

Ref: 8707

June 15, 2021

Ms. Jean M. Bubon, AICP Town Planner Town of Sturbridge 301 Main Street Sturbridge, MA 01566

Re: Response to Follow-Up Peer Review

Proposed Travel Center - 195 Charlton Road (Route 20)

Sturbridge, Massachusetts

#### Dear Jean:

Vanasse & Associates, Inc. (VAI) is providing responses to the follow-up comments that were raised in the June 3, 2021 Peer Review memorandum prepared by Pare Corporation (Pare) on behalf of the Town in reference to their review of the April 2021 Transportation Impact Assessment (the "April 2021 TIA") and the subsequent May 20, 2021 Response to Comments letter prepared by VAI in support of the proposed travel center to be located at 195 Charlton Road (Route 20) in Sturbridge, Massachusetts (hereafter referred to as the "Project"). Listed below are the comments that were identified by Pare in the subject memorandum that required a response followed by our response on behalf of the Applicant.

## Vanasse Traffic Impact Study, dated April 2021 and Response to Comments dated May 20, 2021:

## **Project Description**

Comment 1: The applicant's traffic engineer has stated that an EENF is being prepared for the project

> pursuant to the requirements of the MEPA and will be followed by the preparation of an EIR. Has further coordination occurred with MassDOT and where does the EENF stand.

**Response:** The EENF has been filed with the MEPA Office and was noticed in the June 9, 2021

Environmental Monitor (EEA No. 16389). The Project proponent consulted with MassDOT prior to the filing of the EENF and the accompanying Transportation Impact

Assessment incorporates the initial comments that were provided by MassDOT.

**Comment 2:** Also has any further progress been made with the relocation of the bank driveway been

made. Without this realignment of the driveway, left turn movements out of the bank

driveway will be difficult due to queuing of traffic at the light.

**Response:** Subject to MassDOT review and approval, Cornerstone Bank has agreed to relocate their

(978) 474-8800

driveway so as to be located opposite the primary Project site driveway and included as a

part of the proposed signalized intersection.

Ms. Jean M. Bubon, AICP June 15, 2021 Page 2 of 5

## **Comment 3:**

Also, for the secondary access, the study does not take into account the business across the street and what impacts the two-way left turn lane may have on truck traffic exiting the proposed site that will need to cross two travel lanes and the proposed two-way left turn lane. Please provide further clarification.

#### **Response:**

The planned improvements to Route 20 will include the addition of a center turn lane that will facilitate left-turn movements entering and exiting the east Project site driveway and the driveways located along this section of Route 20 opposite the Project site. The center turn lane allows left-turn movements to be completed in two stages, with vehicles using the center turn lane to wait for a gap in traffic in the opposing direction of travel to complete the left-turn maneuver without impeding through traffic. The April 2021 TIA documents that the available lines of sight along this section of Route 20 meet or exceed the minimum sight distance to allow a vehicle to safely exit the subject driveways and cross two lanes of traffic to complete left-turn maneuvers. Further and as acknowledged by Pare, the proposed traffic signal that will be installed at the primary Project site driveway intersection will create gaps in the flow of eastbound traffic that will allow for trucks to exit from the driveway in a safe manner.

As presented in the May 20, 2021 Response to Comments letter, the number of trucks exiting from the east driveway is expected to be relatively minor and will be dispersed given the limited accommodations that are afforded to park such vehicles within the Project site (two parking spaces) and the time that is required to fuel such vehicles at the four (4) pump diesel pumps. These modest accommodations for parking and fueling of large trucks physically limit the number of trucks exiting from the east driveway.

## **Existing Traffic Volumes**

#### **Comment:**

.....please provide more information related to traffic from business across Route 20 at the secondary access to the proposed site and an analysis of how this intersection will operate. Pare reviewed this development in 2017. The proposed office use was anticipated to generate 98 trips [in] the morning peak hour (86 in/12 out) and 124 trips in the p.m. peak hour (22 in/102 out). Please provide volumes that could/are anticipated during the peak conditions and what the impacts are. Also, please clarify the impact of the additional traffic.

#### **Response:**

A review of the occupancy of the office building located at 198 Charlton Road (opposite the Project site) at the time that the traffic counts that form the basis of the April 2021 TIA was performed (October 2020) indicates that the building was approximately 1/3 occupied. As such, the traffic volumes associated with the office building were increased to reflect the predicted traffic volumes that were identified by PARE (98 vehicle trips during the weekday morning peak-hour and 124 vehicle trips during the weekday evening peak-hour; traffic volumes were assumed to be negligible during the Saturday midday peak-hour). The driveway to the office building and the associated traffic volumes have been added to the traffic volume networks, with Figures 3R, 4R and 5R depicting the revised 2020 Existing (as counted) peak-hour traffic volumes. Figures 6R, 7R and 8R depicted the revised 2028 No-Build peak-hour traffic volumes which incorporate traffic volumes associated with full occupancy of the office building. Figures 13R, 14R and 15R depict the corresponding 2028 Build condition peak-hour traffic volumes.



Tables 9R and 10R summarize the results of the revised traffic operations analyses that reflect the revised traffic volumes shown on the aforementioned figures. A comparison of the analysis results that were presented in Tables 9 and 10 of the April 2021 TIA to those presented in Tables 9R and 10R indicates no significant changes occurred as a result of the addition of traffic volumes associated will the full occupancy of the office building located at 198 Charlton Road. That being said, we note that the addition of the center turn lane to Route 20 was identified to improve traffic operations for vehicles exiting the driveway to 198 Charlton Road and the east Project site driveway. The aforementioned traffic volume networks, analysis summary tables and the detailed analysis worksheets are attached.

## **Project-Generated Traffic**

## **Comment:**

Pare agrees that Automobile Sales LUC 840 for the electrical vehicle discovery center is the best comparable use to determine trips. It is understood that classes/seminars could be taught at this center attracting a significant number of visitors/users. Were these volumes considered?

As discussed at the Planning Board hearing, it was previously stated [that] 70+ individuals could be attending classes/seminars and they may extend to a release time of late afternoon, i.e. the p.m. peak hour. Provide analysis taking into account the impacts of these peak volumes.

## **Response:**

The traffic volume projections that were developed for the EV Discovery Center using Institute of Transportation Engineers (ITE) Land Use Code (LUC) 840, *Automobile Sales* (*New*), <sup>1</sup> estimate that this use could generate approximately 38 vehicle trips during the weekday evening peak-hour, which is a reasonable approximation of the volume of traffic that could be attributable to a class or seminar with approximately 70 participants recognizing that some participants will carpool and that not all participants will leave the site during the same period. That being said, it is clear from the traffic operations analysis that the traffic signal system and the accompanying geometric improvements at the primary Project site driveway afford sufficient reserve capacity to accommodate traffic volume fluctuations that may occur related to the hosting of classes and seminars at the EV Discovery Center.

## **Traffic Operations Analysis**

#### Comment 1:

Route 20 at Hall Road- Existing movements northbound operate at LOS E and F during peak hours. Future No-Build versus Future Build indicates no significant reduction in LOS but there is significant delay northbound. The applicant is to perform a detailed Traffic Signal Warrant Analysis for the Route 20/Hall Road intersection. The results of that and the impacts on this project should be discussed.

Applicant states that a warrant analysis will be performed and provided to Town and MassDOT. The applicant should provide more information as to why the proposed signal could help traffic at Hall Road.

#### **Response:**

The proposed traffic signal that is to be installed at the primary Project site driveway intersection with Route 20 will create gaps in the flow of traffic in the westbound direction



<sup>&</sup>lt;sup>1</sup>Trip Generation, 10<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, DC; 2017.

on Route 20 that will increase the number of gaps in traffic to allow left-turn movements to exit from Hall Road. As an added improvement to address the increase in eastbound traffic on Route 20 resulting from the Project, "Do Not Block" pavement markings and accompanying signs can be installed on Route 20 at Hall Road subject to the review and approval of MassDOT.

#### **Comment 2:**

Route 20 at the Exit-Only Driveway - Level of Service appears acceptable based on volumes generated. There is a concern however that this is going to be truck traffic only and most will be travelling westbound towards the Turnpike. Traffic exiting the site heading westbound will need to cross two eastbound travel lanes. How will this intersection work with proposed signal in place? Gaps may be created due to signal but what will queues be like for traffic heading westbound. This should be addressed.

## **Response:**

As noted previously, the number of trucks exiting from the east driveway is expected to be relatively minor and will be dispersed given the limited accommodations that are afforded to park such vehicles within the Project site (two parking spaces) and the time that is required to fuel such vehicles at the four (4) pumps. These modest accommodations for parking and fueling of large trucks physically limit on the number of trucks exiting from the east driveway.

A review of the predicted vehicle queue on the Route 20 westbound approach to the traffic signal indicates that the longest 95<sup>th</sup> percentile vehicle queue is expected to be 109 feet in the left-turn lane and 162 feet in the through travel lanes, neither of which will block the exit-only Project site driveway which is located approximately 340 feet east of the stop-line for westbound traffic at the proposed traffic signal.

## **Comment 3:**

As previously noted, the development (office space) at 198 Charlton Road is not included in the analysis. Also, a two-way left turn lane in the median is proposed at this driveway. Analyze this intersection with the traffic from the development at 198 Charlton Road and with the left turn lane being installed into that site.

#### **Response:**

The subject intersection has been assessed as discussed previously and operating conditions for vehicles exiting both the driveway to 198 Charlton Road and the east Project site driveway were shown to improve with the addition of the center turn lane along Route 20.

#### **Comment 4:**

Also, more supporting documentation as to why it is felt truck traffic will take a right turn out of the proposed site. In addition to the proposed Pilot stop, there is a diesel fueling station on the Turnpike east of Route 84. Trucks heading east will be anticipated to use this site if heading eastbound instead of using the proposed site and the signalized roadway of Route 20 if heading eastbound. Please provide more justification as to why truck traffic leaving site may be making right turns.

#### **Response:**

Given the fueling opportunities for trucks on I-84 and I-90, there would be no reason for trucks to exit these facilities to patronize the Project site unless they have a destination along Route 20. A truck traveling westbound on Route 20 destined to I-84 or I-90 may patronize the Project site and would turn left from the east driveway. Trucks that exit I-84 that have a destination to the east on Route 20 that patronize the Project site would turn right when exiting. A review of traffic patterns along Route 20 in the vicinity of the Project site indicates that the directional flow during the peak hours is approximately 50/50. Based on these factors, it can reasonably be concluded that the predominant exiting maneuver for



Ms. Jean M. Bubon, AICP June 15, 2021 Page 5 of 5

trucks from the east driveway would be right turns. That being said and as discussed herein, the number of trucks that are expected to exit the east Project site driveway is expected to be relatively minor and dispersed throughout the day.

## **Sturbridge Police Department Comments, dated May 20, 2021:**

**Comment:** See response to previous comment 'Route 20 at the Exit-Only Driveway'.

**Response:** See responses to Pare follow-up comments pertaining to the Route 20 east Project site

driveway.

We trust that this information is responsive to the follow-up Peer Review comments that were provided by Pare in their June 3, 2021 memorandum. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

effrey S. Dirk, P.E., PTOE, FITE

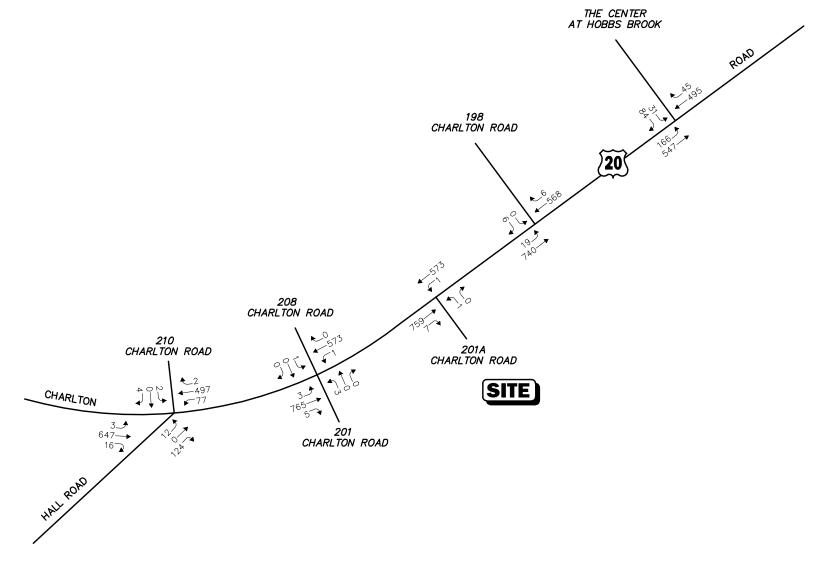
Managing Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

JSD/jsd

Attachments





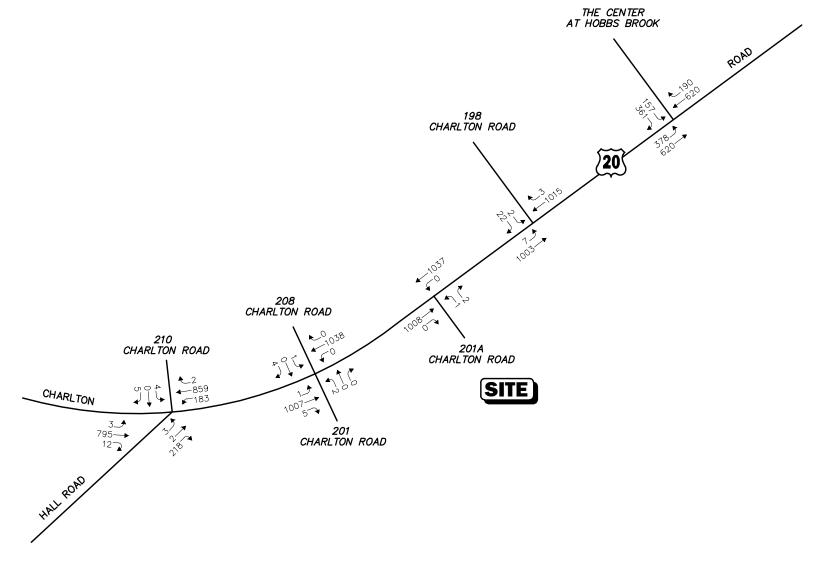


**Not To Scale** 



## Figure 3R

2020 Existing Weekday Morning Peak-Hour Traffic Volumes



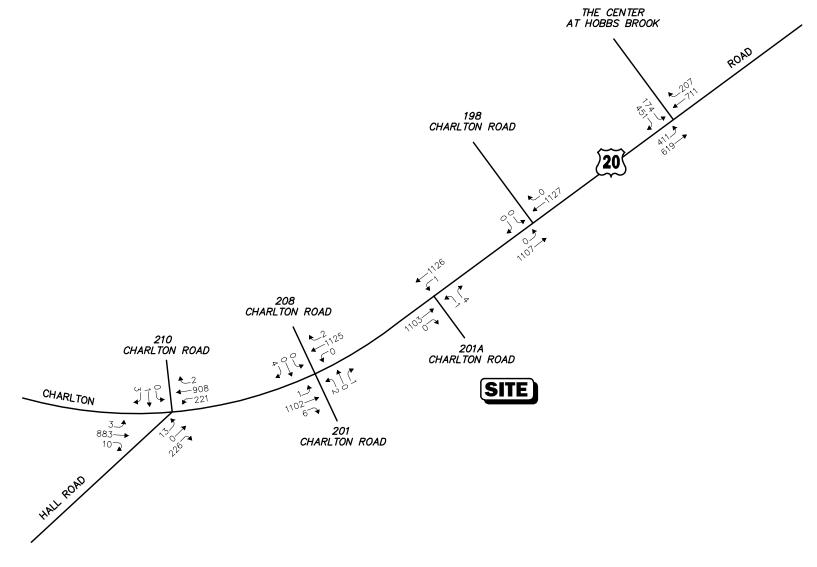


**Not To Scale** 



## Figure 4R

2020 Existing Weekday Evening Peak-Hour Traffic Volumes



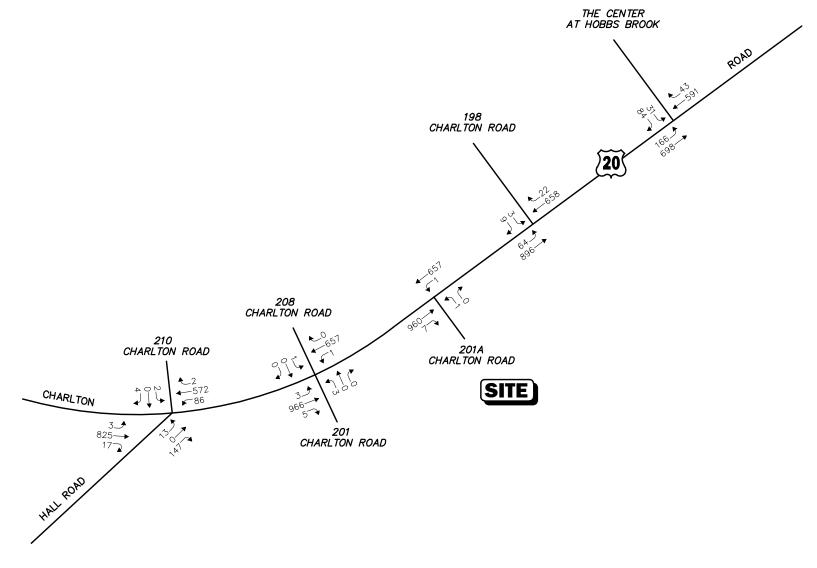


**Not To Scale** 



## Figure 5R

2020 Existing Saturday Midday Peak-Hour Traffic Volumes



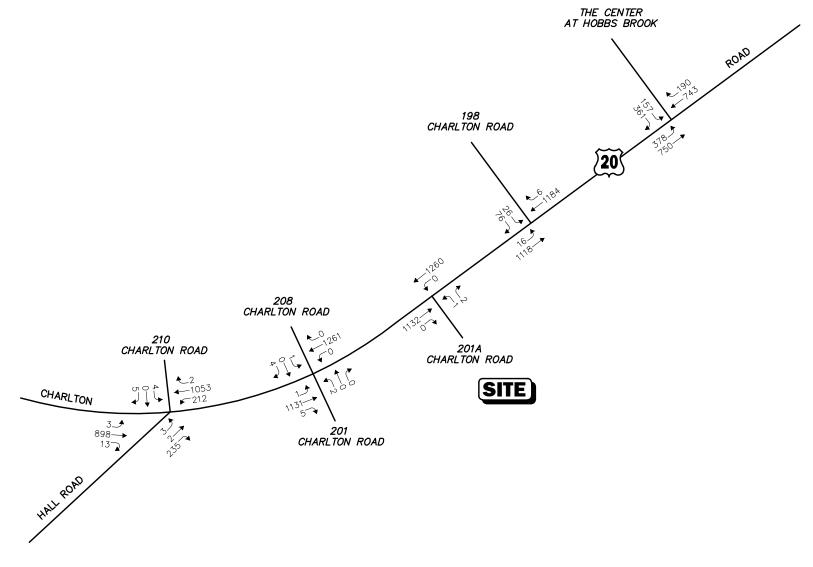


**Not To Scale** 



## Figure 6R

2028 No-Build Weekday Morning Peak-Hour Traffic Volumes



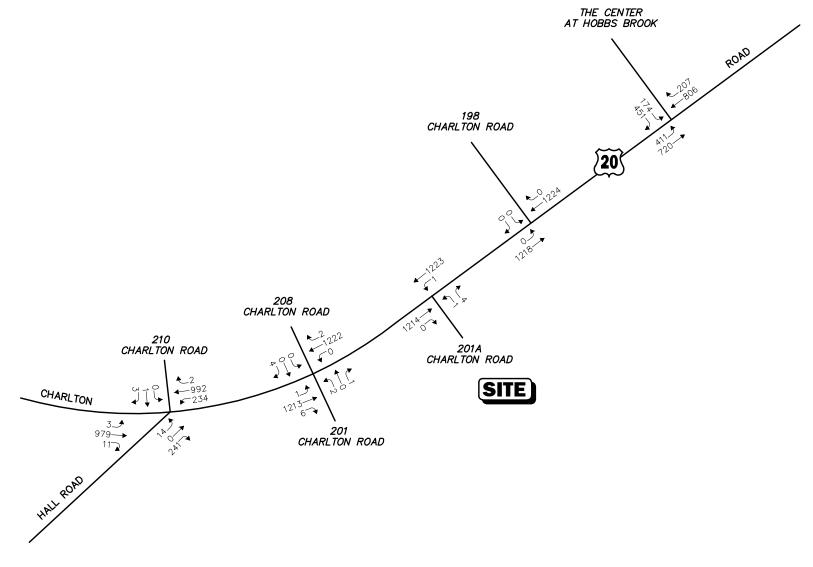


**Not To Scale** 



## Figure 7R

2028 No-Build Weekday Evening Peak-Hour Traffic Volumes



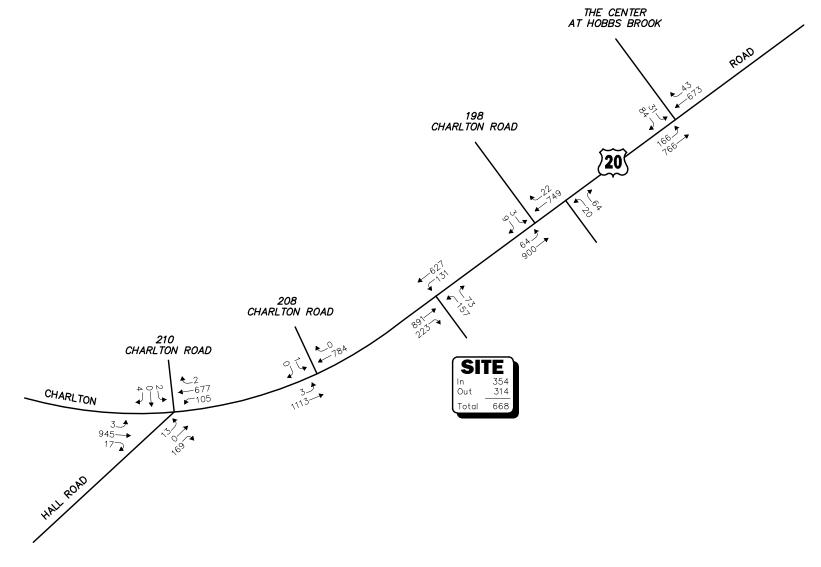


**Not To Scale** 



## Figure 8R

2028 No-Build Saturday Midday Peak-Hour Traffic Volumes



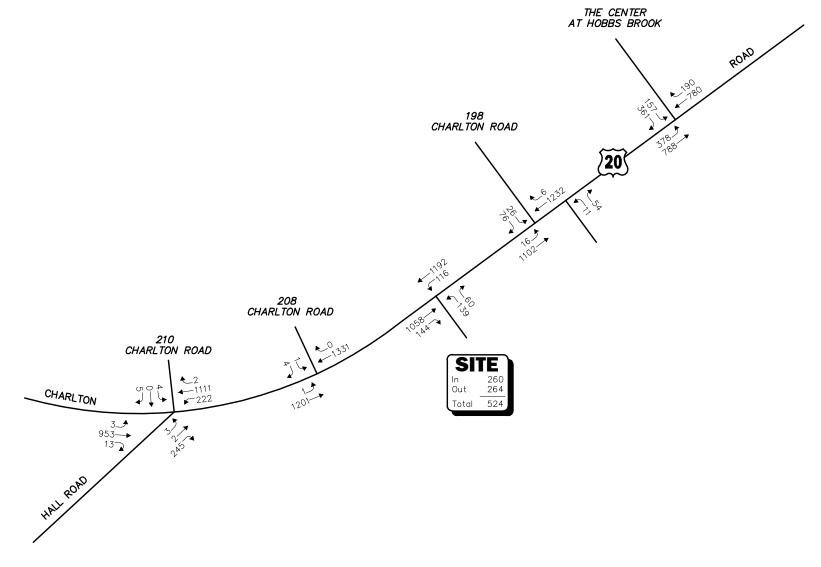


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## Figure 13R

2028 Build Weekday Morning Peak-Hour Traffic Volumes



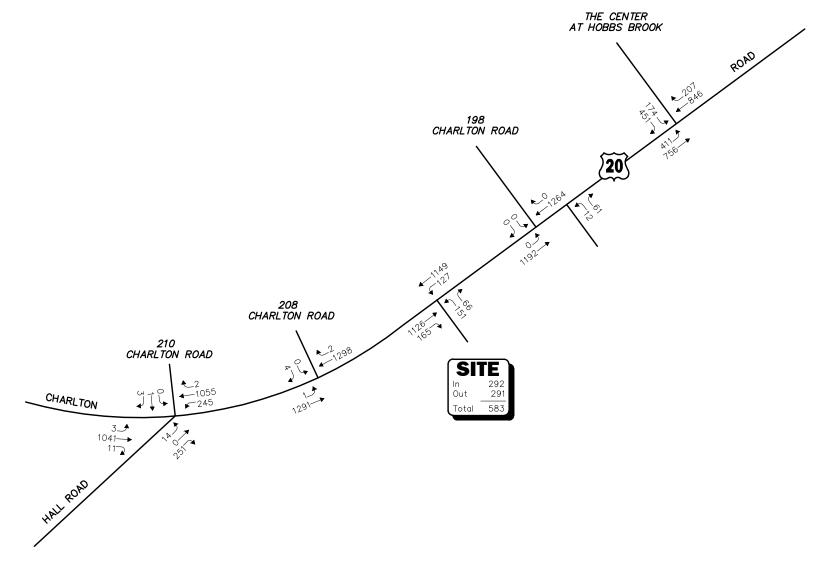


**Not To Scale** 



## Figure 14R

2028 Build Weekday Evening Peak-Hour Traffic Volumes





**Not To Scale** 



## Figure 15R

2028 Build Saturday Midday Peak-Hour Traffic Volumes

Table 9R SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2020 I	Existing			2028 N	lo-Build			2028	Build	
Signalized Intersection/ Peak-Hour/Movement	V/Ca	Delay <sup>b</sup>	LOSc	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
Route 20 at The Center at Hobbs Brook Driveway												
Weekday Morning:												
Route 20 EB LT	0.43	16.8	В	2/5	0.45	18.5	В	2/5	0.46	19.8	В	3/5
Route 20 EB TH	0.26	2.0	A	1/2	0.33	2.0	A	2/2	0.35	2.0	A	2/3
Route 20 WB TH	0.44	10.5	В	3/5	0.49	10.6	В	4/6	0.54	10.9	В	5/7
The Center at Hobbs Brook Driveway SB LT	0.15	21.6	C	1/1	0.16	23.7	C	1/1	0.17	25.3	C	1/1
The Center at Hobbs Brook Driveway SB RT	0.07	11.6	В	0/1	0.09	13.1	В	0/1	0.13	14.5	В	1/1
Overall		7.0	A			8.8	A			8.2	A	
Weekday Evening:												
Route 20 EB LT	0.65	21.5	C	6/12	0.69	25.0	C	7/13	0.70	26.3	C	7/14
Route 20 EB TH	0.26	3.0	A	2/3	0.31	3.0	A	2/3	0.33	3.0	A	2/4
Route 20 WB TH	0.57	19.3	В	5/8	0.62	19.5	В	7/9	0.63	19.6	В	7/10
The Center at Hobbs Brook Driveway SB LT	0.33	26.5	C	2/3	0.34	28.9	C	2/3	0.35	29.7	C	2/3
The Center at Hobbs brook Driveway SB RT	0.36	11.2	В	2/5	0.41	13.4	В	3/7	0.42	14.2	В	4/8
Overall		12.9	В			13.8	В			14.0	В	
Saturday Midday:												
Route 20 EB LT	0.73	25.7	C	8/16	0.76	29.7	C	8/18	0.78	31.7	C	9/18
Route 20 EB TH	0.26	3.0	Α	2/3	0.30	3.0	Α	2/3	0.31	3.0	Α	2/4
Route 20 WB TH	0.63	21.5	C	6/9	0.66	21.5	C	8/11	0.67	21.6	C	8/11
The Center at Hobbs Brook Driveway SB LT	0.39	30.0	C	2/3	0.40	32.1	C	2/4	0.41	33.0	C	2/4
The Center at Hobbs Brook Driveway SB RT	0.52	13.9	В	5/10	0.56	16.4	В	6/12	0.58	17.5	В	6/13
Overall		15.2	В			16.1	В			16.6	В	

See notes at end of table.

Table 9R (Continued) SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2020 I	Existing			2028 N	lo-Build			2028	Build	
Signalized Intersection/ Peak-Hour/Movement	V/C <sup>a</sup>	Delay <sup>b</sup>	LOSc	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
Route 20 at the Main Project Site Driveway												
Weekday Morning:												
Route 20 EB TH/RT									0.72	13.7	В	9/12
Route 20 WB LT									0.57	28.2	C	3/5
Route 20 WB TH									0.29	3.6	A	2/3
Main Project Site Driveway NB LT									0.71	33.9	C	3/5
Main Project Site Driveway NB TH/RT									0.05	23.3	C	0/0
Driveway SB LT/TH/RT									0.01	21.4	C	0/0
Overall										13.6	В	
Weekday Evening:												
Route 20 EB TH/RT									0.75	14.3	В	10/13
Route 20 WB LT									0.49	25.4	C	2/4
Route 20 WB TH									0.52	4.3	A	5/7
Main Project Site Driveway NB LT									0.68	32.3	C	3/5
Main Project Site Driveway NB TH/RT									0.04	23.3	C	0/0
Driveway SB LT/TH/RT									0.02	21.5	C	0/0
Overall										11.6	В	
Saturday Midday:												
Route 20 EB TH/RT									0.77	14.1	В	11/14
Route 20 WB LT									0.65	33.8	C	3/5
Route 20 WB TH									0.50	4.5	A	5/7
Main Project Site Driveway NB LT									0.71	34.9	C	3/5
Main Project Site Driveway NB TH/RT									0.05	22.2	C	0/0
Driveway SB LT/TH/RT									0.03	22.1	C	0/0
Overall										12.5	В	

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

<sup>&</sup>lt;sup>a</sup>Volume-to-capacity ratio. <sup>b</sup>Control (signal) delay per vehicle in seconds. <sup>c</sup>Level of service.

<sup>&</sup>lt;sup>d</sup>Queue length in vehicle.

Table 10R UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2020 Ex	isting			2028 No	o-Build			2028	Build	
Unsignalized Intersection/ Peak Hour/Movement	Demanda	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
Route 20 at Hall Road												
Weekday Morning:												
Route 20 EB LT/TH/RT	666	0.0	A	0	845	0.0	A	0	965	0.0	A	0
Route 20 WB LT	77	9.6	A	1	86	10.7	В	1	105	11.8	В	1
Route 20 WB TH/RT	499	0.0	A	0	574	0.0	A	0	679	0.0	A	0
Hall Road NB LT	12	39.3	E	1	13	>50.0	F	1	13	>50.0	F	2
Hall Road NB TH/RT	124	12.8	В	1	147	15.6	C	2	169	18.9	C	3
Driveway SB LT/TH/RT	6	21.6	C	0	6	32.1	D	0	6	>50.0	F	1
Weekday Evening:												
Route 20 EB LT/TH/RT	810	0.1	A	0	914	0.1	A	0	969	0.1	A	0
Route 20 WB LT	183	11.1	В	1	212	12.4	В	2	222	13.2	В	2
Route 20 WB TH/RT	861	0.0	A	0	1,055	0.0	A	0	1,113	0.0	A	0
Hall Road NB LT	3	>50.0	F	0	3	>50.0	F	1	3	>50.0	F	1
Hall Road NB TH/RT	220	19.3	C	3	237	27.4	D	5	247	35,8	E	6
Driveway SB LT/TH/RT	9	>50.0	F	2	9	>50.0	F	3	9	>50.0	F	4
Saturday Midday:												
Route 20 EB LT/TH/RT	896	0.0	A	0	993	0.1	A	0	1,055	0.1	A	0
Route 20 WB LT	221	12.4	В	2	234	13.8	В	2	245	15.0	В	2
Route 20 WB TH/RT	910	0.0	A	0	994	0.0	A	0	1,057	0.0	A	0
Hall Road NB LT	13	>50.0	F	2	14	>50.0	F	2	14	>50.0	F	3
Hall Road NB TH/RT	216	16.5	C	2	241	19.5	C	3	251	21.7	C	4
Driveway SB LT/TH/RT	4	>50.0	F	1	4	>50.0	F	1	4	>50.0	F	1

See notes at end of table.

Table 10R (Continued)
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2020 Ex	cisting			2028 N	o-Build			2028	Build	
Unsignalized Intersection/ Peak Hour/Movement	Demanda	Delay <sup>b</sup>	LOSc	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
Route 20 at the 201 and 208 Charlton Road Driveways												
Weekday Morning:												
Route 20 EB LT/TH/RT	773	0.0	A	0	974	0.0	A	0	1,116	0.1	A	0
Route 20 WB LT/TH/RT	574	0.0	A	0	658	0.0	A	0	784	0.0	A	0
201 Charlton Road Driveway NB LT/TH/RT	3	41.0	E	0	3	>50.0	F	1				
208 Charlton Road Driveway SB LT/TH/RT	1	38.7	D	0	1	39.6	E	0	1	43.3	E	0
Weekday Evening:												
Route 20 EB LT/TH/RT	1,013	0.0	A	0	1,137	0.0	A	0	1,202	0.0	A	0
Route 20 WB LT/TH/RT	1,038	0.0	A	0	1,261	0.0	A	0	1,331	0.0	A	0
201 Charlton Road Driveway NB LT/TH/RT	2	>50.0	F	0	2	>50.0	F	1				
208 Charlton Road SB LT/TH/RT	5	23.4	C	0	5	33.1	D	0	5	30.0	D	0
Saturday Midday:												
Route 20 EB LT/TH/RT	1,109	0.0	A	0	1,220	0.0	A	0	1,282	0.1	A	0
Route 20 WB LT/TH/RT	1,127	0.0	A	0	1,224	0.0	A	0	1,300	0.0	A	0
201 Charlton Road Driveway NB LT/TH/RT	3	>50.0	F	1	3	>50.0	F	1				
208 Charlton Road SB LT/TH/RT	4	13.6	В	0	4	14.4	В	0	4	16.1	C	0
Route 20 at the 201A Charlton Road Driveway												
Weekday Morning:												
Route 20 EB TH/RT	766	0.0	A	0	967	0.0	A	0				
Route 20 WB LT/TH	574	0.0	A	0	658	0.0	Α	0				
201A Charlton Road Driveway NB LT/RT	1	25.2	D	0	1	35.8	E	0				
Weekday Evening:									Driveway	Closed und	er Build C	onditions
Route 20 EB TH/RT	1.008	0.0	Α	0	1,132	0.0	A	0				
Route 20 WB LT/TH	1,037	0.0	A	0	1,260	0.0	A	0				
201A Charlton Road Driveway NB LT/RT	3	23.2	C	0	3	30.2	D	0				
Saturday Midday:												
Route 20 EB TH/RT	1,103	0.0	A	0	1,214	0.0	A	0				
Route 20 WB LT/TH	1,127	0.0	A	0	1,224	0.0	A	0				
201A Charlton Road Driveway NB LT/RT	5	22.1	C	0	5	26.2	D	0				

See notes at end of table.

Table 10R (Continued) UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2020 Ex	isting			2028 No	o-Build			2028	Build	
Unsignalized Intersection/ Peak Hour/Movement	Demanda	Delay <sup>b</sup>	LOSc	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
Route 20 at the 198 Charlton Road Driveway and the												
Exit-Only Project Site Driveway												
Weekday Morning:												
Route 20 EB LT									64	10.0	A	1
Route 20 EB LT/TH	759	0.4	A	0	960	1.3	A	1				
Route 20 EB TH									900	0.0	A	0
Route 20 WB TH/RT	574	0.0	A	0	680	0.0	A	0	771	0.0	A	0
198 Charlton Road Driveway SB LT	0	0.0	A	0	3	36.9	E	0	3	25.3	D	0
198 Charlton Road SB RT	6	10.3	В	0	9	10.8	В	0	9	11.3	В	0
Exit-Only Project Site Driveway NB LT/RT									84	19.5	C	1
Weekday Evening:												
Route 20 EB LT									16	12.3	В	0
Route 20 EB LT/TH	1,010	0.3	A	0	1,134	0.8	A	0				
Route 20 EB TH									1,102	0.0	A	0
Route 20 WB TH/RT	1.018	0.0	A	0	1,190	0.0	A	0	1,238	0.0	A	0
198 Charlton Road Driveway SB LT	2	49.0	E	0	26	>50.0	F	2	26	48.2	E	1
198 Charlton Road SB RT	22	12.9	В	0	76	15.9	C	1	76	16.4	C	1
Exit-Only Project Site Driveway NB LT/RT									64	20.5	C	1
Saturday Midday:												
Route 20 EB LT									0	0.0	A	0
Route 20 EB LT/TH	1,107	0.0	A	0	1,218	0.0	A	0				
Route 20 EB TH									1,192	0.0	A	0
Route 20 WB TH/RT	1,127	0.0	A	0	1,224	0.0	A	0	1,264	0.0	A	0
198 Charlton Road Driveway SB LT	0	0.0	A	0	0	0.0	A	0	0	0.0	A	0
198 Charlton Road Driveway SB RT	0	0.0	A	0	0	0.0	A	0	0	0.0	A	0
Exit-Only Project Site Driveway NB LT/RT									73	21.4	C	1

<sup>&</sup>lt;sup>a</sup>Demand in vehicles per hour. <sup>b</sup>Average control delay per vehicle (in seconds). <sup>c</sup>Level of service.

<sup>&</sup>lt;sup>d</sup>Queue length in vehicles.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

## **ATTACHMENTS**

MANUAL TURNING MOVEMENT COUNTS CAPACITY ANALYSIS WORKSHEETS



MANUAL TURNING MOVEMENT COUNTS



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 1

Groups Printed- Cars - Trucks

	Route 20 From North		Route 2 From So		198 Char From \		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	0	0	2	0	1	0	3
07:15 AM	0	1	3	0	0	2	6
07:30 AM	0	2	7	0	0	2	11
07:45 AM	0	1	5	0	0	1	7
Total	0	4	17	0	1	5	27
08:00 AM	0	2	4	0	0	1	7
08:15 AM	0	0	3	0	0	1	4
08:30 AM	0	1	3	0	0	2	6
08:45 AM	0	3	2	0	1	2	8
Total	0	6	12	0	1	6	25
Grand Total	0	10	29	0	2	11	52
Apprch %	0	100	100	0	15.4	84.6	
Total %	0	19.2	55.8	0	3.8	21.2	
Cars	0	10	29	0	2	11	52
% Cars	0	100	100	0	100	100	100
Trucks	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0

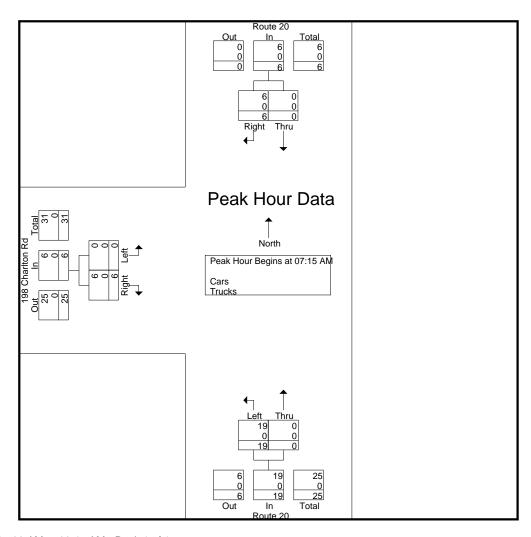
		Route 20 From North			Route 20 From South		19	8 Charlton F From West	Rd	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 0	7:00 AM to 08	3:45 AM - Pe	eak 1 of 1				•			
Peak Hour for Entire Interse	ection Begins	at 07:15 AM								
07:15 AM	Õ	1	1	3	0	3	0	2	2	6
07:30 AM	0	2	2	7	0	7	0	2	2	11
07:45 AM	0	1	1	5	0	5	0	1	1	7
08:00 AM	0	2	2	4	0	4	0	1	1	7
Total Volume	0	6	6	19	0	19	0	6	6	31
% App. Total	0	100		100	0		0	100		
PHF	.000	.750	.750	.679	.000	.679	.000	.750	.750	.705
Cars	0	6	6	19	0	19	0	6	6	31
% Cars	0	100	100	100	0	100	0	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 2



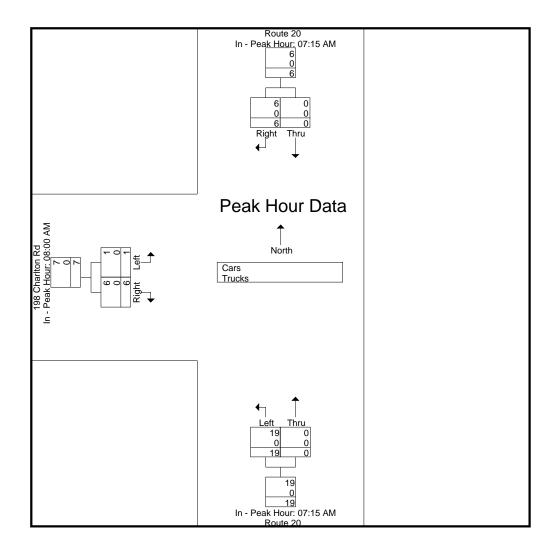
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

reak noul for Each Appl	oacii begiiis a	สเ.							
	07:15 AM			07:15 AM			08:00 AM		
+0 mins.	0	1	1	3	0	3	0	1	1
+15 mins.	0	2	2	7	0	7	0	1	1
+30 mins.	0	1	1	5	0	5	0	2	2
+45 mins.	0	2	2	4	0	4	1	2	3
Total Volume	0	6	6	19	0	19	1	6	7
% App. Total	0	100		100	0		14.3	85.7	
PHF	.000	.750	.750	.679	.000	.679	.250	.750	.583
Cars	0	6	6	19	0	19	1	6	7
% Cars	0	100	100	100	0	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 3



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State: Sturbridge, MA Weather: Clear

File Name: 87070006 Site Code: 87070006

Start Date : 10/1/2020 Page No : 4

			Groups Printed- (	Cars			
	Route	20	Rout	e 20	198 Cha	rlton Rd	
	From N	lorth	From	South	From	West	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	0	0	2	0	1	0	3
07:15 AM	0	1	3	0	0	2	6
07:30 AM	0	2	7	0	0	2	11
07:45 AM	0	1	5	0	0	1	7_
Total	0	4	17	0	1	5	27
08:00 AM	0	2	4	0	0	1	7
08:15 AM	0	0	3	0	0	1	4
08:30 AM	0	1	3	0	0	2	6
08:45 AM	0	3	2	0	1	2	8_
Total	0	6	12	0	1	6	25
Grand Total	0	10	29	0	2	11	52
Apprch %	0	100	100	0	15.4	84.6	
Total %	0	19.2	55.8	0	3.8	21.2	

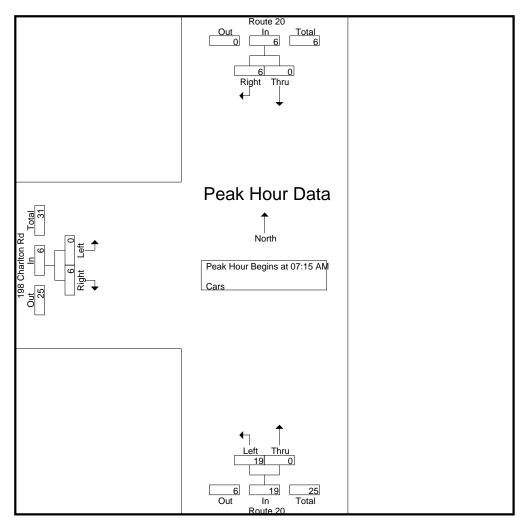
		Route 20			Route 20			198 Charlton F	₹d	
		From North			From Sout	า		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	07:00 AM to	08:45 AM - P	Peak 1 of 1							
Peak Hour for Entire Inter	rsection Begi	ns at 07:15 Al	M							
07:15 AM	0	1	1	3	0	3	0	2	2	6
07:30 AM	0	2	2	7	0	7	0	2	2	11
07:45 AM	0	1	1	5	0	5	0	1	1	7
08:00 AM	0	2	2	4	0	4	0	1	1	7
Total Volume	0	6	6	19	0	19	0	6	6	31
% App. Total	0	100		100	0		0	100		
PHF	.000	.750	.750	.679	.000	.679	.000	.750	.750	.705

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

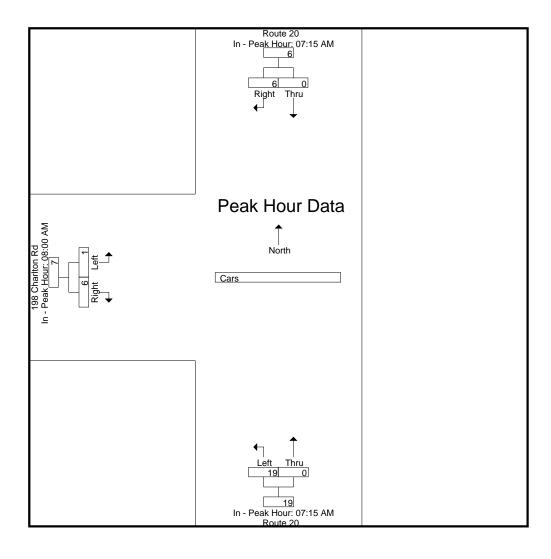
I cak Hour for Lacif Appr	Dacii Degilis a	at.							
	07:15 AM			07:15 AM			08:00 AM		
+0 mins.	0	1	1	3	0	3	0	1	1
+15 mins.	0	2	2	7	0	7	0	1	1
+30 mins.	0	1	1	5	0	5	0	2	2
+45 mins.	0	2	2	4	0	4	1	2	3
Total Volume	0	6	6	19	0	19	1	6	7
% App. Total	0	100		100	0		14.3	85.7	
PHF	.000	.750	.750	.679	.000	.679	.250	.750	.583

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 6



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State: Sturbridge, MA Weather: Clear

File Name: 87070006 Site Code: 87070006

Start Date : 10/1/2020 Page No : 7

		G	roups Printed- Truc	ks			
	Route 20		Route 2	20	198 Char	Iton Rd	
	From North	1	From So	uth	From \	Vest	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0_
Total	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	
Total %							

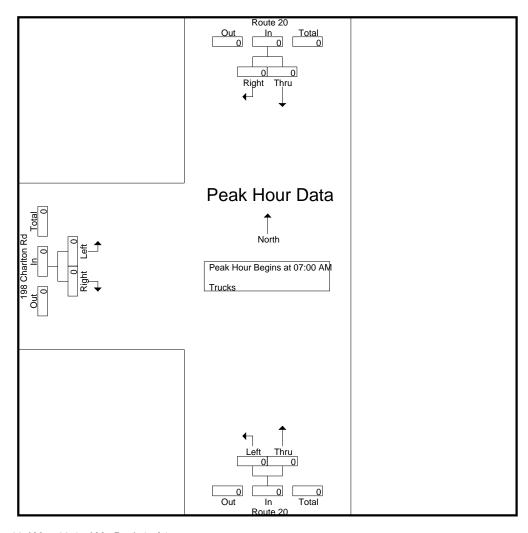
		Route 20			Route 20		1				
		From North			From South			From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Inter	rsection Begi	ns at 07:00 AM	1								
07:00 AM	0	0	0	0	0	0	0	0	0	0	
07:15 AM	0	0	0	0	0	0	0	0	0	0	
07:30 AM	0	0	0	0	0	0	0	0	0	0	
07:45 AM	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	0		0	0		0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 8



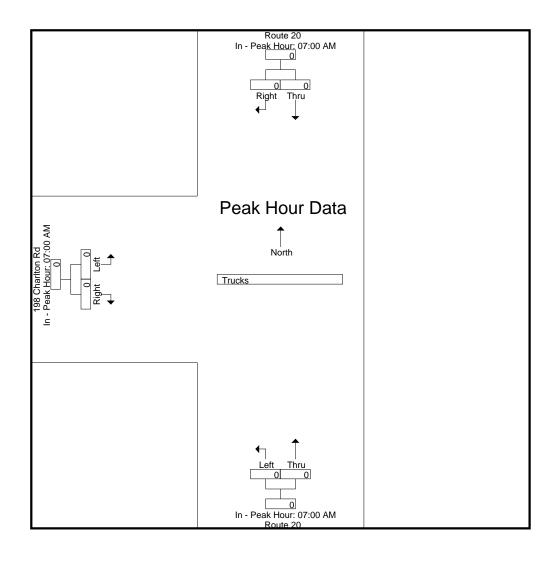
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 9



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

08:45 AM

Grand Total

Apprch % Total %

Total

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 10

	R	Route 20		ŀ	Route 20		198	198 Charlton Rd				
	Fr	om North		Fr	om South		F	From West				
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
-	07:00 AM 07:15 AM 07:30 AM 07:45 AM Total 08:00 AM 08:15 AM	Start Time	Start Time	Start Time	Start Time   Thru   Right   Peds   Left	Start Time   Thru   Right   Peds   Left   Thru	Start Time   Thru   Right   Peds   Left   Thru   Peds	Start Time   Thru   Right   Peds   Left   Thru   Peds   Left	From North         From South         From West           Start Time         Thru         Right         Peds         Left         Thru         Peds         Left         Right           07:00 AM         0	Start Time   Thru   Right   Peds   Left   Thru   Peds   Left   Right   Peds	Start Time   Thru   Right   Peds   Left   Thru   Peds   Left   Right   Peds   Exclu. Total	Start Time   Thru   Right   Peds   Left   Thru   Peds   Left   Right   Peds   Exclu. Total   Inclu. Total

Groups Printed- Bikes Peds

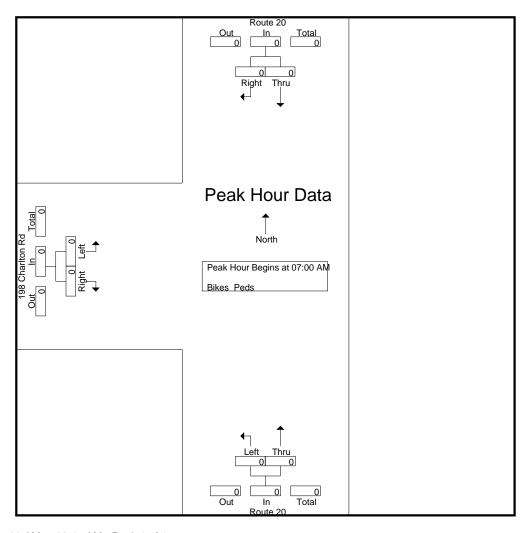
	Route 20				Route 20			198 Charlton Rd		
		From North			From South	1				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	07:00 AM to	08:45 AM - Pe	eak 1 of 1							
Peak Hour for Entire Inter	section Begir	ns at 07:00 AM								
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 11



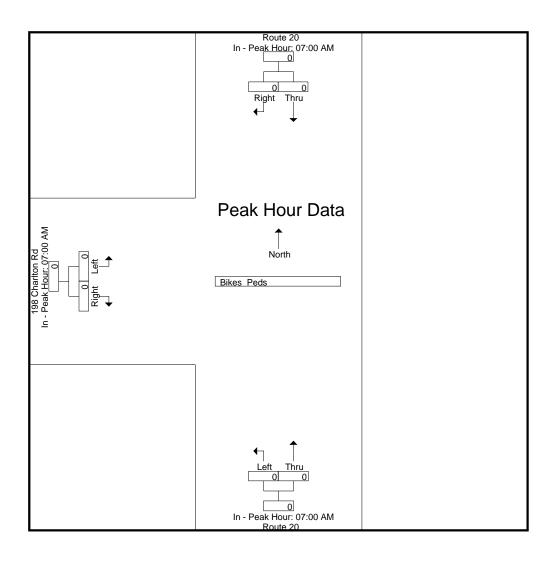
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Teak Hour for Each Approach Begins at.										
	07:00 AM			07:00 AM			07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 12



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 1

Groups Printed- Cars - Trucks

	Route	20	Route		198 Cha		
	From N		From	South	From	West	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	0	1	1	0	0	2	4
04:15 PM	0	0	4	0	0	5	9
04:30 PM	0	0	2	0	2	5	9
04:45 PM	0	3	1	0	0	4	8
Total	0	4	8	0	2	16	30
05:00 PM	0	0	0	0	0	8	8
05:15 PM	0	1	0	0	3	2	6
05:30 PM	0	0	2	0	0	6	8
05:45 PM	0	1	1	0	1	4	7
Total	0	2	3	0	4	20	29
Grand Total	0	6	11	0	6	36	59
Apprch %	0	100	100	0	14.3	85.7	
Total %	0	10.2	18.6	0	10.2	61	
Cars	0	6	11	0	6	36	59
% Cars	0	100	100	0	100	100	100
Trucks	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0

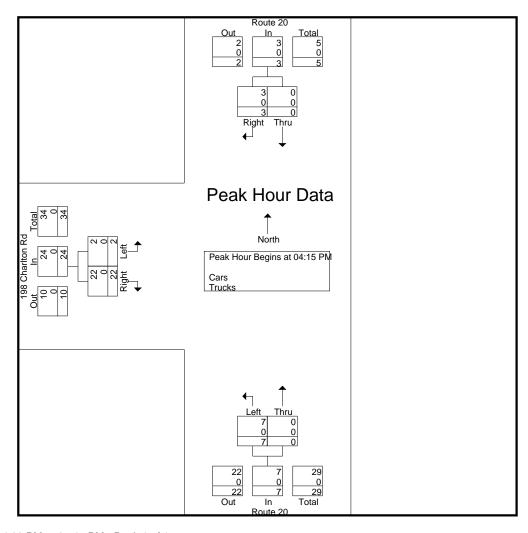
		Route 20			Route 20					
		From Nort	h		From Sout	h		From West	t	
Start Tim	e Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire In	tersection Beg	ins at 04:15 F	PM							
04:15 PI	И 0	0	0	4	0	4	0	5	5	9
04:30 Pf	и о	0	0	2	0	2	2	5	7	9
04:45 PI	И 0	3	3	1	0	1	0	4	4	8
05:00 PM	Λ 0	0	0	0	0	0	0	8	8	8
Total Volum	ie 0	3	3	7	0	7	2	22	24	34
% App. Tot	al 0	100		100	0		8.3	91.7		
PH	F .000	.250	.250	.438	.000	.438	.250	.688	.750	.944
Car	s 0	3	3	7	0	7	2	22	24	34
% Cai	s 0	100	100	100	0	100	100	100	100	100
Truck	s 0	0	0	0	0	0	0	0	0	0
% Truck	s 0	0	0	0	0	0	0	0	0	0

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 2



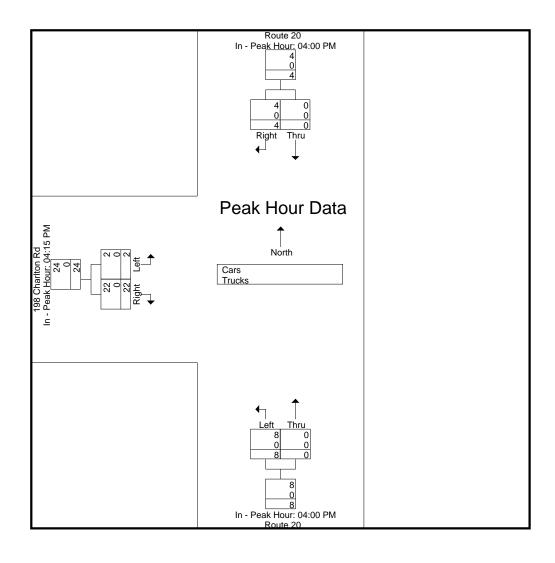
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

eak Hour for Each Approach Begins at.										
	04:00 PM			04:00 PM			04:15 PM			
+0 mins.	0	1	1	1	0	1	0	5	5	
+15 mins.	0	0	0	4	0	4	2	5	7	
+30 mins.	0	0	0	2	0	2	0	4	4	
+45 mins.	0	3	3	1	0	1	0	8	8	
Total Volume	0	4	4	8	0	8	2	22	24	
% App. Total	0	100		100	0		8.3	91.7		
PHF	.000	.333	.333	.500	.000	.500	.250	.688	.750	
Cars	0	4	4	8	0	8	2	22	24	
% Cars	0	100	100	100	0	100	100	100	100	
Trucks	0	0	0	0	0	0	0	0	0	
% Trucks	0	0	0	0	0	0	0	0	0	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 3



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State: Sturbridge, MA Weather: Clear

File Name: 87070006 Site Code: 87070006

Start Date : 10/1/2020 Page No : 4

Groups Printed- Cars

	Route 20		Route 20		198 Charlton		
	From North	1	From South	1	From Wes	t	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	0	1	1	0	0	2	4
04:15 PM	0	0	4	0	0	5	9
04:30 PM	0	0	2	0	2	5	9
04:45 PM	0	3	1	0	0	4	8
Total	0	4	8	0	2	16	30
05:00 PM	0	0	0	0	0	8	8
05:15 PM	0	1	0	0	3	2	6
05:30 PM	0	0	2	0	0	6	8
05:45 PM	0	1	1	0	1	4	7
Total	0	2	3	0	4	20	29
Grand Total	0	6	11	0	6	36	59
Apprch %	0	100	100	0	14.3	85.7	
Total %	0	10.2	18.6	0	10.2	61	

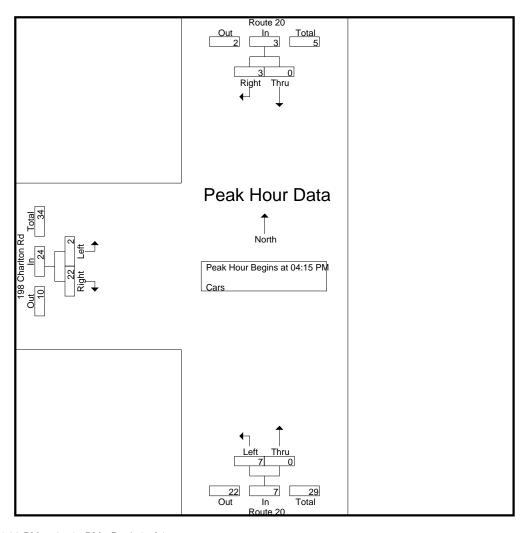
		Route 20		Route 20			1	₹d		
		From North			From South	1		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to	05:45 PM - P	eak 1 of 1							
Peak Hour for Entire Inter	rsection Begin	ns at 04:15 PN	Л							
04:15 PM	0	0	0	4	0	4	0	5	5	9
04:30 PM	0	0	0	2	0	2	2	5	7	9
04:45 PM	0	3	3	1	0	1	0	4	4	8
05:00 PM	0	0	0	0	0	0	0	8	8	8
Total Volume	0	3	3	7	0	7	2	22	24	34
% App. Total	0	100		100	0		8.3	91.7		
PHF	.000	.250	.250	.438	.000	.438	.250	.688	.750	.944

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

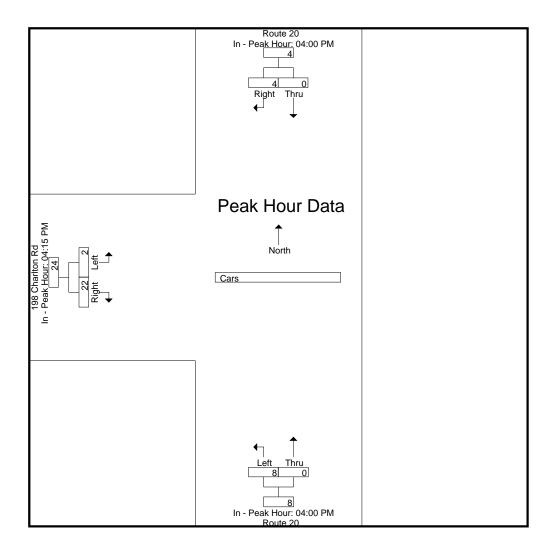
eak Hour for Each Approach Begins at.										
	04:00 PM			04:00 PM			04:15 PM	04:15 PM		
+0 mins.	0	1	1	1	0	1	0	5	5	
+15 mins.	0	0	0	4	0	4	2	5	7	
+30 mins.	0	0	0	2	0	2	0	4	4	
+45 mins.	0	3	3	1	0	1	0	8	8	
Total Volume	0	4	4	8	0	8	2	22	24	
% App. Total	0	100		100	0		8.3	91.7		
PHF	.000	.333	.333	.500	.000	.500	.250	.688	.750	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 6



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State: Sturbridge, MA Weather: Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 7

Groups Printed- Trucks											
	Route		Rout		198 Cha	rlton Rd					
	From I	North	From	South	From						
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total				
04:00 PM	0	0	0	0	0	0	0				
04:15 PM	0	0	0	0	0	0	0				
04:30 PM	0	0	0	0	0	0	0				
04:45 PM	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0				
05:00 PM	0	0	0	0	0	0	0				
05:15 PM	0	0	0	0	0	0	0				
05:30 PM	0	0	0	0	0	0	0				
05:45 PM	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0				
Grand Total	0	0	0	0	0	0	0				
Apprch %	0	0	0	0	0	0					
Total %											

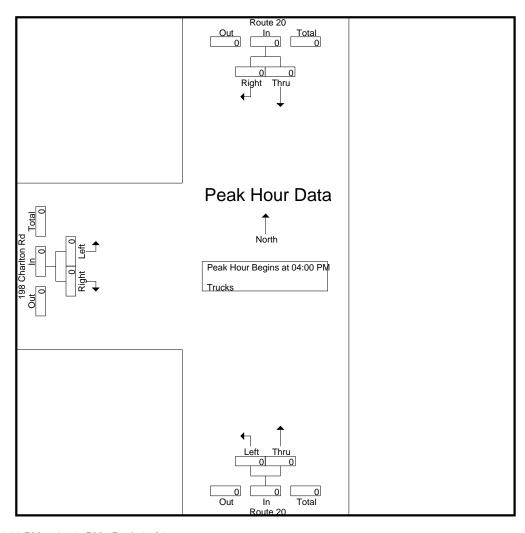
		Route 20			Route 20		1	₹d		
		From North			From South			From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to 0	5:45 PM - Pe	ak 1 of 1							
Peak Hour for Entire Inter	section Begins	at 04:00 PM								
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 8



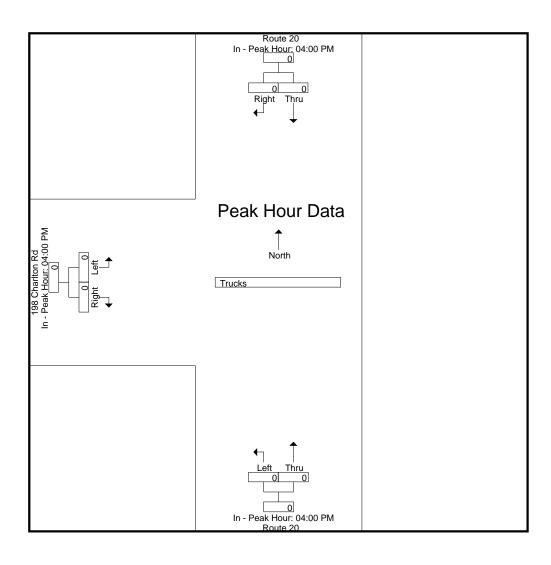
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

I cak Hour for Lacif Appr	eak Hour for Each Approach Degins at.									
	04:00 PM			04:00 PM			04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	. 0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 9



N/S Street : Route 20 E/W Street: 198 Charlton Road City/State: Sturbridge, MA Weather: Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 10

|--|

F	Route 20		F	Route 20		198	Charlton Ro	t			
Fr	om North		Fı	rom South		F	rom West				
Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0_
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0_
0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
0	0		0	0		0	0				
									0	0	
	Thru 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	From North   Thru   Right   Peds	From North   From North   From North   From North   Peds   Left	From North         From South           Thru         Right         Peds         Left         Thru           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0	From North         From South           Thru         Right         Peds         Left         Thru         Peds           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0	From North         From South         F           Thru         Right         Peds         Left         Thru         Peds         Left           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0	From North         From South         From West           Thru         Right         Peds         Left         Thru         Peds         Left         Right           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         <	From North   From South   From West	Thru   Right   Peds   Left   Thru   Peds   Left   Right   Peds   Exclu. Total	Thru   Right   Peds   Left   Thru   Peds   Left   Right   Peds   Exclu. Total   Inclu. Total

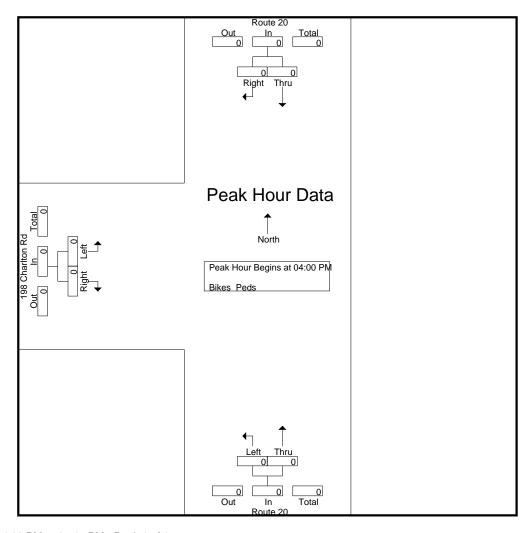
		Route 20			Route 20					
		From North			From South	า		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to	05:45 PM - P	Peak 1 of 1						•	
Peak Hour for Entire Inter	rsection Begi	ns at 04:00 PN	М							
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date: 10/1/2020

Page No : 11



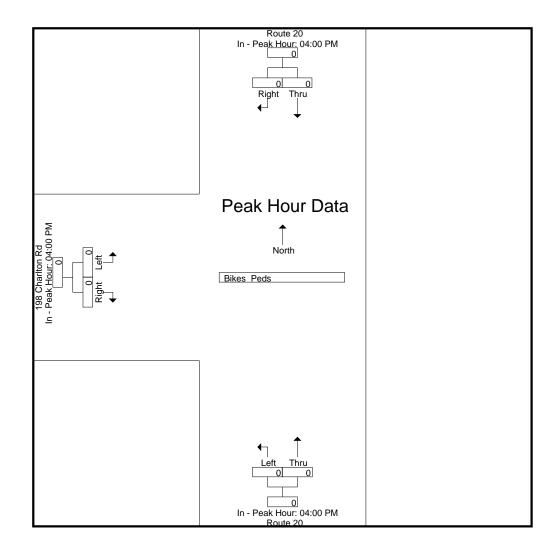
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

eak Hour for Each Approach Begins at.										
	04:00 PM			04:00 PM			04:00 PM	04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	

N/S Street : Route 20

E/W Street: 198 Charlton Road City/State : Sturbridge, MA Weather : Clear

File Name: 87070006 Site Code: 87070006 Start Date : 10/1/2020 Page No : 12



N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State: Sturbridge, MA Weather: Clear

File Name: 870700S6 Site Code: 87070006 Start Date: 10/3/2020

Page No : 1

Groups Printed- Cars - Trucks

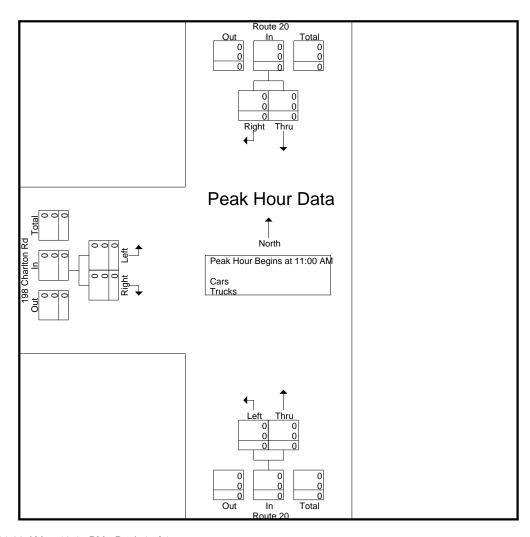
	Route 2		Route		198 Char		
	From Noi		From S		From V		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
11:00 AM	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
40:00 PM	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0
01:15 PM	0	1	0	0	0	0	1
01:30 PM	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	1
Grand Total	0	4	0	0	0	0	4
	0	100	0	0	0	0	ı
Apprch %	0	100	0	0	0	0	
Total %	0	100	0	0	0	0	
Cars	0	100	0	0	0	0	100
% Cars	0	100	0	0	0	0	100
Trucks	U	0	0		0		0
% Trucks	U	0	0	0	0	0	0

		Route 20			Route 20		1	₹d		
		From North			From South			From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	11:00 AM to	12:45 PM - Pe	eak 1 of 1							
Peak Hour for Entire Inte	rsection Begin	ns at 11:00 AM	l .							
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0_
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Cars	0	0	0	0	0	0	0	0	0	0
% Cars	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code: 87070006 Start Date: 10/3/2020

Page No : 2

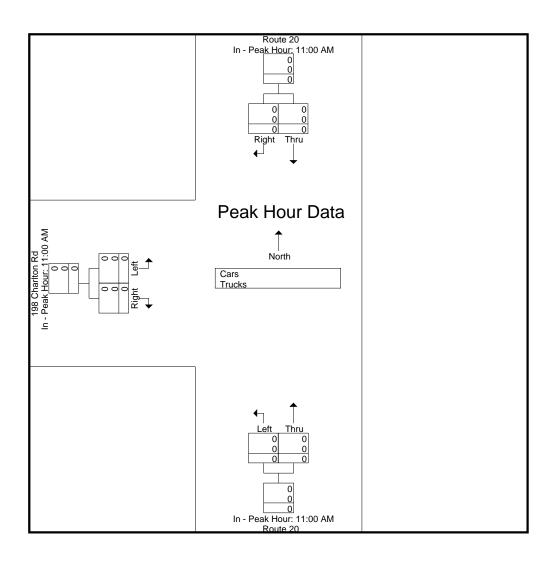


Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Peak Hour for Each Appr	oacn Begins at								
	11:00 AM			11:00 AM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000
Cars	0	0	0	0	0	0	0	0	0
% Cars	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code : 87070006 Start Date : 10/3/2020 Page No : 3



N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State: Sturbridge, MA Weather: Clear

File Name: 870700S6 Site Code: 87070006

Start Date : 10/3/2020 Page No : 4

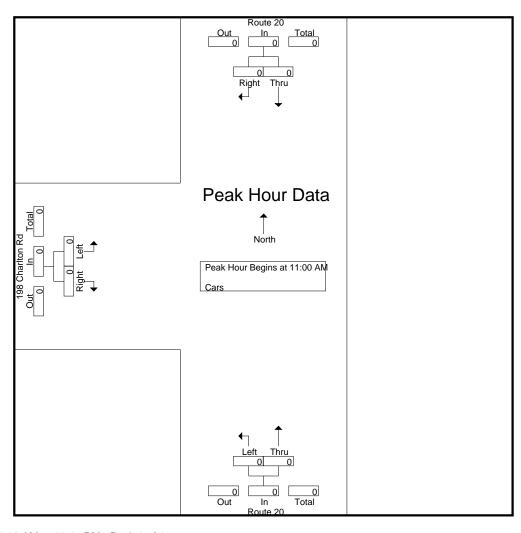
			Groups Printed-	Cars			
	Route	20	Rout	e 20	198 Cha		
	From No	orth	From	South	From	West	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
11:00 AM	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0
01:15 PM	0	1	0	0	0	0	1
01:30 PM	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0_
Total	0	1	0	0	0	0	1
					ı		
Grand Total	0	1	0	0	0	0	1
Apprch %	0	100	0	0	0	0	
Total %	0	100	0	0	0	0	

		Route 20			Route 20		19	98 Charlton F	₹d	
		From North			From South	1		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	11:00 AM to	12:45 PM - P	eak 1 of 1					_		
Peak Hour for Entire Inter	rsection Begin	ns at 11:00 AM	1							
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code: 87070006 Start Date: 10/3/2020

Page No : 5

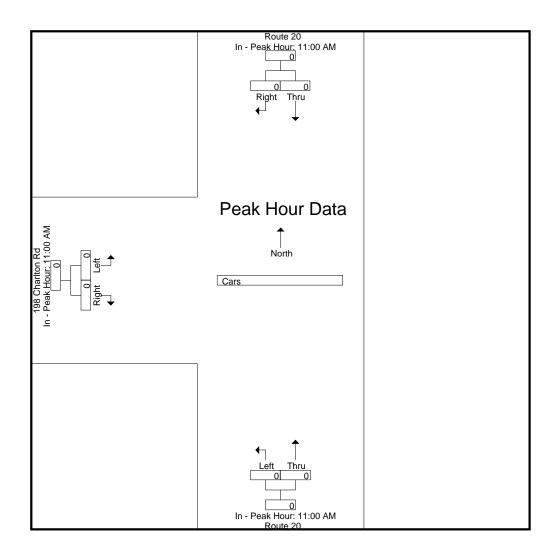


Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

I can flour for Lacif Appr	odon begins	ui.							
	11:00 AM			11:00 AM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code: 87070006 Start Date : 10/3/2020 Page No : 6



N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State: Sturbridge, MA Weather: Clear

File Name: 870700S6 Site Code : 87070006

Start Date : 10/3/2020 Page No : 7

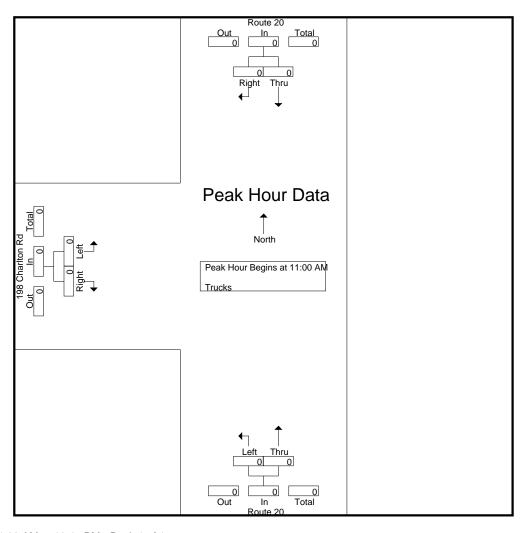
		(	Groups Printed- Tr	rucks			
	Route 2	0	Route	e 20	198 Cha	rlton Rd	
	From No	rth	From	South	From	West	
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
11:00 AM	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
,				i			
01:00 PM	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0_
Total	0	0	0	0	0	0	0
				1			
Grand Total	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	
Total %							

		Route 20			Route 20		1	98 Charlton R	₹d	
		From North			From South	1		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	11:00 AM to	12:45 PM - P	eak 1 of 1					_		
Peak Hour for Entire Inter	rsection Begi	ns at 11:00 AN	√l							
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code: 87070006 Start Date: 10/3/2020

Page No : 8

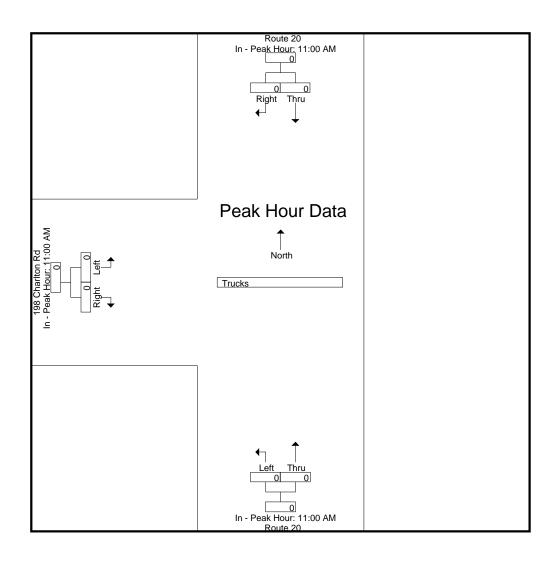


Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

I cak Hour for Lacif Appr	Dacii Degilis	aı.							
	11:00 AM			11:00 AM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code : 87070006 Start Date : 10/3/2020 Page No : 9



N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code : 87070006 Start Date: 10/3/2020

Page No : 10

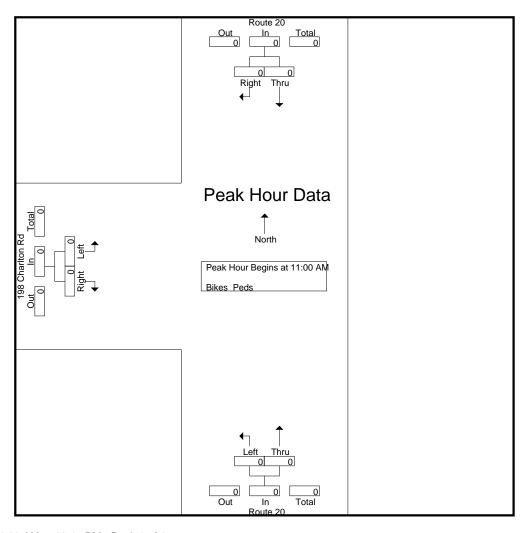
Groups Printed- Bikes Ped		
Route 20 Route 20	198 Charlton Rd	
From North From South	From West	
Start Time Thru Right Peds Left Thru Peds	Left Right Peds	Exclu. Total Inclu. Total Int. Total
11:00 AM   0 0 0 0 0 0	0 0 0	0 0 0
11:15 AM 0 0 0 0 0 0	0 0 0	0 0 0
11:30 AM   0 0 0 0 0 0 0	0 0 0	0 0 0
11:45 AM	0 0 0	0 0 0
Total 0 0 0 0 0 0	0 0 0	0 0 0
12:00 PM   0 0 0 0 0 0 0	0 0 0	0 0 0
12:15 PM 0 0 0 0 0 0	0 0 0	0 0 0
12:30 PM   0 0 0 0 0 0 0	0 0 0	0 0 0
12:45 PM	0 0 0	0 0 0
Total 0 0 0 0 0 0	0 0 0	0 0 0
01:00 PM   0 0 0 0 0 0 0	0 0 0	0 0 0
01:15 PM 0 0 0 0 0 0	0 0 0	0 0 0
01:30 PM   0 0 0 0 0 0 0	0 0 0	0 0 0
01:45 PM	0 0 0	0 0 0
Total 0 0 0 0 0 0	0 0 0	0 0 0
Grand Total 0 0 0 0 0	0 0 0	0 0 0
Apprch % 0 0 0 0	0 0	
Total %		0 0

		Route 20			Route 20		1	98 Charlton R	₹d	
		From North			From South	1		From West		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From	11:00 AM to	12:45 PM - P	eak 1 of 1					_		
Peak Hour for Entire Inter	rsection Begi	ns at 11:00 AN	√l							
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code: 87070006 Start Date: 10/3/2020

Page No : 11

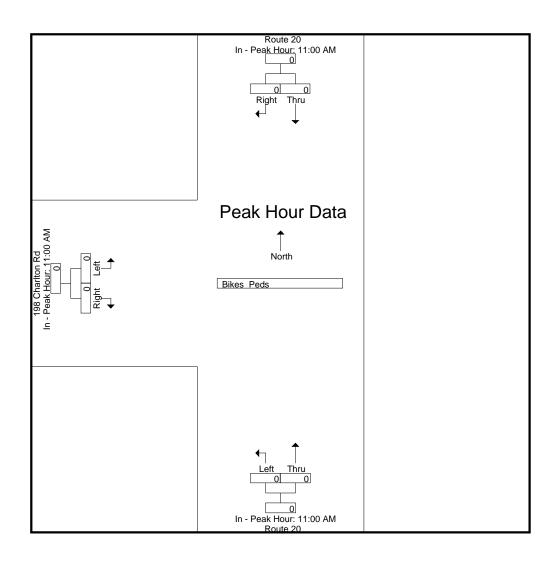


Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Cak Hour for Lacit Appr	odon begins t	<i>a</i> (.							
	11:00 AM			11:00 AM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Route 20 E/W Street: 198 Charlton Rd City/State : Sturbridge, MA Weather : Clear

File Name: 870700S6 Site Code : 87070006 Start Date : 10/3/2020 Page No : 12



CAPACITY ANALYSIS WORKSHEETS

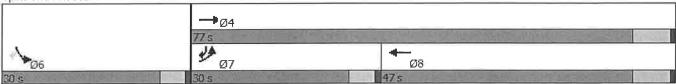


Ame Configurations affic Volume (vph) 166 698 591 43 31 84 thure Volume (vph) 166 698 591 43 31 84 thure Volume (vph) 166 698 591 43 31 84 thure Volume (vph) 1900 1900 1900 1900 1900 1900 1900 and Flow (vphpl) 1900 1900 1900 1900 1900 1900 and Flow (vphpl) 1900 1900 1900 1900 1900 1900 and Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190		*	-	<b>←</b>	*	-	1
And Configurations affice Volume (vph) 166 698 591 43 31 84 and affice Volume (vph) 166 698 591 43 31 84 and all row (vphpl) 1900 1900 1900 1900 1900 1900 1900 and Width (ft) 13 12 11 12 12 12 12 orage Length (ft) 265 115 160 0 orage Lanes 1 1 2 1 12 12 12 orage Length (ft) 265 25 25 30 30 30 30 30 30 30 30 30 30 30 30 30	Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
affic Volume (vph)							
titure Volume (vph)							
earl Flow (vphph)							
Inne Width (ft)							
orage Length (ft)         265         115         160         0           orage Lanes         1         1         2         1           orage Langth (ft)         25         25         yes         yes           yes my Cell (mph)         30         30         30         30           nk Speed (mph)         30         30         30         30           nk Distance (ft)         1177         1858         490         490           avel Time (s)         26.8         42.2         11.1         22           save Hour Factor         0.85         0.85         0.82         0.69         0.69           save Vehicles (%)         2%         11%         10%         3%         0%         12%           avery Vehicles (%)         2%         11%         10%         3%         0%         12%           avery Vehicles (%)         2%         11%         10%         3%         0%         12%           avery Vehicles (%)         2%         11%         10%         3%         0%         12%           avery Vehicles (%)         2%         11%         10%         3%         0%         12%           avery Vehicles (%) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
1	` '		12	11			
## Supper Length (ft)							
ght Turn on Red					1		1
Speed (mph)   30   30   30   30   30   30   30   3		25				25	
Table   Tabl	Right Turn on Red				Yes		Yes
avel Time (s)	Link Speed (mph)		30	30		30	
avel Time (s)	Link Distance (ft)		1177	1858		490	
Back Hour Factor         0.85         0.85         0.82         0.82         0.69         0.69           Beavy Vehicles (%)         2%         11%         10%         3%         0%         12%           Beavy Vehicles (%)         2%         11%         10%         3%         0%         12%           Beaver Lane Traffic (%)         195         821         721         52         45         122           Immorphy Prot         NA         NA         Free         Prot         pm+ov           otected Phases         7         4         8         6         7           effector Phase         7         4         8         6         7           vitch Phase         7         4         8         6         7	Travel Time (s)		26.8	42.2		11.1	
Party Vehicles (%) 2% 11% 10% 3% 0% 12% arred Lane Traffic (%) arred Lane Lane Lane Lane Lane Lane Lane Lane		0.85			0.82	0.69	0.69
Paragraphic							
Second Flow (vph)   195   821   721   52   45   122		Z 10	1170	1070	070	0,10	12.70
rm Type		105	004	701	50	A.F.	122
otected Phases 7 4 8 6 7 ermitted Phases 7 4 8 6 7 ermitted Phase 7 4 8 6 7 witch Phase nimum Initial (s) 4.0 4.0 4.0 4.0 9.0 nimum Split (s) 9.0 23.0 23.0 21.0 9.0 otal Split (s) 30.0 77.0 47.0 30.0 30.0 otal Split (%) 28.0% 72.0% 43.9% 28.0% 28.0% ellow Time (s) 4.0 6.0 6.0 4.0 4.0 Hered Time (s) 1.0 1.0 1.0 1.0 1.0 set Time Adjust (s) -1.0 -3.0 -3.0 -1.0 -1.0 otal Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 dead/Lag Lead Lag							
ermitted Phases 7 4 8 6 7 witch Phase witch Phase inimum Initial (s) 4.0 4.0 4.0 4.0 9.0 witch Phase inimum Split (s) 9.0 23.0 23.0 21.0 9.0 wital Split (s) 30.0 77.0 47.0 30.0 30.0 wital Split (%) 28.0% 72.0% 43.9% 28.0% 28.0% with Split (%) 28.0% 72.0% 43.9% 28.0% 28.0% with Split (%) 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 with Split (s) 1.0 1.0 1.0 1.0 with Split (s) 1.0					Free		A LOCAL CONTRACTOR
Attack of the properties of th		7	4	8		6	
witch Phase nimum Initial (s)	Permitted Phases				Free		
### Inimum Initial (s)	Detector Phase	7	4	8		6	7
nimum Split (s) 9.0 23.0 23.0 21.0 9.0 btal Split (s) 30.0 77.0 47.0 30.0 30.0 btal Split (s) 28.0% 72.0% 43.9% 28.0% 28	Switch Phase						
nimum Split (s) 9.0 23.0 23.0 21.0 9.0 atal Split (s) 30.0 77.0 47.0 30.0 30.0 atal Split (s) 28.0% 72.0% 43.9% 28.0% 28	Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
otal Split (s)         30.0         77.0         47.0         30.0         30.0           otal Split (%)         28.0%         72.0%         43.9%         28.0%         28.0%           bellow Time (s)         4.0         6.0         6.0         4.0         4.0           l-Red Time (s)         1.0         1.0         1.0         1.0         1.0           i-Red Time (s)         1.0         1.0         1.0         1.0         1.0           otal Lost Time (s)         4.0         4.0         4.0         4.0         4.0           otal Lost Time (s)         4.0         4.0         4.0         4.0         4.0           otal Lost Time (s)         4.0         4.0         4.0         4.0         4.0           otal Lost Time (s)         4.0         4.0         4.0         4.0         4.0         4.0           otal Lost Time (s)         4.0 </td <td>Minimum Split (s)</td> <td></td> <td></td> <td>23.0</td> <td></td> <td>21.0</td> <td>9.0</td>	Minimum Split (s)			23.0		21.0	9.0
atal Split (%)         28.0%         72.0%         43.9%         28.0%         28.0%           bellow Time (s)         4.0         6.0         6.0         4.0         4.0           bellow Time (s)         1.0         1.0         1.0         1.0         1.0         1.0           bellow Time (s)         1.0         4.0 <t< td=""><td>Total Split (s)</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Total Split (s)						
### Additional Part							
Fred Time (s)							
### Time Adjust (s)							
Autol							
Lead Lag Optimize? Yes Yes Yes Yes Acall Mode None Min Min None None Ratio 0.43 0.30 0.48 0.03 0.09 0.21 ontrol Delay 22.3 2.3 12.5 0.0 25.3 4.9 Leue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.							
Yes	Total Lost Time (s)		4.0			4.0	
None   None   Min   Min   None   None   Ratio   O.43   O.30   O.48   O.03   O.09   O.21	Lead/Lag						
Ratio 0.43 0.30 0.48 0.03 0.09 0.21 ontrol Delay 22.3 2.3 12.5 0.0 25.3 4.9 Useue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Lead-Lag Optimize?	Yes					
Ratio 0.43 0.30 0.48 0.03 0.09 0.21 ontrol Delay 22.3 2.3 12.5 0.0 25.3 4.9 Useue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Recall Mode	None	Min	Min		None	None
Description   Delay   Description   Delay   Description   Delay   De	v/c Ratio				0.03	0.09	0.21
Delay   Dela	Control Delay						
stal Delay         22.3         2.3         12.5         0.0         25.3         4.9           deue Length 50th (ft)         55         37         89         0         6         4           deue Length 95th (ft)         119         55         143         0         18         18           dernal Link Dist (ft)         1097         1778         410	-						
Serial Length 50th (ft)   55   37   89   0   6   4	-						
Second   Length   95th   (ft)   119   55   143   0   18   18							
ternal Link Dist (ft) 1097 1778 410  In Bay Length (ft) 265 115 160  In Bay Length (ft) 962 3252 2585 1568 1843 960  In Bay Le							
rn Bay Length (ft) 265 115 160 see Capacity (vph) 962 3252 2585 1568 1843 960 arvation Cap Reductn 0 0 0 0 0 0 oillback Cap Reductn 0 0 0 0 0 0 orage Cap Reductn 0 0 0 0 0 0 orage Cap Reductn 0 0 0 0 0 0 0 orage Cap Reductn 0 0 0 0 0 0 0 orage Cap Reductn 0 0.20 0.25 0.28 0.03 0.02 0.13 erresection Summary ea Type: Other		119			U		18
ase Capacity (vph) 962 3252 2585 1568 1843 960 arvation Cap Reductn 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Internal Link Dist (ft)		1097	1778			
arvation Cap Reductn         0         0         0         0         0         0           billback Cap Reductn         0         0         0         0         0         0         0           borage Cap Reductn         0	Turn Bay Length (ft)						
arvation Cap Reductn         0	Base Capacity (vph)	962	3252	2585	1568	1843	960
billback Cap Reductn         0	Starvation Cap Reductn	0	0	0	0	0	0
orage Cap Reductn 0 0 0 0 0 0 0 0 0 0 0 duced v/c Ratio 0.20 0.25 0.28 0.03 0.02 0.13 (ersection Summary Other				0	0	0	0
educed v/c Ratio 0.20 0.25 0.28 0.03 0.02 0.13  ersection Summary  ea Type: Other					0	0	
ea Type: Other							
ea Type: Other		0.20	0.20	0.20	0.00	0,02	0.10
**							
volo Longth: 107	Area Type:	Other					
Cle Length. 107	Cycle Length: 107						

Actuated Cycle Length: 53

Natural Cycle: 55 Control Type: Actuated-Uncoordinated

1: Route 20 & Hobbs Brook Drive Splits and Phases:



	*	-	-	*	-	1
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	**	<b>^</b>	<b>^</b>	77	ሻሻ	77
Traffic Volume (vph)	166	698	591	43	31	84
Future Volume (vph)	166	698	591	43	31	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	13	12	11	12	12	12
Total Lost time (s)	4.0	4.0	4.0	1.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1829	3252	3172	1568	3502	1442
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1829	3252	3172	1568	3502	1442
Peak-hour factor, PHF	0.85	0.85	0.82	0.82	0.69	0.69
Adj. Flow (vph)	195	821	721	52	45	122
RTOR Reduction (vph)	0	0	0	0	0	69
Lane Group Flow (vph)	195	821	721	52	45	53
Heavy Vehicles (%)	2%	11%	10%	3%	0%	12%
Turn Type	Prot	NA	NA	Free	Prot	pm+ov
Protected Phases	7	4	8	,,,,,,	6	7
Permitted Phases		1	, ,	Free		6
Actuated Green, G (s)	12.1	39.4	22.3	54.9	3.5	15.6
Effective Green, g (s)	13.1	42.4	25.3	54.9	4.5	17.6
Actuated g/C Ratio	0.24	0.77	0.46	1.00	0.08	0.32
Clearance Time (s)	5.0	7.0	7.0	1100	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	436	2511	1461	1568	287	567
v/s Ratio Prot	c0.11	0.25	c0.23	1000	c0.01	0.02
v/s Ratio Perm	60.11	0.20	00.20	0.03	00.01	0.01
v/c Ratio	0.45	0.33	0.49	0.03	0.16	0.09
Uniform Delay, d1	17.8	1.9	10.3	0.0	23.4	13.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.3	0.0	0.3	0.1
-	18.5	2.0	10.6	0.0	23.7	13.1
Delay (s)		2.0 A	10.0 B	Α	23.7 C	В
Level of Service	В	A	0	A	40.0	В

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	38.9%	ICU Level of Service	Α
Analysis Period (min)	15		
c Critical Lane Group			

16.0

5.2

9.9

Approach Delay (s)

Approach LOS

	<b>→</b>	<b>→</b>	<b>←</b>	*	1	4
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	Ť	<b>^</b>	ተተ	77	ሻሻ	7
Traffic Volume (vph)	378	750	743	190	157	361
Future Volume (vph)	378	750	743	190	157	361
	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	12
Lane Width (ft)		12	- 11		160	- 0
Storage Length (ft)	265			115		
Storage Lanes	1			1	2	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		1097	1575		490	
Travel Time (s)		24.9	35.8		11.1	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.94	0.94
Heavy Vehicles (%)	0%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)			57,175	577.5		
Lane Group Flow (vph)	415	824	782	200	167	384
Turn Type	Prot	NA	NA	Free	Prot	
Protected Phases	7	4	8	1100	6	7
	- 1	4	0	Free	Ü	6
Permitted Phases	7	4	8	riee	6	7
Detector Phase	1	4	Ŏ		0	1
Switch Phase	1.0	4.0			4.0	4.0
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	9.0	23.0	23.0		21.0	9.0
Total Split (s)	30.0	77.0	47.0		30.0	30.0
Total Split (%)	28.0%	72.0%	43.9%		28.0%	28.0%
Yellow Time (s)	4.0	6.0	6.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-3.0	-3.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	Min	Min		None	None
v/c Ratio	0.69	0.31	0.62	0.12	0.34	0.44
	30.4	3.4	21.6	0.12	32.6	11.1
Control Delay					0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0		
Total Delay	30.4	3.4	21.6	0.2	32.6	11.1
Queue Length 50th (ft)	162	47	156	0	37	77
Queue Length 95th (ft)	#320	79	224	0	72	172
Internal Link Dist (ft)		1017	1495		410	
Turn Bay Length (ft)	265			115	160	
Base Capacity (vph)	674	3306	2026	1615	1267	935
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.25	0.39	0.12	0.13	0.41
Intersection Summary				Want E		
Area Type: Cycle Length: 107	Other					

Proposed Travel Center VAI

### 1: Route 20 & Hobbs Brook Drive

Actuated Cycle Length: 73.4

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 20 & Hobbs Brook Drive



	*	$\rightarrow$	•	*	1	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	ħ	<b>ተ</b> ተ	ተተ	7"	ሻሻ	7	
Traffic Volume (vph)	378	750	743	190	157	361	
Future Volume (vph)	378	750	743	190	157	361	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width	13	12	11	12	12	12	
Total Lost time (s)	4.0	4.0	4.0	1.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00	
Frt	1.00	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1865	3505	3388	1615	3502	1615	
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1865	3505	3388	1615	3502	1615	
Peak-hour factor, PHF	0.91	0.91	0.95	0.95	0.94	0.94	
Adj. Flow (vph)	415	824	782	200	167	384	
RTOR Reduction (vph)	0	0	0	0	0	44	
Lane Group Flow (vph)	415	824	782	200	167	340	
Heavy Vehicles (%)	0%	3%	3%	0%	0%	0%	
Turn Type	Prot	NA	NA	Free	Prot	pm+ov	
Protected Phases	7	4	8	1166	6	7	
Permitted Phases			0	Free	U	6	
	22.6	52.0	24.4	73.2	9.2	31.8	
Actuated Green, G (s)	23.6	55.0	27.4	73.2	10.2	33.8	
Effective Green, g (s)		0.75	0.37	1.00	0.14	0.46	
Actuated g/C Ratio	0.32 5.0	7.0	7.0	1.00	5.0	5.0	
Clearance Time (s)			3.0		3.0	3.0	
Vehicle Extension (s)	3.0	3.0		4045			
Lane Grp Cap (vph)	601	2633	1268	1615	487	833	
v/s Ratio Prot	c0.22	0.24	c0.23	0.40	0.05	c0.13	
v/s Ratio Perm	0.00	0.04	0.00	0.12	0.04	0.08	
v/c Ratio	0.69	0.31	0.62	0.12	0.34	0.41	
Uniform Delay, d1	21.6	3.0	18.6	0.0	28.5	13.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.4	0.1	0.9	0.2	0.4	0.3	
Delay (s)	25.0	3.0	19.5	0.2	28.9	13.4	
Level of Service	С	Α	В	Α	C	В	
Approach Delay (s)		10.4	15.6		18.1		
Approach LOS		В	В		В		
Intersection Summary	and not		In Carlos				
HCM 2000 Control Delay			13.8	H	CM 2000	Level of Serv	vice B
HCM 2000 Volume to Capac	city ratio		0.62				
Actuated Cycle Length (s)			73.2			t time (s)	12.0
Intersection Capacity Utilizat	ion		56.0%	IC	U Level	of Service	В
Analysis Period (min)			15				

	<b>*</b>	<b>-</b>	-	*	-	4
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	Ť	<b>†</b>	<b>1</b>	77	ሻሻ	7
	166	766	673	43	31	84
Traffic Volume (vph)	166	766	673	43	31	84
Future Volume (vph)			1900		1900	1900
Ideal Flow (vphpl)	1900	1900		1900	1900	
Lane Width (ft)	13	12	11	12		12
Storage Length (ft)	265			115	160	0
Storage Lanes	1			1	2	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		1460	2084		490	
Travel Time (s)		33.2	47.4		11.1	
Peak Hour Factor	0.85	0.85	0.82	0.82	0.69	0.69
Heavy Vehicles (%)	2%	11%	10%	3%	0%	12%
Shared Lane Traffic (%)	_,,					
Lane Group Flow (vph)	195	901	821	52	45	122
Turn Type	Prot	NA	NA	Free	Prot	pm+ov
Protected Phases	7	4	8	1100	6	7
Permitted Phases	- 1	4	U	Free	U	6
	7	4	8	riee	6	7
Detector Phase	- 1	4	0		0	1
Switch Phase	4.0	4.0	4.0		4.0	4.0
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	9.0	23.0	23.0		21.0	9.0
Total Split (s)	30.0	77.0	47.0		30.0	30.0
Total Split (%)	28.0%	72.0%	43.9%		28.0%	28.0%
Yellow Time (s)	4.0	6.0	6.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-3.0	-3.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	Min	Min		None	None
v/c Ratio	0.44	0.32	0.52	0.03	0.09	0.22
	24.2	2.3	12.7	0.03	27.6	7.6
Control Delay						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	2.3	12.7	0.0	27.6	7.6
Queue Length 50th (ft)	59	42	108	0	7	10
Queue Length 95th (ft)	129	61	166	0	19	29
Internal Link Dist (ft)		1380	2004		410	
Turn Bay Length (ft)	265			115	160	
Base Capacity (vph)	913	3213	2497	1568	1749	902
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.28	0.33	0.03	0.03	0.14
	V.21	3,23	9.00	2.00	3.00	2,
Intersection Summary	OAL -		1000		C TO C TO	
Area Type:	Other					
Cycle Length: 107						

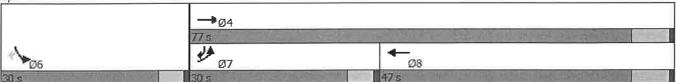
### 1: Route 20 & Hobbs Brook Drive

Actuated Cycle Length: 56.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Route 20 & Hobbs Brook Drive



: <del>-</del>	*	<b>→</b>	<b>—</b>	*	-	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	A CONTRACTOR OF THE PARTY OF TH
Lane Configurations	*5	<b>^</b>	<b>^</b>	7	ሻሻ	7	
Traffic Volume (vph)	166	766	673	43	31	84	
Future Volume (vph)	166	766	673	43	31	84	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width	13	12	11	12	12	12	
Total Lost time (s)	4.0	4.0	4.0	1.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00	
Frt	1.00	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	3252	3172	1568	3502	1442	
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1829	3252	3172	1568	3502	1442	
Peak-hour factor, PHF	0.85	0.85	0.82	0.82	0.69	0.69	
Adj. Flow (vph)	195	901	821	52	45	122	
RTOR Reduction (vph)	0	0	0	0	0	49	
Lane Group Flow (vph)	195	901	821	52	45	73	
Heavy Vehicles (%)	2%	11%	10%	3%	0%	12%	
Turn Type	Prot	NA	NA	Free	Prot	pm+ov	
Protected Phases	7	4	8		6	7	
Permitted Phases				Free		6	
Actuated Green, G (s)	12.6	42.6	25.0	58.1	3.5	16.1	
Effective Green, g (s)	13.6	45.6	28.0	58.1	4.5	18.1	
Actuated g/C Ratio	0.23	0.78	0.48	1.00	0.08	0.31	
Clearance Time (s)	5.0	7.0	7.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	428	2552	1528	1568	271	548	
v/s Ratio Prot	c0.11	0.28	c0.26		0.01	c0.03	
v/s Ratio Perm				0.03		0.02	
v/c Ratio	0.46	0.35	0.54	0.03	0.17	0.13	
Uniform Delay, d1	19.1	1.9	10.5	0.0	25.0	14.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.1	0.4	0.0	0.3	0.1	
Delay (s)	19.8	1.9	10.9	0.0	25.3	14.5	
Level of Service	В	Α	В	Α	С	В	
Approach Delay (s)		5.1	10.2		17.4		
Approach LOS		Α	В		В		
Intersection Summary	Special 15						
HCM 2000 Control Delay			8.2	H	CM 2000	Level of Sen	vice A
HCM 2000 Volume to Capa	city ratio		0.48				
Actuated Cycle Length (s)	•		58.1	Sı	um of los	st time (s)	12.0
Intersection Capacity Utiliza	ation		41.1%			of Service	А
Analysis Period (min)			15				
c Critical Lane Group							

	<b>*</b>	<b>→</b>	+	1	<b>/</b>	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	ሻ	<b>^</b>	44	7	ሻሻ	7	
Traffic Volume (vph)	378	788	780	190	157	361	
Future Volume (vph)	378	788	780	190	157	361	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
_ane Width (ft)	13	12	11	12	12	12	
Storage Length (ft)	265	14		115	160	0	
Storage Lanes	1			1	2	1	
Taper Length (ft)	25				25		
Right Turn on Red	20			Yes	20	Yes	
ink Speed (mph)		30	30	163	30	100	
ink Distance (ft)		1393	1780		490		
		31.7	40.5		11.1		
ravel Time (s)	0.04		0.95	0.95	0.94	0.94	
Peak Hour Factor	0.91	0.91					
Heavy Vehicles (%)	0%	3%	3%	0%	0%	0%	
Shared Lane Traffic (%)				000	4.07	004	
ane Group Flow (vph)	415	866	821	200	167	384	
urn Type	Prot	NA	NA	Free	Prot	pm+ov	
Protected Phases	7	4	8		6	7	
Permitted Phases				Free		6	
etector Phase	7	4	8		6	7	
Switch Phase							
/linimum Initial (s)	4.0	4.0	4.0		4.0	4.0	
linimum Split (s)	9.0	23.0	23.0		21.0	9.0	
otal Split (s)	30.0	77.0	47.0		30.0	30.0	
otal Split (%)	28.0%	72.0%	43.9%		28.0%	28.0%	
'ellow Time (s)	4.0	6.0	6.0		4.0	4.0	
II-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
ost Time Adjust (s)	-1.0	-3.0	-3.0		-1.0	-1.0	
otal Lost Time (s)	4.0	4.0	4.0		4.0	4.0	
ead/Lag	Lead		Lag		.5000	Lead	
ead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	None	Min	Min		None	None	
/c Ratio	0.70	0.33	0.63	0.12	0.35	0.45	
Control Delay	32.0	3.4	21.6	0.12	33.6	12.3	
	0.0	0.0	0.0	0.0	0.0	0.0	
Queue Delay				0.0	33.6	12.3	
otal Delay	32.0	3.4	21.6				
Queue Length 50th (ft)	167	51	167	0	38	84	
Queue Length 95th (ft)	#350	84	237	0	74	187	
nternal Link Dist (ft)		1313	1700		410		
urn Bay Length (ft)	265		×	115	160		
ase Capacity (vph)	659	3297	1983	1615	1239	913	
tarvation Cap Reductn	0	0	0	0	0	0	
pillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.63	0.26	0.41	0.12	0.13	0.42	
ntersection Summary		100					
Area Type: Cycle Length: 107	Other						

Actuated Cycle Length: 75.2

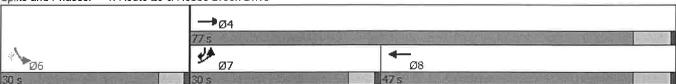
Natural Cycle: 60

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 20 & Hobbs Brook Drive



	•	<b>→</b>	•	*	<b>\</b>	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	esting of the set transfers of t
Lane Configurations	ħ	<b>十</b> 个	<b>^</b>	7"	ሻሻ	7	
Traffic Volume (vph)	378	788	780	190	157	361	
Future Volume (vph)	378	788	780	190	157	361	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width	13	12	11	12	12	12	
Total Lost time (s)	4.0	4.0	4.0	1.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00	
Frt	1.00	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1865	3505	3388	1615	3502	1615	
FIt Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1865	3505	3388	1615	3502	1615	
Peak-hour factor, PHF	0.91	0.91	0.95	0.95	0.94	0.94	
Adj. Flow (vph)	415	866	821	200	167	384	
RTOR Reduction (vph)	0	0	0	0	0	39	
Lane Group Flow (vph)	415	866	821	200	167	345	
Heavy Vehicles (%)	0%	3%	3%	0%	0%	0%	
Turn Type	Prot	NA	NA.	Free	Prot	pm+ov	
Protected Phases	7	4	8		6	7	
Permitted Phases				Free		6	
Actuated Green, G (s)	22.7	53.6	25.9	74.9	9.3	32.0	
Effective Green, g (s)	23.7	56.6	28.9	74.9	10.3	34.0	
Actuated g/C Ratio	0.32	0.76	0.39	1.00	0.14	0.45	
Clearance Time (s)	5.0	7.0	7.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	590	2648	1307	1615	481	819	
v/s Ratio Prot	c0.22	0.25	c0.24		0.05	c0.13	
v/s Ratio Perm				0.12		0.08	
v/c Ratio	0.70	0.33	0.63	0.12	0.35	0.42	
Uniform Delay, d1	22.5	3.0	18.6	0.0	29.3	13.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	0.1	1.0	0.2	0.4	0.4	
Delay (s)	26.3	3.0	19.6	0.2	29.7	14.2	
Level of Service	С	Α	В	Α	С	В	
Approach Delay (s)		10.6	15.8		18.9		
Approach LOS		В	В		В		
Intersection Summary	b sto, se W			visi	71		
HCM 2000 Control Delay			14.0	H	CM 2000	Level of Serv	rice B
HCM 2000 Volume to Capa	city ratio		0.63				
Actuated Cycle Length (s)			74.9			t time (s)	12.0
Intersection Capacity Utiliza	tion		57.0%	IC	U Level	of Service	В
Analysis Period (min)			15				
c Critical Lane Group							

	<b>≯</b>	-	•	•	<b>←</b>	*	4	<b>†</b>	-	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>↑</b> ↑		Ť	<b>^</b>		٦	1>			4	
Traffic Volume (vph)	0	891	223	131	627	0	157	0	73	4	0	(
Future Volume (vph)	0	891	223	131	627	0	157	0	73	4	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	0		50	0		C
Storage Lanes	0		0	- 1		0	- 1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		150			407			200			213	
Travel Time (s)		3.4			9.3			4.5			4.8	
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
Heavy Vehicles (%)	2%	7%	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)									0			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1210	0	142	682	0	171	79	0	0	11	0
Turn Type	U	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2		, 0,,,,	6	
Permitted Phases				Ü	J		2	V V V		6		
Detector Phase		4		3	8		2	2		6	6	
Switch Phase		4		J	0		- 4	4		0	0	
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
		22.0		10.0	22.0		18.0	18.0		19.0	19.0	
Minimum Split (s)		35.0		16.0	51.0		19.0	19.0		19.0	19.0	
Total Split (s)		50.0%		22.9%	72.9%		27.1%	27.1%		27.1%	27.1%	
Total Split (%)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Yellow Time (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
All-Red Time (s)		-2.0		-2.0	-2.0		-2.0	0.0		2.0	-2.0	
Lost Time Adjust (s)					4.0		4.0	6.0			4.0	
Total Lost Time (s)		4.0		4.0	4.0		4.0	0.0			4.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes	Mana		Mana	Mana		Ness	Mono	
Recall Mode		None		None	None		None	None		None	None	
v/c Ratio		0.65		0.38	0.27		0.50	0.14			0.02	
Control Delay		16.4		29.8	4.5		30.4	0.5			0.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		16.4		29.8	4.5		30.4	0.5			0.1	
Queue Length 50th (ft)		217		56	53		66	0			0	
Queue Length 95th (ft)		300		108	75		126	0			0	
Internal Link Dist (ft)		70			327			120			133	
Turn Bay Length (ft)				125								
Base Capacity (vph)		1868		435	2506		429	658			565	
Starvation Cap Reductn		0		0	0		0	0			0	
Spillback Cap Reductn		0		0	0		0	0			0	
Storage Cap Reductn		0		0	0		0	0			0	
Reduced v/c Ratio		0.65		0.33	0.27		0.40	0.12			0.02	
Intersection Summary	MILE.	red in the l	V	8 4.5. 9	NE INCO		162 6	100		-A 97		rë ve

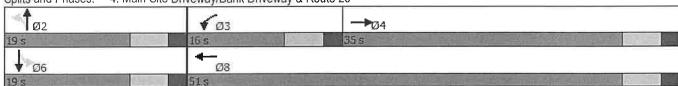
Area Type: Cycle Length: 70 Other

Actuated Cycle Length: 59.9

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Main Site Driveway/Bank Driveway & Route 20



	*	-	7	•	-	*	4	†	-	-	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>ሳ</b> ጉ		ሻ	ተተ		Ŋ,	1>			44	
Traffic Volume (vph)	0	891	223	131	627	0	157	0	73	4	0	6
Future Volume (vph)	0	891	223	131	627	0	157	0	73	4	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	6.0			4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00			1.00	
Frt		0.97		1.00	1.00		1.00	0.85			0.91	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3303		1770	3374		1770	1583			1672	
Flt Permitted		1.00		0.95	1.00		0.75	1.00			0.90	
Satd. Flow (perm)		3303		1770	3374		1398	1583			1525	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	968	242	142	682	0	171	0	79	4	0	7
RTOR Reduction (vph)	0	29	0	0	0	0	0	68	0	0	9	0
Lane Group Flow (vph)	0	1181	0	142	682	0	171	11	0	0	2	0
Heavy Vehicles (%)	2%	7%	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)									0			
Turn Type	11 - 512	NA	Y III	Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)		28.8		6.7	41.5		8.7	8.7			8.7	
Effective Green, g (s)		30.8		8.7	43.5		10.7	8.7			10.7	
Actuated g/C Ratio		0.50		0.14	0.70		0.17	0.14			0.17	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	A 1 1 1 1	1635		247	2359		240	221			262	
v/s Ratio Prot		c0.36		c0.08	0.20			0.01				
v/s Ratio Perm							c0.12				0.00	
v/c Ratio		0.72		0.57	0.29		0.71	0.05			0.01	
Uniform Delay, d1		12.3		25.0	3.5		24.3	23.2			21.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.6		3.2	0.1		9.6	0.1			0.0	
Delay (s)		13.9		28.2	3.6		33.9	23.3			21.4	
Level of Service		В		С	Α		C	C			С	
Approach Delay (s)		13.9			7.8			30.5			21.4	
Approach LOS		В			Α			С			С	
Intersection Summary				H-1000-II			di dani			8 1111 (8)	TENE I	
HCM 2000 Control Delay HCM 2000 Volume to Capa	city ratio		13.6 0.72	H	CM 2000	Level of	Service		В			
Actuated Cycle Length (s)	oity ratio		62.2	Si	um of lost	time (s)			14.0			
Actuated Cycle Leligtii (5)			02.2			٠,			17.0			

ICU Level of Service

66.0%

15

Analysis Period (min) c Critical Lane Group

Intersection Capacity Utilization

С

# 4: Main Site Driveway/Bank Driveway & Route 20

,	۶	<b>→</b>	*	€	<b>←</b>	*	4	†	1	-	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>↑</b> ↑		ሻ	<b>^</b>		ř	↑→			43-	
Traffic Volume (vph)	0	1058	144	116	1192	0	139	0	60	6	0	25
Future Volume (vph)	0	1058	144	116	1192	0	139	0	60	6	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	0		59	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		184			389			200			189	
Travel Time (s)		4.2			8.8			4.5			4.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1307	0	126	1296	0	151	65	0	0	34	0
Turn Type		NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases							2			6		
Detector Phase		4		3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		22.0		10.0	22.0		17.0	17.0		18.0	18.0	
Total Split (s)		35.0		17.0	52.0		18.0	18.0		18.0	18.0	
Total Split (%)		50.0%		24.3%	74.3%		25.7%	25.7%		25.7%	25.7%	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	0.0			-2.0	
Total Lost Time (s)		4.0		4.0	4.0		4.0	6.0			4.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		None		None	None		None	None		None	None	
v/c Ratio		0.67		0.32	0.49		0.46	0.11			0.07	
Control Delay		17.1		27.9	5.6		30.5	0.4			0.3	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		17.1		27.9	5.6		30.5	0.4			0.3	
Queue Length 50th (ft)		240		48	120		58	0			0	
Queue Length 95th (ft)		#337		95	161		115	0			0	
Internal Link Dist (ft)		104		-00	309		110	120			109	
Turn Bay Length (ft)		104		125	000			120			100	
Base Capacity (vph)		1962		502	2686		418	653			571	
Starvation Cap Reductn		0		0	0		0	0			0	
Spillback Cap Reductn		0		0	0		0	0			0	
Storage Cap Reductin		0		0	0		0	0			0	
Reduced v/c Ratio		0.67		0.25	0.48		0.36	0.10			0.06	
reduced v/c ratio		0.07		0.23	0.40		0.50	0.10			0.00	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 58.9

Natural Cycle: 55

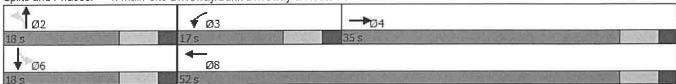
## 4: Main Site Driveway/Bank Driveway & Route 20

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Main Site Driveway/Bank Driveway & Route 20



	۶	$\rightarrow$	7	1	-	*	4	<b>†</b>	1	-	<b></b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>↑</b> ↑		ሻ	ተተ		ሻ	1>			4	
Traffic Volume (vph)	0	1058	144	116	1192	0	139	0	60	6	0	25
Future Volume (vph)	0	1058	144	116	1192	0	139	0	60	6	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	6.0			4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00			1.00	
Frt		0.98		1.00	1.00		1.00	0.85			0.89	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)		3475		1770	3539		1770	1583			1646	
Flt Permitted		1.00		0.95	1.00		0.73	1.00			0.93	
Satd. Flow (perm)		3475		1770	3539		1369	1583			1550	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1150	157	126	1296	0	151	0	65	7	0	27
RTOR Reduction (vph)	0	14	0	0	0	0	0	57	0	0	28	0
Lane Group Flow (vph)	0	1293	0	126	1296	0	151	8	0	0	6	0
Turn Type	7	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8		1 01111	2		1 0.111	6	
Permitted Phases							2			6		
Actuated Green, G (s)		28.1		6.9	41.0		7.9	7.9			7.9	
Effective Green, g (s)		30.1		8.9	43.0		9.9	7.9			9.9	
Actuated g/C Ratio		0.49		0.15	0.71		0.16	0.13			0.16	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1717		258	2498		222	205			251	47,5
v/s Ratio Prot		c0.37		0.07	c0.37		222	0.01			201	
v/s Ratio Perm		60.07		0.07	00.07		c0.11	0.01			0.00	
v/c Ratio		0.75		0.49	0.52		0.68	0.04			0.02	
		12.4		23.9	4.2		24.0	23.2			21.4	
Uniform Delay, d1 Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
•		1.9		1.5	0.2		8.3	0.1			0.0	
Incremental Delay, d2				25.4	4.3		32.3	23.3			21.5	
Delay (s)		14.3		23.4 C			32.3 C	23.3 C			C C	
Level of Service		B		C	A 6.2		C	29.6			21.5	
Approach Delay (s)		14.3						29.6 C			Z1.5	
Approach LOS		В			Α			C			C	
Intersection Summary												
HCM 2000 Control Delay			11.6	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacit	y ratio		0.74									
Actuated Cycle Length (s)			60.9		ım of lost				14.0			
Intersection Capacity Utilization	n		66.3%	1C	U Level c	of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

	٠		*	1	+	*	4	†	1	-	<b></b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>†</b> 1>		ሻ	44		7	Ĵ⇒			4	
Traffic Volume (vph)	0	1126	165	127	1149	0	151	0	66	9	0	31
Future Volume (vph)	0	1126	165	127	1149	0	151	0	66	9	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	0		50	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			395			200			207	
Travel Time (s)		4.7			9.0			4.5			4.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1403	0	138	1249	0	164	72	0	0	44	0
Turn Type		NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases							2			6		
Detector Phase		4		3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		22.0		10.0	22.0		18.0	18.0		18.0	18.0	
Total Split (s)		37.0		14.0	51.0		19.0	19.0		19.0	19.0	
Total Split (%)		52.9%		20.0%	72.9%		27.1%	27.1%		27.1%	27.1%	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0			-2.0	
Total Lost Time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		None		None	None		None	None		None	None	
v/c Ratio		0.69		0.44	0.48		0.52	0.13			0.10	
Control Delay		16.7		33.0	5.8		31.5	0.5			0.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		16.7		33.0	5.8		31.5	0.5			0.4	
Queue Length 50th (ft)		260		56	120		64	0			0	
Queue Length 95th (ft)		#356		109	162		122	0			0	
Internal Link Dist (ft)		128			315			120			127	
Turn Bay Length (ft)				125								
Base Capacity (vph)		2026		337	2623		387	631			541	
Starvation Cap Reductn		0		0	0		0	0			0	
Spillback Cap Reductn		0		0	0		0	0			0	
Storage Cap Reductn		0		0	0		0	0			0	
Reduced v/c Ratio		0.69		0.41	0.48		0.42	0.11			0.08	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 60.9

Natural Cycle: 60

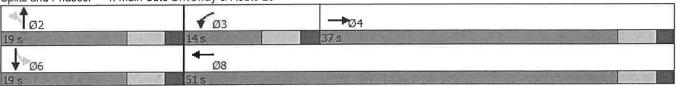
## 4: Main Sute Driveway & Route 20

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Main Sute Driveway & Route 20



•	۶	-	*	•	<b>←</b>	*	4	†	~	1	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ተቡ		ሻ	<b>个</b> 个		Ť	1>			44	
Traffic Volume (vph)	0	1126	165	127	1149	0	151	0	66	9	0	31
Future Volume (vph)	0	1126	165	127	1149	0	151	0	66	9	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00			1.00	
Frt		0.98		1.00	1.00		1.00	0.85			0.90	
FIt Protected		1.00		0.95	1.00		0.95	1.00			0.99	111
Satd. Flow (prot)		3471		1770	3539		1770	1583			1650	
Flt Permitted		1.00		0.95	1.00		0.73	1.00			0.92	
Satd. Flow (perm)		3471		1770	3539		1357	1583			1542	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1224	179	138	1249	0	164	0	72	10	0	34
RTOR Reduction (vph)	0	15	0	0	0	0	- 0	60	0	0	37	0
Lane Group Flow (vph)	0	1388	0	138	1249	0	164	12	0	0	7	0
Turn Type		NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)		31.2		5.6	42.8		8.8	8.8			8.8	
Effective Green, g (s)		33.2		7.6	44.8		10.8	10.8			10.8	
Actuated g/C Ratio		0.52		0.12	0.70		0.17	0.17			0.17	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	100	1811		211	2492		230	268			261	
v/s Ratio Prot		c0.40		c0.08	0.35			0.01				
v/s Ratio Perm							c0.12				0.00	
v/c Ratio		0.77		0.65	0.50		0.71	0.05			0.03	
Uniform Delay, d1		12.1		26.7	4.3		24.9	22.1			22.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		2.0		7.1	0.2		10.0	0.1			0.0	
Delay (s)		14.1		33.8	4.5		34.9	22.2			22.1	
Level of Service		В		С	A		С	С			С	
Approach Delay (s)		14.1			7.4			31.0			22.1	
Approach LOS		В			Α			С			- C	
Intersection Summary	STEELS.		August A	THE STILL	TO WE		hyaéta a					113/67
HCM 2000 Control Delay			12.5	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capaci	ty ratio		0.74									
Actuated Cycle Length (s)			63.6	Sı	um of lost	time (s)			12.0			
Intersection Capacity Utilizati	on		68.5%		U Level o				C			
Analysis Period (min)			15									
c Critical Lane Group												
r												

	<b>*</b>	<b>→</b>	*	1	-	*	4	<b>†</b>	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4T>		T <sub>1</sub>	<b>1</b>		ሻ	1→			4	
Traffic Volume (vph)	3	825	17	86	572	2	13	0	147	2	0	4
Future Volume (vph)	3	825	17	86	572	2	13	0	147	2	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12	15	16	12	12	12	12
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			310			692			212	
Travel Time (s)		17.1			7.0			15.7			4.8	
Peak Hour Factor	0.91	0.91	0.91	0.79	0.79	0.79	0.70	0.70	0.70	0.75	0.75	0.75
Heavy Vehicles (%)	0%	11%	7%	1%	10%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	929	0	109	727	0	19	210	0	0	8	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary							ny jeny j		is/reulig			

Other

ntersection	a pipi	0 3 50	Silen						2.50	Terres			ty is a	40.9	136
nt Delay, s/veh	3														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	68.2		
ane Configurations		47>		7	<b>^</b>		7	B			4				
raffic Vol, veh/h	3	825	17	86	572	2	13	0	147	2	0	4			
uture Vol, veh/h	3	825	17	86	572	2	13	0	147	2	0	4			
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0			
ign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop			
RT Channelized			None			None	- 5		None		1,6	None			
torage Length	39		•	250			0	75	•	7.		(1.00 to			
eh in Median Storage,	# -	0		-	0			0	11.5	1 1	0				
Grade, %	(4)	0	¥	*	0	8		0		×	0	() <del>*</del> (			
eak Hour Factor	91	91	91	79	79	79	70	70	70	75	75	75			
leavy Vehicles, %	0	11	7	1	10	0	0	0	1	0	0	0			
1vmt Flow	3	907	19	109	724	3	19	0	210	3	0	5			
Major/Minor N	lajor1			Major2			Minor1	u of the		Minor2					7950
Conflicting Flow All	727	0	0	926	0	0	1503	1868	463	1404	1876	364			
Stage 1	- 2	-					923	923	1 10-	944	944	II (#)			
Stage 2		-				*	580	945	-	460	932	E#:			
ritical Hdwy	4.1	- 2	9	4.12		-	7.5	6.5	6.92	7.5	6.5	6.9			
ritical Hdwy Stg 1	-	2	3	=		*	6.5	5.5	-	6.5	5.5	:#1			
ritical Hdwy Stg 2			2	-	-	2	6.5	5.5		6.5	5.5	2			
ollow-up Hdwy	2.2	- 8	3	2.21	9	-	3.5	4	3.31	3.5	4	3.3			
ot Cap-1 Maneuver	886			740	-		85	73	548	101	72	639			
Stage 1	-	*					294	351	-	286	344	-			
Stage 2	ш.			-	-		472	343	-	556	348				
latoon blocked, %		:4			*	*									
lov Cap-1 Maneuver	886	9	177.4	740	4		74	62	548	55	61	639			
lov Cap-2 Maneuver	-	:2			2	-	74	62	-	55	61	-			
Stage 1		-			1 = 2	2	292	349	-	284	293				
Stage 2	-	9	ě	8	ŝ	8	399	293	-	341	346				
pproach	EB			WB			NB			SB		15/15/20			CHOR
ICM Control Delay, s	0			1.4			20			32.1					
ICM LOS	U			1,4			C			D					
linor Lane/Major Mvmt		NBLn11		EBL	EBT	EBR	WBL	WBT	WBR 9				PN -	FY. 7	
capacity (veh/h)		74	548	886	2		740			141					
ICM Lane V/C Ratio		0.251	0.383		-	-		4	343	0.057					
ICM Control Delay (s)		69.2	15.6	9.1	0		10.7	74	727	32.1					
ICM Lane LOS		F	С	Α	Α	- 5	В	•		D					
ICM 95th %tile Q(veh)		0.9	1.8	0	-	•	0.5	1.5	i)€¢	0.2					

	<b>→</b>	<b>→</b>	*	•	-	1	4	<b>†</b>	1	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414		ሻ	<b>1</b>		7	1→			€}-	
Traffic Volume (vph)	3	898	13	212	1053	2	3	2	235	4	0	5
Future Volume (vph)	3	898	13	212	1053	2	3	2	235	4	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12	15	16	12	12	12	12
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			310			692			212	
Travel Time (s)		17.1			7.0			15.7			4.8	
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.85	0.85	0.85	0.45	0.45	0.45
Heavy Vehicles (%)	33%	3%	0%	1%	3%	50%	0%	0%	0%	25%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	983	0	223	1110	0	4	278	0	0	20	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary	280 Sugar			1 k _ 6			915.61				-12700	

Other

Int Delay, s/veh	8.4												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	3 77
_ane Configurations	LUC	413	LDIN	T	<b>†</b>	WEIN	7	4	1,01,	ODL	4	OBIN	Harry San
•	3	898	13	212	1053	2	3	2	235	4	0	5	
Traffic Vol, veh/h	3	898	13	212	1053	2	3	2	235	4	0	5	
Future Vol, veh/h	0	090	0	0	0	0	0	0	0	0	0	0	
Conflicting Peds, #/hr					Free	Free		Stop	Stop	Stop	Stop	Stop	
Sign Control	Free	Free	Free	Free			Stop	Stop -		Stop	Slop	1676	
RT Channelized			None	050	ni n	None	-	- 2	None		•	None	
Storage Length		-		250	-		0	-	- 5		- 0	0.77	
Veh in Median Storage,	# -	0			0			0		₹.	0	1.5	
Grade, %	-	0	*	-	0	-	-	0	- 05	45	0	1970	
Peak Hour Factor	93	93	93	95	95	95	85	85	85	45	45	45	
Heavy Vehicles, %	33	3	0	1	3	50	0	0	0	25	0	20	
Mvmt Flow	3	966	14	223	1108	2	4	2	276	9	0	11	
Vajor/Minor N	1ajor1		15-15-1	Major2			Minor1	HW 200	N	/linor2	0-00		E III
	1110	0	0	980	0	0	1979	2535	490	2045	2541	555	
Conflicting Flow All	1110		U	900	-	U	979	979	430	1555	1555	-	
Stage 1							1000	1556	-	490	986		
Stage 2	4.70			440	*	#: VI 0	7.5	6.5	6.9	490	6.5	7.3	
Critical Hdwy	4.76			4.12	-						5.5		
Critical Hdwy Stg 1	2	2	2	-	-	=	6.5	5.5		7		386	
Critical Hdwy Stg 2	-						6.5	5.5	0.0	7	5.5	2.5	
Follow-up Hdwy	2.53	9		2.21	- 4	-	3.5	4	3.3	3.75	4	3.5	
Pot Cap-1 Maneuver	472			706	•	-	38	28	529	25	27	432	
Stage 1	*	ā		<del>T</del> a			272	331		94	176		
Stage 2		- +					264	176		473	328		
Platoon blocked, %		*	*		*	-							
Mov Cap-1 Maneuver	472	4		706	-	*	28	19	529	~ 8	18	432	
Mov Cap-2 Maneuver	3	=	~	<u> 115</u>	#	-	28	19	-	~ 8	18	-	
Stage 1		-	2		12	1 2	268	326	-	93	120	-	
Stage 2	ā	•		8	-	2	176	120	-	221	323	-	
Approach	EB			WB		DESCRIPTION OF THE PERSON OF T	NB	15 34		SB	JE SPON		
Approach	- Harriston						28.9		¢				
HCM Control Delay, s	0.1			2.1					\$	547.2			
HCM LOS							D			F			
Minor Lane/Major Mvml	0=4,	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1	19.15		
Capacity (veh/h)		28	431	472			706	-	-	18			
HCM Lane V/C Ratio			0.647	0.007		2	0.316	121	_	1.111			
HCM Control Delay (s)		151.3	27.4	12.7	0.1	2	12.4	72		547.2			
HCM Lane LOS		F	D	В	Α.	-	В	12	-	F			
HCM 95th %tile Q(veh)		0.4	4.5	0			1.4		_	2.9			
Notes	ST I	0.7	- 1.0		Til	SERVE	WILLIAM ST	No.				100 may	

	<b>→</b>	-	*	1	-	*	4	<b>†</b>	1	1	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		474		ħ	<b>↑</b> ↑		ሻ	1			4	
Traffic Volume (vph)	3	945	17	105	677	2	13	0	169	2	0	4
Future Volume (vph)	3	945	17	105	677	2	13	0	169	2	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12	15	16	12	12	12	12
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			160			692			212	
Travel Time (s)		17.1			3.6			15.7			4.8	
Peak Hour Factor	0.91	0.91	0.91	0.79	0.79	0.79	0.70	0.70	0.70	0.75	0.75	0.75
Heavy Vehicles (%)	0%	11%	7%	1%	10%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1060	0	133	860	0	19	241	0	0	8	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary							1615-18	¥7.747.			e same	i isi i
Area Type:	Other											

Intersection									- Hall			zoelulii e			
Int Delay, s/veh	3.8														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations		473		Ť	44		1	1			4				
Traffic Vol, veh/h	3	945	17	105	677	2	13	0	169	2	0	4			
Future Vol, veh/h	3	945	17	105	677	2	13	0	169	2	0	4			
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	- 1	V 12	None			None	-	-	None			None			
Storage Length	-	-		250		-	0	-		7:					
Veh in Median Storage,	# -	0	-		0			0	-		0	- (2)			
Grade, %	-	0	¥	-	0	. 8		0	<del></del>	*	0	0.00			
Peak Hour Factor	91	91	91	79	79	79	70	70	70	75	75	75			
Heavy Vehicles, %	0	11	7	1	10	0	0	0	1	0	0	0			
Mvmt Flow	3	1038	19	133	857	3	19	0	241	3	0	5			
Major/Minor M	lajor1			Major2	##W 18	1001111	Minor1			Minor2			W. HIRIT., TO		S-19 S-
		^		1057	0	0	1749	2180	529	1650	2188	430			
Conflicting Flow All	860	0	0	1057	-	U	1054	1054	323	1125	1125	450			
Stage 1		-	-			•	695	1126		525	1063				
Stage 2	4.1	-		4.12			7.5	6.5	6.92	7.5	6.5	6.9			
Critical Hdwy			-	4.12	-	-	6.5	5.5	0.92	6.5	5.5	0.9			
Critical Hdwy Stg 1	-				-		6.5	5.5		6.5	5.5				
Critical Hdwy Stg 2	2.2			2.21		7	3.5	4	3.31	3.5	4	3.3			
Follow-up Hdwy	2.2			660		-	56	47	497	66	46	579			
Pot Cap-1 Maneuver	790	- 4.5	1	000			245	305	431	222	283	313			
Stage 1		=	7	- Fi			403	282		509	302				
Stage 2					-		403	202		303	302				
Platoon blocked, %	790			660			47	37	497	29	36	579			
Mov Cap-1 Maneuver	790			000	1 - 1		47	37	431	29	36	-			
Mov Cap-2 Maneuver	-	-			-		243	302		220	226				
Stage 1	÷	- 5		-	8	·	319	225		259	299	-			
Stage 2							313	225		200	200	mi			
Approach	EB	13(3-1)	0112	WB			NB			SB			Lavie	W 2	
HCM Control Delay, s	0			1.6			26.5			55.6					
HCM LOS							D			F					
Minor Lane/Major Mvmt	, O. H.	NBLn1 I	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1		-11792		yo, Ik	elen e
Capacity (veh/h)		47	497	790	2	-	660		240	79					
HCM Lane V/C Ratio					-	2		20	-	0.101					
HCM Control Delay (s)		124.8	18.9	9.6	0	2	11.8	12	020	55.6					
HCM Lane LOS		F	C	A	Ā		В			F					
HCM 95th %tile Q(veh)		1.4	2.6	0	-		0.7		( <del>5</del> )	0.3					

Other

	<b>*</b>	<b>→</b>	*	1	-	*	4	1	1	-	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		413		ሻ	<b>ተ</b> ጮ		ሻ	13			4	
Traffic Volume (vph)	3	953	13	222	1111	2	3	2	245	4	0	5
Future Volume (vph)	3	953	13	222	1111	2	3	2	245	4	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12	15	16	12	12	12	12
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			211			692			212	
Travel Time (s)		17.1			4.8			15.7			4.8	
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.85	0.85	0.85	0.45	0.45	0.45
Heavy Vehicles (%)	33%	3%	0%	1%	3%	50%	0%	0%	0%	25%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1042	0	234	1171	0	4	290	0	0	20	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary						5 7 1 1 kg			CENTY ST	A Sky to	Trojar	

Area Type:

Control Type: Unsignalized

Int Delay, s/veh	12.9													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	1.5/404	E interior
Lane Configurations		413		ሻ	<b>↑</b> ↑		15	- ↑			4			
Traffic Vol, veh/h	3		13	222	1111	2	3	2	245	4	0	5		
Future Vol, veh/h	3	953	13	222	1111	2	3	2	245	4	0	5		
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	*	-	-	250			0		7:		/20	1/5/		
Veh in Median Storage	# -	0		-	0			0			0			
Grade, %	2	0	-		0		*	0	-		0	(m)		
Peak Hour Factor	93	93	93	95	95	95	85	85	85	45	45	45		
Heavy Vehicles, %	33	3	0	1	3	50	0	0	0	25	0	20		
Mvmt Flow	3	1025	14	234	1169	2	4	2	288	9	0	11		
Major/Minor N	/ajor1	Visualu		Major2			Minor1			Minor2				
Conflicting Flow All	1171	0	0	1039	0	0	2091	2677	520	2158	2683	586		
Stage 1			-			-	1038	1038	Ve.	1638	1638			
Stage 2	9	*	8	8	*	*	1053	1639	-	520	1045	S <del>=</del> 1		
Critical Hdwy	4.76		_ ·	4.12	-	-	7.5	6.5	6.9	8	6.5	7.3		
Critical Hdwy Stg 1	-	2		2	<u></u>	4	6.5	5.5	-	7	5.5	:*		
Critical Hdwy Stg 2		1.2	2		1	2	6.5	5.5	1 12	7	5.5			
Follow-up Hdwy	2.53			2.21	- 2	2	3.5	4	3.3	3.75	4	3.5		
Pot Cap-1 Maneuver	444			671			31	22	506	20	22	411		
Stage 1		-	-	-		-	251	311		83	160	-		
Stage 2				_			245	160		452	308			
Platoon blocked, %					¥	*								
Mov Cap-1 Maneuver	444			671	- 2	-	22	14	506	~ 5	14	411		
Mov Cap-1 Maneuver	777	E .		07.1	2	4	22	14	-	~ 5	14	-		
	8			- 5			247	306		82	104			
Stage 1 Stage 2					3	2	155	104	-	190	303			
Approach	EB	T, L	00 v=0	WB			NB	1100		SB				
HCM Control Delay, s	0.1			2.2			37.7		\$ 1	065.6				
HCM LOS	• • • •						E		·	F				
Minor Lane/Major Mvm	t	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR 9	SBLn1	V S. T			
Capacity (veh/h)		22	394	444	2	2	671	2.45	-	11				
HCM Lane V/C Ratio		0.16	0.738	0.007	2	5	0.348	-	-	1.818				
HCM Control Delay (s)		197.7	35.8	13.2	0.1	ě	13.2	72	\$ 1	065.6				
HCM Lane LOS		F	Ε	В	Α	-	В		-	F				
HCM 95th %tile Q(veh)		0.5	5.8	0	=	•	1.6		-	3.4				
Notes	1			Kar L			110	10 - 12			7 7 7			The In the

	<b>*</b>	<b>→</b>	•	1	-	*	1	<b>†</b>	1	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4T <del>)</del>			4î î>			4			4	
Traffic Volume (vph)	3	966	- 5	1	657	0	3	0	0	1	0	- 0
Future Volume (vph)	3	966	5	1	657	0	3	0	0	1	0	0
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	16	12	12	16	12
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		310			261			200			250	
Travel Time (s)		7.0			5.9			4.5			5.7	
Peak Hour Factor	0.91	0.91	0.91	0.79	0.79	0.79	0.50	0.50	0.50	0.50	0.50	0.50
Heavy Vehicles (%)	0%	7%	33%	0%	7%	0%	33%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1070	0	0	833	0	0	6	0	0	2	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary	PUR			3000	e Military III	<u>"</u>				THE WAY		

Area Type:

Other

Control Type: Unsignalized

ntersection	TANK X	NI B	1	3			100	Maria B			41	ot as f			
nt Delay, s/veh	0.3														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	1 3 1		M. J. Mill
ane Configurations		473			47>			- ↔			4				
Fraffic Vol, veh/h	3	966	5	1	657	0	3	0	0	1	0	0			
uture Vol, veh/h	3	966	5	1	657	0	3	0	0	1	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		1 0 1 E	None	•		None		XIII 18	None			
Storage Length	(-)	*	2		-	7	T.	-		B	-	121			
eh in Median Storage,	# -	0	-		0		*	0	301 ±		0				
Grade, %	-	0	-	*	0	×		0	-	*	0	\ <del>-</del>			
eak Hour Factor	91	91	91	79	79	79	50	50	50	50	50	50			
leavy Vehicles, %	0	7	33	0	7	0	33	0	0	0	0	0			
/lvmt Flow	3	1062	5	1	832	0	6	0	0	2	0	0			
							A1 - 4	Will be to		Attack to	111				110101
	lajor1	Telegraph .		Major2			Minor1			Minor2	4005	410		11.45	
Conflicting Flow All	832	0	0	1067	0	0	1489	1905	534	1371	1907	416			
Stage 1	-			-		30.5	1071	1071		834	834	- 75			
Stage 2	(A)		- 4			-	418	834	=	537	1073				
critical Hdwy	4.1	. 2	1. 4	4.1		-	8.16	6.5	6.9	7.5	6.5	6.9			
critical Hdwy Stg 1	-2/	- 5	- 4	2	-	-	7.16	5.5	-	6.5	5.5	(+:			
Critical Hdwy Stg 2	-			- 2	2	-	7.16	5.5		6.5	5.5	-			
ollow-up Hdwy	2.2		-	2.2	9	-	3.83	4	3.3	3.5	4	3.3			
ot Cap-1 Maneuver	809		-	661	-	-	64	69	496	107	69	591			
Stage 1	-	- 1		:=	-	-	187	300	- 5	333	386	0.5			
Stage 2	:=)						507	386		501	299				
Platoon blocked, %			-		*	*									
Nov Cap-1 Maneuver	809	2	1,2	661		-	63	68	496	106	68	591			
Nov Cap-2 Maneuver	2	2	- 4	22	2	<u>=</u>	63	68	-	106	68	-			
Stage 1		30	-	- 3	- 2	12	185	297	2	330	385	II I je			
Stage 2		= =	- 5	ě		*	505	385		496	296				
norenah	EB			WB			NB	11 3 4	I NI WIE	SB			A		
pproach				0			68.1			39.6			- HUDE		
ICM Control Delay, s ICM LOS	0			U			66. I			59.0 E					
Ainor Lane/Major Mvmt	in J	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						Halle on
Capacity (veh/h)		63	809	2	-	661	¥	-	106						
ICM Lane V/C Ratio		0.095	0.004	_	-	0.002	-	2	0.019						
ICM Control Delay (s)		68.1	9.5	0	-	10.5	0	-	39.6						
ICM Lane LOS		F	Α	Α	-	В	Α	9	E						
ICM 95th %tile Q(veh)		0.3	0			0			0.1						

# 2028 No-Build Weekday Evening Peak Hour 3: 201 Charlton Road Driveway/Driveway & Route 20

	<b>*</b>	-	*	1	-	*	4	<b>†</b>	1	-	Ų.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		413			413			€}>			€}>	
Traffic Volume (vph)	1	1131	5	0	1261	0	2	0	0	1.	0	4
Future Volume (vph)	1	1131	5	0	1261	0	2	0	0	1	0	4
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	16	12	12	16	12
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		310			261			200			250	
Travel Time (s)		7.0			5.9			4.5			5.7	
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.50	0.50	0.50	0.50	0.50	0.50
Heavy Vehicles (%)	0%	2%	40%	0%	2%	0%	0%	0%	0%	0%	0%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1222	0	0	1327	0	0	4	0	0	10	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary						400					Traps.	11/2/2
Area Type:	Other											

Intersection						N 00 -	u nyie	aures "		J. 1		117	
Int Delay, s/veh	0.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		414			414			4			4		
Traffic Vol, veh/h	1	1131	5	0	1261	0	2	0	0	1	0	4	
Future Vol, veh/h	1	1131	5	0	1261	0	2	0	0	1	0	4	
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,	# -	100	-	-	0	11/2/15		0			0	•	
Grade, %		0	2	2	0	-	-	0		-	0	-	
Peak Hour Factor	93	93	93	95	95	95	50	50	50	50	50	50	
Heavy Vehicles, %	0	2	40	0	2	0	0	0	0	0	0	25	
Mvmt Flow	1	1216	5	0	1327	0	4	0	0	2	0	8	
Major/Minor N	//ajor1	NV. 5250		Major2			Minor1		up Auti N	Minor2	THE ST	II SV	Maria San Maria
Conflicting Flow All	1327	0	0	1221	0	0	1885	2548	611	1937	2550	664	
Stage 1	1021	-	-	1221	-		1221	1221	-	1327	1327	-	
Stage 2	-	2		2			664	1327	_	610	1223	-09-0	
Critical Hdwy	4.1		172	4.1			7.5	6.5	6.9	7.5	6.5	7.4	
Critical Hdwy Stg 1			-	038840	2	2	6.5	5.5	-	6.5	5.5	848	
Critical Hdwy Stg 2							6.5	5.5	·	6.5	5.5	-	
Follow-up Hdwy	2.2		*	2.2			3.5	4	3.3	3.5	4	3.55	
Pot Cap-1 Maneuver	527		11.00	578			44	27	442	40	27	353	
Stage 1	-	*					194	255	-	167	227	S=1	
Stage 2		-		114			421	227	_	453	254		
Platoon blocked, %		2	2										
Mov Cap-1 Maneuver	527			578	-		43	27	442	40	27	353	
Mov Cap-2 Maneuver		-			8	2	43	27	-	40	27	-	
Stage 1				-			193	253		166	227	-	
Stage 2	-	-		-		ā	411	227	-	450	252	-	
										op.			
Approach	EB	SA SUL		WB	100		NB			SB	10. 4		
HCM Control Delay, s HCM LOS	0			0			97.1 F			33.1 D			
Minor Lane/Major Mvm	d a	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		TA The	DW.	in the state of
Capacity (veh/h)		43	527	-	ĕ	578	2	2	138				
HCM Lane V/C Ratio		0.093	0.002	-	-	-	3	8	0.072				
HCM Control Delay (s)		97.1	11.8	0		0	7.	₹.	33.1				
HCM Lane LOS		F	В	Α	*	Α	7:		D				
HCM 95th %tile Q(veh)		0.3	0	-	*	0	*	*	0.2				

# 3: Route 20 & Driveway

Lane Group EBL EBT  Lane Configurations Traffic Volume (vph) 3 1113 Future Volume (vph) 3 1113 Ideal Flow (vphpl) 1900 1900 Link Speed (mph) 30	WBT 784 784 1900	WBR 0 0 1900	SBL 1 1	SBR 0 0	
Traffic Volume (vph)       3       1113         Future Volume (vph)       3       1113         Ideal Flow (vphpl)       1900       1900         Link Speed (mph)       30	784 784 1900	0	1	0	
Traffic Volume (vph)       3       1113         Future Volume (vph)       3       1113         Ideal Flow (vphpl)       1900       1900         Link Speed (mph)       30	784 784 1900	0	1	0	
Future Volume (vph)       3       1113         Ideal Flow (vphpl)       1900       1900         Link Speed (mph)       30	1900	7121	1		
Ideal Flow (vphpl) 1900 1900 Link Speed (mph) 30		1900	1000		
Link Speed (mph) 30	-00	1000	1900	1900	
	30		30		
Link Distance (ft) 160	150		165		
Travel Time (s) 3.6	3.4		3.8		
Peak Hour Factor 0.91 0.91	0.79	0.79	0.50	0.50	
Heavy Vehicles (%) 0% 7%	7%	0%	0%	0%	
Shared Lane Traffic (%)					
Lane Group Flow (vph) 0 1226	992	0	2	0	
Sign Control Free	Free		Stop		

Intersection	4,17	FI . 7		10.1	101	5 m z i			Ely 1			100 11 1	'y al			
Int Delay, s/veh	0.1															
Movement	EBL	EBT	WBT	WBR	SBL	SBR		=NE nu			3			1000		
Lane Configurations		414	<b>↑</b> ↑		N. A.											
Traffic Vol, veh/h	3	1113	784	0	1	0										
Future Vol, veh/h	3	1113	784	0	1	0										
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	43	0	*										
Peak Hour Factor	91	91	79	79	50	50										
Heavy Vehicles, %	0	7	7	0	0	0										
Mvmt Flow	3	1223	992	0	2	0										
Major/Minor N	Major1		Major2	١	Ainor2					4/8/				The state of	Land to	
Conflicting Flow All	992	0		0	1610	496										
Stage 1	1.0		-	0.1 =	992											
Stage 2	2		¥		618											
Critical Hdwy	4.1	- 1	-		6.8	6.9										
Critical Hdwy Stg 1		<u>u</u>	2	=	5.8	*										
Critical Hdwy Stg 2			-		5.8											
Follow-up Hdwy	2.2	70		-	3.5	3.3										
Pot Cap-1 Maneuver	705			- 5	97	525										
Stage 1		*		=	324	7.0										
Stage 2		*	-		506											
Platoon blocked, %		*	*	-												
Mov Cap-1 Maneuver	705	2	2		96	525										
Mov Cap-2 Maneuver	2	2	<u> </u>	2	96	20										
Stage 1	•			-	320	- 2										
Stage 2	ā	7.		8	506	-										
Approach	EB	No.	WB		SB		n Ey ik		t-original in the second	5/12/	0,10			Fig. 100		
HCM Control Delay, s	0.1		0		43.3											
HCM LOS					Е											
Minor Lane/Major Mvm	t	EBL	EBT	WBT	WBR	SBLn1	SENS	À.	124	T YELL		Ami				
Capacity (veh/h)		705	\$	2	¥	96										
HCM Lane V/C Ratio		0.005	2	2	5	0.021										
HCM Control Delay (s)		10.1	0.1	ě		43.3										
HCM Lane LOS		В	Α	*		Е										
HCM 95th %tile Q(veh)		0		5	-	0.1										
		-														

# 3: Route 20 & Driveway

	<i>•</i>	-	←	•	-	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>^</b>		15/1		
Traffic Volume (vph)	1	1201	1331	0	- 1	4	
Future Volume (vph)	1	1201	1331	0	1	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		211	184		212		
Travel Time (s)		4.8	4.2		4.8		
Peak Hour Factor	0.93	0.93	0.95	0.95	0.50	0.50	
Heavy Vehicles (%)	0%	2%	2%	0%	0%	25%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1292	1401	0	10	0	
Sign Control		Free	Free		Stop		
Intersection Summary	H 2015 H 2	OTHERS S	1808		97/451 2		
Area Type:	Other						

Intersection			18 <b>-2</b> 9			
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		414	<b>†</b> 1>	1,000	N/	
Traffic Vol, veh/h	-1	1201	1331	0	1	4
Future Vol, veh/h	1	1201	1331	0	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	1100	None	1100	HANNE COOK	- Ciop	None
Storage Length		IVOITE	2	None	0	None -
Veh in Median Storage	# -	0	0	1	0	V .
Grade, %	η π	0	0	-	0	
Peak Hour Factor	93	93	95	95	50	50
	93	2	2	0	0	25
Heavy Vehicles, %	1	1291	1401	0	2	8
Mvmt Flow	- 1	1291	1401	0	2	0
Major/Minor I	Major1		Major2		Minor2	
Conflicting Flow All	1401	0	*	0	2049	701
Stage 1	- 41		1		1401	-
Stage 2	-	- 32	2	≅	648	2
Critical Hdwy	4.1				6.8	7.4
Critical Hdwy Stg 1				-	5.8	
Critical Hdwy Stg 2					5.8	
Follow-up Hdwy	2.2		-		3.5	3.55
Pot Cap-1 Maneuver	494				49	332
			- 6		197	- 002
Stage 1	<b>4</b>	-			488	-
Stage 2	4	-			400	
Platoon blocked, %	40.4	<u> </u>		2	40	220
Mov Cap-1 Maneuver	494				49	332
Mov Cap-2 Maneuver			-	7	49	2
Stage 1	-		- 7		196	
Stage 2		*	-	=	488	
Approach	EB	21 119	WB		SB	
HCM Control Delay, s	0		0		30	
HCM LOS					D	
TION LOO						
NO.		19456.5		Vavaterass	2.0000000000000000000000000000000000000	1924/1991
Minor Lane/Major Mvm	ıt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		494		-	•	154
HCM Lane V/C Ratio		0.002	-			0.065
HCM Control Delay (s)		12.3	0		-	30
HCM Lane LOS		В	Α			D
HCM 95th %tile Q(veh)		0	_	_		0.2

	-	*	1	-	1		
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>↑</b> Ъ			414	M		
Traffic Volume (vph)	960	7	1	657	1	0	
Future Volume (vph)	960	7	1	657	1	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)	30			30	30		
Link Distance (ft)	261			429	367		
Travel Time (s)	5.9			9.8	8.3		
Peak Hour Factor	0.91	0.91	0.79	0.79	0.50	0.50	
Heavy Vehicles (%)	7%	0%	0%	7%	0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1063	0	0	833	2	0	
Sign Control	Free			Free	Stop		
Intersection Summary	100	100	West le	giri ju			

Intersection		0.00					
Int Delay, s/veh	0						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	ΛÞ			414	N/F		
Traffic Vol, veh/h	960	_ 7	. 1	657	1	0	
Future Vol, veh/h	960	7	1	657	1	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	TS	None		None		None	
Storage Length	-	-		-	0	- 5	
Veh in Median Storage	,# 0			0	0	70.20	
Grade, %	0			0	0	*	
Peak Hour Factor	91	91	79	79	50	50	
Heavy Vehicles, %	7	0	0	7	0	0	
Mvmt Flow	1055	8	1	832	2	0	
Major/Minor N	Major1		Major2	1	Minor1	e de	
Conflicting Flow All	0	0	1063	0	1477	532	
Stage 1		- 1			1059		
Stage 2	8	*		-	418	*	
Critical Hdwy			4.1		6.8	6.9	
Critical Hdwy Stg 1	¥	4		-	5.8	-	
Critical Hdwy Stg 2			2	- T	5.8		
Follow-up Hdwy	-	-	2.2	_	3.5	3.3	
Pot Cap-1 Maneuver			663	-	119	497	
Stage 1		-	5	-	299	-	
Stage 2				-	638		
Platoon blocked, %							
Mov Cap-1 Maneuver	-		663		119	497	
Mov Cap-2 Maneuver	3	=	-		119	-	
Stage 1		- 2	្ន	- 2	299	S 100	
Stage 2	- 2	9			636	_	
Glage 2					000		
Approach	EB		WB	,	NB	West 1	
HCM Control Delay, s	0		0		35.8		
HCM LOS	J				E		
. 13.11 200					_		
Minor Lane/Major Mvm	t I	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)		119			663		
HCM Lane V/C Ratio		0.017		2	0.002	-	
HCM Control Delay (s)		35.8		2	10.4	0	
HCM Lane LOS		E	2	-	В	Ā	
HCM 95th %tile Q(veh)		0.1			0	_	
TOTAL DOUL THEIR ON A LACITY		0.1			J		

	-	7	1	•	1		
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>†</b> }			412	N/A		
Traffic Volume (vph)	1132	0	0	1260	1	2	
Future Volume (vph)	1132	0	0	1260	1	2	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
ink Speed (mph)	30			30	30		
Link Distance (ft)	261			509	367		
Travel Time (s)	5.9			11.6	8.3		
Peak Hour Factor	0.93	0.93	0.95	0.95	0.50	0.50	
Heavy Vehicles (%)	7%	0%	0%	7%	0%	0%	
Shared Lane Traffic (%)							
ane Group Flow (vph)	1217	0	0	1326	6	0	
Sign Control	Free			Free	Stop		
Intersection Summary		275)60					
Area Type:	Other						

Intersection	mi- si		NAME OF			da R				1.817/3		JIE)
Int Delay, s/veh	0.1											
Movement	EBT	EBR	WBL	WBT	NBL	NBR		4dd 3"				
Lane Configurations	<b>†</b>			414	NA.							
Traffic Vol, veh/h	1132	0	0	1260	1	2						
Future Vol, veh/h	1132	0	0	1260	1	2						
Conflicting Peds, #/hr	- 0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	N 12	None		None		None						
Storage Length	-	-		-	0	- 3						
Veh in Median Storage,	# 0	-	-	0	0	-						
Grade, %	. 0		-	0	0	-						
Peak Hour Factor	93	93	95	95	50	50						
Heavy Vehicles, %	7	0	0	7	0	0						
Mymt Flow	1217	0	0	1326	2	4						
WWIIICTIOW	1211		•	1020	_							
Major/Minor N	1ajor1		Vajor2	٨	/linor1	JE 31, 13	AND THE STREET	Na 23, 3		UI III 25-10	S Spilling	135
	0	0	1217	0	1880	609						
Conflicting Flow All		U	1217	U	1217	009						
Stage 1												
Stage 2			4.1		663	6.9						
Critical Hdwy	•			-	6.8							
Critical Hdwy Stg 1	*	*	*	-	5.8							
Critical Hdwy Stg 2	-		-	-	5.8							
Follow-up Hdwy	12	=	2.2		3.5	3.3						
Pot Cap-1 Maneuver			580		64	443						
Stage 1	ī	-		_	247							
Stage 2				-	480							
Platoon blocked, %	:=	in										
Mov Cap-1 Maneuver			580	•	64	443						
Mov Cap-2 Maneuver	-		¥	8	64	-						
Stage 1		-	-		247	-						
Stage 2	2	12	ş	-	480	-						
Approach	EB	repair	WB	IIS IIB	NB	Party -		WESE !	1000		TI COM	8.5
HCM Control Delay, s	0		0		30.2							
HCM LOS					D							
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT			, ng Hig			75
Capacity (veh/h)		149	-	-	580	*						
HCM Lane V/C Ratio		0.04		×	_	*						
HCM Control Delay (s)		30.2	2	2	0	2						
HCM Lane LOS		D	-	2	Ā	2						
HCM 95th %tile Q(veh)		0.1		ş	0							
TOTAL DOUL WILL ON A COLL		0.1			v							

			-		-	2	
	•	_		_	-	•	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>ተ</b> ኈ		ĬŢ	7	
Traffic Volume (vph)	19	740	568	6	0	6	
Future Volume (vph)	19	740	568	6	0	6	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		399	1207		236		
Travel Time (s)		9.1	27.4		5.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	825	624	0	0	7	
Sign Control		Free	Free		Stop		
Intersection Summary		0.65					
Area Type:	Other						
Control Type: Unsignalize	d						

Intersection		W					8.50	Section 1	g sed	02.4	esaula)		degra.	B.W.		R C
Int Delay, s/veh	0.3															
Movement	EBL	EBT	WBT	WBR	SBL	SBR						1835				30
Lane Configurations		414	<b>1</b>		ሻ	7										
Traffic Vol, veh/h	19	740	568	6	0	6										
Future Vol, veh/h	19	740	568	6	0	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	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	21	804	617	7	0	7										
Major/Minor	Major1	1	Major2	1	Minor2										W/Bu	N
Conflicting Flow All	624	0	•	0	1065	312										
Stage 1			*		621											
Stage 2	- 3	æ	. *	*	444											
Critical Hdwy	4.14	-	.74		6.84	6.94										
Critical Hdwy Stg 1	22	:2	12	-	5.84	*										
Critical Hdwy Stg 2		- 2	= =		5.84	-										
Follow-up Hdwy	2.22	2		2	3.52	3.32										
Pot Cap-1 Maneuver	953		-		218	684										
Stage 1		ā		ā	498	<u></u>										
Stage 2					614											
Platoon blocked, %		×	*	_ *												
Mov Cap-1 Maneuver	953	-			209	684										
Mov Cap-2 Maneuver	32	2	9	2	209	-										
Stage 1		2	2	2	478	- 1-										
Stage 2	Ē	9	=		614	-										
Approach	EB		WB		SB		T W	363	VILIO				87/10			
HCM Control Delay, s	0.4		0		10.3											
HCM LOS					В											
Minor Lane/Major Mvm	it	EBL	EBT	WBT	WBR	SBLn1 S	BLn2				1007	Pain	315		1 7 K	U
Capacity (veh/h)		953		2	-	-	684									
HCM Lane V/C Ratio		0.022	9	9	2	-	0.01									
HCM Control Delay (s)		8.9	0.2		-	0	10.3									
HCM Lane LOS		A	Α	-	9	A	В									
HCM 95th %tile Q(veh)		0.1				_	0									
TION OUT MINO SELVOIT	,	٧.١					•									

	*		-	*	-	1	
						•	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		ተኩ	<b>∱</b> ∱		ሻ	7	
Traffic Volume (vph)	7	1003	1015	3	2	22	
Future Volume (vph)	7	1003	1015	3	2	22	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		479	1127		332		
Travel Time (s)		10.9	25.6		7.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1098	1106	0	2	24	
Sign Control		Free	Free		Stop		
Intersection Summary						3 1 1	
Area Type:	Other						
Control Type: Unsignalized	d						

Intersection					all Tu	( POT 8)	1,,-20		en en	AUG N		تاريست	78			
int Delay, s/veh	0.3															
Movement	EBL	EBT	WBT	WBR	SBL	SBR	- ,,,,,,,	500	A Pari	N III B		Horie	15.8	W	300	
Lane Configurations		414	朴净		3	7										
Traffic Vol, veh/h	7	1003	1015	3	2	22										
Future Vol, veh/h	7	1003	1015	3	2	22										
Conflicting Peds, #/hr	0	0	0	0	0	0										
Sign Control	Free	Free	Free	Free	Stop	Stop										
RT Channelized		None		None	*	None										
Storage Length	2	-		*	0	0										
Veh in Median Storage,	# -	0	0	'g ="	0											
Grade, %	-	0	0	2	0	-										
Peak Hour Factor	92	92	92	92	92	92										
Heavy Vehicles, %	2	2	2	2	2	2										
Mvmt Flow	8	1090	1103	3	2	24										
Major/Minor N	Najor1		Major2	1	Minor2			EUN			A	judie".		7 51		ar,
Conflicting Flow All	1106	0		0	1666	553										
Stage 1	- 4				1105	*										
Stage 2	:2	2	=	2	561	=										
Critical Hdwy	4.14	=		Ŀ	6.84	6.94										
Critical Hdwy Stg 1	-	9	8	<u>u</u>	5.84	Avecania.										
Critical Hdwy Stg 2			17.		5.84											
Follow-up Hdwy	2.22	-		-	3.52	3.32										
Pot Cap-1 Maneuver	627	-	*		87	477										
Stage 1	-			*	279											
Stage 2	-		=		535	No ret										
Platoon blocked, %			2	¥	77027											
Mov Cap-1 Maneuver	627	4	-	2	84	477										
Mov Cap-2 Maneuver	-				84	-										
Stage 1				1	270											
Stage 2	*	*	-	=	535	-										
Olago Z																
Approach	EB	THE ST	WB		SB	778-71	-205						778			250
HCM Control Delay, s	0.3		0		15.9	100										
HCM LOS	3.0				С											
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR :	SBLn1 S	BLn2	XII.OW			dig.					
Capacity (veh/h)		627		2	-	84	477									
HCM Lane V/C Ratio		0.012	-		-	0.026	0.05									
HCM Control Delay (s)		10.8	0.2			49	12.9									
HCM Lane LOS		В	A			E	В									
HCM 95th %tile Q(veh)		0	-		*	0.1	0.2									
HOW SOUL WINE OR VEIL)		U	_			0.1	0.2									

	•		-	•	/	2	
		-		•	_	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		<b>ተ</b> ጮ	<b>↑</b> ↑		Ť	7	
Traffic Volume (vph)	- 0	1107	1127	0	0	0	
Future Volume (vph)	0	1107	1127	0	0	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		449	1157		343		
Travel Time (s)		10.2	26.3		7.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1203	1225	0	0	0	
Sign Control		Free	Free		Stop		
Intersection Summary							
Area Type:	Other						
Control Type: Unsignalize	ed						

Intersection	FIRESA	and the						
Int Delay, s/veh	0							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		43 PA 1 1 PA 1 PA 1 PA 1 PA 1 PA 1 PA 1 P
Lane Configurations		41	<b>^</b>		- 1	7		
Traffic Vol, veh/h	0	1107	1127	0	0	0		
Future Vol, veh/h	0	1107	1127	0	0	0		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None		None		None		
Storage Length		-		7:	0	0		
Veh in Median Storage,	# -	0	0		0			
Grade, %	*	0	0	*	0	H.		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	0	1203	1225	0	0	0		
Major/Minor N	/lajor1	i	Major2	N	/linor2	- NAT		E EX CITE WILLIAM
Conflicting Flow All	1225	0	7	0	1827	613		
Stage 1		v= +			1225			
Stage 2				Ħ	602			
Critical Hdwy	4.14			-	6.84	6.94		
Critical Hdwy Stg 1	- 4	×	=	=	5.84			
Critical Hdwy Stg 2		2		2	5.84	1-11		
Follow-up Hdwy	2.22	-	2	€	3.52	3.32		
Pot Cap-1 Maneuver	565		*		68	435		
Stage 1				77	241			
Stage 2					510	1.0		
Platoon blocked, %				-				
Mov Cap-1 Maneuver	565	*			68	435		
Mov Cap-2 Maneuver	*	¥	-	-	68	-		
Stage 1		12	- 2	A. IN	241			
Stage 2		Ë	- 2	- 2	510	-		
Approach	EB		WB	SELV .	SB			
HCM Control Delay, s	0		0		0			
HCM LOS					А			
Minor Lane/Major Mvmt	Ngjar	EBL	EBT	WBT	WBR S	SBLn1 SBI	2	
Capacity (veh/h)		565	340	100	:( <del>*</del> )	;:+)	(m)	
HCM Lane V/C Ratio		-	1(2)	100	345	-	-	
HCM Control Delay (s)		0	72	72	· ·	0	0	
HCM Lane LOS		Α	•		-	Α	A	
HCM 95th %tile Q(veh)		0	7.5	0.55	(. <del></del> )	•	•	

	<b>*</b>		4	*	1	1	
	_				-	-	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>†</b>		ሻ	7	
Traffic Volume (vph)	64	896	658	22	3	9	
Future Volume (vph)	64	896	658	22	3	9	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		429	1177		319		
Travel Time (s)		9.8	26.8		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1044	739	0	3	10	
Sign Control		Free	Free		Stop		
Intersection Summary					E EVEN		
Area Type:	Other						
Control Type: Unsignalize	d						

Intersection			J. 10		B. D.	0 200	Town of the									The second	
Int Delay, s/veh	0.9												_				
Movement	EBL	EBT	WBT	WBR	SBL	SBR	31.7	Live I	J.	- 1540		ln×	ie ", j	31.	E (01)		
Lane Configurations		413	<b>1</b>		<b>ነ</b>	7											
Traffic Vol, veh/h	64	896	658	22	3	9											
Future Vol, veh/h	64	896	658	22	3	9											
Conflicting Peds, #/hr	0	0	0	0	0	.0											
Sign Control	Free	Free	Free	Free	Stop	Stop											
RT Channelized	1	None	-7.	None		None											
Storage Length	-	7.	π:	-	0	0											
Veh in Median Storage,	# -	0	0		0												
Grade, %	-	0	0	-	0	1941											
Peak Hour Factor	92	92	92	92	92	92											
Heavy Vehicles, %	2	2	2	2	2	2											
Mvmt Flow	70	974	715	24	3	10											
Major/Minor N	1ajor1		Major2	1	Minor2							135			OU II		
Conflicting Flow All	739	0	-	0	1354	370											
Stage 1					727												
Stage 2	÷	*		xe:	627	:::::											
Critical Hdwy	4.14			:-:	6.84	6.94											
Critical Hdwy Stg 1	¥	-	£.	-	5.84	7.60											
Critical Hdwy Stg 2			- 3		5.84	48											
Follow-up Hdwy	2.22	2	2	725	3.52	3.32											
Pot Cap-1 Maneuver	863	1		- 4	141	627											
Stage 1		-		( <del>-</del> )	439												
Stage 2			J.		495												
Platoon blocked, %				(+)													
Mov Cap-1 Maneuver	863				116	627											
Mov Cap-2 Maneuver	2	-		S#3	116	***											
Stage 1	15		1	7.67	361	V :=											
Stage 2	128	- 2	- 12	1747	495												
Olago Z					100												
Approach	EB		WB		SB		15 Tel.		0		Tix n.		=1-5-2	2		S17.E	9
HCM Control Delay, s	1.3		0		17.3					100							
HCM LOS	1.0		U		C												
HOW LOS					C												
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1 S	BLn2			5,00		70		8. UE	182	COR INC	JA
Capacity (veh/h)		863	-	543	1.0	116	627										
HCM Lane V/C Ratio		0.081	_	928	-	0.028											
HCM Control Delay (s)		9.5	0.7	928	120	36.9	10.8										
HCM Lane LOS		Α.	Α			E	В										
HCM 95th %tile Q(veh)		0.3				0.1	0										
HOW SOM MANE CALVELL)		0.0	-	1000		0.1	U										

	<b>→</b>		4	•	\ \	1	
	_	_					
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>↑</b> ↑		Ť	7	
Traffic Volume (vph)	16	1118	1184	6	26	76	
Future Volume (vph)	16	1118	1184	6	26	76	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		509	1097		283		
Travel Time (s)		11.6	24.9		6.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1232	1294	0	28	83	
Sign Control		Free	Free		Stop		
Intersection Summary				Ballayunia Ballayunia	# FIRENCE	15 - 35	
Area Type:	Other						
Control Type: Unsignalize	ed						

Intersection		30,700	7 10	W-163			AII ST			3		19		10		
Int Delay, s/veh	2.3															
Movement	EBL	EBT	WBT	WBR	SBL	SBR		1 Atom								
Lane Configurations		414	<b>^</b>		7	7										
Traffic Vol, veh/h	16	1118	1184	6	26	76										
Future Vol, veh/h	16	1118	1184	6	26	76										
Conflicting Peds, #/hr	0	0	0	0	0	0										
Sign Control	Free	Free	Free	Free	Stop	Stop										
RT Channelized		None	ц.	None		None										
Storage Length	=			2.5	0	0										
Veh in Median Storage	e,# -	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	17	1215	1287	7	28	83										
	evenesiiiivii		NUMBER 1920	276									10042007600	SCHOOL ST		
	Major1		Major2		Ainor2						A NEW		DOM:	7.9	DXI	
Conflicting Flow All	1294	0	(2)	0	1933	647										
Stage 1	190	-		ř-1	1291	- 2										
Stage 2					642											
Critical Hdwy	4.14	-	-	-	6.84	6.94										
Critical Hdwy Stg 1	2		30	-	5.84	365										
Critical Hdwy Stg 2	12	*	*	н г	5.84	-										
Follow-up Hdwy	2.22	3		-	3.52	3.32										
Pot Cap-1 Maneuver	531	5.T.(	7.	-	58	414										
Stage 1		: :=:		-	222											
Stage 2	V 180	(#1			486	-										
Platoon blocked, %		(#C		æ:												
Mov Cap-1 Maneuver	531	(4)	(4)	(*)	52	414										
Mov Cap-2 Maneuver	:=:	( <del>-</del> 8)		140	52	94										
Stage 1	12	20	12/	140	200	2										
Stage 2		•	=	-	486	-										
								_								
Approach	EB	ALBI E	WB	100111	SB	7-3						ngy.	SIC BAL			
HCM Control Delay, s HCM LOS	8.0		0		46.8 E											
Minor Lane/Major Mvm	it = 5	EBL	EBT	WBT	WBR :	SBLn1 S	BLn2	18 71 8	BEATY.	18		29		4100	Blo	
Capacity (veh/h)		531	140	(4)	9	52	414									
HCM Lane V/C Ratio		0.033	_	4	12	0.543	0.2									
HCM Control Delay (s)		12	0.6	-	9		15.9									
HCM Lane LOS		В	А		-	F	С									
HCM 95th %tile Q(veh)	)	0.1	_		-	2.1	0.7									
Jour Mile of ton	/	5.1					5.,									

	<b>→</b>	-	-	*	-	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>↑</b> ↑		ሻ	7	
Traffic Volume (vph)	0	1218	1224	0	0	0	
Future Volume (vph)	0	1218	1224	0	0	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Link Speed (mph)		30	30		30		
Link Distance (ft)		619	987		365		
Travel Time (s)		14.1	22.4		8.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1324	1330	0	0	0	
Sign Control		Free	Free		Stop		
Intersection Summary	no.						
Area Type:	Other						
Control Type: Unsignalize	ed						

Intersection	WIND IN			Planter.		INCOME.
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	11201112	414	朴		青	7
Traffic Vol, veh/h	0	1218	1224	0	0	0
Future Vol, veh/h	0	1218	1224	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		MACONING A		None	-	None
Storage Length		-	-	*	0	0
Veh in Median Storage		0	0	70	0	
Grade, %	02	0	0	02	92	92
Peak Hour Factor	92	92	92	92		2
Heavy Vehicles, %	2	1324	1330	2	0	0
Mvmt Flow	U	1324	1330	U	U	U
	Major1		Vajor2	1	/linor2	
Conflicting Flow All	1330	0	-	0	1992	665
Stage 1		-	-	-	1330	
Stage 2		-	-		662	-
Critical Hdwy	4.14	-	-		6.84	6.94
Critical Hdwy Stg 1	*	-	-	- 20	5.84	
Critical Hdwy Stg 2		-			5.84	
Follow-up Hdwy	2.22	-	-	:=:	3.52	3.32
Pot Cap-1 Maneuver	515		-		53 211	403
Stage 1	ě	-	-		475	
Stage 2 Platoon blocked, %		-	-		4/3	
Mov Cap-1 Maneuver	515				53	403
Mov Cap-1 Maneuver	010				53	403
Stage 1					211	
Stage 2	2	2	2	- 4	475	
Oluge Z					.,,	
Annual Control of the	THE STATE OF THE S		TO A COMM		00	
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WBR	SBLn1 SBL
Capacity (veh/h)		515	*			-
HCM Lane V/C Ratio		-	8			-
HCM Control Delay (s)		0	- 2		¥	0
HCM Lane LOS		Α	22	-	2	Α
HCM 95th %tile Q(veh)		0	3	2	-	-
•						

	<b>→</b>	<b>→</b>	•	1	-	*	4	<b>†</b>	-	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>^</b>			<b>↑</b> ↑			4		ħ		7
Traffic Volume (vph)	64	900	0	0	749	22	20	0	64	3	0	9
Future Volume (vph)	64	900	0	0	749	22	20	0	64	3	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			1460			367			255	
Travel Time (s)		9.3			33.2			8.3			5.8	
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
Heavy Vehicles (%)	2%	7%	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	978	0	0	838	0	0	92	0	3	0	10
Sign Control		Free			Free			Stop			Stop	
Interesting Comment	S150 S0 11 V	S MILE /13	E E SE	(C. 57 a. b.)	HID HEX	W	S STEED		SITALE	50.00	100	= 3 = 5

Intersection Summary

Other

Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2	1.4 EBL 5 64 64 0	EBT ↑↑ 900	EBR	WBL	WBT	A STEEDING							
Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2	<b>5</b> 64 64	<b>ተ</b> ተ	EBR	WBL	MPT	77 CONSTRUCTOR							
Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2	<b>64</b> 64					WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2	64				<b>↑</b> ↑			€\$		ሻ		7	
Conflicting Peds, #/hr Sign Control RT Channelized Storage Length /eh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2			0	0	749	22	20	0	64	3	0	9	
Sign Control RT Channelized Storage Length /eh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow  Major/Minor Conflicting Flow All Stage 1 Stage 2	0	900	0	0	749	22	20	0	64	3	0	9	
RT Channelized Storage Length /eh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow Major/Minor Ma Conflicting Flow All Stage 1 Stage 2	V	0	0	0	0	0	0	0	0	0	0	0	
Storage Length /eh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % //wmt Flow //ajor/Minor Ma Conflicting Flow All Stage 1 Stage 2	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
/eh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow  Major/Minor Ma Conflicting Flow All Stage 1 Stage 2		1   2	None	-		None	-		None	-	-	None	
Grade, % Peak Hour Factor Ideavy Vehicles, % Invertigation Major/Minor Conflicting Flow All Stage 1 Stage 2	75	-				-	-	-	-	0	-	0	
Peak Hour Factor Heavy Vehicles, %  Mymt Flow  Major/Minor  Conflicting Flow All  Stage 1  Stage 2	# -	0	Y	17	0			0	-		0		
leavy Vehicles, %  Nort Flow  Major/Minor  Conflicting Flow All  Stage 1  Stage 2	:*:	0	-		0	-	-	0	-	-	0	-	
Nort Flow  Najor/Minor Ma  Conflicting Flow All  Stage 1  Stage 2	92	92	92	92	92	92	92	92	92	92	92	92	
Major/Minor Ma Conflicting Flow All Stage 1 Stage 2	2	7	2	2	7	2	2	2	2	2	2	2	
Conflicting Flow All Stage 1 Stage 2	70	978	0	0	814	24	22	0	70	3	0	10	
Conflicting Flow All Stage 1 Stage 2	ajor1	3/11	1	Major2		1	/linor1	200	The same of	Minor2	S. Marin	5 86	
Stage 1 Stage 2	838	0		12	127	0	1525	1956	489	1455	0	419	
Stage 2	-	-					1118	1118	-	826			
			-	-		-	407	838	-	629		-	
	4.14			101.		X -, -,	7.54	6.54	6.94	7.54		6.94	
Critical Hdwy Stg 1		-	*		25		6.54	5.54		6.54	*	-	
critical Hdwy Stg 2	-		- 4	-	-		6.54	5.54		6.54	v 1-	-	
	2.22	2	-	-	- 12	-	3.52	4.02	3.32	3.52	-	3.32	
ot Cap-1 Maneuver	792		0	0	13	=	81	63	525	91	0	583	
Stage 1		4	0	0	=	~ ~	221	281	-	332	0	-	
Stage 2		115	0	0	-		592	380		437	0	11.41	
latoon blocked, %		-											
	792					-	74	57	525	74		583	
Nov Cap-2 Maneuver	*			æ	i <del>i</del>	8	158	154	-	181	*	-	
Stage 1	- 2	-	×	-	-	-	202	256		303			
Stage 2	2	22	-	2	-	¥	582	380	-	346	×	¥:	
pproach	EB	JE 7. E		WB	H N II	8/4 E4	NB	147 000	id et s	SB		W BIL	Capital Spanish
ICM Control Delay, s	0.7			0			19.5			14.8			
ICM LOS							С			В			
Minor Lane/Major Mvmt	N	NBLn1	EBL	EBT	WBT	WBR S						13	
Capacity (veh/h)		338	792	*	*	-	181	583					
ICM Lane V/C Ratio		0.27	0.088	=	$\simeq$	-	0.018	0.017					
ICM Control Delay (s)		19.5	10	-		-	25.3	11.3					
ICM Lane LOS								D					
ICM 95th %tile Q(veh)		С	Α	9	0	-	D	В					

	٠	<b>→</b>	*	1	-	1	1	†	-	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	<b>ተ</b> ተ			<b>↑</b> ↑>			4		Ť		77
Traffic Volume (vph)	16	1102	0	0	1232	6	11	0	53	26	0	76
Future Volume (vph)	16	1102	0	0	1232	6	11	0	53	26	0	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		389			1393			367			219	
Travel Time (s)		8.8			31.7			8.3			5.0	
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
Heavy Vehicles (%)	2%	7%	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1198	0	0	1346	0	0	70	0	28	0	83
Sign Control		Free			Free			Stop			Stop	
Intersection Summary	- NEW			IIII				SURFIE :		F. W. 191		

Area Type:

Other

Control Type: Unsignalized

06/15/2021

Intersection	HID OF	дз=Ал	Alg S	182VIII)	ika b	SHE				77 11975		H-VH <sub>2+0</sub>		H	BELLVILLY
Int Delay, s/veh	1.6														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		Ex C	
Lane Configurations	Ť	<b>*</b>			<b>1</b>			4		Ήį		ř			
Traffic Vol, veh/h	16	1102	0	0	1232	6	11	0	53	26	0	76			
Future Vol, veh/h	16	1102	0	0	1232	6	11	0	53	26	0	76			
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	14		None	-		None	-	-	None			
Storage Length	75	121	5	9	2	2	2	-	-	0	-	0			
Veh in Median Storage,	,# -	0			0	-		0	= 8	1	0	-			
Grade, %	-	0			0			0	= =	-	0	-			
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92			
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2			
Mvmt Flow	17	1198	0	0	1339	7	12	0	58	28	0	83			
	/lajor1	19. 1		Major2			Viinor1			Minor2			N 19 1		
Conflicting Flow All	1346	0	3	3	2	0	1902	2578	599	1976	(%)	673			
Stage 1		-	2	- 12	-	1	1232	1232		1343	74				
Stage 2		÷			9	-	670	1346		633		-			
Critical Hdwy	4.14			-	- 5		7.54	6.54	6.94	7.54		6.94			
Critical Hdwy Stg 1			=	_ =		_	6.54	5.54	100	6.54	3.5	2.00			
Critical Hdwy Stg 2	9		×	1 -		-	6.54	5.54	-	6.54		1,000			
Follow-up Hdwy	2.22			-		-	3.52	4.02	3.32	3.52	-	3.32			
Pot Cap-1 Maneuver	508	-	0	0	1 2		42	25	445	37	0	398			
Stage 1	2	9	0	0	2	-	188	248	242	160	0	-			
Stage 2	-	102	0	0	-	-	413	218	-	434	0	-			
Platoon blocked, %		ě			•	9									
Mov Cap-1 Maneuver	508			7.7			32	24	445	31		398			
Mov Cap-2 Maneuver	*	*	_==	7.	*	==	118	111	-	111					
Stage 1			*	-	*	-	182	240		155		**			
Stage 2	*	*	×	#	*	*	327	218	-	365	;=0;	(A)			
					- ^										
Approach	EB	H5: F	- Illinis	WB	8415	LI ST	NB	No. of		SB	Walls	5413			
HCM Control Delay, s	0.2			0			20.5			24.5					
HCM LOS							С			С					
						MILITARY WAY	WOOMING THE		-		-				
Minor Lane/Major Mvmt	t N	IBLn1	EBL	EBT	WBT	WBR S			B S		28. 3A				400
Capacity (veh/h)		301	508	5	2.50		111	398							
HCM Lane V/C Ratio			0.034		79	( <del>-</del> )		0.208							
HCM Control Delay (s)		20.5	12.3		:**	::	48.2	16.4							
HCM Lane LOS		С	В	-	(iii)	(4)	Е	С							
HCM 95th %tile Q(veh)		0.9	0.1	16	-		0.9	8.0							

	<b>*</b>	-	7	1	4	*	4	<b>†</b>	1	-	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>ሳ</b> ጉ			<b>↑</b> ⊅			44		75		7
Traffic Volume (vph)	0	1192	0	0	1264	0	12	0	61	0	0	0
Future Volume (vph)	0	1192	0	0	1264	0	12	0	61	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		395			1383			367			291	
Travel Time (s)		9.0			31.4			8.3			6.6	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1296	0	0	1374	0	0	79	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary	2.39.5		Spirit State						200025	116		78, 1
Area Type:	Other											

Control Type: Unsignalized

Intersection			76	jimkui		up Cavall		E (Alega	100		No.	no part	
Int Delay, s/veh	0.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ħ	<b>†</b>			<b>↑</b> ↑			4		ሻ		7	
Traffic Vol, veh/h	0	1192	0	0	1264	0	12	0	61	0	0	0	
Future Vol, veh/h	0	1192	0	0	1264	0	12	0	61	0	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	-	112	None	) S. 2	1 2	None	- 1 -		None	- C - C	-	None	
Storage Length	75		- 57	3	9	3	2	-	-	0	-	0	
Veh in Median Storage	,# -	0		-	0	11 1 1	- 3	0	3	•	0	•	
Grade, %	-	0	i <del>a</del>	*	0	- 5	÷=	0			0	5	
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	
Vivmt Flow	0	1296	0	0	1374	0	13	0	66	0	0	0	
Major/Minor I	Major1	W.		Major2	198		Minor1	-		Minor2	20 34	2000	
Conflicting Flow All	1374	0	0	vicijoi z	2	0	1983	2670	648	2022		687	
Stage 1	1374		-				1296	1296	-	1374		-	
Stage 2		-	-	-			687	1374		648			
Critical Hdwy	4.14		. A.		N 3	L DJ L	7.54	6.54	6.94	7.54	10.5	6.94	
Critical Hdwy Stg 1	7.17		-			-	6.54	5.54	-	6.54		*	
Critical Hdwy Stg 2	1 2	- 3	2505			×	6.54	5.54		6.54	-	- 2	
Follow-up Hdwy	2.22		-	2			3.52	4.02	3.32	3.52		3.32	
Pot Cap-1 Maneuver	495			0		12	36	22	413	34	0	389	
Stage 1	-		ŝ	0	2	2	171	231	8	153	0	2	
Stage 2				0			403	211		425	0		
Platoon blocked, %		-	-		-	-		· · · · · · · · · · · · · · · · · · ·					
Mov Cap-1 Maneuver	495		11 +	9.1.			36	22	413	29		389	
Mov Cap-2 Maneuver	700						123	111	-	109	*		
Stage 1			4	ev ji	-		171	231		153	+		
Stage 2		2	4	2	=		403	211	-	357	¥	=	
0.030 2							.00						
Approach	EB	3 11 3		WB			NB	WE SHE		SB		Sen Fall	
HCM Control Delay, s HCM LOS	0			0			21.4 C			0 A			
Minor Lane/Major Mvm	+ 1	NBLn1	EBL	EBT	EBR	WBT	WRR	BLn1	SRI n2	5 5		Name of	
			495	LDI	EDIT	VVD1	VIDICO		JULITE				
Capacity (veh/h)		298	490	*									
HCM Lane V/C Ratio		0.266	- 0	-	-			0	0				
HCM Control Delay (s)		21.4	0		*	•		0	0				
HCM Lane LOS		C	A		2	2	, i	А	Α				
HCM 95th %tile Q(veh)		1	0				•	-					