



LSC TRANSPORTATION CONSULTANTS, INC.

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September 11, 2023

Mr. Maxwell Blair
GMT Exploration Company LLC
4949 S. Niagara, Suite 250
Denver, CO 80237

Re: GMT Exploration Company -
Invicta 3-65 28 Pad
Traffic Impact Analysis
Aurora, CO
LSC #230620

Dear Mr. Blair:

In response to your request, LSC Transportation Consultants, Inc. has prepared this Traffic Impact Analysis for the proposed GMT Exploration Company (GMT) - Invicta 3-65 28 Pad well site in Aurora, Colorado. The site is located west of Monaghan Road and south of E. 38th Avenue as shown in Figure 1.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways for the highest trip generating phases; the projected total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the traffic impacts from the site. The estimated timing of each phase is the best information available today but is subject to change over time.

LAND USE AND ACCESS

The site is proposed as oil and gas operations with 8 well heads. Full movement access is proposed to E. 38th Avenue as shown in Figure 2. There is adequate sight distance along E. 38th Avenue.

The site will be developed concurrently in 13 phases as follows:

- | | |
|---|---------|
| 1. Construction Phase 1 Set up | 2 days |
| 2. Construction Phase 1 (Earthwork of site and access road) | 41 days |
| 3. Construction Phase 1 Breakdown | 2 days |
| 4. Construction Phase 2 (Finishing work and access road construction) | 10 days |

5. Construction Phase 3 (Construction for Facilities)	60 days
6. Drilling Set Up	2 days
7. Drilling	72 days
8. Drilling Breakdown	2 days
9. Completion & Flow Back Set Up	10 days
10. Completion (5.8 days per well)	56 days
11. Flowback	21 days
12. Completion & Flow Back Breakdown	3 days
13. Production/Operations	ongoing

These phases are detailed in Table 1.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **Monaghan Road** is a north-south, two-lane paved arterial county road east of the proposed site. The posted speed limit is 45 mph in the vicinity of the site.
- **E. 38th Avenue** is an east-west, two-lane roadway north of the site. The intersection with Monaghan Road is stop-sign controlled.
- **E. 26th Avenue** is an east-west, two-lane paved roadway south of the site. The intersection with Monaghan Road is stop-sign controlled. The posted speed limit is 45 mph.
- **Hudson Road** is a north-south, two-lane, paved road east of the site. The intersections with E. 26th Avenue and E. Colfax Avenue (US 36) are stop-sign controlled. The posted speed limit is 45 mph.
- **E. Colfax Avenue (US 36)** is a two-lane federal highway south of the site. The intersection with Hudson Road is stop-sign controlled and the posted speed limit is 45 mph and increases to 55 mph east of Hudson Road.
- **Existing or Proposed Private Access Roads** are gravel roadways that will provide access to the site. They will be maintained to accommodate construction traffic with a minimum width of 23 to 30 feet.

Existing Traffic Conditions

Figure 3 shows the existing weekday traffic volumes, lane geometry, traffic controls, and the posted speed limits in the vicinity of the site. The weekday peak-hour traffic volumes and average daily traffic volumes are from the attached traffic counts conducted by Counter Measures in June, 2023. The intersection counts were conducted on separate days so the highest volume intersection was used to balance the north-south through volumes at the other intersections to maintain a conservative analysis.

2025 Background Traffic

Figure 4 shows the 2025 background traffic volumes which assumes an annual growth rate of five percent to maintain a conservative analysis.

Existing and 2025 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from “A” to “F.” LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for unsignalized intersections.

The intersections in the study area were analyzed to determine the existing and 2025 background levels of service using Synchro. Table 2 shows the level of service analysis results. The level of service reports are attached.

- 1. E. 38th Avenue/Site Access:** This intersection was analyzed only for the total traffic scenarios.
- 2. Monaghan Road/E. 38th Avenue:** All movements at this unsignalized intersection currently operate at LOS “A” during both morning and afternoon peak-hours and are expected to do so through 2025.
- 3. Monaghan Road/E. 26th Avenue:** All movements at this unsignalized intersection currently operate at LOS “B” or better during both morning and afternoon peak-hours and are expected to do so through 2025.
- 4. Hudson Road/E. 26th Avenue:** All movements at this unsignalized intersection currently operate at LOS “B” or better during both morning and afternoon peak-hours and are expected to do so through 2025.
- 5. E. Colfax Avenue (US 36)/Hudson Road:** All movements at this unsignalized intersection currently operate at LOS “B” or better during both morning and afternoon peak-hours and are expected to do so through 2025.

TRIP GENERATION

Table 3 shows the two phases with the highest daily passenger car equivalent trip generation potential - the Completion phase and Flow Back phase.

TRIP DISTRIBUTION

Figure 5 shows the estimated directional distribution of the site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site’s proposed land use.

TRIP ASSIGNMENT

Figure 6a shows the estimated peak 2025 assignment of site-generated traffic volumes in passenger car equivalents for the Completion phase (56 days).

Figure 6b shows the estimated peak 2025 assignment of site-generated traffic volumes in passenger car equivalents for the Flow Back phase (21 days).

2025 TOTAL TRAFFIC

Figure 7 shows the estimated peak 2025 total traffic, traffic control, and lane geometry for the Completion phase (56 days) which is the sum of 2025 background traffic volumes (from Figure 4) and the 2025 Completion phase site-generated traffic volumes (from Figure 6a).

Figure 8 shows the estimated peak 2025 total traffic, traffic control, and lane geometry for the Flow Back phase (21 days) which is the sum of 2025 background traffic volumes (from Figure 4) and the 2025 Flow Back phase site-generated traffic volumes (from Figure 6b).

PROJECTED LEVELS OF SERVICE

The intersections in the study area were analyzed as appropriate to determine the 2025 total levels of service for the two highest trip generating scenarios (Completion and Flow Back phases). Table 2 shows the level of service analysis results. The level of service reports are attached.

- 1. E. 38th Avenue/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2025.
- 2. Monaghan Road/E. 38th Avenue:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2025.
- 3. Monaghan Road/E. 26th Avenue:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2025.
- 4. Hudson Road/E. 26th Avenue:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2025.
- 5. E. Colfax Avenue (US 36)/Hudson Road:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2025.

AUXILIARY TURN LANE EVALUATION

The City of Aurora generally follows the CDOT NR-B classification to determine if auxiliary turn lanes are warranted. Figures 7 and 8 show a few auxiliary turn lanes would typically be re-

commended. The threshold volume to construct these lanes is only met by site traffic for a little over one month.

The construction of these turn lanes is not recommended because the turn lane volume threshold will only be met for a little over one month. A detailed traffic control plan is recommended in lieu of constructing these lanes. Also, see below for restrictions preventing the applicant from hauling during the typical commuter peaks.

TRAFFIC CONTROL PLAN

The City of Aurora is restricting all non-essential site trips during the commuter hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. which will greatly reduce impacts to commuter traffic. A traffic control plan should be developed to warn motorists of heavy truck traffic during construction of the site. Auxiliary turn lanes are not recommended per the above section because the impacts are temporary and the traffic control and construction of a turn lane would likely be more impactful than the temporary impact with implementation of a traffic control plan as shown in Figure 9. It is also worth noting the site access intersection is not intended as a future public street so the turning volumes will be very low once the productions/operations phase begins.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The daily impact for either site will be highest at about 422 passenger car equivalent trips per day during the Completion Phase (56 days).
2. The long-term impact will be minimal due to product being removed from the site via pipeline. Only produced water is expected to be trucked from the site.

Projected Levels of Service

3. All movements at the unsignalized intersections analyzed are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2025. Operations will likely be much better because the City is restricting all non-essential site trips during the commuter hours of 7:00 - 9:00 a.m. and 4:00 - 6:00 p.m.

Conclusions

4. The impact of the proposed GMT - Invicta 3-65 28 Pad well site can be accommodated by the existing roadway network with the following recommendations.

Recommendations

5. The City of Aurora is restricting all non-essential site trips during the commuter hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. which will greatly reduce impacts to commuter traffic. A traffic control plan should be developed to warn motorists of heavy truck traffic during construction of the site. Auxiliary turn lanes are not recommended because the impacts are temporary and the traffic control and construction of one or more

turn lanes would be more impactful than the temporary impact with implementation of a traffic control plan. The recommended traffic control plan is shown in Figure 9.

* * * * *

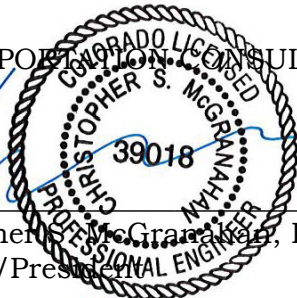
We trust our findings will assist you in gaining approval of the proposed GMT Exploration Company - Invicta 3-65 28 Pad well site development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By

Christopher S. McGraw, PE
Principal/President



9-11-23

CSM/wc

Enclosures: Tables 1 - 3
Figures 1 - 9
Traffic Count Reports
Level of Service Definitions
Level of Service Reports

Table 1
GMT Exploration Company - Invicta 3-65 28 Pad (8 well heads)
Trip Generation Estimate
LSC #230620; September, 2023

Phase of Development and Estimated Start Date		Gross Vehicle Weight ⁽¹⁾		ESAL Per Vehicle ⁽¹⁾	Number of Vehicles Estimated per Day ⁽¹⁾		Average Daily Trips	Average Daily ESALs
Construction Phase 1 (45 days +/-) - Earthwork of site and access road								
1.)	Setup (2 Day)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	10	Vehicles	20	0.06
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	5	Vehicles	10	10.87
					Typical Vehicle Trips per Day =		30	10.93
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		50	
2.)	Construction (41 days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	10	Vehicles	20	0.06
					Typical Vehicle Trips per Day =		20	0.06
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		20	
3.)	Breakdown (2 Days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	10	Vehicles	20	0.06
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	5	Vehicles	10	10.87
					Typical Vehicle Trips per Day =		30	10.93
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		50	
4.) Construction Phase 2 (10 days +/-) - Finishing work and access road construction								
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	10	Vehicles	20	0.06
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	40	Vehicles	80	86.96
					Typical Vehicle Trips per Day =		100	87.02
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		260	
5.) Construction Phase 3 (60 days +/-) - Construction for Facilities								
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	10	Vehicles	20	0.06
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	2	Vehicles	4	4.348
					Typical Vehicle Trips per Day =		24	4.408
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		32	
Drilling Phase 2 (76 days +/-)								
6.)	Setup (2 Days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	20	Vehicles	40	0.12
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	14	Vehicles	28	30.44
					Typical Vehicle Trips per Day =		68	30.56
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		124	
7.)	Drilling (72 days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	23	Vehicles	46	0.14
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	11	Vehicles	22	23.91
					Typical Vehicle Trips per Day =		68	24.05
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		112	
8.)	Breakdown (2 Days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	20	Vehicles	40	0.12
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	14	Vehicles	28	30.44
					Typical Vehicle Trips per Day =		68	30.56
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		124	
Completion & Flow Back Phase (90 days +/-)								
9.)	Setup (10 Days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	20	Vehicles	40	0.12
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	40	Vehicles	80	86.96
					Typical Vehicle Trips per Day =		120	87.08
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		280	
10.)	Completion (56 days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	61	Vehicles	122	0.37
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	50	Vehicles	100	108.70
					Typical Vehicle Trips per Day =		222	109.07
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		422	
11.)	Flow Back (21 Days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	5	Vehicles	10	0.03
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	50	Vehicles	100	108.70
					Typical Vehicle Trips per Day =		110	108.73
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		310	
12.)	Breakdown (3 days)							
	Passenger Vehicle ⁽²⁾	4,500	to 8,500 lbs	0.003	20	Vehicles	40	0.12
	Multiple Unit Trucks ⁽²⁾	50,000	to 70,000 lbs	1.087	40	Vehicles	80	86.96
					Typical Vehicle Trips per Day =		120	87.08
					Typical Passenger Car Equivalent Trips per Day ⁽³⁾ =		280	
13.) Production/Operation Phase (ongoing with no distribution/collection system)								
	Passenger Vehicle	4,500	to 8,500 lbs	0.003	2	Vehicles	4	0.01
	Tanker Truck Trips			1.087	1	Vehicles	2	2.174
					Typical Vehicle Trips per Day =		6	2.18
					Typical Passenger Car Equivalent Trips per Day =		10	

Notes:

(1) Source: Based on scheduling information provided by GMT Exploration Company

(2) CDOT *State Highway Access Code* (SHAC) assumes: passenger vehicle < 20', single unit truck from 20' to 40', multiple unit truck > 40'

(3) CDOT SHAC assumes single unit trucks = 2 passenger car equivalents and multiple unit trucks = 3 passenger car equivalents

Source: LSC Transportation Consultants, Inc. based on scheduling input from GMT Exploration Company

Table 2
Intersection Levels of Service Analysis
GMT Exploration Company - Invicta 3-65 28 Pad
Aurora, CO
LSC #230620; September, 2023

Intersection No. & Location	Traffic Control	Existing Traffic				2025 Background Traffic				2025 Total Traffic Completion Phase				2025 Total Traffic Flow Back Phase			
		Level of Service AM	Seconds of Delay	Level of Service PM	Seconds of Delay	Level of Service AM	Seconds of Delay	Level of Service PM	Seconds of Delay	Level of Service AM	Seconds of Delay	Level of Service PM	Seconds of Delay	Level of Service AM	Seconds of Delay	Level of Service PM	Seconds of Delay
1) <u>E. 38th Avenue/Site Access</u>	TWSC																
NB Approach		--	--	--	--	--	--	--	--	A	9.1	A	8.4	A	9.1	A	8.4
WB Approach		--	--	--	--	--	--	--	--	A	8.0	A	8.0	A	8.0	A	8.0
2) <u>Monaghan Road/E. 38th Avenue</u>	TWSC																
NB Approach		A	7.4	A	7.7	A	7.4	A	7.8	A	8.2	A	8.6	A	8.1	A	8.6
EB Approach		A	9.3	A	9.4	A	9.1	A	9.7	A	9.6	B	10.6	A	9.6	B	10.6
3) <u>Monaghan Road/E. 26th Avenue</u>	TWSC																
NB Approach		B	11.1	A	0.0	B	10.3	A	9.7	B	10.5	A	9.8	B	10.4	A	9.8
EB Approach		A	7.6	A	7.4	A	7.6	A	7.4	A	7.7	A	7.5	A	7.7	A	7.5
WB Approach		A	0.0	A	0.0	A	7.3	A	7.4	A	7.3	A	7.4	A	7.3	A	7.4
SB Approach		B	10.0	A	9.9	B	10.2	B	10.2	B	11.2	B	10.8	B	11.0	B	10.7
4) <u>Hudson Road/E. 26th Avenue</u>	TWSC																
NB Approach		A	7.4	A	7.4	A	7.5	A	7.4	A	7.7	A	7.6	A	7.7	A	7.6
EB Approach		A	9.0	A	9.1	A	9.1	A	9.2	A	9.3	A	9.6	A	9.3	A	9.5
WB Approach		B	10.6	A	9.8	B	10.6	A	9.9	B	11.1	B	10.4	B	11.0	B	10.3
SB Approach		A	0.0	A	7.3	A	7.3	A	7.3	A	7.3	A	7.3	A	7.3	A	7.3
5) <u>E. Colfax Avenue (US 36)/Hudson Road</u>	TWSC																
NB Approach		B	11.3	A	9.2	B	11.2	A	9.4	B	11.9	A	9.7	B	11.7	A	9.6
EB Left/Through		A	7.6	A	7.4	A	7.6	A	7.5	A	7.9	A	7.7	A	7.9	A	7.7
WB Approach		A	7.6	A	0.0	A	7.7	A	7.5	A	7.7	A	7.5	A	7.7	A	7.5
SB Approach		B	10.8	B	10.2	B	11.2	B	10.5	B	11.6	B	11.0	B	11.6	B	10.9

Table 3
ESTIMATED TRAFFIC GENERATION ⁽¹⁾
GMT Exploration Company - Invicta 3-65 28 Pad
Aurora, CO
LSC #230620; September, 2023

Month/Year	Average Daily PCE ⁽¹⁾ ⁽²⁾ ⁽³⁾	Vehicle-Trips Generated			
		AM Peak-Hour ⁽⁴⁾		PM Peak-Hour ⁽⁴⁾	
		In	Out	In	Out
Completion Phase (56 Days)					
Invicta Pad	422	21	21	21	21
Flow Back Phase (21 Days)					
Invicta Pad	310	16	15	16	15

Notes:

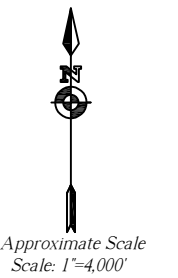
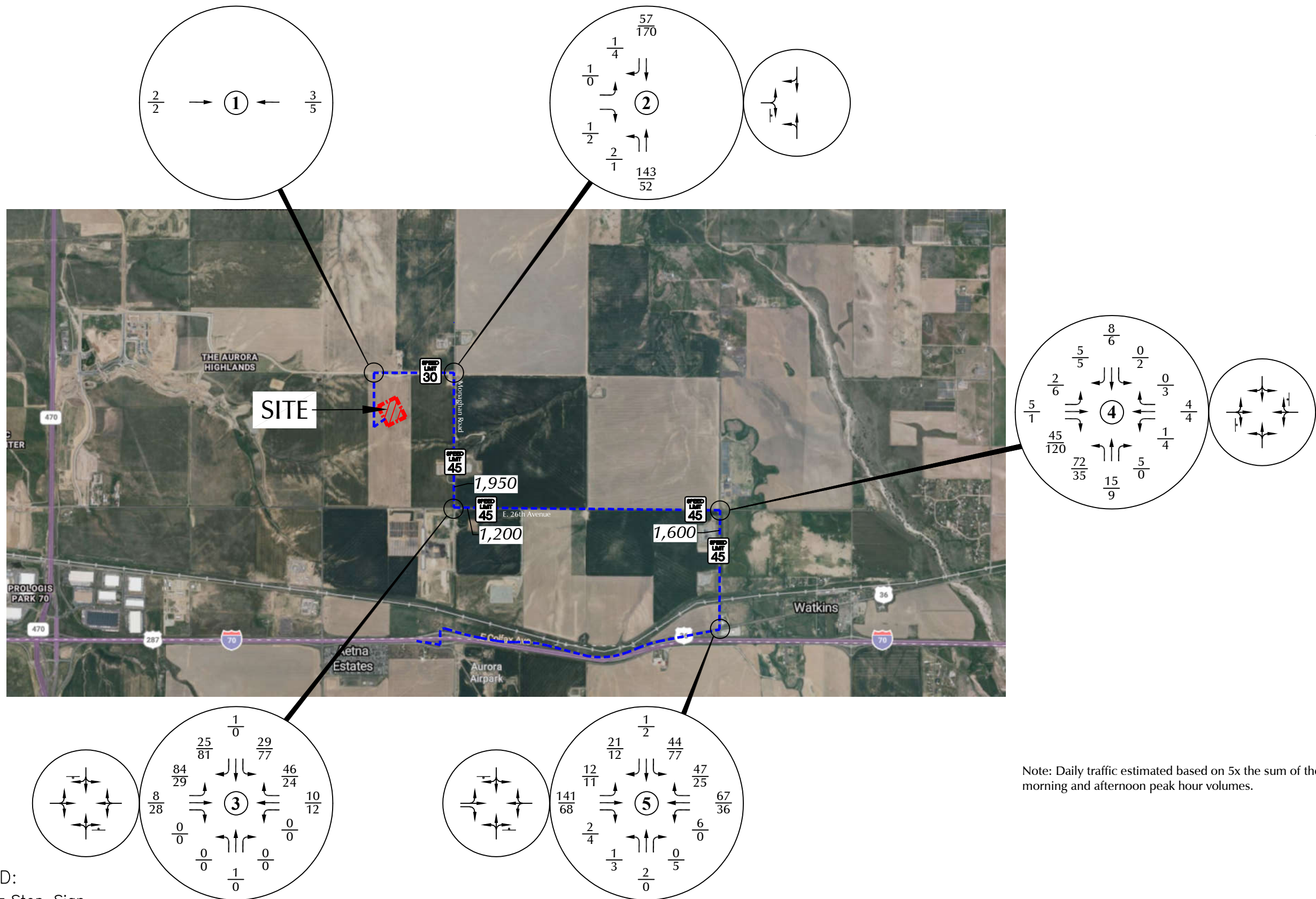
- (1) Based on data in Table 1 - all volumes are in passenger car equivalents.
- (2) CDOT *State Highway Access Code* (SHAC) assumes: passenger vehicle < 20', single unit truck from 20' to 40', multiple unit truck > 40'
- (3) CDOT SHAC assumes single unit trucks = 2 passenger car equivalents and multiple unit trucks = 3 passenger car equivalents
- (4) Assumes peak-hour trips are 10% of daily trips





Figure 1

Vicinity Map

GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



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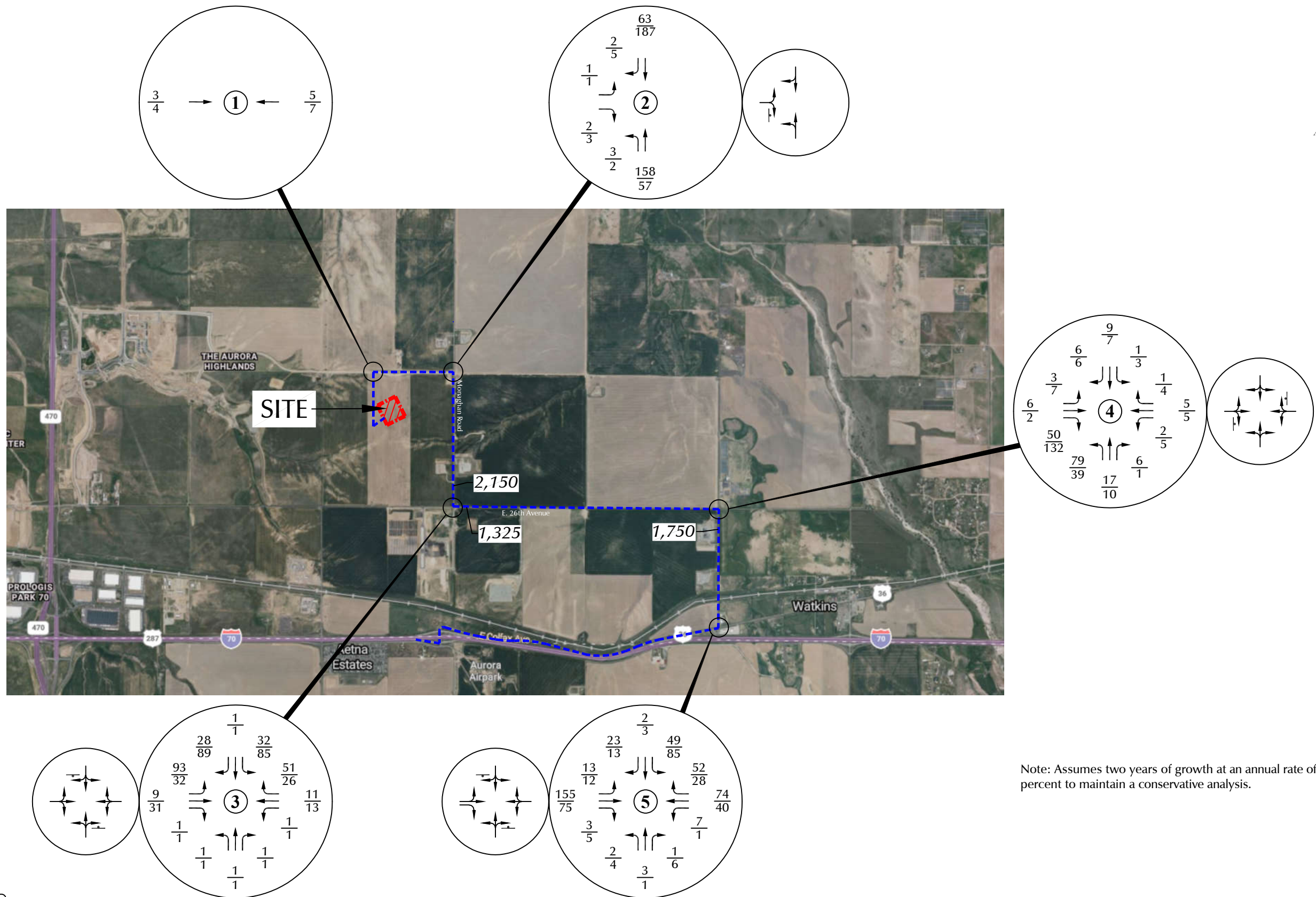
-  = Stop Sign
-  = Speed Limit
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

Note: Daily traffic estimated based on 5x the sum of the morning and afternoon peak hour volumes.

Figure 3

Existing Traffic, Lane Geometry and Traffic Control

GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



Approximate Scale
Scale: 1"=4,000'

Note: Assumes two years of growth at an annual rate of five percent to maintain a conservative analysis.

LEGEND:
 ↳ = Stop Sign
 $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
 1,000 = Average Daily Traffic



Figure 4
**Year 2025 Background Traffic,
 Lane Geometry and Traffic Control**
 GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



Approximate Scale
Scale: 1" = 1 Mile

LEGEND:

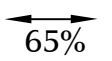
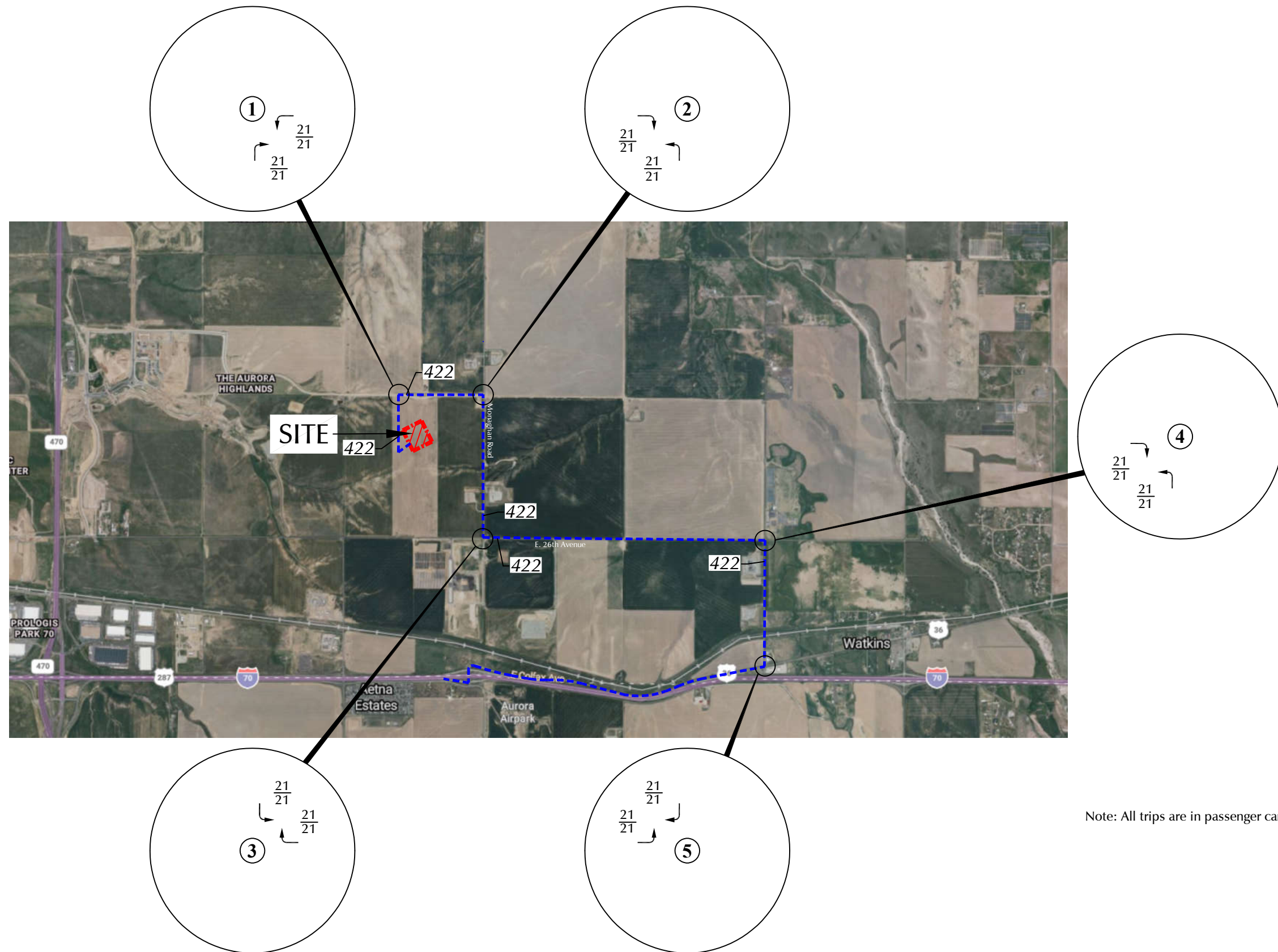
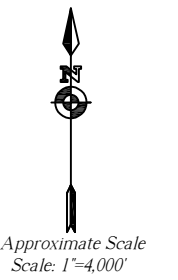

 = Percent Directional
Distribution

Figure 5

Directional Distribution of Site-Generated Traffic

GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)

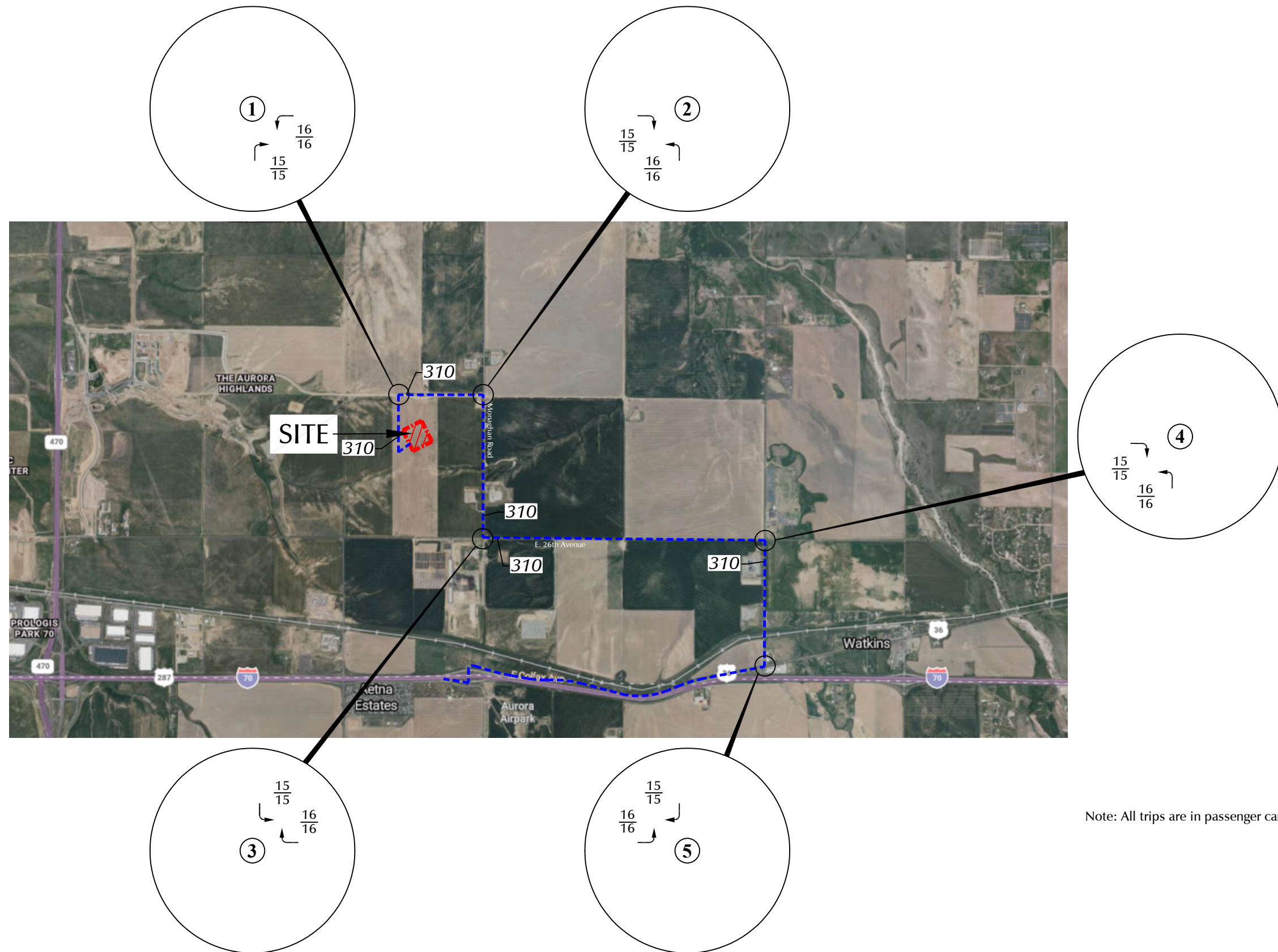
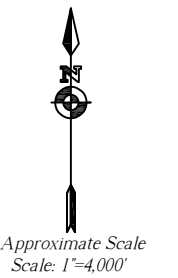


Note: All trips are in passenger car equivalent (PCE).



LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{26}$ = PM Peak Hour Traffic
1,000 = Average Daily Traffic

Figure 6a
**Assignment of
Site-Generated Traffic
for Completion Phase (56 Days)**
GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



Note: All trips are in passenger car equivalent (PCE).



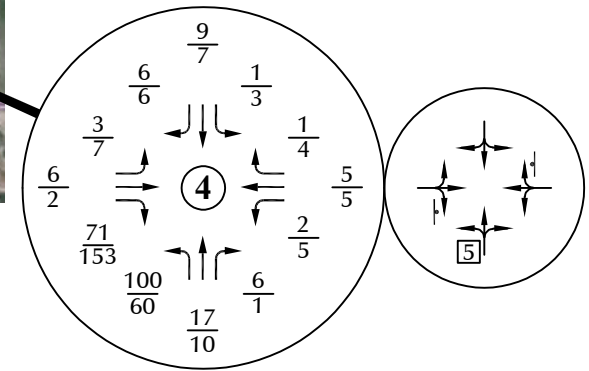
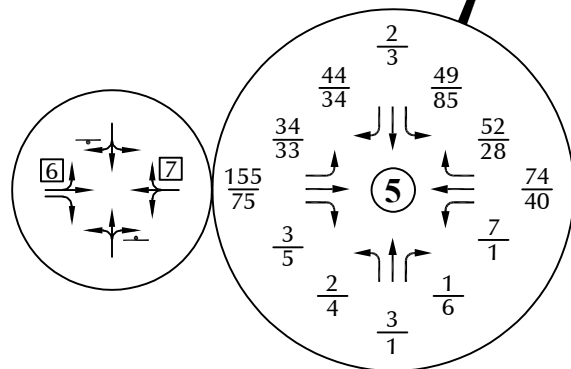
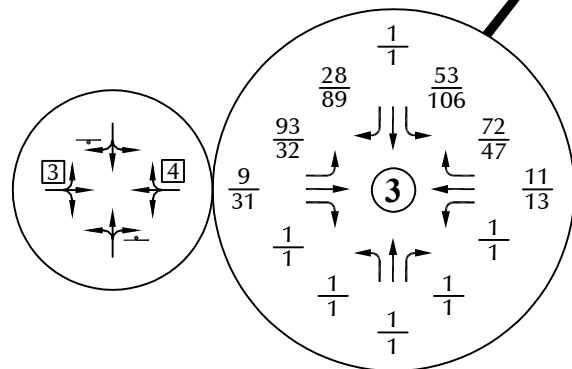
LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{26}$ = PM Peak Hour Traffic
1,000 = Average Daily Traffic

Figure 6b
**Assignment of
Site-Generated Traffic
for Flow Back Phase (21 Days)**
GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



Discussion of Peak Houring Turning Volumes

- ① WB LT = The threshold to construct this lane would be a peak hour volume of greater than 25vph so this is not recommended.
- ② NB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and an opposing volume greater than 100vph so this lane is warranted. It is not recommended to be constructed by the applicant because the threshold will only be exceeded during a few individual phases of construction and not for productions/operations once construction is completed.
- ③ EB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and the opposing volume greater than 100vph so this lane is not warranted.
- ④ WB RT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an approach volume of greater than 150vph so this lane is not warranted.
- ⑤ NB LT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an opposing volume greater than 100vph so this lane is not warranted.
- ⑥ EB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and the opposing volume greater than 100vph so this lane is warranted. It is not recommended to be constructed by the applicant because the threshold will only be exceeded during a few individual phases of construction and not for productions/operations once construction is completed.
- ⑦ WB RT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an approach volume of greater than 150vph so this lane is not warranted.



Notes:
 1. These volumes are the sum of the volumes in Figures 4 and 6a.
 2. See Figure 9 for a recommended traffic control plan for the site access intersection on E. 38th Avenue.

Figure 7

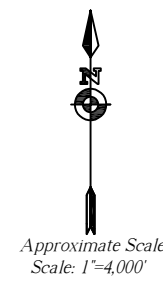
Year 2025 Total Traffic, Lane Geometry and Traffic Control for Completion Phase (56 Days)

GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)

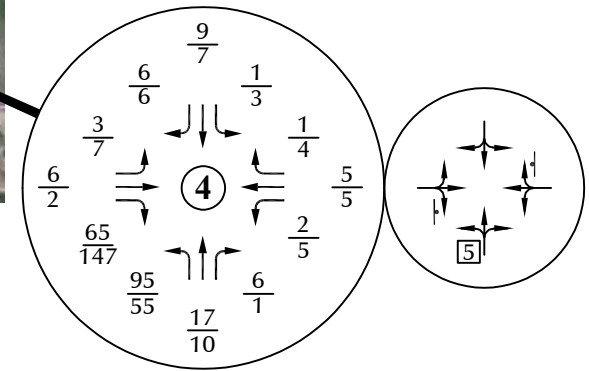
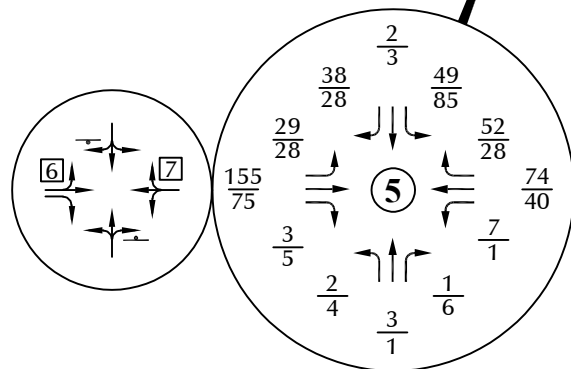
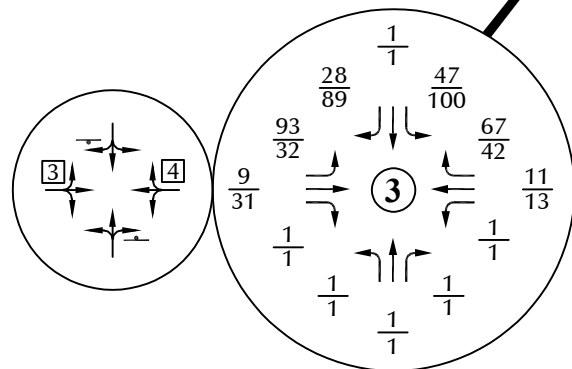
LEGEND:

- ⊥ = Stop Sign
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic





- Discussion of Peak Houring Turning Volumes
- ① WB LT = The threshold to construct this lane would be a peak hour volume of greater than 25vph so this is not recommended.
 - ② NB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and an opposing volume greater than 100vph so this lane is warranted. It is not recommended to be constructed by the applicant because the threshold will only be exceeded during a few individual phases of construction and not for productions/operations once construction is completed.
 - ③ EB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and the opposing volume greater than 100vph so this lane is not warranted.
 - ④ WB RT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an approach volume of greater than 150vph so this lane is not warranted.
 - ⑤ NB LT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an opposing volume greater than 100vph so this lane is not warranted.
 - ⑥ EB LT = The threshold to construct this lane would be a peak hour volume of greater than 10vph and the opposing volume greater than 100vph so this lane is warranted. It is not recommended to be constructed by the applicant because the threshold will only be exceeded during a few individual phases of construction and not for productions/operations once construction is completed.
 - ⑦ WB RT = The threshold to construct this lane would be a peak hour volume of greater than 25vph and an approach volume of greater than 150vph so this lane is not warranted.



Notes:
 1. These volumes are the sum of the volumes in Figures 4 and 6b.
 2. See Figure 9 for a recommended traffic control plan for the site access intersection on E. 38th Avenue.

Figure 8

LEGEND:

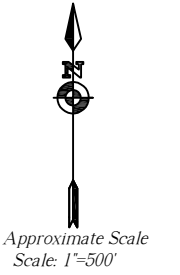
⊥ = Stop Sign

$\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

**Year 2025 Total Traffic,
 Lane Geometry and Traffic Control
 for Flow Back Phase (21 Days)**

GMT Exploration Company Invicta 3-65-28 Pad (LSC #230620)



Existing posted speed limit = 30mph

All signs shall be accordance with the current version of the M.U.T.C.D.

COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: HUDSON RD
E/W STREET: E. COLFAX AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDSCOLFAX23
Site Code : 00000011
Start Date : 6/22/2023
Page No : 1

Groups Printed- VEHICLES

	HUDSON RD Southbound				E. COLFAX AVE Westbound				HUDSON RD Northbound				E. COLFAX AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	19	1	10	0	3	12	8	0	1	0	0	0	3	31	1	0	89
06:45 AM	6	0	4	0	2	15	12	0	0	0	0	0	4	36	1	0	80
Total	25	1	14	0	5	27	20	0	1	0	0	0	7	67	2	0	169
07:00 AM	8	0	1	0	1	21	15	0	0	0	0	0	5	34	0	0	85
07:15 AM	11	0	6	0	0	19	12	0	0	2	0	0	0	40	0	0	90
07:30 AM	4	0	2	0	2	18	9	0	0	0	0	0	3	21	0	0	59
07:45 AM	11	0	3	0	0	11	11	0	0	0	0	0	3	21	0	0	60
Total	34	0	12	0	3	69	47	0	0	2	0	0	11	116	0	0	294
08:00 AM	7	0	0	0	0	12	8	0	1	0	0	0	3	18	1	0	50
08:15 AM	17	0	4	0	0	10	6	0	0	0	0	0	3	13	0	0	53
Total	24	0	4	0	0	22	14	0	1	0	0	0	6	31	1	0	103
04:00 PM	27	0	4	0	0	4	4	0	0	0	0	0	5	13	0	0	57
04:15 PM	17	1	6	0	0	16	5	0	0	0	0	0	3	14	3	0	65
04:30 PM	13	1	0	0	0	6	6	0	0	0	3	0	1	20	0	0	50
04:45 PM	20	0	2	0	0	10	10	0	3	0	2	0	2	21	1	0	71
Total	77	2	12	0	0	36	25	0	3	0	5	0	11	68	4	0	243
05:00 PM	11	0	2	0	0	10	9	0	2	0	1	0	4	16	0	0	55
05:15 PM	11	1	0	0	0	10	5	0	0	1	0	0	0	14	1	0	43
05:30 PM	6	0	1	0	0	0	5	0	0	0	1	0	3	14	0	0	30
05:45 PM	4	0	3	0	1	4	4	0	0	0	4	0	1	6	0	0	27
Total	32	1	6	0	1	24	23	0	2	1	6	0	8	50	1	0	155
Grand Total	192	4	48	0	9	178	129	0	7	3	11	0	43	332	8	0	964
Apprch %	78.7	1.6	19.7	0.0	2.8	56.3	40.8	0.0	33.3	14.3	52.4	0.0	11.2	86.7	2.1	0.0	
Total %	19.9	0.4	5.0	0.0	0.9	18.5	13.4	0.0	0.7	0.3	1.1	0.0	4.5	34.4	0.8	0.0	

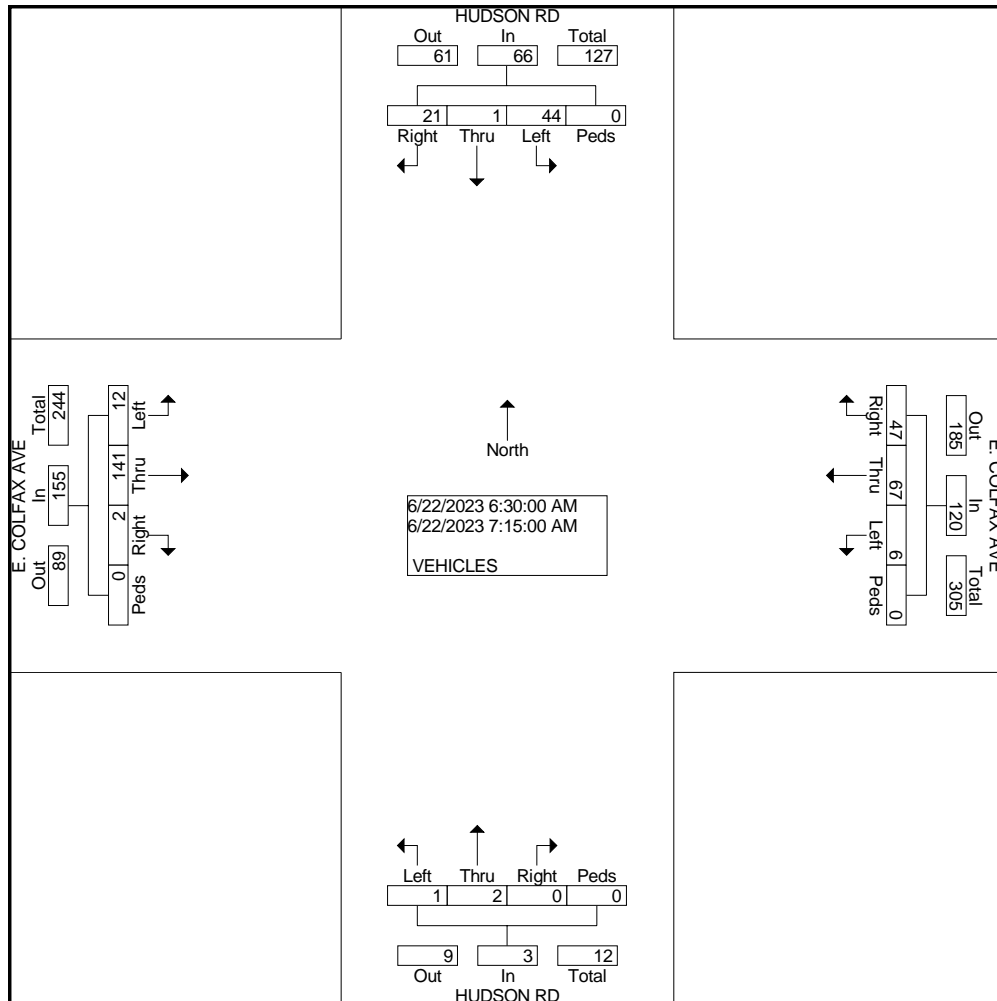
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: HUDSON RD
E/W STREET: E. COLFAX AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDSCOLFAX23
Site Code : 00000011
Start Date : 6/22/2023
Page No : 2

	HUDSON RD Southbound					E. COLFAX AVE Westbound					HUDSON RD Northbound					E. COLFAX AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1	06:30 AM																				
Intersection	06:30 AM																				
Volume	44	1	21	0	66	6	67	47	0	120	1	2	0	0	3	12	141	2	0	155	344
Percent	66.7	1.5	31.8	0.0		5.0	55.8	39.2	0.0		33.3	66.7	0.0	0.0		7.7	91.0	1.3	0.0		
07:15 Volume	11	0	6	0	17	0	19	12	0	31	0	2	0	0	2	0	40	0	0	40	90
Peak Factor																					0.956
High Int. Volume	06:30 AM					07:00 AM					07:15 AM					06:45 AM					
Peak Factor	19	1	10	0	30	1	21	15	0	37	0	2	0	0	2	4	36	1	0	41	
	0.55					0.81					0.37					0.94					5
	0					1					5					5					



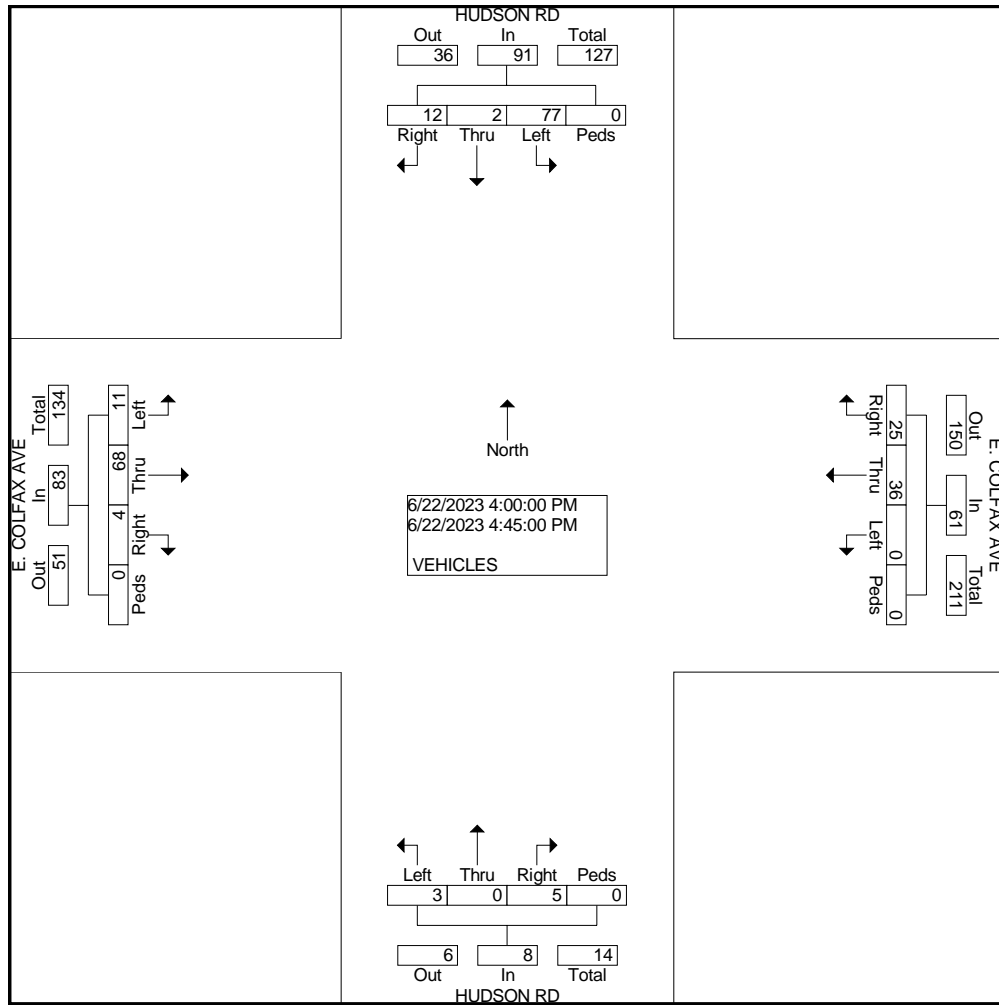
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: HUDSON RD
E/W STREET: E. COLFAX AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDSCOLFAX23
Site Code : 00000011
Start Date : 6/22/2023
Page No : 3

	HUDSON RD Southbound					E. COLFAX AVE Westbound					HUDSON RD Northbound					E. COLFAX AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	77	2	12	0	91	0	36	25	0	61	3	0	5	0	8	11	68	4	0	83	243
Percent	84.6	2.2	13.2	0.0		0.0	59.0	41.0	0.0		37.5	0.0	62.5	0.0		13.3	81.9	4.8	0.0		
04:45 Volume	20	0	2	0	22	0	10	10	0	20	3	0	2	0	5	2	21	1	0	24	71
Peak Factor	0.856																				
High Int. Volume	04:00 PM					04:15 PM					04:45 PM					04:45 PM					
Peak Factor	27	0	4	0	31	0	16	5	0	21	3	0	2	0	5	2	21	1	0	24	
	0.73					0.72					0.40					0.86					
	4					6					0					5					



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MONAGHAN RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : MONA26THAVE
Site Code : 00000013
Start Date : 6/27/2023
Page No : 1

Groups Printed- VEHICLES

	MONAGHAN RD Southbound				E. 26TH AVE Westbound				MONAGHAN RD Northbound				E. 26TH AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	7	0	9	0	0	4	17	0	0	0	0	0	36	1	0	0	74
06:45 AM	8	0	8	0	0	3	11	0	0	0	0	0	16	2	0	0	48
Total	15	0	17	0	0	7	28	0	0	0	0	0	52	3	0	0	122
07:00 AM	4	1	6	0	0	2	5	1	0	1	0	0	16	2	0	0	38
07:15 AM	10	0	2	0	0	1	13	0	0	0	0	0	16	3	0	0	45
07:30 AM	7	1	3	0	0	1	6	0	0	0	0	0	8	2	0	0	28
07:45 AM	3	0	4	0	0	4	15	0	0	0	0	0	15	2	0	0	43
Total	24	2	15	0	0	8	39	1	0	1	0	0	55	9	0	0	154
08:00 AM	7	0	11	0	1	1	15	0	0	0	0	0	12	6	0	0	53
08:15 AM	5	0	7	0	0	7	17	0	0	0	0	0	10	0	0	0	46
Total	12	0	18	0	1	8	32	0	0	0	0	0	22	6	0	0	99
04:00 PM	15	0	24	0	0	3	12	0	0	0	0	0	3	6	0	0	63
04:15 PM	21	0	25	0	0	2	2	0	0	0	0	0	2	3	0	0	55
04:30 PM	20	0	20	0	0	0	4	0	0	0	0	0	13	8	0	0	65
04:45 PM	21	0	12	0	0	7	6	0	0	0	0	0	11	11	0	0	68
Total	77	0	81	0	0	12	24	0	0	0	0	0	29	28	0	0	251
05:00 PM	25	0	13	0	0	4	10	0	0	0	0	0	9	4	0	0	65
05:15 PM	20	0	20	0	0	6	7	0	0	0	0	0	11	7	1	0	72
05:30 PM	21	0	9	0	0	2	5	0	0	0	1	0	10	6	0	0	54
05:45 PM	9	0	14	0	0	2	9	0	0	0	0	0	2	4	0	0	40
Total	75	0	56	0	0	14	31	0	0	0	1	0	32	21	1	0	231
Grand Total	203	2	187	0	1	49	154	1	0	1	1	0	190	67	1	0	857
Apprch %	51.8	0.5	47.7	0.0	0.5	23.9	75.1	0.5	0.0	50.0	50.0	0.0	73.6	26.0	0.4	0.0	
Total %	23.7	0.2	21.8	0.0	0.1	5.7	18.0	0.1	0.0	0.1	0.1	0.0	22.2	7.8	0.1	0.0	

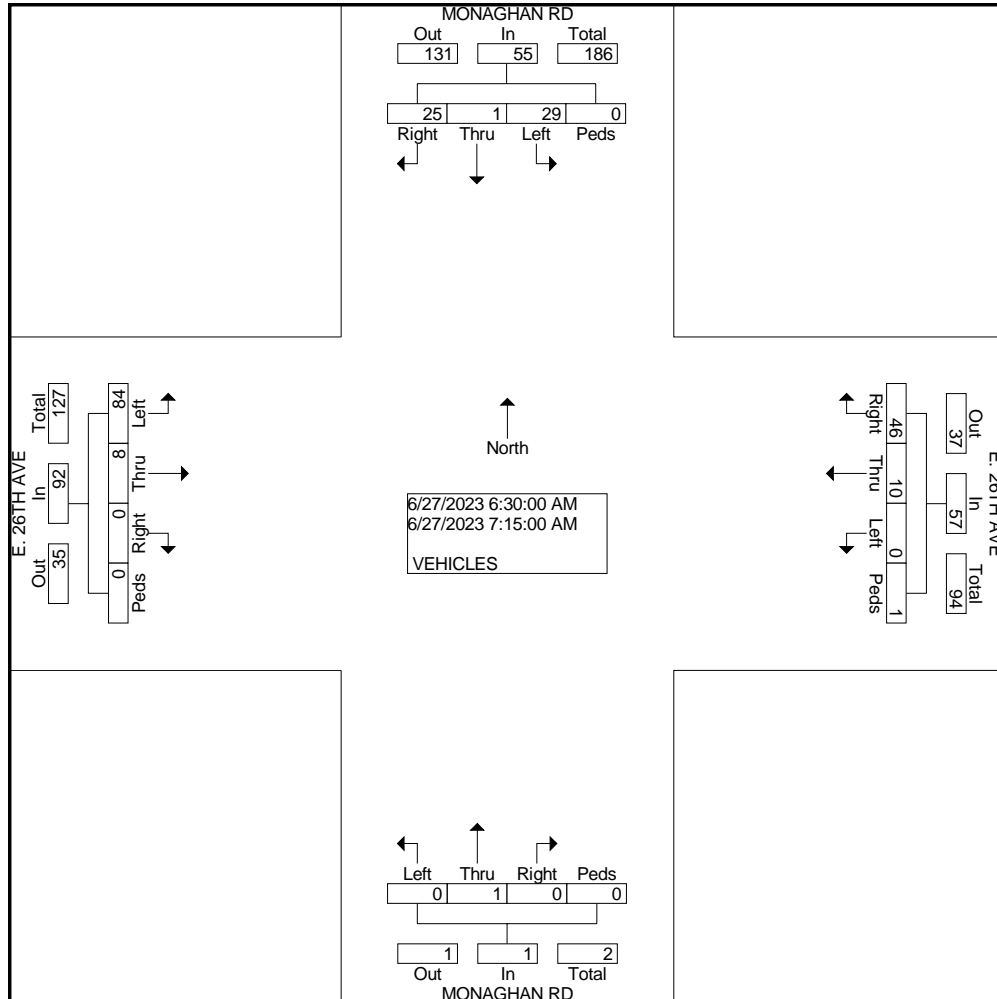
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MONAGHAN RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : MONA26THAVE
Site Code : 00000013
Start Date : 6/27/2023
Page No : 2

	MONAGHAN RD Southbound					E. 26TH AVE Westbound					MONAGHAN RD Northbound					E. 26TH AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 07:15 AM - Peak 1 of 1	06:30 AM																				
Intersection	06:30 AM																				
Volume	29	1	25	0	55	0	10	46	1	57	0	1	0	0	1	84	8	0	0	92	205
Percent	52.7	1.8	45.5	0.0		0.0	17.5	80.7	1.8		0.0	100.0	0.0	0.0		91.3	8.7	0.0	0.0		
06:30 Volume Peak Factor	7	0	9	0	16	0	4	17	0	21	0	0	0	0	0	36	1	0	0	37	74
High Int. Volume Peak Factor	06:30 AM					06:30 AM					07:00 AM					06:30 AM					
	7	0	9	0	16	0	4	17	0	21	0	1	0	0	1	36	1	0	0	37	
	0.85					0.67					0.25					0.62					
	9					9					0					2					



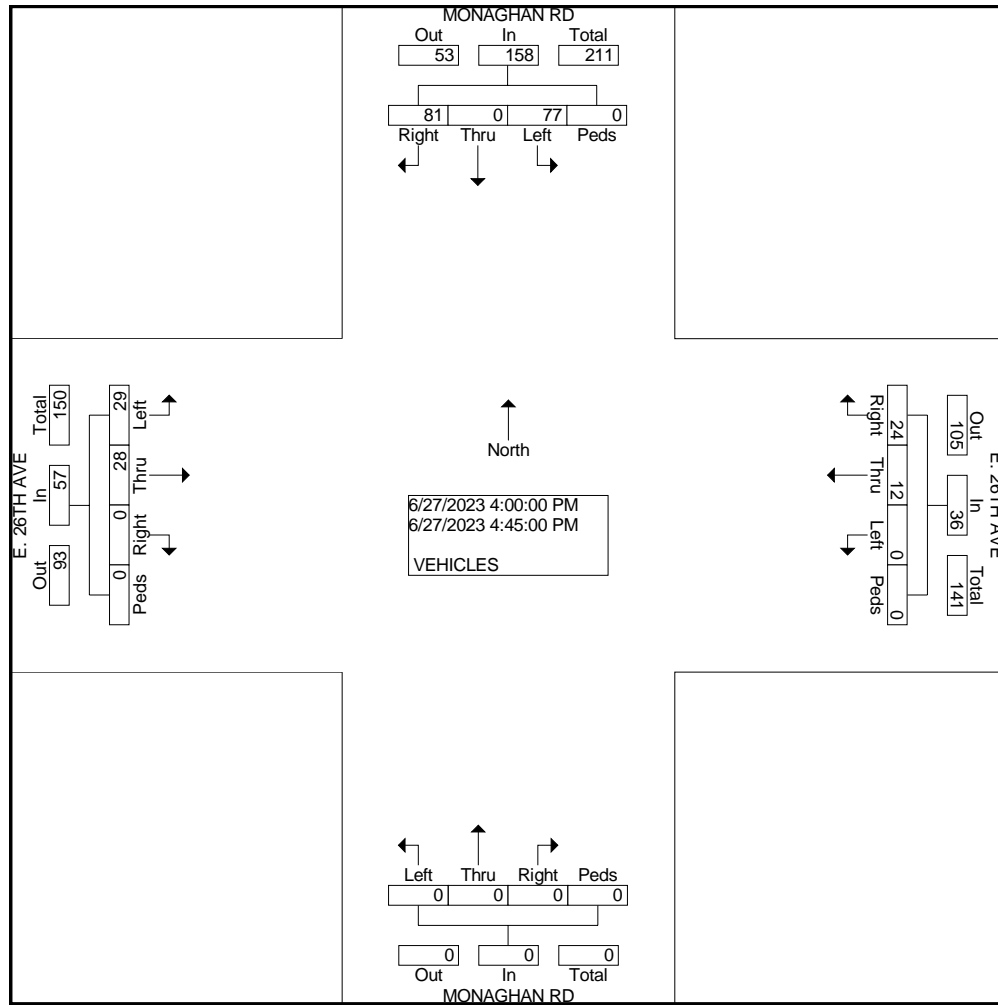
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MONAGHAN RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : MONA26THAVE
Site Code : 00000013
Start Date : 6/27/2023
Page No : 3

	MONAGHAN RD Southbound					E. 26TH AVE Westbound					MONAGHAN RD Northbound					E. 26TH AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	77	0	81	0	158	0	12	24	0	36	0	0	0	0	0	29	28	0	0	57	251
Percent	48.7	0.0	51.3	0.0		0.0	33.3	66.7	0.0		0.0	0.0	0.0	0.0		50.9	49.1	0.0	0.0		
04:45																					
Volume	21	0	12	0	33	0	7	6	0	13	0	0	0	0	0	11	11	0	0	22	68
Peak Factor																					0.923
High Int.	04:15 PM					04:00 PM										04:45 PM					
Volume	21	0	25	0	46	0	3	12	0	15	0	0	0	0	0	11	11	0	0	22	
Peak Factor	0.859					0.600					0.648										



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: N. HUDSON RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDS26THAVE
Site Code : 00000011
Start Date : 6/28/2023
Page No : 1

Groups Printed- VEHICLES

	N. HUDSON RD Southbound				E. 26TH AVE Westbound				N. HUDSON RD Northbound				E. 26TH AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	0	1	0	1	0	0	0	22	2	5	0	0	1	10	0	42
06:45 AM	0	6	1	0	0	2	0	0	22	4	0	0	0	1	11	0	47
Total	0	6	2	0	1	2	0	0	44	6	5	0	0	2	21	0	89
07:00 AM	0	1	2	0	0	2	0	0	18	5	0	0	1	3	9	1	42
07:15 AM	0	1	1	0	0	0	0	0	10	4	0	0	1	0	15	0	32
07:30 AM	0	1	0	0	0	0	0	0	15	5	0	0	1	3	12	0	37
07:45 AM	0	2	0	0	1	0	0	0	24	0	0	0	0	0	12	0	39
Total	0	5	3	0	1	2	0	0	67	14	0	0	3	6	48	1	150
08:00 AM	0	2	1	0	1	1	0	0	15	5	0	0	3	0	13	0	41
08:15 AM	0	3	2	0	0	0	0	0	18	0	0	0	5	0	6	0	34
Total	0	5	3	0	1	1	0	0	33	5	0	0	8	0	19	0	75
04:00 PM	2	2	1	0	0	0	3	0	15	0	0	0	2	0	31	0	56
04:15 PM	0	0	0	0	0	1	0	0	8	3	0	0	0	1	34	0	47
04:30 PM	0	3	4	0	4	2	0	0	6	5	0	0	4	0	22	0	50
04:45 PM	0	1	0	0	0	1	0	0	6	1	0	0	0	0	33	0	42
Total	2	6	5	0	4	4	3	0	35	9	0	0	6	1	120	0	195
05:00 PM	0	3	1	0	0	1	0	0	7	4	0	0	1	2	20	0	39
05:15 PM	0	3	1	0	0	0	0	0	6	1	2	0	2	1	32	0	48
05:30 PM	0	3	0	0	0	0	0	0	4	1	1	0	2	1	15	0	27
05:45 PM	0	2	2	0	0	0	0	0	9	4	0	0	2	0	15	0	34
Total	0	11	4	0	0	1	0	0	26	10	3	0	7	4	82	0	148
Grand Total	2	33	17	0	7	10	3	0	205	44	8	0	24	13	290	1	657
Apprch %	3.8	63.5	32.7	0.0	35.0	50.0	15.0	0.0	79.8	17.1	3.1	0.0	7.3	4.0	88.4	0.3	
Total %	0.3	5.0	2.6	0.0	1.1	1.5	0.5	0.0	31.2	6.7	1.2	0.0	3.7	2.0	44.1	0.2	

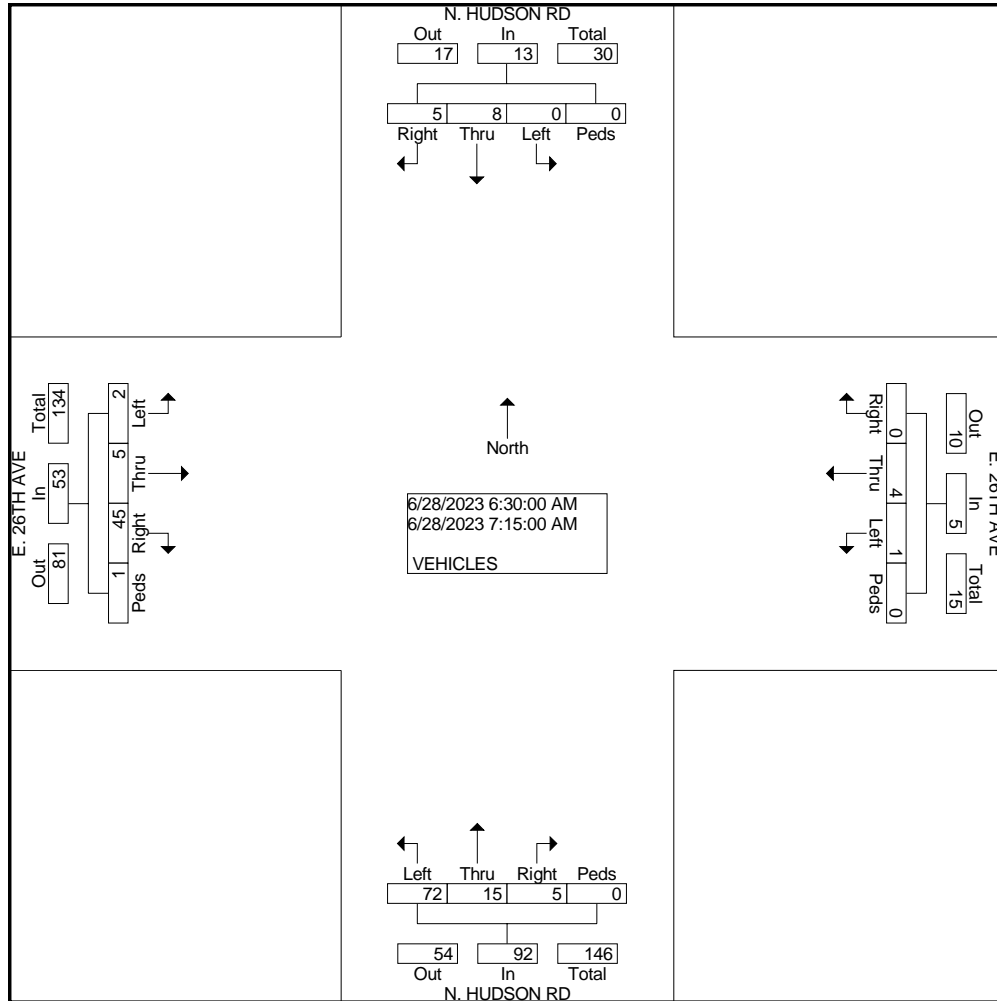
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: N. HUDSON RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDS26THAVE
Site Code : 00000011
Start Date : 6/28/2023
Page No : 2

	N. HUDSON RD Southbound					E. 26TH AVE Westbound					N. HUDSON RD Northbound					E. 26TH AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 07:15 AM - Peak 1 of 1	06:30 AM																				
Intersection	06:30 AM																				
Volume	0	8	5	0	13	1	4	0	0	5	72	15	5	0	92	2	5	45	1	53	163
Percent	0.0	61.5	38.5	0.0		20.0	80.0	0.0	0.0		78.3	16.3	5.4	0.0		3.8	9.4	84.9	1.9		
06:45																					
Volume	0	6	1	0	7	0	2	0	0	2	22	4	0	0	26	0	1	11	0	12	47
Peak Factor																					0.867
High Int.	06:45 AM					06:45 AM					06:30 AM					07:15 AM					
Volume	0	6	1	0	7	0	2	0	0	2	22	2	5	0	29	1	0	15	0	16	
Peak Factor	0.46					0.62					0.79					0.82					
	4					5					3					8					



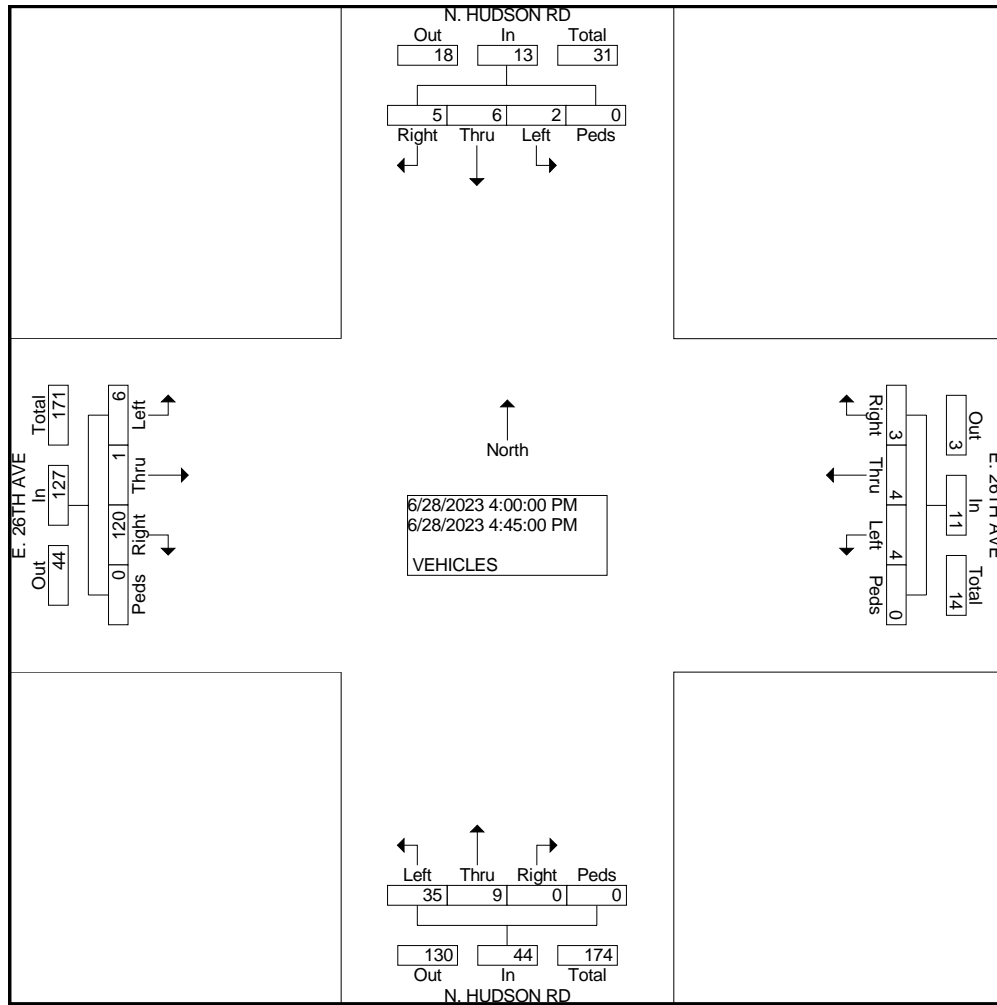
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: N. HUDSON RD
E/W STREET: E. 26TH AVE
CITY: WATKINS
COUNTY: ADAMS

File Name : HUDS26THAVE
Site Code : 00000011
Start Date : 6/28/2023
Page No : 3

	N. HUDSON RD Southbound					E. 26TH AVE Westbound					N. HUDSON RD Northbound					E. 26TH AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	2	6	5	0	13	4	4	3	0	11	35	9	0	0	44	6	1	120	0	127	195
Percent	15.	46.	38.	0.0		36.	36.	27.	0.0		79.	20.	0.0	0.0		4.7	0.8	94.	0.0		
	4	2	5			4	4	3			5	5						5			
04:00 Volume	2	2	1	0	5	0	0	3	0	3	15	0	0	0	15	2	0	31	0	33	56
Peak Factor																					0.871
High Int.	04:30 PM					04:30 PM					04:00 PM					04:15 PM					
Volume	0	3	4	0	7	4	2	0	0	6	15	0	0	0	15	0	1	34	0	35	
Peak Factor	0.46					0.45					0.73					0.90					7
	4					8					3					7					



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MONAGHAN RD
E/W STREET: 38TH PKWY
CITY: WATKINS
COUNTY: ADAMS

File Name : MONA38THPKWY
Site Code : 00000016
Start Date : 7/25/2023
Page No : 1

Groups Printed- VEHICLES

	MONAGHAN RD Southbound				NO ACCESS Westbound				MONAGHAN RD Northbound				38TH PKWY Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	18	0	0	0	0	0	0	1	39	0	0	1	0	0	0	59
06:45 AM	0	9	1	0	0	0	0	0	0	31	0	0	0	0	0	0	41
Total	0	27	1	0	0	0	0	0	1	70	0	0	1	0	0	0	100
07:00 AM	0	15	0	0	0	0	0	0	0	30	0	0	0	0	1	0	46
07:15 AM	0	15	0	0	0	0	0	0	1	43	0	0	0	0	0	0	59
07:30 AM	0	18	0	0	0	0	0	0	0	22	0	0	0	0	0	0	40
07:45 AM	0	11	1	0	0	0	0	0	2	34	0	0	0	0	0	0	48
Total	0	59	1	0	0	0	0	0	3	129	0	0	0	0	1	0	193
08:00 AM	0	8	0	0	0	0	0	0	0	18	0	0	2	0	1	0	29
08:15 AM	0	18	1	0	0	0	0	0	0	18	0	0	0	0	1	0	38
Total	0	26	1	0	0	0	0	0	0	36	0	0	2	0	2	0	67
04:00 PM	0	48	0	0	0	0	0	0	0	12	0	0	0	0	1	0	61
04:15 PM	0	34	1	0	0	0	0	0	0	10	0	0	0	0	0	0	45
04:30 PM	0	44	1	0	0	0	0	0	0	14	0	0	0	0	0	0	59
04:45 PM	0	44	2	0	0	0	0	0	1	16	0	0	0	0	1	0	64
Total	0	170	4	0	0	0	0	0	1	52	0	0	0	0	2	0	229
05:00 PM	0	28	0	0	0	0	0	0	0	14	0	0	0	0	0	0	42
05:15 PM	0	32	1	0	0	0	0	0	0	6	0	0	0	0	0	0	39
05:30 PM	0	27	1	0	0	0	0	0	0	15	0	0	0	0	0	0	43
05:45 PM	0	17	0	0	0	0	0	0	0	13	0	0	0	0	1	0	31
Total	0	104	2	0	0	0	0	0	0	48	0	0	0	0	1	0	155
Grand Total	0	386	9	0	0	0	0	0	5	335	0	0	3	0	6	0	744
Apprch %	0.0	97.7	2.3	0.0	0.0	0.0	0.0	0.0	1.5	98.5	0.0	0.0	33.3	0.0	66.7	0.0	
Total %	0.0	51.9	1.2	0.0	0.0	0.0	0.0	0.0	0.7	45.0	0.0	0.0	0.4	0.0	0.8	0.0	

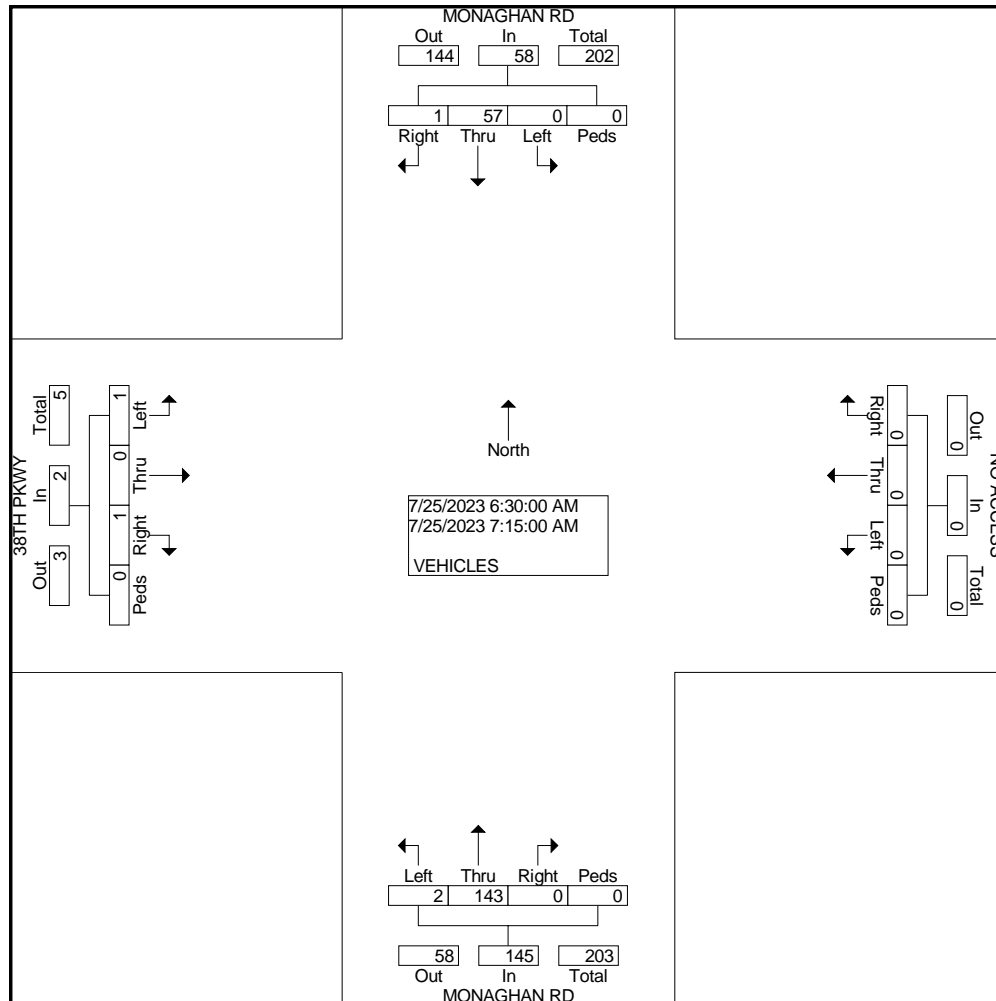
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MONAGHAN RD
E/W STREET: 38TH PKWY
CITY: WATKINS
COUNTY: ADAMS

File Name : MONA38THPKWY
Site Code : 00000016
Start Date : 7/25/2023
Page No : 2

	MONAGHAN RD Southbound					NO ACCESS Westbound					MONAGHAN RD Northbound					38TH PKWY Eastbound					Int. Total
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 07:15 AM - Peak 1 of 1	06:30 AM																				
Intersection	06:30 AM																				
Volume	0	57	1	0	58	0	0	0	0	0	2	143	0	0	145	1	0	1	0	2	205
Percent	0.0	98.3	1.7	0.0		0.0	0.0	0.0	0.0		1.4	98.6	0.0	0.0		50.0	0.0	50.0	0.0		
07:15	0					0					1					0					59
Volume	15					0					43					0					0.869
Peak Factor																					
High Int.	06:30 AM					6:15:00 AM					07:15 AM					06:30 AM					
Volume	0	18	0	0	18	0	0	0	0	0	1	43	0	0	44	1	0	0	0	1	
Peak Factor	0.80										0.82					0.50					
	6										4					0					



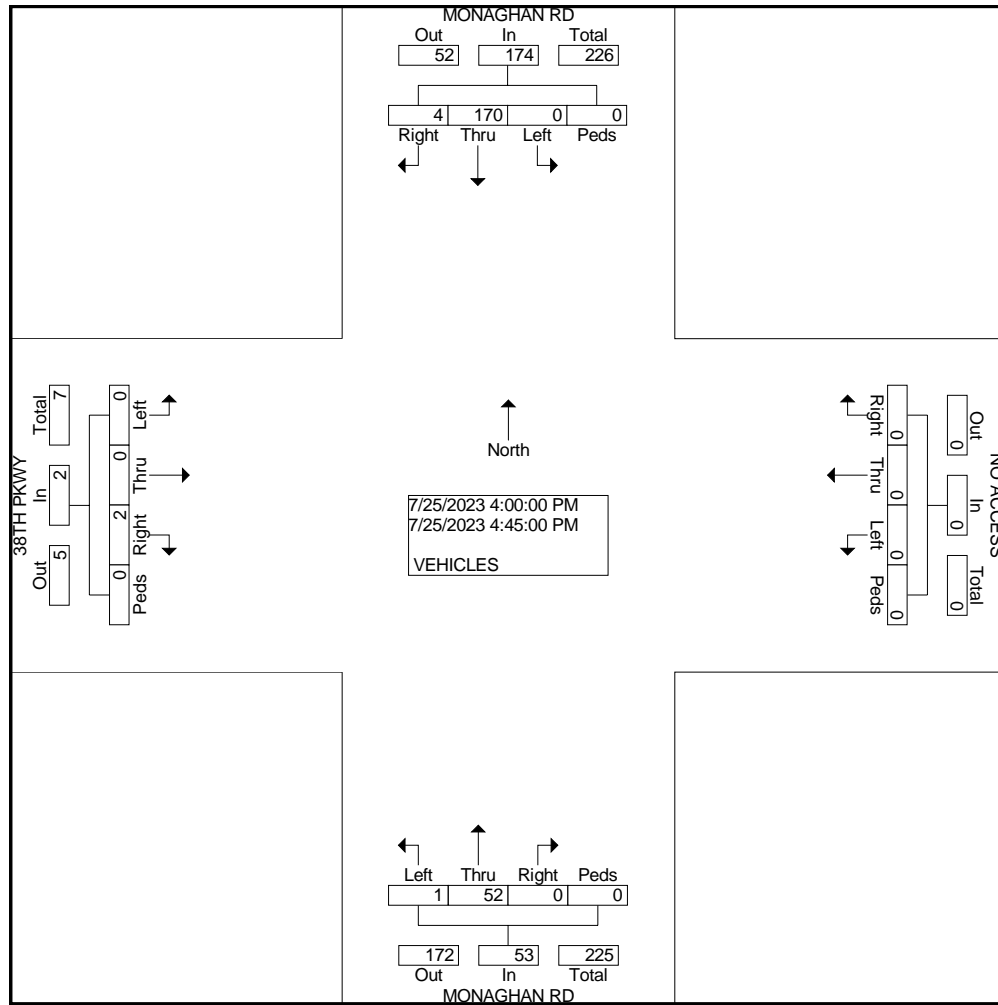
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	MONAGHAN RD Southbound					NO ACCESS Westbound					MONAGHAN RD Northbound					38TH PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	0	170	4	0	174	0	0	0	0	0	1	52	0	0	53	0	0	2	0	2	229
Percent	0.0	97.7	2.3	0.0		0.0	0.0	0.0	0.0		1.9	98.1	0.0	0.0		0.0	0.0	100.0	0.0		
04:45																					
Volume	0	44	2	0	46	0	0	0	0	0	1	16	0	0	17	0	0	1	0	1	64
Peak Factor																					0.895
High Int.	04:00 PM										04:45 PM					04:00 PM					
Volume	0	48	0	0	48	0	0	0	0	0	1	16	0	0	17	0	0	1	0	1	
Peak Factor	0.906										0.779					0.500					



LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2016, 6th Edition




UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. <u>The delay could be up to 15 seconds.</u> Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. <u>Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.</u>
D	25 to 35 seconds	<u>This is the point at which a traffic signal may be warranted for this intersection.</u> The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. <u>There is a high probability that this intersection will meet traffic signal warrants.</u> The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. <u>The only remedy for these long delays is installing a traffic signal or restricting the accesses.</u> The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

Existing
AM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	2	143	57	1
Future Vol, veh/h	1	1	2	143	57	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	1	1	2	163	65	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	233	66	66	0	-	0
Stage 1	66	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	738	976	1486	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	737	976	1486	-	-	-
Mov Cap-2 Maneuver	737	-	-	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1486	-	840	-	-	
HCM Lane V/C Ratio	0.002	-	0.003	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

Existing
AM Peak

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	84	8	0	0	10	46	0	1	0	29	1	25
Future Vol, veh/h	84	8	0	0	10	46	0	1	0	29	1	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	95	9	0	0	11	52	0	1	0	33	1	28
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	9	0	0	251	262	9	237	236	37
Stage 1	-	-	-	-	-	-	199	199	-	37	37	-
Stage 2	-	-	-	-	-	-	52	63	-	200	199	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1490	-	-	1560	-	-	686	630	1050	701	651	1013
Stage 1	-	-	-	-	-	-	785	722	-	958	849	-
Stage 2	-	-	-	-	-	-	941	827	-	784	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1560	-	-	633	590	1050	666	609	1013
Mov Cap-2 Maneuver	-	-	-	-	-	-	633	590	-	666	609	-
Stage 1	-	-	-	-	-	-	735	676	-	897	849	-
Stage 2	-	-	-	-	-	-	913	827	-	733	676	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	6.9			0			11.1			10		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	590	1490	-	-	1560	-	-	787				
HCM Lane V/C Ratio	0.002	0.064	-	-	-	-	-	0.079				
HCM Control Delay (s)	11.1	7.6	0	-	0	-	-	10				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.3				






HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

Existing
AM Peak

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	45	1	4	0	72	15	5	0	8	5
Future Vol, veh/h	2	5	45	1	4	0	72	15	5	0	8	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	2	6	51	1	5	0	82	17	6	0	9	6
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	199	199	12	225	199	20	15	0	0	23	0	0
Stage 1	12	12	-	184	184	-	-	-	-	-	-	-
Stage 2	187	187	-	41	15	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	743	683	1046	714	683	1035	1552	-	-	1542	-	-
Stage 1	988	870	-	800	733	-	-	-	-	-	-	-
Stage 2	797	730	-	954	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	709	646	1046	647	646	1035	1552	-	-	1542	-	-
Mov Cap-2 Maneuver	709	646	-	647	646	-	-	-	-	-	-	-
Stage 1	935	870	-	757	693	-	-	-	-	-	-	-
Stage 2	749	691	-	901	867	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		10.6			5.8			0			
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1552	-	-	970	646	1542	-	-				
HCM Lane V/C Ratio	0.053	-	-	0.061	0.009	-	-	-				
HCM Control Delay (s)	7.4	0	-	9	10.6	0	-	-				
HCM Lane LOS	A	A	-	A	B	A	-	-				
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-				




HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

Existing
AM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	141	2	6	67	47	1	2	0	44	1	21
Future Vol, veh/h	12	141	2	6	67	47	1	2	0	44	1	21
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	14	160	2	7	76	53	1	2	0	50	1	24
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	129	0	0	162	0	0	317	331	160	307	307	103
Stage 1	-	-	-	-	-	-	188	188	-	117	117	-
Stage 2	-	-	-	-	-	-	129	143	-	190	190	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1409	-	-	1370	-	-	620	576	865	630	594	930
Stage 1	-	-	-	-	-	-	796	730	-	869	784	-
Stage 2	-	-	-	-	-	-	856	763	-	794	728	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1409	-	-	1370	-	-	595	566	865	620	584	930
Mov Cap-2 Maneuver	-	-	-	-	-	-	595	566	-	620	584	-
Stage 1	-	-	-	-	-	-	787	722	-	859	779	-
Stage 2	-	-	-	-	-	-	828	758	-	783	720	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.4			11.3			10.8		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	575	1409	-	-	1370	-	-	693				
HCM Lane V/C Ratio	0.006	0.01	-	-	0.005	-	-	0.108				
HCM Control Delay (s)	11.3	7.6	0	-	7.6	0	-	10.8				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4				

HCM 6th TWSC 2: Monaghan Road & E. 38th Avenue

Existing
PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	1	52	170	4
Future Vol, veh/h	0	2	1	52	170	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	2	1	59	193	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	257	196	198	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	715	825	1328	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	714	825	1328	-	-	-
Mov Cap-2 Maneuver	714	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	0.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1328	-	825	-	-	
HCM Lane V/C Ratio	0.001	-	0.003	-	-	
HCM Control Delay (s)	7.7	0	9.4	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

Existing
PM Peak

Intersection												
Int Delay, s/veh	7.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	28	0	0	12	24	0	0	0	77	0	81
Future Vol, veh/h	29	28	0	0	12	24	0	0	0	77	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	33	32	0	0	14	27	0	0	0	88	0	92
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	32	0	0	172	139	32	126	126	28
Stage 1	-	-	-	-	-	-	98	98	-	28	28	-
Stage 2	-	-	-	-	-	-	74	41	-	98	98	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1518	-	-	1530	-	-	774	737	1019	829	750	1025
Stage 1	-	-	-	-	-	-	889	799	-	969	856	-
Stage 2	-	-	-	-	-	-	916	845	-	889	799	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1530	-	-	693	721	1019	815	734	1025
Mov Cap-2 Maneuver	-	-	-	-	-	-	693	721	-	815	734	-
Stage 1	-	-	-	-	-	-	869	781	-	948	856	-
Stage 2	-	-	-	-	-	-	834	845	-	869	781	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.8			0			0			9.9		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	1518	-	-	1530	-	-	911				
HCM Lane V/C Ratio	-	0.022	-	-	-	-	-	0.197				
HCM Control Delay (s)	0	7.4	0	-	0	-	-	9.9				
HCM Lane LOS	A	A	A	-	A	-	-	A				
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.7				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

Existing
PM Peak

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	1	120	4	4	3	35	9	0	2	6	5
Future Vol, veh/h	6	1	120	4	4	3	35	9	0	2	6	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	7	1	136	5	5	3	40	10	0	2	7	6
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	108	104	10	173	107	10	13	0	0	10	0	0
Stage 1	14	14	-	90	90	-	-	-	-	-	-	-
Stage 2	94	90	-	83	17	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	852	771	1048	772	768	1048	1555	-	-	1559	-	-
Stage 1	986	868	-	898	805	-	-	-	-	-	-	-
Stage 2	894	805	-	906	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	828	750	1048	657	747	1048	1555	-	-	1559	-	-
Mov Cap-2 Maneuver	828	750	-	657	747	-	-	-	-	-	-	-
Stage 1	960	867	-	875	784	-	-	-	-	-	-	-
Stage 2	863	784	-	786	865	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		9.8			5.9			1.1			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1555	-	-	1032	769	1559	-	-				
HCM Lane V/C Ratio	0.026	-	-	0.14	0.016	0.001	-	-				
HCM Control Delay (s)	7.4	0	-	9.1	9.8	7.3	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-				

HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

Existing
PM Peak




Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	11	68	4	0	36	25	3	0	5	77	2	12
Future Vol, veh/h	11	68	4	0	36	25	3	0	5	77	2	12
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	13	77	5	0	41	28	3	0	6	88	2	14
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	82	0	0	166	172	77	164	163	55
Stage 1	-	-	-	-	-	-	103	103	-	55	55	-
Stage 2	-	-	-	-	-	-	63	69	-	109	108	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1483	-	-	1466	-	-	781	707	962	783	715	990
Stage 1	-	-	-	-	-	-	884	795	-	937	834	-
Stage 2	-	-	-	-	-	-	928	822	-	877	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1483	-	-	1466	-	-	763	701	962	773	709	990
Mov Cap-2 Maneuver	-	-	-	-	-	-	763	701	-	773	709	-
Stage 1	-	-	-	-	-	-	876	788	-	929	834	-
Stage 2	-	-	-	-	-	-	913	822	-	864	784	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			9.2			10.2		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	876	1483	-	-	1466	-	-	794				
HCM Lane V/C Ratio	0.01	0.008	-	-	-	-	-	0.13				
HCM Control Delay (s)	9.2	7.4	0	-	0	-	-	10.2				
HCM Lane LOS	A	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4				

HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

2025 Background
AM Peak

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	3	158	63	2
Future Vol, veh/h	1	3	3	158	63	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	1	3	3	180	72	2

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	259	73	74
Stage 1	73	-	-
Stage 2	186	-	-
Critical Hdwy	6.5	6.3	4.2
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.5	-	-
Follow-up Hdwy	3.59	3.39	2.29
Pot Cap-1 Maneuver	713	967	1476
Stage 1	930	-	-
Stage 2	827	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	712	967	1476
Mov Cap-2 Maneuver	712	-	-
Stage 1	928	-	-
Stage 2	827	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1476	-	888	-	-
HCM Lane V/C Ratio	0.002	-	0.005	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Background
AM Peak

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	93	9	1	1	11	51	1	1	1	32	1	28
Future Vol, veh/h	93	9	1	1	11	51	1	1	1	32	1	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	106	10	1	1	13	58	1	1	1	36	1	32
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	71	0	0	11	0	0	284	296	11	268	267	42
Stage 1	-	-	-	-	-	-	223	223	-	44	44	-
Stage 2	-	-	-	-	-	-	61	73	-	224	223	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1480	-	-	1557	-	-	652	602	1047	669	625	1006
Stage 1	-	-	-	-	-	-	762	704	-	950	843	-
Stage 2	-	-	-	-	-	-	931	819	-	761	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1557	-	-	595	558	1047	630	579	1006
Mov Cap-2 Maneuver	-	-	-	-	-	-	595	558	-	630	579	-
Stage 1	-	-	-	-	-	-	707	653	-	882	842	-
Stage 2	-	-	-	-	-	-	899	818	-	704	653	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	6.9			0.1			10.3			10.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	678	1480	-	-	1557	-	-	759				
HCM Lane V/C Ratio	0.005	0.071	-	-	0.001	-	-	0.091				
HCM Control Delay (s)	10.3	7.6	0	-	7.3	0	-	10.2				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.3				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

2025 Background
AM Peak

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	6	50	2	5	1	79	17	6	1	9	6
Future Vol, veh/h	3	6	50	2	5	1	79	17	6	1	9	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	3	7	57	2	6	1	90	19	7	1	10	7
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	222	222	14	251	222	23	17	0	0	26	0	0
Stage 1	16	16	-	203	203	-	-	-	-	-	-	-
Stage 2	206	206	-	48	19	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	717	663	1043	686	663	1031	1550	-	-	1538	-	-
Stage 1	983	866	-	781	719	-	-	-	-	-	-	-
Stage 2	778	717	-	945	864	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	679	623	1043	614	623	1031	1550	-	-	1538	-	-
Mov Cap-2 Maneuver	679	623	-	614	623	-	-	-	-	-	-	-
Stage 1	925	865	-	735	677	-	-	-	-	-	-	-
Stage 2	725	675	-	886	863	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.1		10.6		5.8		0.5					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1550	-	-	952	653	1538	-	-				
HCM Lane V/C Ratio	0.058	-	-	0.07	0.014	0.001	-	-				
HCM Control Delay (s)	7.5	0	-	9.1	10.6	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-				




HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Background
AM Peak

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	13	155	3	7	74	52	2	3	1	49	2	23
Future Vol, veh/h	13	155	3	7	74	52	2	3	1	49	2	23
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	15	176	3	8	84	59	2	3	1	56	2	26
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	143	0	0	179	0	0	350	365	176	340	339	114
Stage 1	-	-	-	-	-	-	206	206	-	130	130	-
Stage 2	-	-	-	-	-	-	144	159	-	210	209	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1392	-	-	1350	-	-	590	551	847	599	570	917
Stage 1	-	-	-	-	-	-	778	717	-	855	773	-
Stage 2	-	-	-	-	-	-	840	751	-	774	714	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1392	-	-	1350	-	-	563	541	847	587	560	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	563	541	-	587	560	-
Stage 1	-	-	-	-	-	-	769	708	-	845	768	-
Stage 2	-	-	-	-	-	-	809	746	-	760	705	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.4			11.2			11.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	584	1392	-	-	1350	-	-	660				
HCM Lane V/C Ratio	0.012	0.011	-	-	0.006	-	-	0.127				
HCM Control Delay (s)	11.2	7.6	0	-	7.7	0	-	11.2				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4				

HCM 6th TWSC 2: Monaghan Road & E. 38th Avenue

2025 Background
PM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	2	57	187	5
Future Vol, veh/h	1	3	2	57	187	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	1	3	2	65	213	6





Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	285	216	219	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	69	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	689	804	1304	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	688	804	1304	-	-	-
Mov Cap-2 Maneuver	688	-	-	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1304	-	771	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.8	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Background
PM Peak

Intersection												
Int Delay, s/veh	7.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	31	1	1	13	26	1	1	1	85	1	89
Future Vol, veh/h	32	31	1	1	13	26	1	1	1	85	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	36	35	1	1	15	30	1	1	1	97	1	101
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	36	0	0	191	155	36	141	140	30
Stage 1	-	-	-	-	-	-	108	108	-	32	32	-
Stage 2	-	-	-	-	-	-	83	47	-	109	108	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1513	-	-	1525	-	-	752	723	1014	811	737	1022
Stage 1	-	-	-	-	-	-	878	791	-	964	853	-
Stage 2	-	-	-	-	-	-	906	840	-	877	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1513	-	-	1525	-	-	664	705	1014	794	719	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	664	705	-	794	719	-
Stage 1	-	-	-	-	-	-	857	772	-	941	852	-
Stage 2	-	-	-	-	-	-	814	839	-	854	772	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.7			0.2			9.7			10.2		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	767	1513	-	-	1525	-	-	895				
HCM Lane V/C Ratio	0.004	0.024	-	-	0.001	-	-	0.222				
HCM Control Delay (s)	9.7	7.4	0	-	7.4	0	-	10.2				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.8				






HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

2025 Background
PM Peak

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	132	5	5	4	39	10	1	3	7	6
Future Vol, veh/h	7	2	132	5	5	4	39	10	1	3	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	8	2	150	6	6	5	44	11	1	3	8	7
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	123	118	12	194	121	12	15	0	0	12	0	0
Stage 1	18	18	-	100	100	-	-	-	-	-	-	-
Stage 2	105	100	-	94	21	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	833	758	1046	748	755	1046	1552	-	-	1556	-	-
Stage 1	981	865	-	887	797	-	-	-	-	-	-	-
Stage 2	881	797	-	894	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	805	735	1046	624	732	1046	1552	-	-	1556	-	-
Mov Cap-2 Maneuver	805	735	-	624	732	-	-	-	-	-	-	-
Stage 1	953	863	-	861	774	-	-	-	-	-	-	-
Stage 2	845	774	-	762	860	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.2		9.9			5.8			1.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1552	-	-	1025	750	1556	-	-				
HCM Lane V/C Ratio	0.029	-	-	0.156	0.021	0.002	-	-				
HCM Control Delay (s)	7.4	0	-	9.2	9.9	7.3	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0	-	-				

HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Background
PM Peak




Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	75	5	1	40	28	4	1	6	85	3	13
Future Vol, veh/h	12	75	5	1	40	28	4	1	6	85	3	13
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	14	85	6	1	45	32	5	1	7	97	3	15
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	91	0	0	185	192	85	183	182	61
Stage 1	-	-	-	-	-	-	113	113	-	63	63	-
Stage 2	-	-	-	-	-	-	72	79	-	120	119	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1472	-	-	1455	-	-	759	689	952	761	698	982
Stage 1	-	-	-	-	-	-	873	787	-	928	827	-
Stage 2	-	-	-	-	-	-	918	814	-	865	782	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1455	-	-	739	681	952	748	690	982
Mov Cap-2 Maneuver	-	-	-	-	-	-	739	681	-	748	690	-
Stage 1	-	-	-	-	-	-	864	779	-	919	826	-
Stage 2	-	-	-	-	-	-	900	813	-	849	774	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.1			9.4			10.5		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	834	1472	-	-	1455	-	-	770				
HCM Lane V/C Ratio	0.015	0.009	-	-	0.001	-	-	0.149				
HCM Control Delay (s)	9.4	7.5	0	-	7.5	0	-	10.5				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.5				

HCM 6th TWSC
1: Site Access & E. 38th Avenue

2025 Total - Completion Phase
AM Peak

Intersection

Int Delay, s/veh 7.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	21	5	0	21
Future Vol, veh/h	3	0	21	5	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	80	80	10	80	80
Mvmt Flow	3	0	24	6	0	24




Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	3
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.92	-
Pot Cap-1 Maneuver	-	1229	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1229	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.5	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	892	-	-	1229	-
HCM Lane V/C Ratio	0.027	-	-	0.019	-
HCM Control Delay (s)	9.1	-	-	8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

2025 Total - Completion Phase
AM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	23	24	158	63	2
Future Vol, veh/h	1	23	24	158	63	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	75	75	10	10	10
Mvmt Flow	1	26	27	180	72	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	307	73	74	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.5	6.95	4.85	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.975	2.875	-	-	-
Pot Cap-1 Maneuver	669	819	1167	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	819	1167	-	-	-
Mov Cap-2 Maneuver	652	-	-	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.6	1.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1167	-	810	-	-	
HCM Lane V/C Ratio	0.023	-	0.034	-	-	
HCM Control Delay (s)	8.2	0	9.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Total - Completion Phase
AM Peak

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	93	9	1	1	11	72	1	1	1	53	1	28
Future Vol, veh/h	93	9	1	1	11	72	1	1	1	53	1	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	30	10	10	10	30	10	10
Mvmt Flow	106	10	1	1	13	82	1	1	1	60	1	32
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	95	0	0	11	0	0	296	320	11	280	279	54
Stage 1	-	-	-	-	-	-	223	223	-	56	56	-
Stage 2	-	-	-	-	-	-	73	97	-	224	223	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.4	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.77	4.09	3.39
Pot Cap-1 Maneuver	1450	-	-	1557	-	-	641	584	1047	620	616	991
Stage 1	-	-	-	-	-	-	762	704	-	890	833	-
Stage 2	-	-	-	-	-	-	917	799	-	719	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1557	-	-	584	540	1047	583	570	991
Mov Cap-2 Maneuver	-	-	-	-	-	-	584	540	-	583	570	-
Stage 1	-	-	-	-	-	-	706	652	-	824	832	-
Stage 2	-	-	-	-	-	-	885	798	-	664	652	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	6.9			0.1			10.5			11.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	664	1450	-	-	1557	-	-	678				
HCM Lane V/C Ratio	0.005	0.073	-	-	0.001	-	-	0.137				
HCM Control Delay (s)	10.5	7.7	0	-	7.3	0	-	11.2				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.5				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

2025 Total - Completion Phase
AM Peak

Intersection												
Int Delay, s/veh	7.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	6	71	2	5	1	100	17	6	1	9	6
Future Vol, veh/h	3	6	71	2	5	1	100	17	6	1	9	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	30	10	10	10	30	10	10	10	10	10
Mvmt Flow	3	7	81	2	6	1	114	19	7	1	10	7
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	270	270	14	311	270	23	17	0	0	26	0	0
Stage 1	16	16	-	251	251	-	-	-	-	-	-	-
Stage 2	254	254	-	60	19	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.5	7.2	6.6	6.3	4.4	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.57	3.59	4.09	3.39	2.47	-	-	2.29	-	-
Pot Cap-1 Maneuver	667	623	990	626	623	1031	1436	-	-	1538	-	-
Stage 1	983	866	-	736	685	-	-	-	-	-	-	-
Stage 2	733	683	-	932	864	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	620	572	990	534	572	1031	1436	-	-	1538	-	-
Mov Cap-2 Maneuver	620	572	-	534	572	-	-	-	-	-	-	-
Stage 1	903	865	-	676	630	-	-	-	-	-	-	-
Stage 2	667	628	-	848	863	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.3		11.1		6.3		0.5					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1436	-	-	919	595	1538	-	-				
HCM Lane V/C Ratio	0.079	-	-	0.099	0.015	0.001	-	-				
HCM Control Delay (s)	7.7	0	-	9.3	11.1	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0	0	-	-				




HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Total - Completion Phase
AM Peak

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	34	155	3	7	74	52	2	3	1	49	2	44
Future Vol, veh/h	34	155	3	7	74	52	2	3	1	49	2	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	30	10	10	10	10	10	10	10	10	10	10	30
Mvmt Flow	39	176	3	8	84	59	2	3	1	56	2	50
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	143	0	0	179	0	0	410	413	176	388	387	114
Stage 1	-	-	-	-	-	-	254	254	-	130	130	-
Stage 2	-	-	-	-	-	-	156	159	-	258	257	-
Critical Hdwy	4.4	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.47	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.57
Pot Cap-1 Maneuver	1285	-	-	1350	-	-	538	517	847	557	535	868
Stage 1	-	-	-	-	-	-	733	683	-	855	773	-
Stage 2	-	-	-	-	-	-	828	751	-	729	680	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1285	-	-	1350	-	-	490	496	847	536	514	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	490	496	-	536	514	-
Stage 1	-	-	-	-	-	-	708	660	-	826	768	-
Stage 2	-	-	-	-	-	-	773	746	-	700	657	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			0.4			11.9			11.6		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	530	1285	-	-	1350	-	-	651				
HCM Lane V/C Ratio	0.013	0.03	-	-	0.006	-	-	0.166				
HCM Control Delay (s)	11.9	7.9	0	-	7.7	0	-	11.6				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.6				

Intersection

Int Delay, s/veh 6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	21	7	0	21
Future Vol, veh/h	4	0	21	7	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	80	80	10	80	0
Mvmt Flow	5	0	24	8	0	24




Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	5
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.92	-
Pot Cap-1 Maneuver	-	1227	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1227	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1227	-
HCM Lane V/C Ratio	0.022	-	-	0.019	-
HCM Control Delay (s)	8.4	-	-	8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

2025 Total - Completion Phase
PM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	24	23	57	187	5
Future Vol, veh/h	1	24	23	57	187	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	75	75	10	10	10
Mvmt Flow	1	27	26	65	213	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	333	216	219	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.5	6.95	4.85	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.975	2.875	-	-	-
Pot Cap-1 Maneuver	646	671	1016	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	629	671	1016	-	-	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	2.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1016	-	669	-	-	
HCM Lane V/C Ratio	0.026	-	0.042	-	-	
HCM Control Delay (s)	8.6	0	10.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Total - Completion Phase
PM Peak

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	31	1	1	13	47	1	1	1	106	1	89
Future Vol, veh/h	32	31	1	1	13	47	1	1	1	106	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	30	10	10	10	30	10	10
Mvmt Flow	36	35	1	1	15	53	1	1	1	120	1	101
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	36	0	0	203	178	36	153	152	42
Stage 1	-	-	-	-	-	-	108	108	-	44	44	-
Stage 2	-	-	-	-	-	-	95	70	-	109	108	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.4	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.77	4.09	3.39
Pot Cap-1 Maneuver	1484	-	-	1525	-	-	738	702	1014	755	725	1006
Stage 1	-	-	-	-	-	-	878	791	-	904	843	-
Stage 2	-	-	-	-	-	-	892	821	-	832	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1525	-	-	650	684	1014	738	706	1006
Mov Cap-2 Maneuver	-	-	-	-	-	-	650	684	-	738	706	-
Stage 1	-	-	-	-	-	-	856	771	-	881	842	-
Stage 2	-	-	-	-	-	-	800	820	-	809	771	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.7			0.1			9.8			10.8		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	753	1484	-	-	1525	-	-	839				
HCM Lane V/C Ratio	0.005	0.025	-	-	0.001	-	-	0.265				
HCM Control Delay (s)	9.8	7.5	0	-	7.4	0	-	10.8				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	1.1				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue






2025 Total - Completion Phase
PM Peak

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	153	5	5	4	60	10	1	3	7	6
Future Vol, veh/h	7	2	153	5	5	4	60	10	1	3	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	30	10	10	10	30	10	10	10	10	10
Mvmt Flow	8	2	174	6	6	5	68	11	1	3	8	7
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	171	166	12	254	169	12	15	0	0	12	0	0
Stage 1	18	18	-	148	148	-	-	-	-	-	-	-
Stage 2	153	148	-	106	21	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.5	7.2	6.6	6.3	4.4	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.57	3.59	4.09	3.39	2.47	-	-	2.29	-	-
Pot Cap-1 Maneuver	775	712	993	683	710	1046	1438	-	-	1556	-	-
Stage 1	981	865	-	836	760	-	-	-	-	-	-	-
Stage 2	831	760	-	880	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	738	676	993	540	675	1046	1438	-	-	1556	-	-
Mov Cap-2 Maneuver	738	676	-	540	675	-	-	-	-	-	-	-
Stage 1	934	863	-	796	724	-	-	-	-	-	-	-
Stage 2	781	724	-	723	860	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.6		10.4		6.4		1.4					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1438	-	-	973	683	1556	-	-				
HCM Lane V/C Ratio	0.047	-	-	0.189	0.023	0.002	-	-				
HCM Control Delay (s)	7.6	0	-	9.6	10.4	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.1	0	-	-				

HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Total - Completion Phase

PM Peak




Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	75	5	1	40	28	4	1	6	85	3	34
Future Vol, veh/h	33	75	5	1	40	28	4	1	6	85	3	34
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	30	10	10	10	10	10	10	10	10	10	10	30
Mvmt Flow	38	85	6	1	45	32	5	1	7	97	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	91	0	0	245	240	85	231	230	61
Stage 1	-	-	-	-	-	-	161	161	-	63	63	-
Stage 2	-	-	-	-	-	-	84	79	-	168	167	-
Critical Hdwy	4.4	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.47	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.57
Pot Cap-1 Maneuver	1362	-	-	1455	-	-	692	648	952	707	656	931
Stage 1	-	-	-	-	-	-	823	750	-	928	827	-
Stage 2	-	-	-	-	-	-	905	814	-	815	745	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1362	-	-	1455	-	-	646	629	952	685	636	931
Mov Cap-2 Maneuver	-	-	-	-	-	-	646	629	-	685	636	-
Stage 1	-	-	-	-	-	-	799	728	-	901	826	-
Stage 2	-	-	-	-	-	-	863	813	-	784	723	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			0.1			9.7			11		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	781	1362	-	-	1455	-	-	738				
HCM Lane V/C Ratio	0.016	0.028	-	-	0.001	-	-	0.188				
HCM Control Delay (s)	9.7	7.7	0	-	7.5	0	-	11				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.7				

HCM 6th TWSC
1: Site Access & E. 38th Avenue

2025 Total - Flow Back Phase
AM Peak

Intersection

Int Delay, s/veh 6.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	16	5	0	15
Future Vol, veh/h	3	0	16	5	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	80	80	10	80	80
Mvmt Flow	3	0	18	6	0	17




Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	3
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.92	-
Pot Cap-1 Maneuver	-	1229	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1229	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.1	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	892	-	-	1229	-
HCM Lane V/C Ratio	0.019	-	-	0.015	-
HCM Control Delay (s)	9.1	-	-	8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-





HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

2025 Total - Flow Back Phase
AM Peak

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	17	19	158	63	2
Future Vol, veh/h	1	17	19	158	63	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	75	75	10	10	10
Mvmt Flow	1	19	22	180	72	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	297	73	74	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.5	6.95	4.85	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.975	2.875	-	-	-
Pot Cap-1 Maneuver	678	819	1167	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	664	819	1167	-	-	-
Mov Cap-2 Maneuver	664	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.6	0.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1167	-	809	-	-	
HCM Lane V/C Ratio	0.019	-	0.025	-	-	
HCM Control Delay (s)	8.1	0	9.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Total - Flow Back Phase
AM Peak

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	9	1	1	11	67	1	1	1	47	1	28
Future Vol, veh/h	93	9	1	1	11	67	1	1	1	47	1	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	30	10	10	10	30	10	10
Mvmt Flow	106	10	1	1	13	76	1	1	1	53	1	32
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	89	0	0	11	0	0	293	314	11	277	276	51
Stage 1	-	-	-	-	-	-	223	223	-	53	53	-
Stage 2	-	-	-	-	-	-	70	91	-	224	223	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.4	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.77	4.09	3.39
Pot Cap-1 Maneuver	1457	-	-	1557	-	-	644	588	1047	623	618	995
Stage 1	-	-	-	-	-	-	762	704	-	893	835	-
Stage 2	-	-	-	-	-	-	920	804	-	719	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1457	-	-	1557	-	-	587	544	1047	586	572	995
Mov Cap-2 Maneuver	-	-	-	-	-	-	587	544	-	586	572	-
Stage 1	-	-	-	-	-	-	706	653	-	828	834	-
Stage 2	-	-	-	-	-	-	888	803	-	665	653	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	6.9			0.1			10.4			11		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	667	1457	-	-	1557	-	-	690				
HCM Lane V/C Ratio	0.005	0.073	-	-	0.001	-	-	0.125				
HCM Control Delay (s)	10.4	7.7	0	-	7.3	0	-	11				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.4				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

2025 Total - Flow Back Phase
AM Peak

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	6	65	2	5	1	95	17	6	1	9	6
Future Vol, veh/h	3	6	65	2	5	1	95	17	6	1	9	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	30	10	10	10	30	10	10	10	10	10
Mvmt Flow	3	7	74	2	6	1	108	19	7	1	10	7
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	258	258	14	295	258	23	17	0	0	26	0	0
Stage 1	16	16	-	239	239	-	-	-	-	-	-	-
Stage 2	242	242	-	56	19	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.5	7.2	6.6	6.3	4.4	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.57	3.59	4.09	3.39	2.47	-	-	2.29	-	-
Pot Cap-1 Maneuver	679	633	990	642	633	1031	1436	-	-	1538	-	-
Stage 1	983	866	-	747	693	-	-	-	-	-	-	-
Stage 2	744	691	-	936	864	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	634	584	990	554	584	1031	1436	-	-	1538	-	-
Mov Cap-2 Maneuver	634	584	-	554	584	-	-	-	-	-	-	-
Stage 1	908	865	-	690	640	-	-	-	-	-	-	-
Stage 2	681	638	-	858	863	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.3		11			6.2			0.5			
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1436	-	-	917	609	1538	-	-				
HCM Lane V/C Ratio	0.075	-	-	0.092	0.015	0.001	-	-				
HCM Control Delay (s)	7.7	0	-	9.3	11	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0	0	-	-				

HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Total - Flow Back Phase
AM Peak




Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	29	155	3	7	74	52	2	3	1	49	2	38
Future Vol, veh/h	29	155	3	7	74	52	2	3	1	49	2	38
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	30	10	10	10	10	10	10	10	10	10	10	30
Mvmt Flow	33	176	3	8	84	59	2	3	1	56	2	43
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	143	0	0	179	0	0	394	401	176	376	375	114
Stage 1	-	-	-	-	-	-	242	242	-	130	130	-
Stage 2	-	-	-	-	-	-	152	159	-	246	245	-
Critical Hdwy	4.4	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.47	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.57
Pot Cap-1 Maneuver	1285	-	-	1350	-	-	551	525	847	567	544	868
Stage 1	-	-	-	-	-	-	744	691	-	855	773	-
Stage 2	-	-	-	-	-	-	832	751	-	740	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1285	-	-	1350	-	-	508	507	847	548	525	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	508	507	-	548	525	-
Stage 1	-	-	-	-	-	-	722	671	-	830	768	-
Stage 2	-	-	-	-	-	-	784	746	-	714	669	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			0.4			11.7			11.6		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	544	1285	-	-	1350	-	-	650				
HCM Lane V/C Ratio	0.013	0.026	-	-	0.006	-	-	0.156				
HCM Control Delay (s)	11.7	7.9	0	-	7.7	0	-	11.6				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.5				

HCM 6th TWSC
1: E. 38th Avenue

2025 Total - Flow Back Phase
PM Peak

Intersection

Int Delay, s/veh 6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	16	7	0	15
Future Vol, veh/h	4	0	16	7	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	80	80	10	80	0
Mvmt Flow	5	0	18	8	0	17




Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	5
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.92	-
Pot Cap-1 Maneuver	-	1227	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1227	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.5	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1227	-
HCM Lane V/C Ratio	0.016	-	-	0.015	-
HCM Control Delay (s)	8.4	-	-	8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th TWSC
2: Monaghan Road & E. 38th Avenue

2025 Total - Flow Back Phase
PM Peak

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	18	18	57	187	5
Future Vol, veh/h	1	18	18	57	187	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	75	75	10	10	10
Mvmt Flow	1	20	20	65	213	6

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	321	216	219	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.5	6.95	4.85	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.975	2.875	-	-	-
Pot Cap-1 Maneuver	656	671	1016	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	643	671	1016	-	-	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	2.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1016	-	669	-	-
HCM Lane V/C Ratio	0.02	-	0.032	-	-
HCM Control Delay (s)	8.6	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC
3: Monaghan Road & E. 26th Avenue

2025 Total - Flow Back Phase
PM Peak

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	31	1	1	13	42	1	1	1	100	1	89
Future Vol, veh/h	32	31	1	1	13	42	1	1	1	100	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	30	10	10	10	30	10	10
Mvmt Flow	36	35	1	1	15	48	1	1	1	114	1	101
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	36	0	0	200	173	36	150	149	39
Stage 1	-	-	-	-	-	-	108	108	-	41	41	-
Stage 2	-	-	-	-	-	-	92	65	-	109	108	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.4	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.4	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.77	4.09	3.39
Pot Cap-1 Maneuver	1490	-	-	1525	-	-	741	706	1014	758	728	1010
Stage 1	-	-	-	-	-	-	878	791	-	907	845	-
Stage 2	-	-	-	-	-	-	896	825	-	832	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1525	-	-	653	688	1014	741	709	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	653	688	-	741	709	-
Stage 1	-	-	-	-	-	-	856	771	-	884	844	-
Stage 2	-	-	-	-	-	-	804	824	-	809	771	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.7			0.1			9.8			10.7		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	755	1490	-	-	1525	-	-	846				
HCM Lane V/C Ratio	0.005	0.024	-	-	0.001	-	-	0.255				
HCM Control Delay (s)	9.8	7.5	0	-	7.4	0	-	10.7				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	1				

HCM 6th TWSC
4: Hudson Road & E. 26th Avenue

2025 Total - Flow Back Phase
PM Peak

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	147	5	5	4	55	10	1	3	7	6
Future Vol, veh/h	7	2	147	5	5	4	55	10	1	3	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	30	10	10	10	30	10	10	10	10	10
Mvmt Flow	8	2	167	6	6	5	63	11	1	3	8	7
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	161	156	12	240	159	12	15	0	0	12	0	0
Stage 1	18	18	-	138	138	-	-	-	-	-	-	-
Stage 2	143	138	-	102	21	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.5	7.2	6.6	6.3	4.4	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.57	3.59	4.09	3.39	2.47	-	-	2.29	-	-
Pot Cap-1 Maneuver	787	722	993	698	719	1046	1438	-	-	1556	-	-
Stage 1	981	865	-	846	767	-	-	-	-	-	-	-
Stage 2	841	767	-	885	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	752	689	993	559	686	1046	1438	-	-	1556	-	-
Mov Cap-2 Maneuver	752	689	-	559	686	-	-	-	-	-	-	-
Stage 1	938	863	-	809	733	-	-	-	-	-	-	-
Stage 2	794	733	-	733	860	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.5		10.3		6.3		1.4					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1438	-	-	973	698	1556	-	-				
HCM Lane V/C Ratio	0.043	-	-	0.182	0.023	0.002	-	-				
HCM Control Delay (s)	7.6	0	-	9.5	10.3	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.1	0	-	-				

HCM 6th TWSC
5: Hudson Road & E. Colfax Avenue (CO-36)

2025 Total - Flow Back Phase
PM Peak

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	28	75	5	1	40	28	4	1	6	85	3	28
Future Vol, veh/h	28	75	5	1	40	28	4	1	6	85	3	28
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	-	-	400	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	30	10	10	10	10	10	10	10	10	10	10	30
Mvmt Flow	32	85	6	1	45	32	5	1	7	97	3	32
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	91	0	0	230	228	85	219	218	61
Stage 1	-	-	-	-	-	-	149	149	-	63	63	-
Stage 2	-	-	-	-	-	-	81	79	-	156	155	-
Critical Hdwy	4.4	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.47	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.57
Pot Cap-1 Maneuver	1362	-	-	1455	-	-	708	658	952	720	666	931
Stage 1	-	-	-	-	-	-	835	759	-	928	827	-
Stage 2	-	-	-	-	-	-	908	814	-	828	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1362	-	-	1455	-	-	668	641	952	700	649	931
Mov Cap-2 Maneuver	-	-	-	-	-	-	668	641	-	700	649	-
Stage 1	-	-	-	-	-	-	814	740	-	905	826	-
Stage 2	-	-	-	-	-	-	872	813	-	800	735	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2			0.1			9.6			10.9		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	794	1362	-	-	1455	-	-	743				
HCM Lane V/C Ratio	0.016	0.023	-	-	0.001	-	-	0.177				
HCM Control Delay (s)	9.6	7.7	0	-	7.5	0	-	10.9				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.6				