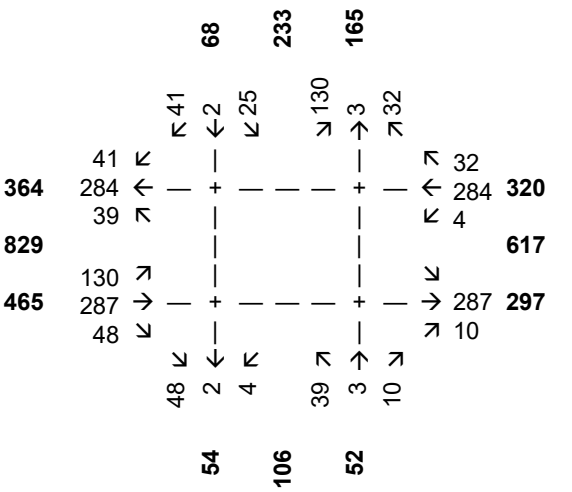


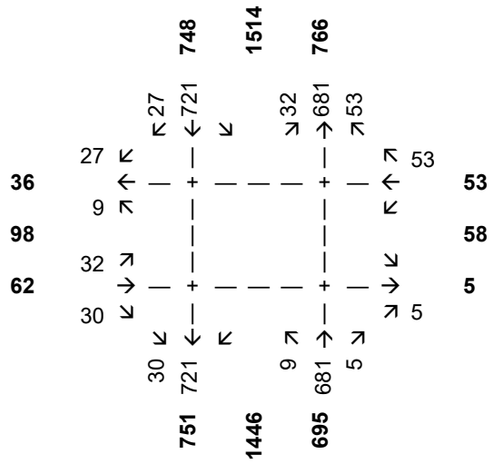
Access Drive/Home Depot Drive and Oldham Parkway



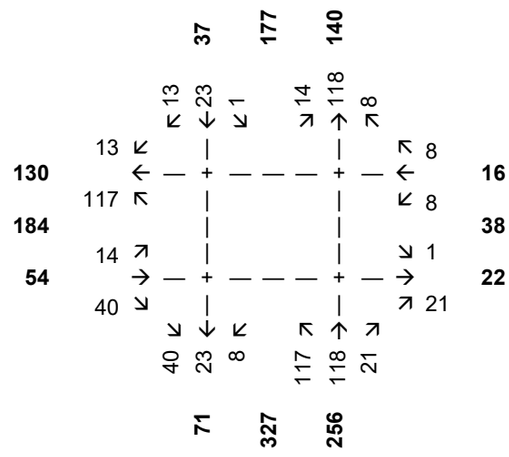
Extra Space Traffic Impact Study
Lee's Summit, Missouri

Existing plus Development Traffic Volumes
Saturday Mid-day Peak Hour

Hamblen Road and Access Drive



Access Drive and Aldi Parking Aisle/Site Driveway



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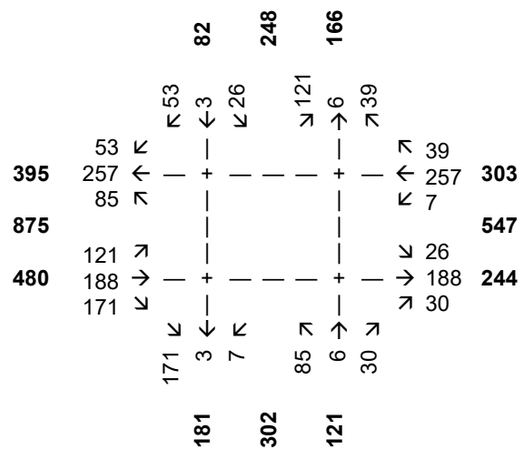
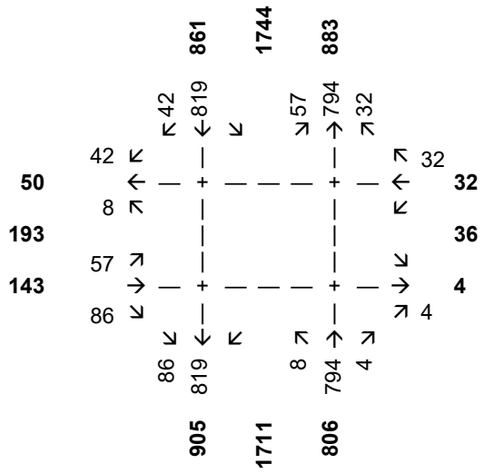


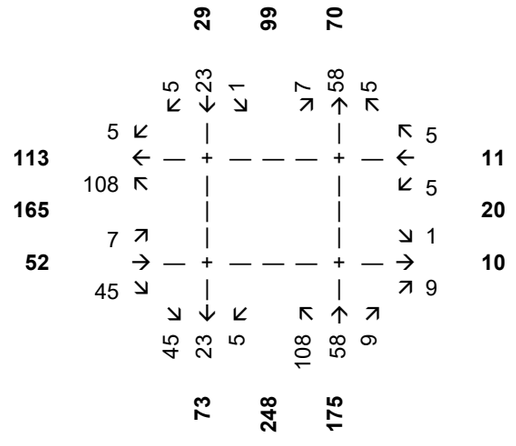
Extra Space Traffic Impact Study
Lee's Summit, Missouri

Existing plus Development Traffic Volumes
P.M. Peak Hour

Hamblen Road and Access Drive



Access Drive and Aldi Parking Aisle/Site Driveway



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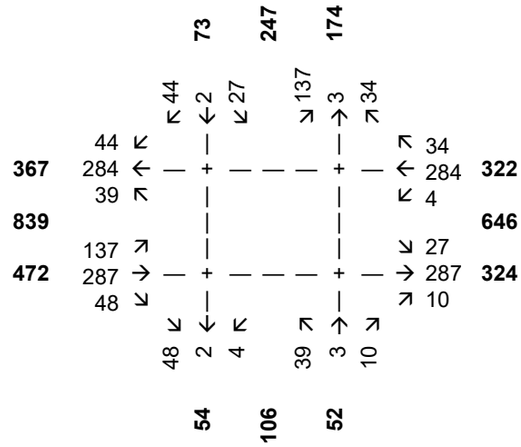
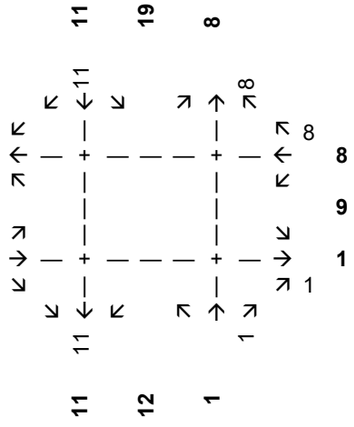


Extra Space Traffic Impact Study
Lee's Summit, Missouri

Proposed Development Trips
Saturday Mid-day Peak Hour

Hamblen Road and Access Drive



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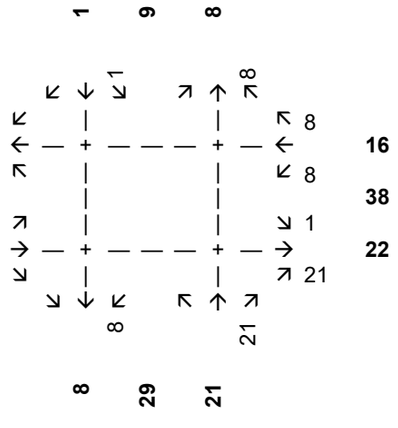

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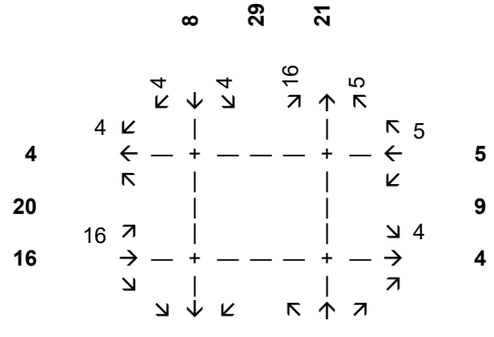
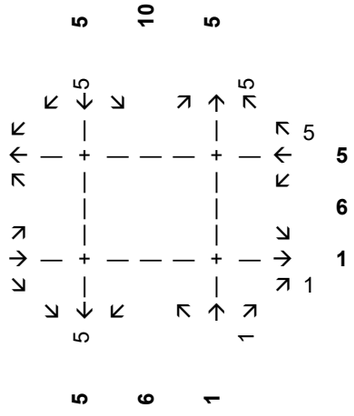


Extra Space Traffic Impact Study
Lee's Summit, Missouri

Proposed Development Trips
P.M. Peak Hour

Hamblen Road and Access Drive



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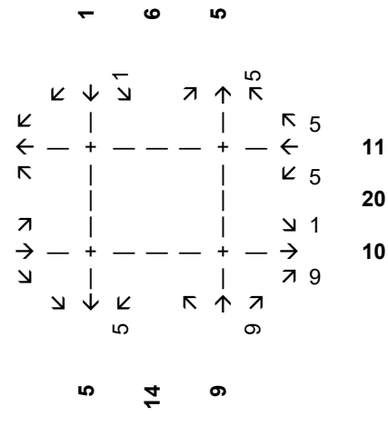

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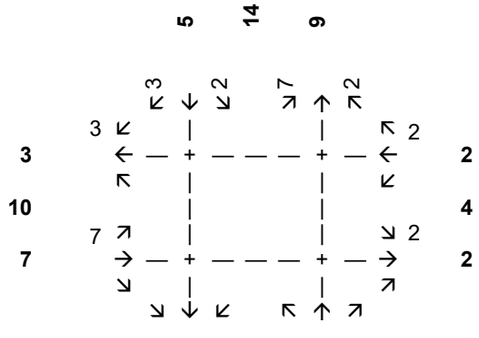
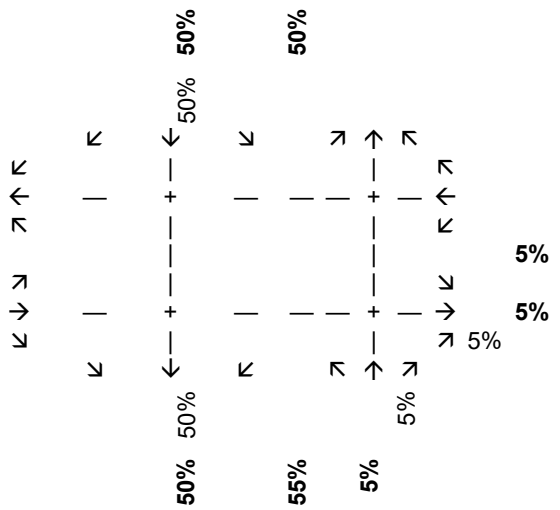


Extra Space Traffic Impact Study
Lee's Summit, Missouri

Trip Distribution
INBOUND

Hamblen Road and Access Drive



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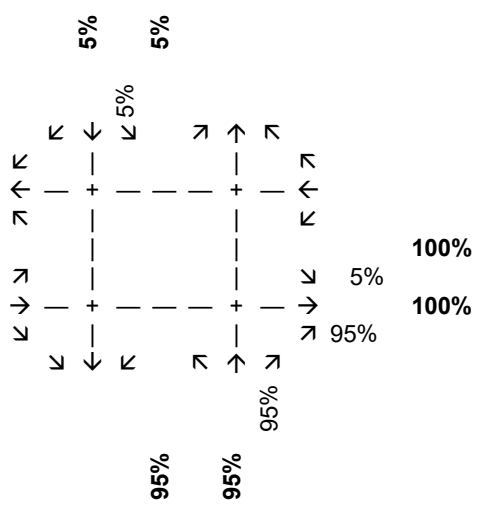
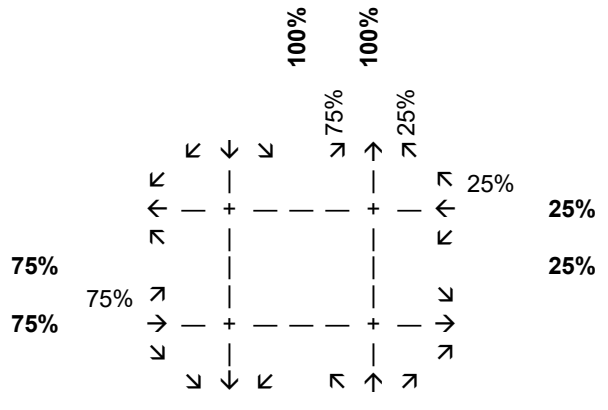


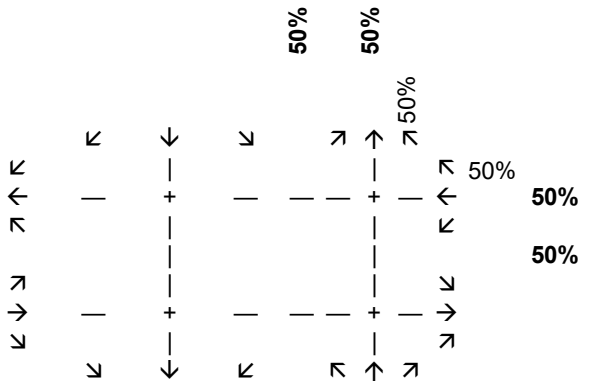
Access Drive/Home Depot Drive and Oldham Parkway



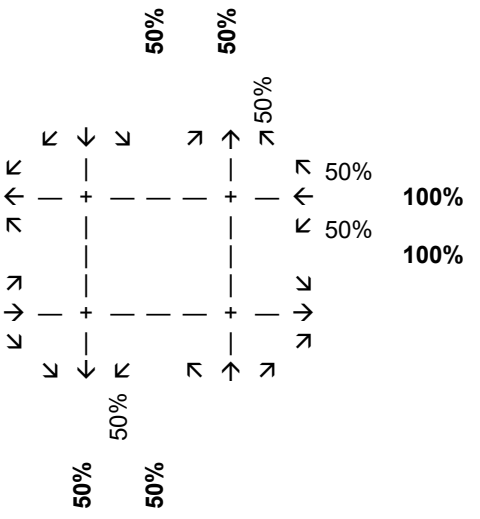
Extra Space Traffic Impact Study
Lee's Summit, Missouri

Trip Distribution
OUTBOUND

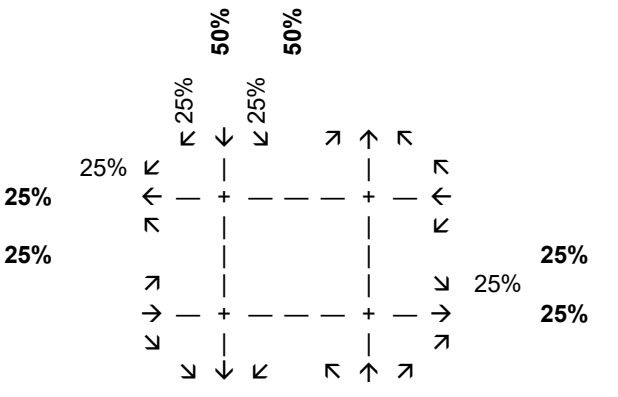
Hamblen Road and Access Drive



Access Drive and Aldi Parking Aisle/Site Driveway



Access Drive/Home Depot Drive and Oldham Parkway



Appendix C – Capacity Analysis Reports

See attached Reports.

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	105	188	171	7	257	34	85	6	30	22	3	49
Future Vol, veh/h	105	188	171	7	257	34	85	6	30	22	3	49
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	165	-	-	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	114	204	186	8	279	37	92	7	33	24	3	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	316	0	0	390	0	0	867	857	195	648	932	298
Stage 1	-	-	-	-	-	-	525	525	-	314	314	-
Stage 2	-	-	-	-	-	-	342	332	-	334	618	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1243	-	-	1167	-	-	260	294	814	369	266	741
Stage 1	-	-	-	-	-	-	505	528	-	696	656	-
Stage 2	-	-	-	-	-	-	672	644	-	654	480	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1243	-	-	1167	-	-	221	265	814	322	240	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	221	265	-	322	240	-
Stage 1	-	-	-	-	-	-	459	479	-	632	651	-
Stage 2	-	-	-	-	-	-	616	639	-	562	436	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.2	30	13.5
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	272	1243	-	-	1167	-	-	504
HCM Lane V/C Ratio	0.484	0.092	-	-	0.007	-	-	0.16
HCM Control Delay (s)	30	8.2	-	-	8.1	-	-	13.5
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.5	0.3	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	30	0	0	45	9	681	4	0	710	27
Future Vol, veh/h	32	0	30	0	0	45	9	681	4	0	710	27
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	0	-	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	35	0	33	0	0	49	10	740	4	0	772	29

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1177	-	401	-	-	372	801	0	0	-	-	0
Stage 1	787	-	-	-	-	-	-	-	-	-	-	-
Stage 2	390	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	146	0	599	0	0	625	818	-	-	0	-	-
Stage 1	351	0	-	0	0	-	-	-	-	0	-	-
Stage 2	606	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	132	-	599	-	-	625	818	-	-	-	-	-
Mov Cap-2 Maneuver	132	-	-	-	-	-	-	-	-	-	-	-
Stage 1	344	-	-	-	-	-	-	-	-	-	-	-
Stage 2	547	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.1	11.2	0.2	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	818	-	-	132	599	625	-	-
HCM Lane V/C Ratio	0.012	-	-	0.264	0.054	0.078	-	-
HCM Control Delay (s)	9.5	0.1	-	41.8	11.4	11.2	-	-
HCM Lane LOS	A	A	-	E	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.2	0.3	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	40	117	118	23	13
Future Vol, veh/h	14	40	117	118	23	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	15	43	127	128	25	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	414	32	39	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	382	-	-	-	-	-
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	595	1042	1571	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	543	1042	1571	-	-	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	3.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	842	-	-
HCM Lane V/C Ratio	0.081	-	0.07	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	130	287	48	4	284	32	39	3	10	25	2	41
Future Vol, veh/h	130	287	48	4	284	32	39	3	10	25	2	41
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	165	-	-	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	141	312	52	4	309	35	42	3	11	27	2	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	344	0	0	364	0	0	978	972	182	775	981	327
Stage 1	-	-	-	-	-	-	620	620	-	335	335	-
Stage 2	-	-	-	-	-	-	358	352	-	440	646	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1213	-	-	1193	-	-	217	252	830	301	249	713
Stage 1	-	-	-	-	-	-	443	479	-	678	642	-
Stage 2	-	-	-	-	-	-	659	631	-	567	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1213	-	-	1193	-	-	184	222	830	267	219	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	184	222	-	267	219	-
Stage 1	-	-	-	-	-	-	392	423	-	599	640	-
Stage 2	-	-	-	-	-	-	614	629	-	491	412	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.1	27.1	15.3
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	219	1213	-	-	1193	-	-	424
HCM Lane V/C Ratio	0.258	0.116	-	-	0.004	-	-	0.174
HCM Control Delay (s)	27.1	8.4	-	-	8	-	-	15.3
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.4	-	-	0	-	-	0.6

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	57	0	86	0	0	27	8	794	3	0	814	42
Future Vol, veh/h	57	0	86	0	0	27	8	794	3	0	814	42
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	0	-	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	62	0	93	0	0	29	9	863	3	0	885	46

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1358	-	466	-	-	433	931	0	0	-	-	0
Stage 1	908	-	-	-	-	-	-	-	-	-	-	-
Stage 2	450	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	107	0	543	0	0	571	731	-	-	0	-	-
Stage 1	296	0	-	0	0	-	-	-	-	0	-	-
Stage 2	558	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	100	-	543	-	-	571	731	-	-	-	-	-
Mov Cap-2 Maneuver	100	-	-	-	-	-	-	-	-	-	-	-
Stage 1	289	-	-	-	-	-	-	-	-	-	-	-
Stage 2	517	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	42.6	11.6	0.2	0
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	731	-	-	100	543	571	-	-
HCM Lane V/C Ratio	0.012	-	-	0.62	0.172	0.051	-	-
HCM Control Delay (s)	10	0.1	-	87.2	13	11.6	-	-
HCM Lane LOS	A	A	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	3	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	45	108	58	23	5
Future Vol, veh/h	7	45	108	58	23	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	8	49	117	63	25	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	325	28	30	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	297	-	-	-	-	-
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	669	1047	1583	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	617	1047	1583	-	-	-
Mov Cap-2 Maneuver	617	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	754	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1583	-	957	-	-
HCM Lane V/C Ratio	0.074	-	0.059	-	-
HCM Control Delay (s)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	121	188	171	7	257	39	85	6	30	26	3	53
Future Vol, veh/h	121	188	171	7	257	39	85	6	30	26	3	53
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	165	-	-	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	132	204	186	8	279	42	92	7	33	28	3	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	390	0	0	908	898	195	686	970	300
Stage 1	-	-	-	-	-	-	561	561	-	316	316	-
Stage 2	-	-	-	-	-	-	347	337	-	370	654	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1237	-	-	1167	-	-	243	278	814	347	252	739
Stage 1	-	-	-	-	-	-	480	509	-	694	654	-
Stage 2	-	-	-	-	-	-	668	640	-	623	462	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1237	-	-	1167	-	-	202	247	814	298	224	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	247	-	298	224	-
Stage 1	-	-	-	-	-	-	429	455	-	620	649	-
Stage 2	-	-	-	-	-	-	609	636	-	527	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.2	34.1	14.3
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	251	1237	-	-	1167	-	-	476
HCM Lane V/C Ratio	0.524	0.106	-	-	0.007	-	-	0.187
HCM Control Delay (s)	34.1	8.3	-	-	8.1	-	-	14.3
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.8	0.4	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	30	0	0	53	9	681	5	0	721	27
Future Vol, veh/h	32	0	30	0	0	53	9	681	5	0	721	27
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	0	-	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	35	0	33	0	0	58	10	740	5	0	784	29

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	1189	-	407	-	-	373	813	0	0	-	-	0
Stage 1	799	-	-	-	-	-	-	-	-	-	-	-
Stage 2	390	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	143	0	593	0	0	624	810	-	-	0	-	-
Stage 1	345	0	-	0	0	-	-	-	-	0	-	-
Stage 2	606	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	-	593	-	-	624	810	-	-	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-	-	-	-	-	-	-
Stage 1	338	-	-	-	-	-	-	-	-	-	-	-
Stage 2	539	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.9	11.4	0.2	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	810	-	-	128	593	624	-	-
HCM Lane V/C Ratio	0.012	-	-	0.272	0.055	0.092	-	-
HCM Control Delay (s)	9.5	0.1	-	43.3	11.4	11.4	-	-
HCM Lane LOS	A	A	-	E	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.2	0.3	-	-

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	14	0	40	8	0	8	117	118	21	1	23	13
Future Vol, veh/h	14	0	40	8	0	8	117	118	21	1	23	13
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	15	0	43	9	0	9	127	128	23	1	25	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	432	439	32	450	435	140	39	0	0	151	0	0
Stage 1	34	34	-	394	394	-	-	-	-	-	-	-
Stage 2	398	405	-	56	41	-	-	-	-	-	-	-
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	534	512	1042	519	514	908	1571	-	-	1430	-	-
Stage 1	982	867	-	631	605	-	-	-	-	-	-	-
Stage 2	628	598	-	956	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	493	466	1042	463	468	908	1571	-	-	1430	-	-
Mov Cap-2 Maneuver	493	466	-	463	468	-	-	-	-	-	-	-
Stage 1	896	866	-	575	552	-	-	-	-	-	-	-
Stage 2	567	545	-	915	860	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	11	3.4	0.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1571	-	-	809	613	1430	-	-
HCM Lane V/C Ratio	0.081	-	-	0.073	0.028	0.001	-	-
HCM Control Delay (s)	7.5	0	-	9.8	11	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	287	48	4	284	34	39	3	10	27	2	44
Future Vol, veh/h	137	287	48	4	284	34	39	3	10	27	2	44
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	165	-	-	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	149	312	52	4	309	37	42	3	11	29	2	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	364	0	0	997	990	182	792	998	328
Stage 1	-	-	-	-	-	-	636	636	-	336	336	-
Stage 2	-	-	-	-	-	-	361	354	-	456	662	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1211	-	-	1193	-	-	210	246	830	293	243	713
Stage 1	-	-	-	-	-	-	433	471	-	677	641	-
Stage 2	-	-	-	-	-	-	657	630	-	554	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1211	-	-	1193	-	-	176	215	830	258	212	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	176	215	-	258	212	-
Stage 1	-	-	-	-	-	-	380	413	-	594	639	-
Stage 2	-	-	-	-	-	-	609	628	-	476	402	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.1	28.3	15.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	210	1211	-	-	1193	-	-	415
HCM Lane V/C Ratio	0.269	0.123	-	-	0.004	-	-	0.191
HCM Control Delay (s)	28.3	8.4	-	-	8	-	-	15.7
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.4	-	-	0	-	-	0.7

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	57	0	86	0	0	32	8	794	4	0	819	42
Future Vol, veh/h	57	0	86	0	0	32	8	794	4	0	819	42
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	0	-	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	62	0	93	0	0	35	9	863	4	0	890	46

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1363	-	468	-	-	434	936	0	0	-	-	0
Stage 1	913	-	-	-	-	-	-	-	-	-	-	-
Stage 2	450	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	107	0	542	0	0	570	727	-	-	0	-	-
Stage 1	294	0	-	0	0	-	-	-	-	0	-	-
Stage 2	558	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	-	542	-	-	570	727	-	-	-	-	-
Mov Cap-2 Maneuver	99	-	-	-	-	-	-	-	-	-	-	-
Stage 1	287	-	-	-	-	-	-	-	-	-	-	-
Stage 2	511	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43.2	11.7	0.2	0
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	727	-	-	99	542	570	-	-
HCM Lane V/C Ratio	0.012	-	-	0.626	0.172	0.061	-	-
HCM Control Delay (s)	10	0.1	-	88.8	13	11.7	-	-
HCM Lane LOS	B	A	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	3	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	0	45	5	0	5	108	58	9	1	23	5
Future Vol, veh/h	7	0	45	5	0	5	108	58	9	1	23	5
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	8	0	49	5	0	5	117	63	10	1	25	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	335	337	28	356	334	68	30	0	0	73	0	0
Stage 1	30	30	-	302	302	-	-	-	-	-	-	-
Stage 2	305	307	-	54	32	-	-	-	-	-	-	-
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	619	584	1047	599	586	995	1583	-	-	1527	-	-
Stage 1	987	870	-	707	664	-	-	-	-	-	-	-
Stage 2	705	661	-	958	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	579	538	1047	537	540	995	1583	-	-	1527	-	-
Mov Cap-2 Maneuver	579	538	-	537	540	-	-	-	-	-	-	-
Stage 1	911	869	-	653	613	-	-	-	-	-	-	-
Stage 2	647	610	-	912	867	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	10.2	4.6	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1583	-	-	944	698	1527	-	-
HCM Lane V/C Ratio	0.074	-	-	0.06	0.016	0.001	-	-
HCM Control Delay (s)	7.5	0	-	9.1	10.2	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-