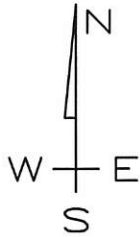
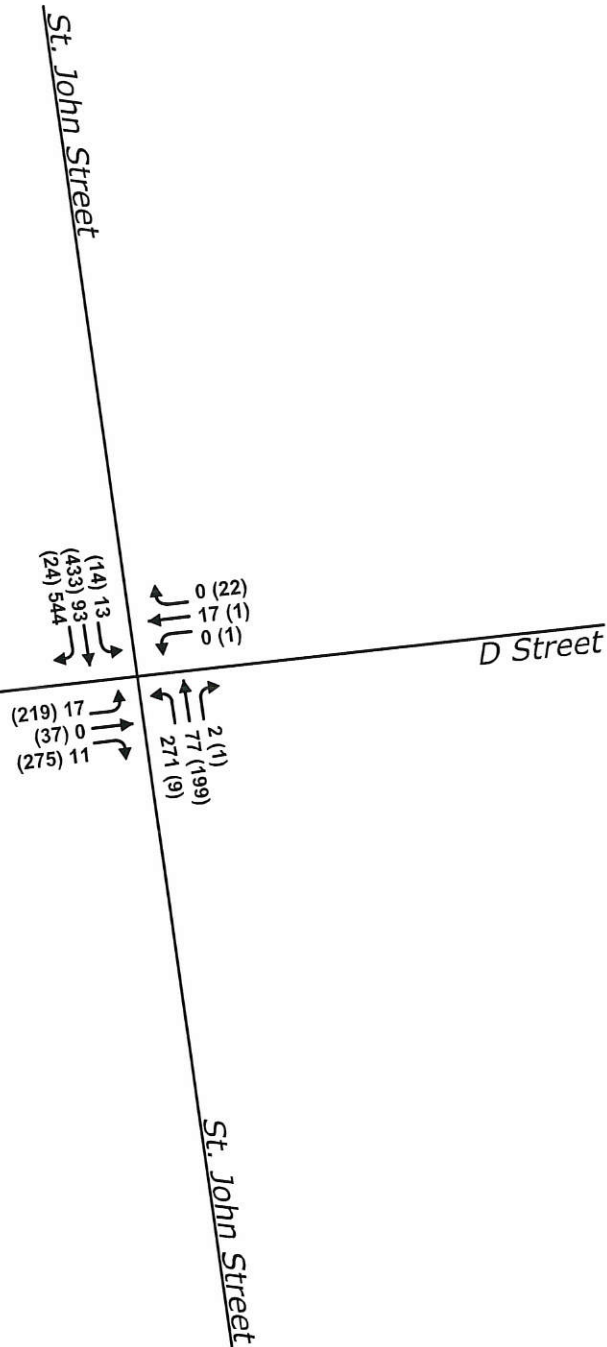


2023 Design Hourly Volumes

Figure No. 1



MMC
PARKING
GARAGE



Sources:

1. Adjacent Street Volumes:

AM - Counts collected by Gorrill Palmer
March 12, 2020 (See Figure #3)

PM - Figure 5 - 2023 Predevelopment of the
"Revised Section #7 Traffic Impact Study"
dated November 2018 (See Figure 5)

2. Garage Volumes:

AM - Counts collected March 12, 2020 (See
Figure 3) plus assumed 292 additional trip
ends (90% of 324) following existing traffic
patterns

PM - Counts collected March 11, 2020 (See
Figure 2) plus assumed 292 additional trip
ends (90% of 324) following existing traffic
patterns

XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

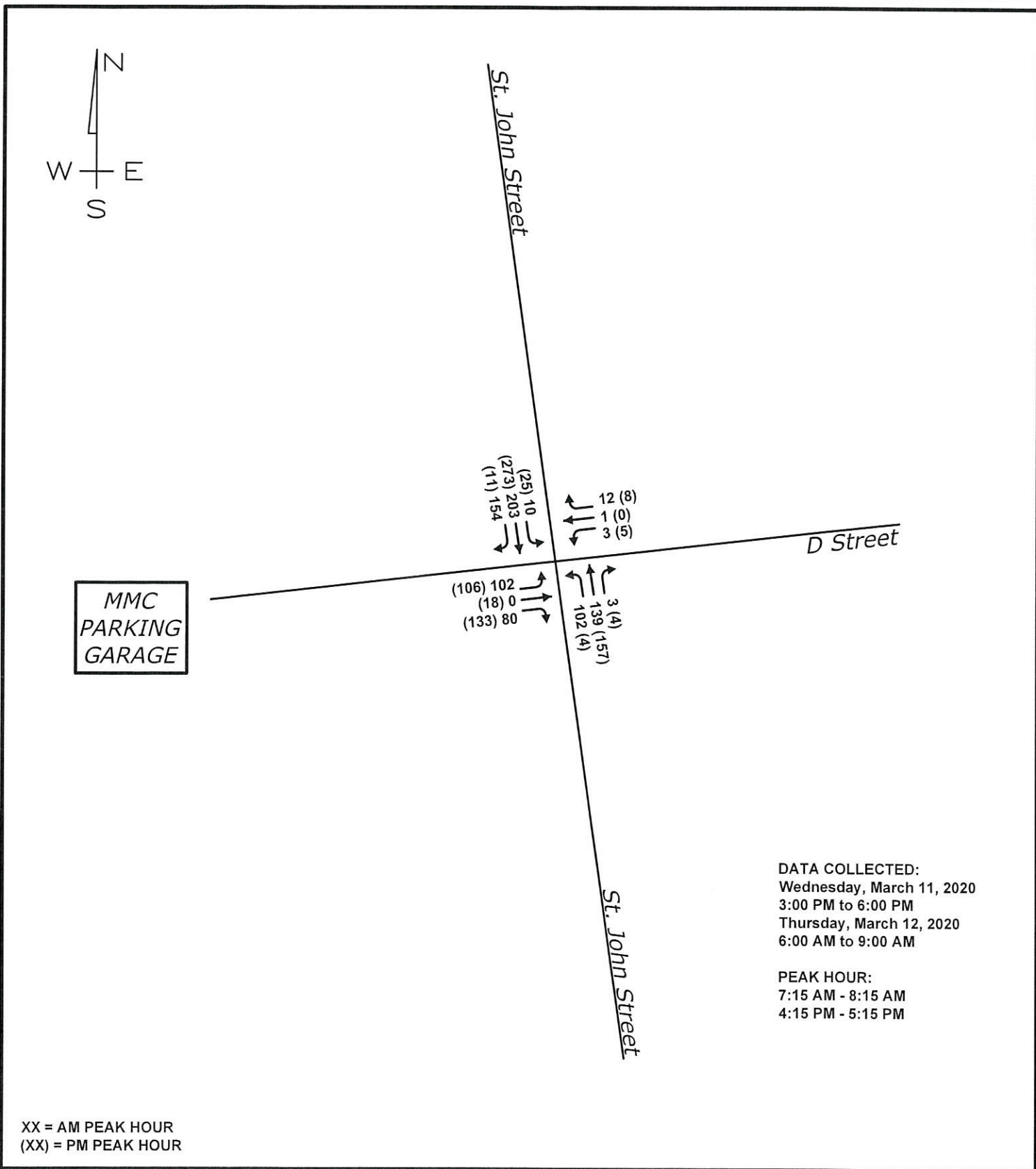
MAINE MEDICAL CENTER PARKING GARAGE PORTLAND, MAINE

Design: TPG Scale: NONE
Draft: TPG Date: JULY 2020
Checked: RED File Name: St Johns Garage Figures

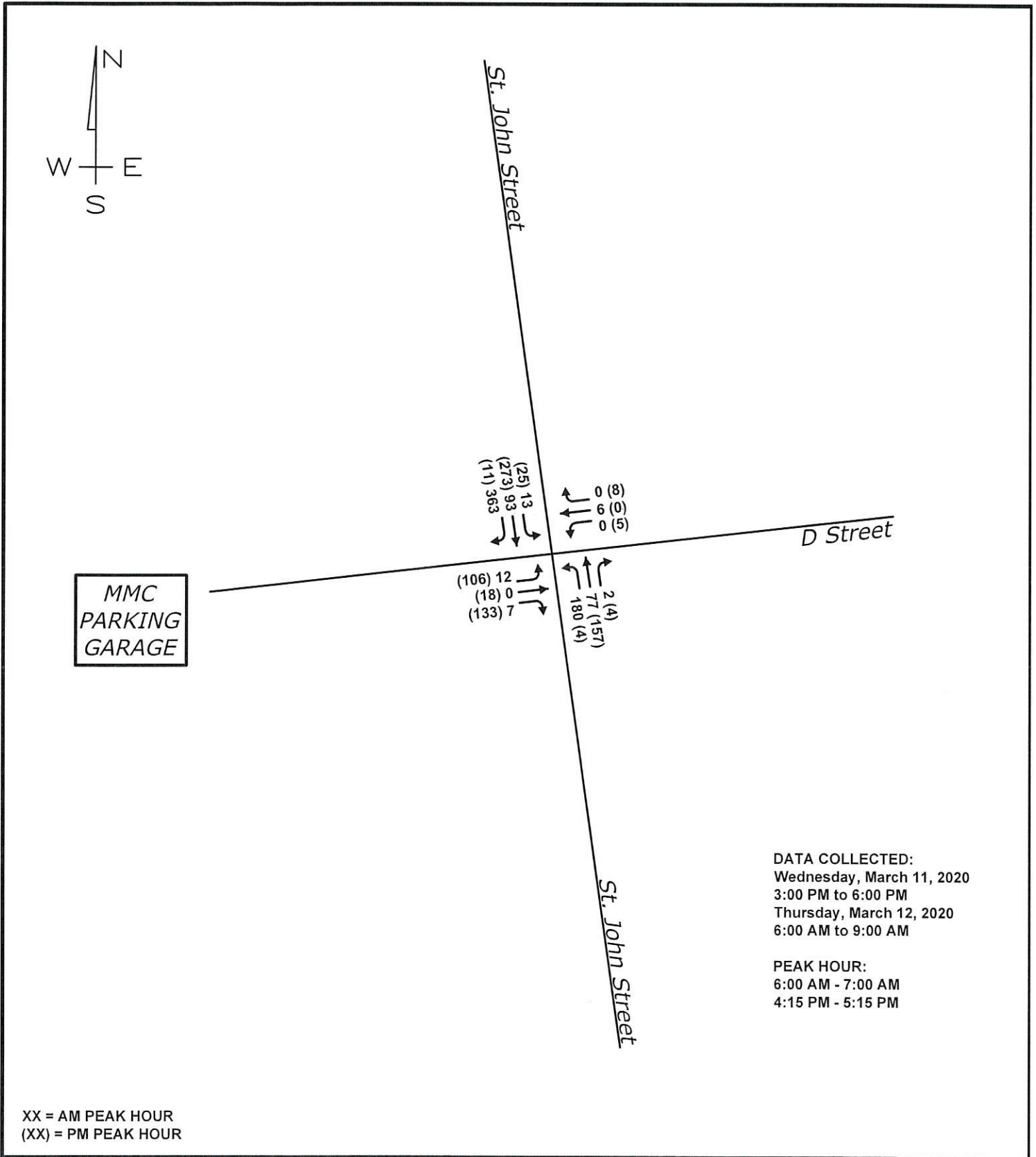


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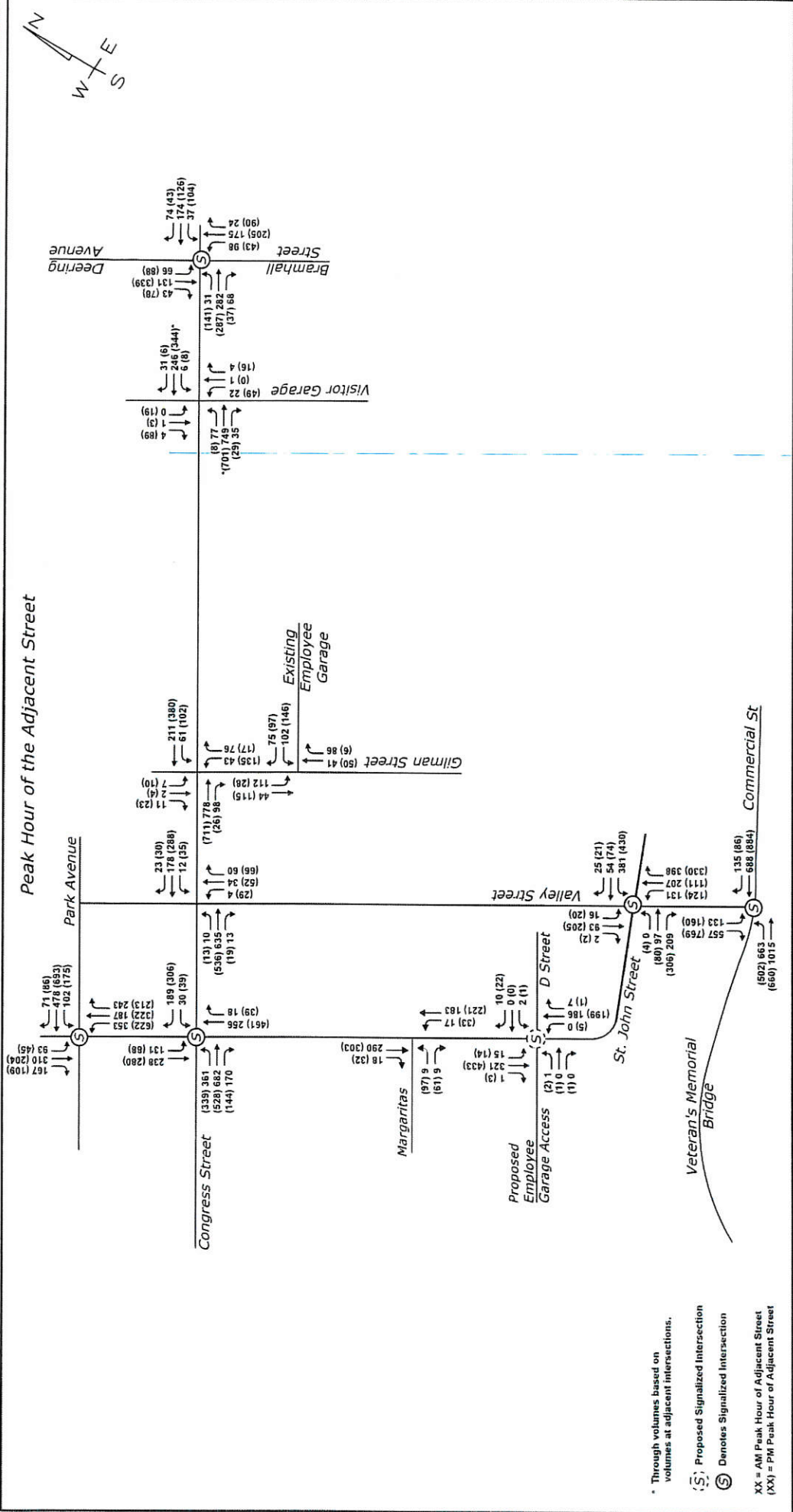
MAINE MEDICAL CENTER PARKING GARAGE PORTLAND, MAINE



MAINE MEDICAL CENTER PARKING GARAGE PORTLAND, MAINE

2023 Predevelopment

Figure No. 5

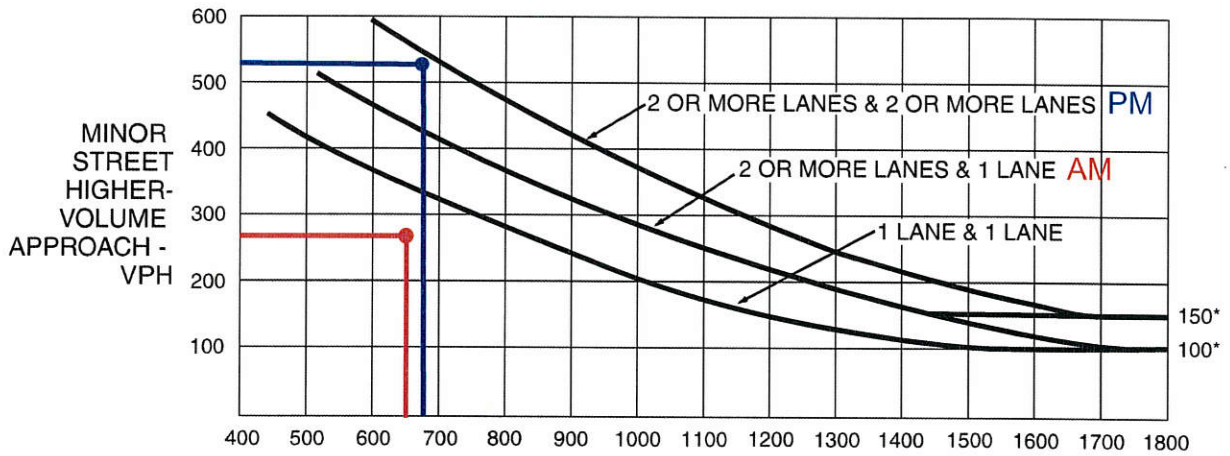


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Design: EAL Scale: NONE
 Draft: Date: SEP 2018
 Checked: RED File Name: 285665.01 - TIS Figures

Proposed Garage Access Signal Warrant
2023 Postdevelopment DHV
(Includes New Employees)

Figure 4C-3. Warrant 3, Peak Hour



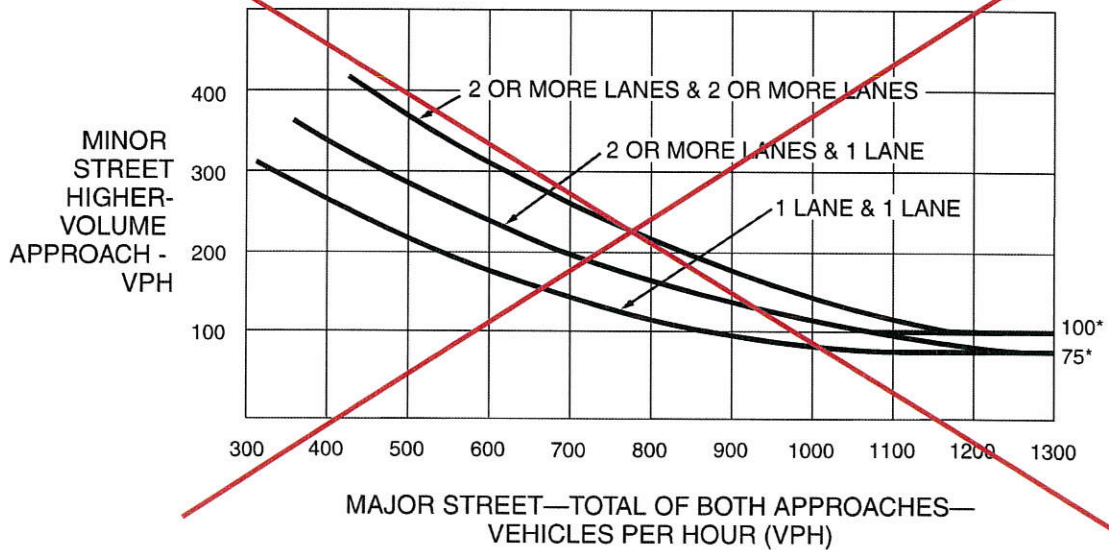
AM - Major: 650, Minor: 271
PM - Major: 680, Minor: 531

MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

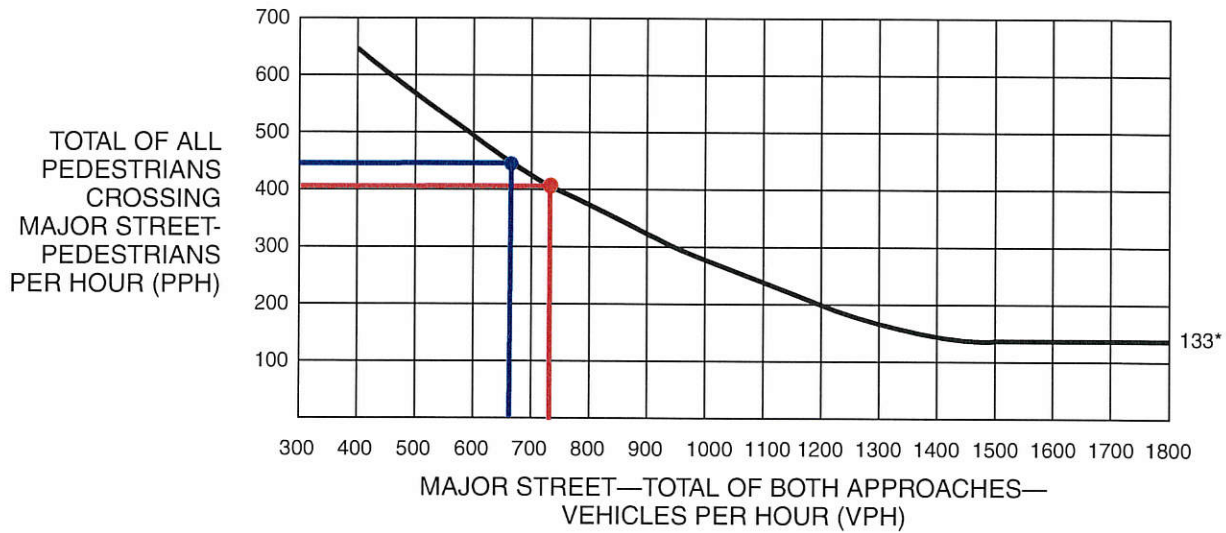
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

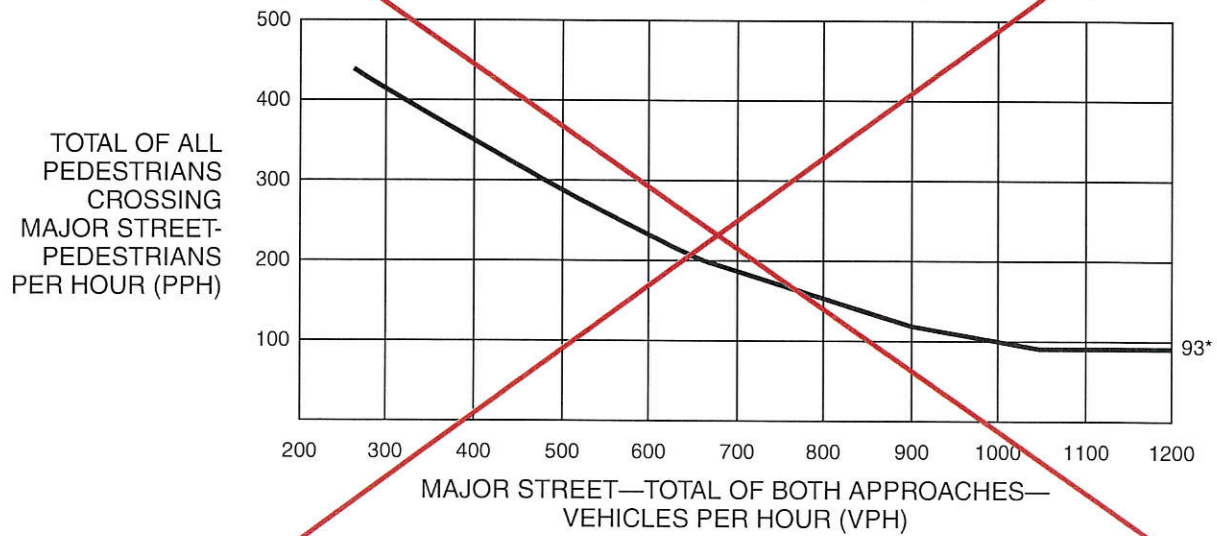
Figure 4C-7. Warrant 4, Pedestrian Peak Hour



AM - Major: 727
PM - Major: 670

*Note: 133 pph applies as the lower threshold volume.

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1083	1098	1035	1011	962	1037
Vehs Exited	1085	1099	1038	1010	956	1038
Starting Vehs	15	11	11	12	8	11
Ending Vehs	13	10	8	13	14	11
Travel Distance (mi)	284	288	271	264	251	272
Travel Time (hr)	14.1	13.9	13.1	13.6	11.9	13.3
Total Delay (hr)	3.2	2.9	2.8	3.4	2.3	2.9
Total Stops	321	348	309	340	262	315
Fuel Used (gal)	11.3	11.5	10.7	10.7	9.8	10.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00					
End Time	8:00					
Total Time (min)	60					
Volumes adjusted by Growth Factors.						
Run Number	1	2	3	4	5	Avg
Vehs Entered	1083	1098	1035	1011	962	1037
Vehs Exited	1085	1099	1038	1010	956	1038
Starting Vehs	15	11	11	12	8	11
Ending Vehs	13	10	8	13	14	11
Travel Distance (mi)	284	288	271	264	251	272
Travel Time (hr)	14.1	13.9	13.1	13.6	11.9	13.3
Total Delay (hr)	3.2	2.9	2.8	3.4	2.3	2.9
Total Stops	321	348	309	340	262	315
Fuel Used (gal)	11.3	11.5	10.7	10.7	9.8	10.8

3: Garage/D Street & St John Street Performance by lane

Lane	EB	EB	WB	NB	NB	SB	SB	SB	All
Movements Served	LT	R	LTR	L	TR	L	T	R	
Denied Del/Veh (s)									3.0
Total Del/Veh (s)	31.8	2.7	33.4	11.5	11.6	1.0	13.0	0.6	6.5
Stop Delay (hr)	0.1	0.0	0.2	0.8	0.1	0.0	0.0	0.0	1.2
Stop Del/Veh (s)	30.6	2.7	30.6	10.8	2.9	0.0	0.0	0.2	4.1

Total Network Performance

Denied Del/Veh (s)	3.0
Total Del/Veh (s)	7.1
Stop Delay (hr)	1.2
Stop Del/Veh (s)	4.3

Intersection: 3: Garage/D Street & St John Street

Movement	EB	EB	WB	NB	NB	SB	SB	SB
Directions Served	LT	R	LTR	L	TR	L	T	R
Maximum Queue (ft)	45	21	56	100	188	6	13	53
Average Queue (ft)	11	4	16	66	20	0	1	26
95th Queue (ft)	35	18	44	108	110	4	6	51
Link Distance (ft)		589	450		722		724	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	155			75		82		105
Storage Blk Time (%)				11				
Queuing Penalty (veh)				9				

Network Summary

Network wide Queuing Penalty: 9

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1252	1286	1271	1219	1130	1231
Vehs Exited	1253	1290	1273	1220	1129	1233
Starting Vehs	18	15	12	13	10	14
Ending Vehs	17	11	10	12	11	12
Travel Distance (mi)	341	350	345	331	307	335
Travel Time (hr)	15.5	16.2	15.8	15.6	13.4	15.3
Total Delay (hr)	3.1	3.5	3.3	3.6	2.3	3.2
Total Stops	546	584	591	572	513	561
Fuel Used (gal)	12.5	12.9	12.8	12.3	11.1	12.3

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1252	1286	1271	1219	1130	1231
Vehs Exited	1253	1290	1273	1220	1129	1233
Starting Vehs	18	15	12	13	10	14
Ending Vehs	17	11	10	12	11	12
Travel Distance (mi)	341	350	345	331	307	335
Travel Time (hr)	15.5	16.2	15.8	15.6	13.4	15.3
Total Delay (hr)	3.1	3.5	3.3	3.6	2.3	3.2
Total Stops	546	584	591	572	513	561
Fuel Used (gal)	12.5	12.9	12.8	12.3	11.1	12.3

3: Garage/D Street & St John Street Performance by lane

Lane	EB	EB	WB	NB	NB	SB	SB	SB	All
Movements Served	LT	R	LTR	L	TR	L	T	R	
Denied Del/Veh (s)									1.2
Total Del/Veh (s)	19.7	10.8	5.3	4.4	0.6	1.6	1.1	0.0	7.1
Stop Delay (hr)	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Stop Del/Veh (s)	18.6	7.8	5.0	3.5	0.0	0.5	0.0	0.0	5.7

Total Network Performance

Denied Del/Veh (s)	1.2
Total Del/Veh (s)	7.9
Stop Delay (hr)	2.1
Stop Del/Veh (s)	6.0

Intersection: 3: Garage/D Street & St John Street

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	L	L
Maximum Queue (ft)	170	164	43	25	30
Average Queue (ft)	83	60	16	3	2
95th Queue (ft)	147	124	41	16	16
Link Distance (ft)		589	450		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	155			75	82
Storage Blk Time (%)	1				
Queuing Penalty (veh)	4				

Network Summary

Network wide Queuing Penalty: 4